OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING MATERIALS 01/28/1993



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ENVIRONMENTAL QUALITY COMMISSION MEETING

January 28-29, 1993 DEQ Conference Room 3a 811 S. W. 6th Avenue Portland, Oregon

Thursday, January 28, 1993: Work Session beginning at 1:00 p.m.

- 1. Work Session: Presentation and Discussion of Findings on Wastewater Treatment Costs A Case Study
- 2. Work Session: Informal Discussion of Current Issues Affecting the Department

Friday, January 29, 1993: Regular Meeting beginning at 8:30 a.m.

Notes: Because of the uncertain length of time needed for each agenda item, the Commission may deal with any item at any time in the meeting. Times noted on the agenda are approximate. An effort will be made to consider items with a designated time as close to that time as possible. However, scheduled times may be modified if agreeable with participants. Anyone wishing to be heard or listen to the discussion on any item should arrive at the beginning of the meeting to avoid missing the item of interest.

- A. Approval of Minutes
- B. Approval of Tax Credits
- C-1. Pulp Mill Contested Case: Consideration of Agreement Regarding Enforceability of Dioxin and Other Provisions of the Order that are not Subject to Reconsideration
- C-2. Pulp Mill Contested Case: Petition for Withdrawal of Order Granting Reconsideration
- C-3. Petition for Rulemaking filed by Columbia River United
- D. Proposed Adoption of Temporary Rule Amendments to the Pollution Control Tax Credit Rules
- E. Status Report on the Total Maximum Daily Load (TMDL) Program
- F. Report on Tualatin Basin Nonpoint Source Control Program Implementation and Compliance Dates
- G. Request by Mapleton Commercial Area Owners Association for Waiver or Reduction in Water Quality Annual Compliance Determination Fee

11:30 a.m. Public Forum

This is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for this meeting. Individual presentations will be limited to 5 minutes. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.

- H. (Withdrawn)
- I. Approval of Resolution for Sale of Pollution Control Bonds
- J. †Rule Adoption: Proposed Housekeeping Amendments to OAR Chapter 340, Divisions 13, 14, and 20 through 34
- K. Report to the Legislature: Status of Underground Storage Tank Financial Assistance Program (Section 62 of SB 1215)
- L. Report to the Legislature: Fourth Annual Environmental Cleanup Report
- M. Report to the Legislature: Sewage Treatment Works Operator Certification Program
- N. Periodic Rule Review
- O. Commission Members Reports (Oral)
- P. Director's Report (Oral)
- Q. Status Report on Legislative Proposals (Oral)

[†]Hearings have already been held on the Rule Adoption items; therefore any testimony received will be limited to comments on changes proposed by the Department in response to hearing testimony. The Commission also may choose to question interested parties present at the meeting.

The Commission has set aside March 5, 1993, for their next meeting. The location has not been established.

Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.

WASTEWATER TREATMENT COSTS - A CASE STUDY

BRETT FRIED DECEMBER 31, 1992

INTERNSHIP REPORT
PREPARED FOR
THE DEPARTMENT OF ENVIRONMENTAL QUALITY
811 SW SIXTH
PORTLAND, OREGON 97204

ACKNOWLEDGEMENTS

I would like to thank all the people from the State of Oregon, Department of Environmental Quality (DEQ), the James River Corporation and the city of Corvallis who have assisted me in gathering information for this study. In particular I would like to thank Tom Lucas, Elana Stampfer and Harold Sawyer from DEQ, George Appleton and Steve Wolfe from the James River Corporation, and Daniel Hanthorn and Tom Penpraze from the City of Corvallis. Finally, I would like to thank Dr. David Ervin, from Oregon State University, for providing essential support and guidance.

INTRODUCTION

Over the last 20 years, the state of Oregon has used permit regulations and other requirements to create a buffer of "assimilative capacity" and to maintain water quality standards. In the process of implementing these requirements and regulations, questions have arisen concerning the incidence of the associated benefits and costs. The goal of this project is to provide insight into the cost issue by estimating the selected cost measures of BOD (biochemical oxygen demand) removal at two wastewater treatment plants -- the Halsey Secondary Fiber Pulp Mill Wastewater Treatment Plant and the Corvallis Wastewater Treatment Plant.

Economic Concepts

Society pays the costs to remove BOD and preserve a river's assimilative capacity, whether by public or private plants. Thus, it is in society's interest to minimize the total of public and private costs of meeting an assimilative capacity target. The cost estimates presented here help assess whether some social cost savings might be possible in reallocating treatment responsibility among the plants. The assignment of financial responsibility for achieving the potential cost savings to private and/or public parties is a separate question not addressed in this report.

The cost measures in this report require comment for proper interpretation. Three different measures are used -- total, average, and marginal costs. <u>Total cost</u> reflects all resources used for current treatment, the plant and equipment, labor, materials, etc. Because total cost obviously varies by the amount of waste requiring treatment, the <u>average cost</u> per unit of treatment is useful to account for plant size differences. Finally, the <u>marginal cost</u> of treating one

more or one less unit of waste reveals the increase or decrease in expenses at the margin of operation (in contrast to the average over all units). In general, the total social cost of removing a given level of BOD contributed by two plants is lowest when the marginal costs of the last treated unit are equal for each plant. If not, the total cost could be reduced by shifting more treatment to the lower marginal cost plant.

For this study, marginal costs could be estimated only for one plant due to incomplete data. Therefore, average treatment cost data are used to compare across plants. Two types of (annual) average costs are computed. The first is average construction costs, the annual expenses necessary to recoup the investments made when the plant was built and replace it at the end of its useful life. This cost concept is referred to as an average fixed cost because in the short-run the plant and equipment cannot be changed. The second is average operation costs and reflects the labor, materials, etc., to run the plant and equipment. These operation costs vary in the short-run with treatment level. When the average construction and operation costs are added, the resulting figure captures the average total costs of treatment, given the fixed plant and equipment.

Water Quality Context

Oregon's rivers have traditionally been used for food, recreation, navigation, power generation, irrigation and waste disposal. In the 1920's, the Willamette River, which flows through Oregon's most populous valley, was used so heavily for waste disposal that it resembled an "open sewer" (DEQ Brochure). The situation on the Willamette became so critical that in 1938 Oregonians voted to create the State Sanitary Authority.

In 1969, the name of the Sanitary Authority was changed to the Department of Environmental Quality (DEQ). DEQ, the agency responsible for administering federal and state

wastewater statutes, requires National Pollution Discharge Elimination System (NPDES) permits for all commercial, industrial or government bodies discharging wastewater into public waters.

Although standards are mandated for a number of pollution parameters, the 5-day BOD (BOD₅) and 5-day Carbonaceous Biochemical Oxygen Demand (CBOD₅) are the only parameters considered in this study. BOD₅ and CBOD₅ refer to the "amount of oxygen consumed by bacteria in a sample of effluent incubated over a period of five days under controlled temperature and light conditions" (Kneese and Bower, 1968:247). CBOD₅ differs from BOD₅ in that it does not include the amount of nitrogenous biochemical oxygen demand.

Aside from the BOD₅ parameter (or equivalent CBOD₅ standard), the other major environmental quality parameter for both the Halsey treatment plant and the Corvallis treatment plant is Total Suspended Solids (TSS). However, because BOD₅ and TSS are jointly removed in the treatment process, these parameters provide alternate measures of performance (Frass and Munley, 1984:29).

Controlling discharge into rivers is complicated by the quality (concentration of BOD₅) and quantity (flow of influent or effluent) dimensions of waste streams. This dual nature of waste streams has led to the use of mass load limits (concentration times flow) in setting waste discharge standards. For example, the monthly average mass load limits for BOD₅, at the Halsey plant, are 2,000 lbs./day for the dry season and 3,120 lbs./day for the wet season. Although the use of mass load limits constrains the allowable concentration of pollutants and volume of the wastestream, concentration limits have often been required to insure that federal guidelines are met and that water treatment plants operate continually throughout the year (Sawyer, 1992).

Mass load limits and other standards do not come without costs. In this paper, a case study of a private firm, James River Corporation, and a municipality, the city of Corvallis, is undertaken to provide some insight into the incidence of wastewater treatment costs.

The paper is divided into four sections.

- (1) A short background discussion of the Halsey Secondary Fiber Wastewater Treatment Plant and the Corvallis Wastewater Treatment Plant.
- (2) A discussion of the economic analysis, including the methods used for estimating costs at each site.
- (3) A comparison between the capital and operating costs of wastewater treatment at the two plants. The costs are broken down into (1) total costs of wastewater treatment, (2) average costs per pound of BOD₅ removed, (3) average costs of primary treatment per pound of BOD₅ removed during primary treatment, and (4) average costs of secondary treatment per pound of BOD₅ removed during secondary treatment.
- (4) An application of an economic model using performance data from the Corvallis Wastewater Treatment Plant to estimate marginal costs for changes in effluent quality.

BACKGROUND

James River Corporation

In June 1990, the James River Corporation began constructing a \$65 million secondary fiber de-inking mill in Halsey, Oregon. Prior to the start-up of the de-inking mill in March of 1992, the Halsey Paper Mill (owned and operated by James River Corporation) was supplied with bleached kraft pulp by the adjacent Pope and Talbot Pulp Mill. Besides supplying the necessary pulp, Pope and Talbot also treated the sanitary and production waste from the James River paper mill in its wastewater treatment plant.

Currently, the effluent from the paper mill and secondary fiber mill are being treated at the

wastewater treatment facility in the new plant. Sanitary wastes from the James River plant are now the only discharge from James River being pumped to Pope and Talbot for treatment.

The James River Corporation expects to process about 500 tons of office paper a day at their Halsey plant. This will result in approximately 300 tons of paper pulp (Appleton, 1992). The wastes generated from the production of the paper pulp and white water coming from the paper mill include both solid waste and effluent. The solid waste is disposed of in the Coffin Butte Landfill near Corvallis, and the treated effluent flows into the Willamette River.

James River Corporation's NPDES wastewater discharge permit for the secondary fiber pulp mill and the paper mill was approved on February 28, 1992. The parameters listed in the James River NPDES waste discharge permit include flow rate, BOD₅, TSS, pH, total phosphorous-P, ammonia-N, dioxin, total recoverable metals and bioassays. The Corporation uses an activated sludge treatment system. The principle behind activated-sludge treatment systems is to use a process of aerating and agitating a mixture of wastewater and biological sludge to promote the consumption of organic matter by micro-organisms.

The City of Corvallis

Corvallis, located approximately 15 miles down river from Halsey, is a municipality with a total population of 44,525. The majority of waste being treated at the Corvallis Wastewater Treatment Plant is residential. Corvallis does, however, have a pretreatment program for industrial users. The two Corvallis industries required to meet federal pretreatment standards, are Hewlett Packard and United Chrome. The standards listed in the Corvallis NPDES permit are CBOD₅, fecal coliform, pH, TSS and chlorine residual.

In the 1960's the existing primary treatment facilities were augmented by the addition of a trickling filter system. The principle behind trickling filters is to use bacteria growing on stones or other material to remove organic matter from the wastewater.

In 1978 the treatment plant was upgraded and an activated sludge treatment system was added. Corvallis now uses a combination of a trickling filter and activated sludge treatment system. This particular system was pioneered at the Corvallis plant. In Corvallis's NPDES permit it is referred to as a Trickling Filter - Solids Contact Treatment System. The effluent from the wastewater treatment plant flows into the Willamette River.

THE ECONOMIC ANALYSIS

Economic cost analysis attempts to explain how firms purchase and combine various inputs to produce desired goods and services (e.g., wastewater treatment). By understanding how the inputs are combined, the effects of different standards, flow rates, influent concentrations, prices or other factors can be evaluated.

Both the municipality of Corvallis and the James River Corporation combine labor, land and capital to provide wastewater treatment. Although wastewater treatment plants can treat for a variety of environmental quality parameters, the focus of this study will be on the removal of BOD₅.

The economic models most frequently used to estimate the cost of wastewater treatment are engineering based. These models usually relate design flow to costs at different treatment levels (e.g., primary, secondary or tertiary). Frass and Munley (1984:30) argue that these approaches are inadequate because they do not address the relationship between performance (e.g., treatment quality) and costs within each treatment level. Thus, Frass and Munley have proposed the use of a model, where the marginal cost per pound of BOD₅ removed can be related to different levels of effluent quality, influent quality, volume of the wastestream and prices of the factor inputs (see Appendix I).

Criticism of the Frass and Munley model centers upon their assumption that wastewater treatment cost curves are continuous. Estimated cost functions in some empirical studies support the contention that the "lumpy" nature of changes in wastewater treatment technology result in discontinuous cost curves (McConnell et al., 1988).

In this study, the Frass and Munley (F&M) approach will only be used to estimate O&M marginal costs for the Corvallis wastewater treatment facility. The F&M approach (see Appendix III) is not used for estimating costs at the Halsey treatment plant because Frass and Munley only used data from publicly-owned treatment works to construct their empirical model (1984:33).

Because a similar model does not exist for estimating the costs of wastewater treatment at secondary fiber wastewater treatment plants, marginal costs are only estimated for the Corvallis treatment plant. Cost comparisons between the two treatment plants are thus limited to average and total cost estimates.

In order to understand these cost comparisons between treatment plants it is necessary to consider some of the differences in wastewater treatment between the Corvallis and Halsey facilities. The following differences were identified by individuals at the Corvallis plant, the Halsey plant and DEQ.

- 1) The Halsey wastewater treatment plant will not experience the large variance of flow levels that the municipality experiences. Because flow is a function of the industrial process, the James River plant will not experience the fluctuations in flow levels that the municipality experiences. Flow variability, at the municipality, is further exacerbated by overflow from the combined sewer collection during high water conditions, and rain seepage into sewer pipes. For Corvallis, the design flow is 9.7 mgd from May 1 to October 31 and 17.8 mgd from Nov. 1 to April 30. For James River Corporation's design flow is 3.5 mgd all year (Appleton, 1992).
- 2) Municipalities incur large expenses in constructing, operating and maintaining wastewater conveyance systems. Although the type and efficiency of the collection system can affect the costs of wastewater treatment, these costs are not included in this analysis.
- James River Corporation's ability to control production processes gives it more control over the constitution of its influent. For James River, the quality of the influent is a function of known industrial inputs. Corvallis, however, has to build in flexibility to compensate for its limited ability to control the quality of the influent. Municipal control of the quality of its influent is currently limited to a mandated pretreatment program which is used to regulate influent quality at the United Chrome and Hewlett Packard sites.
- 4) James River Corporation is not subject to a fecal coliform standard. James River Corporation is not subject to a fecal coliform standard because it pipes all of its sanitary wastes to Pope and Talbot. Corvallis, however, must disinfect its effluent

- The strength and composition of the influents are different. The BOD₅ concentration of the James River influent is approximately 10 times higher than the BOD₅ concentration of the Corvallis influent. Additionally, the composition of the James River influent is a function of its industrial processes whereas the Corvallis influent is mostly residential waste.
- The BOD₅ standards are different. In the Corvallis permit, which is being reviewed by the DEQ, the allowable average CBOD₅ effluent concentration is 10mg/l for May 1 through October 31 (the dry season) and 25 mg/l (the wet season). Additionally, the monthly average pounds of CBOD₅ is 809 for the dry season and 2022 for the wet season. CBOD₅ is used instead of BOD₅ because at higher levels of treatment nitrogenous BOD₅ becomes a factor. At or below 10 mg/l of BOD₅, the EPA considers CBOD₅ and BOD₅ equivalent (Hanthorn, 1992). The allowable BOD₅ limitations for the James River Corporation are 2000 pounds for the dry season and 3,120 pounds for the wet season (DEQ, 1992). With a flow of 3.5 mg/l, this would translate into a concentration of 68.5 mg/l of BOD₅ in the dry season and 106.9 mg/l BOD₅ in the wet season.

There are other differences between wastewater treatment at Corvallis and James River, including testing requirements and TSS standards.

Although these differences complicate comparisons between industrial and municipal wastewater treatment costs somewhat, the major treatment parameters are the same for both James River and Corvallis. In this study, pounds of BOD₅ (or equivalent pounds of CBOD₅) removed is the performance parameter used in calculating average costs. Total costs of treatment are also presented to describe the relative magnitude of O&M and construction costs at each facility, and marginal costs of treatment changes are analyzed for the Corvallis facility.

TOTAL AND AVERAGE COSTS

Total and Average Costs for Total Wastewater Treatment

For wastewater treatment, total cost figures can provide useful information on the magnitude of costs and how these costs are split between operation and maintenance (O&M) and capital (plant and equipment). O&M costs are often referred to as variable costs in that they can be altered to achieve different treatment quality given a fixed capital base. The capital costs can only be varied over a longer period.

The Corvallis total annual O&M cost figure (see table 1) represents the actual amount spent on O&M in 91/92. The total annual capital cost figure was developed in three steps. First, an estimate of \$13.7 million, for constructing the wastewater treatment facilities, was obtained from the city of Corvallis (Penpraze, 1992). This \$13.7 million estimate was in 1977 dollars. Second, the Engineering News Record Construction Cost Index was used to convert the \$13.7 million from 1977 dollars to 1991 dollars. Finally, the 1991 amount was amortized over 20 years using an amortization rate of 10 percent. This 10 percent figure reflects both interest and expected inflation. The resulting estimated total annual capital cost of approximately \$2.9 million is almost three times the total annual O&M cost of \$1.08 million. The capital costs were defrayed somewhat by an EPA grant that paid for at least 50 percent of the costs of the 1978 wastewater treatment upgrade (Hanthorn, 1992).

TABLE 1
CITY OF CORVALLIS (CV) AND JAMES RIVER (JR) - WASTEWATER
TREATMENT ANNUAL TOTAL COSTS AND AVERAGE COSTS
OF REDUCING BOD

	Total Cost (\$ Million)		Average Cost ^a (\$ Per Pound)		
	Corvallis	James River	Corvallis	James River	
O&M	1.08 ^b	8.58°	0.35	0.42	
Construction ^d	2.87°	1.53	0.94	0.07	
Construction and O&M	3.95	10.11	1.29	0.49	

^aThe averages are calculated by dividing the relevant cost by the annual number of pounds of BOD₅ removed. The annual number of pounds of BOD₅ removed is approximately 20.4 million for James river and 3.1 million for Corvallis.

bO&M costs are for the period July 1, 1991 to June 30, 1992.

O&M costs are estimated using 1992 data to forecast 1993 costs. Projected 1993 costs are then deflated to 1991 using a simple 5 period average derived from the pollution abatement and control index in the Survey of Current Business (1992:35).

^dEstimated construction costs are for 1991 and were amortized over a 20 year period.

Estimated construction costs were corrected for inflation using the construction cost index from the Engineering News Record (1992:47).

For James River, the total 1991 construction cost was amortized over 20 years using an equivalent interest rate of 10 percent. George Appleton, a representative of James River Corporation, felt that the 20 year figure was unrealistic and that 50 years was a better estimate. However, even with the 20 year estimate, the total annual construction costs of approximately \$1.5 million are substantially less than those of the municipality (see table 1). This could reflect many factors, including less variability in flow, lower capacity, less variability in the influent composition, improvements in technology and the ability of James River to reduce wastewater treatment costs through control of its industrial processes.

Because James River began operating its wastewater treatment facility in March of 1992 and was on its start-up curve for most of this time, O&M costs were forecasted for the year 1993. These O&M costs were then deflated to 1991 dollars using a forecast derived from the Survey of Current Business' Pollution Control and Abatement index. Total O&M costs for James River are higher than those of Corvallis, perhaps because of the additional treatment costs incurred due to higher concentrations of TSS and BOD₅. Specifically, these higher concentrations of BOD₅ and TSS would tend to increase sludge disposal costs and chemical costs.

For comparison purposes, a performance based measure, such as the average cost per pound of BOD₅, removed is more useful than a total cost figure. Average costs are computed by dividing the total annual costs by the total annual pounds of BOD₅ removed at each plant.

The average construction costs for Corvallis are more than 13 times larger than the James River average construction costs (see table 1). This is partially a reflection of the larger estimated number of pounds of BOD₅ removed by James River (over twenty million) compared to Corvallis (approximately three million).

Despite the larger number of pounds removed, James River still, has a slightly higher average O&M cost than Corvallis. Combining both averages (the average O&M cost plus the average construction cost) it appears that (see table 1) more BOD₅ is being removed for less money at the Halsey Wastewater Treatment plant than at the Corvallis Wastewater Treatment Plant.

The total and average costs of wastewater treatment, however, do not provide a great deal of insight into where these costs are being realized. One way to achieve further understanding of differences in cost structures and a clearer picture of how changes in BOD₅ standards would affect the cost per pound of BOD₅ removed is to derive average costs by treatment level. For example, if the analysis is for the short-run (i.e., plant capacity and technology remain constant) and a new attainable change in the BOD₅ standard is proposed, then the average O&M costs for secondary treatment would more accurately reflect the resulting changes in O&M costs than the average total (primary, secondary and sludge disposal) O&M cost figure. This is true for the short-run because BOD₅ removal during the primary process is incidental to the removal of solids. In the long run, plant treatment capacity and technology could be changed which might alter the structure as well as the level of O&M costs.

Total and Average Costs for Primary and Secondary Treatment

An empirical difficulty encountered when estimating average and total wastewater treatment costs by treatment levels is the division of costs between primary and secondary treatment. For Corvallis, EPA estimates were used to estimate the percentage of total annual construction or O&M costs attributable to primary or secondary treatment. These costs are then divided by the annual pounds of BOD₅ removed during primary or secondary treatment to obtain average costs

by treatment level. For example, to derive the \$.37 average O&M cost for primary treatment at Corvallis, the 91/92 O&M cost for primary treatment (\$400,756) was divided by the 91/92 total number of pounds of BOD₅ removed in the primary process (1,071,657). In the James River case, data were available to allocate costs between primary and secondary treatment processes.

For Corvallis, the average O&M costs associated with secondary treatment are higher than those associated with primary treatment. However, the greater removal of BOD₅ in the secondary process (65%) results in the cost per pound of BOD₅ removed being less for secondary treatment. Additionally, the total annual construction costs associated with secondary treatment are higher than the total annual construction costs associated with primary treatment (see table 2). This does not hold true for James River, where the total annual secondary and primary treatment construction costs are almost identical but the total annual O&M costs for primary treatment are more than double the total annual O&M costs for secondary treatment. This outcome is a direct reflection of the estimated 1.8 million dollars that James River must pay for polymers in its primary treatment process to remove TSS. In contrast, Corvallis spent less than \$23 thousand on "chemicals/lab supplies" in 91/92.

TABLE 2
CITY OF CORVALLIS AND JAMES RIVER- WASTEWATER TREATMENT
ANNUAL TOTAL COSTS AND AVERAGE COSTS OF REDUCING BOD
BY TREATMENT LEVEL

	Primary*	Secondary
Corvallis -		
Total Cost ^b (\$1000)		
Construction	585°	$2,258^{4}$
O&M°	401	589
James River -		
Total Cost ^b (\$1000)		
Construction	555 ^t	592 ^g
O&M	2,160	960
Corvallis -		
Average Cost (\$/lb.)		
Construction	0.54	1.13
O&M	0.37	0.30
James River -		
Average Cost (\$/lb.)		
Construction	0.04	0.08
O&M	0.16	0.13

^aAn EPA estimate of 35% is used for the percentage of total lbs. of BOD₅ that are removed in the primary process (see EPA, 1979:4).

^bCosts associated with sludge disposal have not been included.

^cConstruction costs associated with influent pumping, grit removal, comminution, preliminary treatment, primary sedimentation, chlorination and relevant costs associated with the construction of the control/lab/maintenance building (see Appendix B).

dConstruction Costs associated with the utilization of trickling filters, activated sludge, chemical additions, contact stabilization, anaerobic digestion and relevant portion of the costs associated with the construction of the control/lab/maintenance building (see Appendix B).

eAn average of the EPA and AMSA survey estimates of 47% and 34% of O&M costs attributable to primary treatment (EPA, 1978:4-16 & 4-18) is used for this estimate. The 47% (35/74) and 34% (27/80) figures do not directly correspond to those in the tables because solids handling is not included as a category. The average of 40.5% of O&M costs is then attributed to primary treatment.

^fConstruction costs associated with influent pumping, primary treatment and sedimentation. Includes costs associated with making chemical additions and relevant portion of control/lab/maintenance building.

^gConstruction costs associated with utilization of activated sludge, chemical additions, extended aeration and relevant portion of the control/lab/maintenance building.

For James River, the average construction costs within each performance class (secondary or primary treatment) are low compared to the average operation and maintenance costs within each performance class. Surprisingly, the average operation and maintenance costs for both primary and secondary treatment are lower for James River than for Corvallis (see table 2). This is surprising because James River's average total O&M costs were higher (see table 1). The reason average costs of O&M by treatment level are so much lower than average total costs of O&M is that sludge disposal costs were not included in the calculation of the average costs by treatment level. This division of costs between primary treatment, secondary treatment and sludge disposal costs is consistent with EPA's cost analyses (see EPA, 1978:4-18). Sludge disposal costs are far from incidental to James River, which has estimated 1991 O&M costs (including tipping fees at the landfill) of approximately \$5.4 million for sludge disposal. This is more than fifty times larger than the 91/92 O&M sludge disposal costs of approximately \$90 thousand for Corvallis.

Although average costs by treatment level can result in a clearer picture of the cost structures of the Corvallis and James River wastewater treatment costs, it still neglects information on the relationship between costs and performance standards within treatment levels. The Frass and Munley approach (1984) is an attempt to rectify this weakness for municipal wastewater treatment costs. Unfortunately, there is not a comparable model for industrial wastewater treatment costs.

EMPIRICAL APPLICATIONS OF THE FRASS AND MUNLEY MODEL

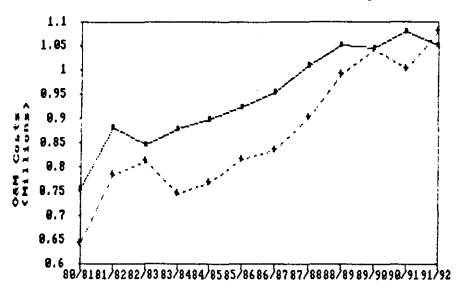
Frass and Munley (1984) estimate an ordinary least squares (OLS) regression equation using EPA data from 107 publicly-owned treatment works. This estimated equation relates O&M costs to average actual effluent concentration, average actual influent concentration, average actual flow and average capacity utilization (see Appendix III.). Therefore the estimated costs are based on actual performance, not engineering estimates. To test the applicability of this model to Corvallis wastewater treatment operation, Frass and Munley's estimated equation is used to derive predictions of Corvallis' O&M costs. These predictions are then compared to the reported actual O&M costs.

The model seems to predict well, with the largest deviations from the true model being estimates in 80/81 and 83/84 that were 18 percent higher than the true value (see figure 1). The average capacity figure in table 3 is derived by dividing actual flow by design flow. An average between the dry weather flow (9.7) and the wet weather flow (17.8) is used for the design flow measure. Additionally BOD₅ measures, not CBOD₅ measures, are used wherever possible because Frass and Munley used BOD₅ measures to estimate their model.

FIGURE 1

CITY OF CORUALLIS - O&M COSTS

MASTEMATER TREATMENT (Frass and Munley)



Year
* ESTIMATED COSTS + TRUE COSTS

TABLE 3
FRASS AND MUNLEY O&M COSTS MODEL
CITY OF CORVALLIS - WASTEWATER TREATMENT
PREDICTIONS VERSUS REPORTED ACTUAL VALUES

(1) Year	(2) Avg. Flow mgd	(3) Avg. Inf. BOD ₅ mg/l	(4) Avg. Eff. CBOD₅ mg/l	(5) Avg.* Eff. BOD ₅ mg/l	(6) Avg. Capa. Util.	(7) Est. Cost 1976(\$)	(8) Est. ^b Cost (\$)	(9) True ^c Cost (\$)	(10) Percent of True Cost
91/92	7.68	155.25	7.50	15.66	0.56	472892.75	1048491.89	1079378	97
90/91	8.36	160.33	6.83	11.75	0.61	500061.09	1078256.73	1002115	108
89/90	8.37	170.75	7.25	15.41	0.61	498326.38	1046290.75	1042118	100
88/89	9.07	177.67	6.41	14.67	0.66	518396.16	1049954.72	990182	106
87/88	8.43	147.75	5.87	****	0.61	516177.56	1008159.30	899182	112
86/87	8.52	131.83	5.92	****	0.62	503709.41	953309.41	832219	115
85/86	8.57	125.33	6.00	****	0.62	498127.35	922313.92	814527	113
84/85	9.32	129.17	6.08 ^d	7.10°	0.68	509790,88	898108.15	765318	117
83/84	11.07	105.33	****	6.58	0.80	516534.69	878714.29	743496	118
82/83	11.30	103.33	****	6.00	0.82	521019.21	844620.98	8122648	104
81/82	11.11	158.02	****	6.25	0.81	572082.97	881588.79	784372	112
80/81	8.25	180.46	***	5.92	0.60	537393.99	755710.29	639893	118

^aBOD₅ effluent concentrations are the chosen parameter for this analysis. However, for 87/88, 86/87 and 85/86 these figures were not available and CBOD₅ data were used instead.

bEstimated costs were corrected for inflation using price indexes (current price index/time t price index) from the "Survey of Current Business: Pollution Abatement and Control by Sector and Type" (U.S. Department of Commerce, 1992). Additionally, the 1991 index figure was forecasted using a simple 5 period moving average.

True costs for 89/90 were not available, so estimated actual costs were used instead. Estimated actual costs are computed every six months and usually exceed actual costs. For each of the 5 years from 86/87 to 90/91, \$50,000 was subtracted from actual costs because of a replacement fund that was listed under O&M expenses but never used for O&M. Ten thousand dollars was also subtracted from every year with the exception of 91/92 to account for a vehicle fund that was never used (Hanthorn, 1992). Additionally, expenditures on the United Chrome cleanup were not included.

^dEffluent BOD₅ concentration data were only available for the months July through November.

^eEffluent CBOD₅ concentration data were only available for the months December through June.

Another approach is to use the average dry weather flow and the CBOD₅ effluent figures in the model. The dry weather flow is used because this parameter is often considered synonymous for design flow. Additionally, the use of the BOD₅ instead of the CBOD₅ parameter could be seen as misleading because at higher treatment levels nitrogenous BOD₅ interference occurs. In fact, the EPA considers CBOD₅ and BOD₅ concentration limits at or below 10 mg/l as being equivalent (Hanthorn, 1992). After making these changes, the largest deviation from the true value was 13 percent in 91/92 (see Appendix IV). Since in both cases, when CBOD₅ and 9.7 mgd is used or when BOD₅ and 13.75 mgd is used, predictions from the O&M model are close to the true values, this model will be used to predict marginal costs for different levels of effluent quality (see table 4).

In computing the marginal cost per pound of pollutant removed at different levels of effluent quality, the 13.75 mgd average design flow is used (see table 4). Changing the design flow measurement to 9.7 mgd does not appreciably alter the marginal cost trend. An assumption inherent in the calculations used in the estimation of the marginal cost for changes in effluent is that the performance parameters (avg. flow, avg. inf., avg. cap. util.) remain constant. Since changes in any of these parameters would alter the costs the marginal costs are only relevant for the case study data being analyzed.

CITY OF CORVALLIS - WASTEWATER TREATMENT
MARGINAL COST PER POUND OF POLLUTANT REMOVED (91/92)
AT DIFFERENT LEVELS OF EFFLUENT QUALITY
USING THE FRASS AND MUNLEY MODEL

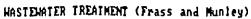
TABLE 4

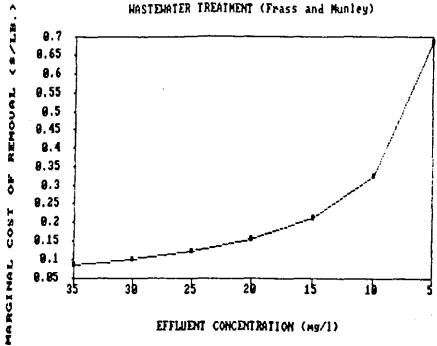
(1) Avg. Eff. BOD ₅ mg/l	(2) Avg. Flow mg/l	(3) Avg. Inf. BOD ₅ mg/l	(4) Avg. Cap. Util.	(5) Est. Cost 1976 (\$)	(6) Index ^a Conv.	(7) Marg. O&M Cost 1992(\$)
5	7.68	155.25	0.56	0.306	2.22	0.68
10	7.68	155.25	0.56	0.146	2.22	0.32
15	7.68	155.25	0.56	0.094	2.22	0.21
20	7.68	155.25	0.56	0.069	2.22	0.16
25	7.68	155.25	0.56	0.054	2.22	0.12
30	7.68	155.25	0.56	0.045	2.22	0.10
35	7.68	155.25	0.56	0.038	2.22	0.09

^{*}The price indexes used to develop conversion factors are from the "Survey of Current Business: Pollution Abatement and Control by Sector and Type" (U.S. Department of Commerce, June 1992). Additionally, the 1991 index figure was forecasted using a simple 5 period moving average.

FIGURE 2

CITY OF CORVALLIS - O&M COSTS





*Lines drawn between points on the graph, corresponding to effluent concentrations seen in table 4, do not reflect marginal cost estimates. They are only included to aid the reader in picturing potential continuous relationships.

It is clear from figure 2 that as environmental quality is increased the estimated marginal O&M costs increase at an increasing rate. Particularly notable is the large jump in costs between 10mg/l and 5mg/l.

INTERPRETATION

Differences in flow variations, technology, concentration of influent, composition of influent and effluent quality standards complicate comparisons between municipal and industrial wastewater treatment costs. In fact, part of the usefulness of this analysis is the identification of differences in cost components and structures.

Dissimilarities in types and sizes of equipment and time of construction make specific comparisons of construction costs between James River and Corvallis difficult. From tables 1 and 2 it is, clear, however, that James River's construction costs were substantially less than those of Corvallis.

With O&M costs it is possible to probe deeper into the reasons for the differences in costs. Particularly dramatic is the higher level of total costs associated with chemical additions and sludge disposal at the James River Plant. Interestingly, these are both a function of the high concentration of suspended solids and BOD₅ in James River's influent. The advantage of being more informed about the cost structures of wastewater treatment at the two facilities is that a clearer picture emerges of how changes will affect these costs. For example, changes in treatment requirements that involve changes in the costs of sludge disposal or changes in the levels of polymer usage would affect the costs at James River more than at the municipality. However, changes in disinfection standards or

flow variations would have a greater impact at the municipality.

An additional advantage is being able to compare average costs across performance classes. This comparison is made more complicated by the difference between the level of cost associated with sludge disposal. Because sludge disposal costs are not included in the cost evaluation by performance class a direct comparison could be misleading.

A weakness of the treatment level cost analyses is that variations in costs within each treatment level are ignored. Because a performance-based industrial model was not found, only a municipal model was used for this type of analysis. This model was then used to estimate marginal operation and maintenance costs at different levels of effluent quality. By estimating how O&M costs increase at an increasing rate beyond a certain level of effluent quality, the tradeoffs inherent in requiring more or less pollution abatement become evident (see figure 2). Additionally, other variables such as the flow parameter could be changed in order to estimate how this would affect costs. The Frass and Munley model, or a similar performance-based model could be particularly useful for comparing marginal operation and maintenance costs of different municipal treatment plants.

PROBLEMS AND SUGGESTIONS

Some of the problems encountered in conducting this analysis included: (1) estimating the interest and inflation rates and the lifespan of capital, (2) estimating which costs should be included under primary or secondary treatment, (3) estimating the number of pounds of BOD₅ removed by treatment level, (4) estimating annual operating and maintenance costs for a firm that has only been

in operation for 7 months, and (5) relying solely on the BOD₅ parameter as the indicator of effluent quality.

Although the choice of a 10 percent interest rate is somewhat arbitrary (see Frass and Munley), the ratio of annual construction costs at the Corvallis Plant to annual construction costs for the Halsey Plant is independent of the interest rate. Thus, for comparison purposes the level of the interest rate is inconsequential. Inflation rates, however, are not inconsequential and were calculated using the appropriate indexes.

The choice of 20 years for the lifespan of the wastewater treatment plants is an EPA estimate specific to municipal treatment systems (1979:7). The 20 year time period was chosen to provide conservative estimates of the differences between these costs. Amortizing over more years for the industrial facilities than the municipal facilities would lower the estimated annual construction costs for the Halsey plant and serve only to accentuate the differences that are already evident.

Another problem is dividing the cost among the primary and secondary processes. For Corvallis, National EPA estimates of the percentage of total costs associated with primary and secondary treatment were used (1978: (4-16)-(4-18)). For James River, these cost were provided on the basis of treatment level.

Aside from the division of costs between treatment levels, there is also the difficulty associated with determining how much BOD₅ is removed in each process. James River Corporation and DEQ estimates were used to estimate the pounds of BOD₅ removed by treatment level at the Halsey treatment plant and EPA estimates were used for the Corvallis treatment plant (1979:4). The Corvallis estimates were based on reported actual pounds removed whereas the James River estimates were based on the design parameters. This could be misleading in terms of actual pounds removed

because the pounds of BOD₅ in James River's effluent is averaging closer to 200 - 300 lbs. per day than 2,000 lbs. per day allowed by their permit (Appleton, 1992). However, because the total pounds removed is so large (over 50 thousand a day) this would only change the average cost figures slightly.

The Halsey pulp plant has only been operating since March of 1992. Because much of this time the mill was on its start-up curve O&M costs were estimated for 1993. These estimates were then deflated to 1991 dollars to facilitate comparisons. Additionally, no effort was made to determine the costs incurred by James River to facilitate water quality treatment by making changes in their industrial processes. For example, James River uses a mechanical, not chemical de-inking process which eliminates the need for chlorine bleaching.

The two major performance parameters for both James River and Corvallis are TSS and BOD₅. Because removing TSS also removes BOD₅, the BOD₅ parameter can serve as a proxy for the TSS parameter. Other parameters such as ph, total phosphorous-p, ammonia-n, recoverable metals or fecal coliform were not considered in this analysis.

POTENTIAL POLICY IMPLICATIONS

Despite the data shortcomings, the economic cost analysis can be used to suggest some wastewater treatment policy implications for these cases. A central question can be used to guide the discussion:

"If a private company owned both the James River and the Corvallis treatment plants and the treatment standard was tightened, how would the added treatment be allocated among the plants?"

The question deserves both short-run and long-run answers. Clearly, the short-run average costs of secondary treatment (Table 2) suggest allocating the added treatment to the James River plant. This conclusion would be in error only if the James River marginal cost were approximately three times higher than the average cost of \$.13 per pound, thus exceeding the Corvallis marginal cost of \$.32 per pound at a 10 mg/liter standard. Such a disparity would suggest that the James River plant is operating very close to capacity where marginal costs rise rapidly. The data do not suggest this is the case.

In the longer-term, the cost comparison should reflect any needed changes in construction costs to accommodate a tighter standard. Again, the average construction costs suggest that expanding the James River treatment technology would be less costly than for the Corvallis plant. This outcome is probably due to the improvements in technology between the Corvallis and James River plant construction, and the enhanced efficiency permitted by an internally controlled production system versus the largely uncontrollable municipal influent quantity and quality.

These conclusions are, of course, only applicable to the cases analyzed here. However, broader analysis could extend the usefulness of the analysis to multiple municipalities and industries and to account for longer-term economic adjustments.

Clearly, more work is needed. This is particularly true in light of the paucity of economic wastewater treatment work that has been completed on this topic. Most of the literature concerning wastewater treatment costs was completed in the late 70's and early 80's, possibly because of the

amount of available EPA grant money. Some possible areas for future research are:

- (1) Further application of the Frass Munley model to other municipalities. The resulting estimates of marginal costs per pound of pollutant removed could potentially be used to compare efficiencies of treatment at different municipal plants.
- (2) Perform a statistical and economic analysis of wastewater treatment costs across municipal plants within Oregon. The resulting performance-based model could potentially be used to examine how changes in different environmental quality parameters and differences in treatment technology would affect costs.
- (3) Perform a statistical and economic analysis of wastewater treatment costs across industries with similar influent qualities. The endogenous nature of industrial influent concentration and composition increases the level of difficulty associated with this type of analysis.

APPENDIX I - THEORETICAL MODEL

Frass and Munley (1984:30) assume that wastewater treatment costs are minimized subject to a given level of output. The output level is specified by the state and is dependent on the following production function:

$$Q = f(I, F, E, X)$$

where:

I = concentration of BOD in the influent

F = flow of the influent

E = concentration of BOD in the effluent

X = vector of factors of production

The objective function for the treatment plant is:

$$L = MIN X'P \text{ s.t. } Q = f(I, F, E, X) \text{ with respect to } X (1)$$

where:

P = a vector of prices for factor inputs.

The solution to the above constrained optimization will be a function with the following parameters:

$$C^* = f(I, F, E, P)$$
 (2)

Specifically, the cost function for the Corvallis wastewater treatment plant would be,

$$C_m = f(I_m, F_m, E_m, P_m)$$
 (3)

Marginal cost functions can then be derived by differentiating with respect to pounds of BOD₅ removed.

APPENDIX II. - Corvallis - Primary and Secondary Treatment (see EPA, 1983:115 - 116)

	CONST.	PERC. OF
UNIT PROCESSES	COST	TOTAL
AND OPERATIONS	MUNI	
	1983	
PRIMARY		
Influent Pumping	765219.7	
Grit Removal	120434.2	
Comminution	66602.43	
Preliminary Treatment	589941.6	
Primary Sedimentation	879056.3	
(1/2)Control Lab/Maint.	413856.2	
Chlorination	389651.7	
		20.34%
SECONDARY		
Trickling Filter	1669797.	
Contact Stabilization	3355804.	
Activated Sludge	3857362.	
Chemical Additions	661529.6	
(1/2)Control Lab/Maint.	413856.2	
Anaerobic Digestion	2492234.	
		78.53%
SLUDGE DISPOSAL		70.0070
Land Application	179103.0	
Mechanical Sludge Dry	0	1.13%
Gravity Thickening	ő	1.15 /0
<u></u>	15854450	
	2000 1 100	

 15854450×0.628013 (Conversion factor to 1977 dollars) = 9,956,800.71

9956800.71 x 1.32 (Nonconstruction costs - see EPA, 1978:6-16) = 13,142,976.9

13142976.93 x 1.03 (City multiplier - See EPA, 1978:7-15) = 13,537,266.24

The percentage breakdown shown above is used for the division between primary and secondary processes. Sludge costs are not included. The 1992 Corvallis wastewater treatment construction costs are thus broken down into 78.53 percent for secondary, 20.34 percent for primary and 1.13 percent for sludge disposal. Interestingly the construction cost prediction in 1977 dollars is 13,537266 which is close to the estimate of 13.7 million by the city of Corvallis.

Appendix III. - Empirical OLS Equation for O&M Costs Determination (Frass and Munley, 1984: 32, 33)

$$N = 178$$
$$R^2 = 0.78$$

"The marginal cost per pound of pollutant removed at different levels of effluent quality" is obtained using the following equation:

$$MC = -0.000329 \text{ x } (-0.07) \text{ x } \exp(10.17) \text{ x } F^{-21} \text{ x } F^{-24} \text{ x } E^{-1.07} \text{ x } U^{-.46}$$
 (5)

APPENDIX IV - The Frass Munley Model using a Design Flow of 9.7 and the CBOD parameter.

TABLE 4A
FRASS AND MUNLEY O&M COSTS MODEL
PREDICTIONS VERSUS TRUE VALUES
USING CBOD AS THE EFFLUENT PARAMETER
AND DESIGN DRY WEATHER FLOW AS THE DESIGN FLOW

(1) Year	(2) Avg.	(3) Avg.	(4) Avg	(5) Avg.*	(6) Avg.	(7) Est.	(8) Est. ^b	(9) True ^c	(10) Perc.
	Flow mgđ	Inf. BOD ₅ mg/l	Eff. CBOD ₅ mg/l	Eff. BOD ₅ mg/l	Capa. Util.	Cost 1976(\$)	Cost (\$)	Cost (\$)	of True Cost
91/92	7.68	155.25	7.50	15.66	0.79	424084.60	940274.77	1079378	87
90/91	8.36	160.33	6.83	11.75	0.86	442396.86	953918.22	100211	95
89/90	8.37	170.75	7.25	15.41	0.86	447437.28	939443.52	1042118	90
88/89	9.07	177.67	6.41	14.67	0.94	467872.57	947624.71	990182	96
87/88	8.43	147.75	5.87	***	0.87	439637.66	858667.31	899182	95
86/87	8.52	131.83	5.92	***	0.88	429018.31	811950.67	832219	97
85/86	8.57	125.33	6.00	***	0.88	424263.97	785551.26	814527	96
84/85	9.32	129.17	6.08 ^d	7.10°	0.96	434198.01	764934.77	765318	100
83/84	11.07	105.33	***	6.58	1.14	439285.10	747299.46	743496	100
82/83	11.30	103.33	***	6.00	1.17	443761.38	719378.80	812264	89
81/82	11.11	158.02	***	6.25	1.15	487253.30	750864.94	784372	96
80/81	8.25	180.46	***	5.92	0.85	457708.07	643651.97	639893	101

*CBOD₅ effluent concentrations are the chosen parameter for this analysis. However, for 83/84, 82/83, 81/82 and 80/81 these figures were not available and BOD₅ data were used instead. bEstimated costs were corrected for inflation using price indexes (current price index/time t price index) from the "Survey of Current Business: Pollution Abatement and Control by Sector and Type" (U.S. Department of Commerce, 1992). Additionally, the 1991 index figure was forecasted using a simple 5 period moving average.

True costs for 89/90 were not available, so estimated actual costs were used instead. Estimated actual costs are computed every six months and usually exceed actual costs. For each of the 5 years from 86/87 to 90/91, 50,000 was subtracted from actual costs because of a replacement fund that was listed under O&M expenses but never used for O&M. Ten thousand dollars was also subtracted from every year with the exception of 91/92 to account for a vehicle fund that was never used (Hanthorn, 1992). Additionally, expenditures on the United Chrome cleanup were not included.

^dEffluent BOD₅ concentration data were only available for the months July through November. ^eEffluent CBOD₅ concentration data were only available for the months December through June.

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Approved Approved with Corrections	
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Minutes are not final until approved by the EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Two Hundred and Twenty Fifth Meeting December 11, 1992

The Environmental Quality Commission meeting was convened at 8:30 a.m. on Friday, December 11, 1992, in conference room 3A at the Department of Environmental Quality (DEQ) offices at 811 S. W. Sixth Avenue, Portland, Oregon. The following commission members were present:

William Wessinger, Chair Emery Castle, Vice Chair Henry Lorenzen, Commissioner Linda McMahan, Commissioner Carol Whipple, Commissioner

Also present were Michael Huston, Assistant Attorney General, Oregon Department of Justice, Fred Hansen, Director, DEQ, and other DEQ staff.

Note: Staff reports presented at this meeting, which contain the Department's recommendations, are on file in the Office of the Director, DEQ, 811 S. W. Sixth Avenue, Portland, Oregon 97204. Written material submitted at this meeting is made a part of this record and is on file at the above address. These written materials are incorporated into the minutes of the meeting by reference.

Chair Wessinger called the meeting to order.

A. Approval of the minutes. Commissioner Castle moved that the minutes for the regular meeting on October 15-16, 1992, and the special telephone conference meeting on November 10, 1992, be approved as submitted. The motion was seconded by Commissioner Whipple and unanimously approved.

Environmental Quality Commission Minutes Page 2 December 11, 1992

B. Approval of tax credit applications.

Commissioner Lorenzen asked that Tax Credit Applications TC-3786, 3787 and 3854 be considered separately from the remainder. He stated that he was opposed to granting tax credits for the two landfill applications (TC-3786 and 3878) for the reasons stated at the last meeting on similar applications (no Return on Investment calculation). Commissioner Lorenzen also stated that he would not participate in any discussion or action on application TC-3854 for Pendleton Grain Growers because of a potential conflict of interest.

Commissioner Whipple asked about the application for noise tax credit (TC-3419), whether other noise applications had been approved, and whether the Department checks compliance. Mike Downs, Administrator of the Water Quality Division, responded that the statutes provide eligibility for noise facilities. Brian Fields, Air Quality Division staff, noted that the Department had checked the facility after installation and that the applicant had installed noise monitoring.

Commissioner Lorenzen moved that the tax credits listed below excluding Tax Credit Applications Nos. 3786, 3787, and 3854 be approved. The motion was seconded by Commissioner Castle and unanimously approved.

Application Number	Applicant	Facility Description
TC-3399	Trashco Services, Inc.	Peterbilt 320 truck; Rand Enviro Master Recycling body; Plastic-Pak Plastic Compactor Model LC60-B.
TC-3566	Portland General Electric Company	Four ENDA-1220 continuous emission monitoring systems and display equipment.
TC-3730	Hydraulic and Machine Services, Inc.	Model EC RGF Ultrasorb Water Recycling System; covered wash pad; concrete sump.
TC-3766	GFK Associates	Auto air conditioning recycling machine.
TC-3784	Columbia Plywood Corporation	Carter Day 144 RJ120 Baghouse and modifications to existing support equipment.

Application Number	Applicant	Facility Description
TC-3803	Jantzen Inc.	Air conditioner refrigerant recycling machine.
TC-3806	Graham Oil Company, Inc.	Installation of three STI-P3 tanks and fiberglass piping, spill containment basins, overfill alarm, line leak detectors, tank monitor and automatic shutoff valves.
TC-3807	Station Mart James Bao & Thuy Luong	Installation of three STI-P3 tanks and fiberglass piping, spill containment basins, tank monitor, line leak detectors, monitoring wells, Stage I vapor recovery and automatic shutoff valves.
TC-3817	Harvey & Price Co.	Air conditioner refrigerant recycling machine.
TC-3821	All Around Automotive	Auto air conditioning recycling machine.
TC-3822	E & E Body Shop	Auto air conditioning recycling machine.
TC-3823	The Heating Specialist, Inc.	Air conditioner refrigerant recycling machine.
TC-3827	Marion Ag Service, Inc.	Auto air conditioning recycling machine.
TC-3828	Knez Building Supply	John Deere Loader 544B, sheetrock processing machine, vibrating conveyor, and support equipment.
TC-3829	Certified Automotive	Auto air conditioning recycling machine.
TC-3830	Denny Green Radiator & Automotive, Inc.	Auto air conditioning recycling machine.
TC-3831	BP Oil Company	Installation of three fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, ball float valves, monitoring wells and Stage I vapor recovery equipment.

Application Number	Applicant	Facility Description
TC-3833	BP Oil Company	Installation of three fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, ball float valves, monitoring wells and Stage I vapor recovery equipment.
TC-3834	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves, tank monitoring system and Stage I vapor recovery equipment.
TC-3835	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, ball float valves, monitoring wells and Stage I vapor recovery equipment.
TC-3837	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves and monitoring wells.
TC-3838	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, ball float valves, monitoring wells and Stage I vapor recovery equipment.
TC-3839	Gil's Truck Repair, Inc.	Auto air conditioning recycling machine.
TC-3840	Atlas Refrigeration, Inc.	Three commercial air conditioning recycling machines.
TC-3841	Westermam Heat & Cool	Air conditioner refrigerant recycling machine.

Application Number	Applicant	Facility Description
TC-3842	Harvey & Price Co.	Air conditioner refrigerant recycling machine.
TC-3845	Blooms Automania	Auto air conditioning recycling machine.
TC-3847	Cascade Farm Machinery Co., Inc.	Auto air conditioning recycling machine.
TC-3848	Professional Drivers & Dispatch	Auto air conditioning recycling machine.
TC-3849	Brakes Plus	Auto air conditioning recycling machine.
TC-3850	Don Rasmussen Co.	Auto air conditioning recycling machine.
TC-3852	Terry Shellman	Auto air conditioning recycling machine.
TC-3853	Western Stations Co.	Installation of epoxy lining in three tanks, sumps and Stage II vapor recovery system.
TC-3854	Pendleton Grain Growers, Inc.	Installation of a tank monitor system, overfill alarm and spill containment basins.
TC-3855	J & R Automotive Services, Inc.	Auto air conditioning recycling machine.
TC-3856	Bewley Mechanical Systems, Inc.	Air conditioner refrigerant recycling machine.
TC-3857	Prewitt's Quality Body & Paint	Auto air conditioning recycling paint machine.
TC-3858	Erickson Automotive	Auto air conditioning recycling machine.
TC-3860	Meier & Frank	Air conditioner refrigerant recycling machine.
TC-3861	Crown Auto Craft	Auto air conditioning recycling machine.
TC-3862	Central Auto Services, Inc.	Auto air conditioning recycling machine.

Application Number	Applicant	Facility Description
TC-3863	Scott T. Robertson	Yale Model #GLC030CE 3,000 lb. forklift truck.
TC-3865	Portland General Electric	Steel containment basin and 4-inch oil stop valve.
TC-3867	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves, monitoring wells and Stage I vapor recovery equipment.
TC-3868	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves and Stage I vapor recovery equipment.
TC-3869	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves, monitoring wells and Stage I vapor recovery equipment.
TC-3870	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves, Stage I vapor recovery equipment and automatic tank gauges.
TC-3871	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves, monitoring wells, Stage I vapor recovery equipment and automatic tank gauges.

Application Number	Applicant	Facility Description
TC-3872	BP Oil Company	Installation of fiberglass underground storage tanks, double wall fiberglass piping, spill containment basins, line leak detection, float vent valves, monitoring wells and Stage I vapor recovery equipment.
TC-3873	Cedar Mill Texaco	Auto air conditioning recycling machine.
TC-3875	G & R Auto Wreckers, Inc.	Auto air conditioning recycling machine.
TC-3876	G & R Auto Wreckers, Inc.	Auto air conditioning recycling machine.
TC-3879	The Master Wrench Inc.	Auto air conditioning recycling machine.
TC-3881	Quality Volvo Service	Auto air conditioning recycling machine.
TC-3883	Far West Fibers, Inc.	Fence and paving; forklift truck; magazine storage area; metal tote bins; mixed waste paper drop box.
TC-3884	Far West Fibers, Inc.	Krause rubber belt conveyor; CIII Promal chain; 20 HP hydrostatic drive.
TC-3886	Virgil Welch Chevron	Auto air conditioning recycling machine.
TC-3887	Quality Repairs, Inc.	Auto air conditioning recycling machine.
TC-3888	Larry Henderson's Chevron	Auto air conditioning recycling machine.
TC-3889	Western Stations Co.	Installation of two corrosion protected storage tanks (1 STI-P3 and 1 composite), double wall fiberglass piping to four tanks, spill containment basins for four tanks, expansion of tank monitoring system with overfill alarm, monitoring wells, sumps, Stage II vapor recovery piping, automatic shutoff valves and an oil/water separator.
TC-3890	American Heating, Inc.	Air conditioner refrigerant recycling machine.

Application Number	Applicant	Facility Description
TC-3891	Foster Auto Parts, Inc.	Auto air conditioning recycling machine.
TC-3894	U-Pull-It, Ltd.	Auto air conditioning recycling machine.
TC-3895	U Pull It Tigard, Inc.	Auto air conditioning recycling machine.
TC-3896	Western Stations Co.	Installation of a Stage II vapor recovery system and spill containment basins, sumps and vapor leak detection system related to retrofitting the facility for Stage II.
TC-3897	Comfort Control, Inc.	Air conditioner refrigerant recycling machine.
TC-3899	Coastal Refrigeration	Air conditioner refrigerant recycling machine.
TC-3900	Don Giles Gas & Oil	Installation of two fiberglass tanks and piping, spill containment basins, line leak detectors, overfill alarm, monitoring wells, sumps, automatic shutoff valves, Stage I vapor recovery and hook up to an existing tank monitoring system at an adjacent facility.
TC-3901	Cascade Chevron	Auto air conditioning recycling machine.
TC-3905	Sheldon's Texaco & Muffler Shop	Auto air conditioning recycling machine.
TC-3907	Clear Pine Moulding, Inc.	Clark wood crusher, Jeffery hog, two drum magnetic separators, and conveyor belts.
Tax Credit A	oplication Review Reports With	Facility Costs Over \$250,000:

Application Number	Applicant	Facility Description
TC-3419	Fujitsu Microelectronics, Inc.	Sound walls; cooling tower modifications; scrubber exhaust silencers and system modifications; standby generator silencers and structural materials; boiler silencers and structural modifications.
TC-3786 & 3787	Hillsboro Landfill, Inc.	Landfill liner and leachate collection system.
TC-3846	Medford Corporation	E-Tube electrostatic filter and associated support equipment.

Commissioner Castle moved approval of Tax Credit Application TC-3854. The motion was seconded by Commissioner Whipple and approved with four yes votes and Commissioner Lorenzen abstaining.

Commissioner Castle moved approval of Tax Credit Applications TC-3786 and 3787. The motion was seconded by Commissioner Whipple and approved with four yes votes and Commissioner Lorenzen voting no.

Commissioner Lorenzen asked about the process for reporting to the legislature on the tax credit program. Director Hansen responded that a report had been drafted which reflected the discussion at the last meeting. A letter for the Chair's signature transmitting the report to the Governor had also been prepared. Director Hansen stated that the report would be circulated to the members for review before transmittal to the Governor.

C. Rule Adoption: Proposed Solid Waste Fee for Orphan Sites

Director Hansen introduced this agenda item by providing some background information on the legislation which included three separate funding sources for the Orphan Site Account. The account can be used to pay for cleanup of sites where the responsible party is unknown or unable to pay for cleanup or where the responsible party is a local government. The three funding sources are the petroleum loading fee, the hazardous substance possession fee, and the solid waste disposal fee which this rule proposes to establish at 13 cents per ton to take effect January 1, 1993.

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Chair Wessinger asked why the fee had not been established earlier. Director Hansen responded that legal questions on the petroleum loading fee delayed implementation because both were to go into effect at the same time. Commissioner McMahan asked how big the potential cleanup problem at solid waste sites was. Jeff Christensen of the Environmental Cleanup Division staff responded that there are nine landfills where a release of hazardous substances has been identified. He also noted that separate rules are being developed for administration and use of the Orphan Site Account.

Commissioner Lorenzen moved that the rule amendment presented in Attachment A of the staff report which establishes the 13 cents per ton solid waste disposal fee for the Orphan Site Account effective January 1, 1993, be adopted. The motion was seconded by Commissioner Whipple and unanimously approved.

D. Rule Adoption: Rule Exempting Lenders, ORS Chapter 709 Trusts Acting as Fiduciaries, and Government Entities from Cleanup Liability

Director Hansen introduced this item noting that the intent was to parallel federal legislation to the extent possible consistent with Oregon law. Brooks Koenig of the Environmental Cleanup Division staff explained the rules in more detail. He specifically noted that the proposed rules only clarify liability and do not create or remove any basis for liability. The responsible party remains liable for all cleanup costs. He also noted that the rules were developed with the assistance of the Lender Liability Advisory Committee.

Commissioner Whipple moved approval of the proposed rules as presented in Attachment A of the staff report. The motion was seconded by Commissioner McMahan and unanimously approved.

E. Rule Adoption: Solid Waste Reduction and Recycling Rules

Pat Vernon and Jan Whitworth of the Hazardous and Solid Waste Division introduced this item and explained that the amendments to these rules were made necessary by new statutory requirements enacted by the 1991 legislature. The amendments were developed with the assistance of the Solid Waste Advisory Committee. Three hearings were held, and ten people testified at these hearings. The rule amendments focus on the following:

 Creation of new and more specific recycling collection program requirements for local governments.

- Establishment of comprehensive reporting requirements for counties and the private recycling industry.
- Deletion of previous requirements which are now inconsistent with the new requirements.
- Expansion of the requirement for Waste Reduction Programs to include private industry in addition to local governments. This requirement applies to generators of solid waste who wish to dispose of at least 75,000 tons of waste per year in Oregon.

The proposed amendments also re-arrange the existing rules to establish greater clarity.

Department staff proposed an amendment to the staff report to address an issue that had been raised after the hearing regarding recycling collection for multi-family dwellings. Local governments cannot place requirements on landlords, therefore, there is a need for more flexibility to accomplish the desired result. Specifically, staff proposed that subparagraph (d) on page A-12 of the rules be amended to read as follows:

(Note: This section is all new language; amendments show changes proposed)

- "(d) Establish and implement a recycling collection program through local ordinance, contract or <u>any</u> other means enforceable by the appropriate city or county [which requires the collector and the landlord] for each multi-family dwelling complex having five or more units to provide the collection service and the appropriate convenient location and equipment for collection of source separated recyclables]. The collection program shall meet the following requirements:
 - (A) ..."

Commissioner Whipple asked why there were so few comments on the reporting requirements during the hearing process. Ms. Whitworth responded that local governments have had to report since 1983. The only new requirement is reporting by the private collectors.

David Rand, representing the Oregon Apartment Association, expressed support for the rules as proposed by the staff.

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Meganne Steele, representing the City of Portland Bureau of Environmental Services, noted that she enjoyed working with the Department on the proposed rules. She said the City supported the staff report and recommended changes. She expressed concern regarding the provisions of Section (3) of OAR 340-90-190 as amended on page A-38 of the rules. This section provides that each unit of a multi-family dwelling up to and including four units is considered one residential generator. The rules require collection of one unit of yard debris each month for each unit for no additional charge. This requirement applied to multi-family units is inequitable because quantity is not related to the number of units. In addition, this requirement has an impact on rates that cannot be accommodated until the next cycle of the rate setting process. She, therefore, suggested that this change should be eliminated or at least delayed until after July 1.

David Rand disagreed with Ms. Steele. He stated that each unit pays full cost for solid waste and recycling and is, consequently, paying for the yard debris service. Ms. Whitworth stated the Department was trying to clarify the intent of the rule and change it. The Department believed that four or less units were treated individually like single-family units. Ms. Steele stated that yard debris is not handled in the same way as other recyclables in the rate setting process.

Jeanne Roy, representing Recycling Advocates, noted her long involvement in the yard debris issue and expressed concern over the proposed amendments relating to yard debris. She was concerned that the proposed rules would result in backsliding on the issue and loss of progress made to date. She urged the Commission to either retain the old rules until the matter is resolved or amend the rules on page A-18 to continue the 80 percent recovery rate for yard debris from the old rules.

Ms. Vernon responded that the Department was proposing to simplify and clarify the rules. Specifically, the Metro plan has been approved as an alternative method for yard debris under the existing rules. Under the new rules, this plan cannot be changed without Department approval. Director Hansen commented that what is involved is a shift in philosophy, from performance standards to performance requirements. The issue is a difference in opinion on whether the approach proposed in the rules will accomplish the desired result. The Department expects the performance requirements to achieve the equivalent of the old performance standards which were difficult to measure. Michael Huston noted that the rules do provide for authority to enforce the approved alternative method under section 080.

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Chair Wessinger directed attention back to the apartment issue. After some discussion, the Commission deferred action on this item until later in the meeting to give staff time to develop proposed alternative wording to clarify the intent of achieving equivalency of single-family units.

F. Rule Adoption: Proposed Revisions to Definitions and to Permit Fee Schedule for Wastewater Disposal Permits

Tom Lucas of the Water Quality Division explained that these proposed rule amendments modify a definition to clarify permit requirements for on-site sewage disposal systems with a capacity of less than 5,000 gallons per day and add new definitions for septage and septage alkaline stabilization facilities. The rules also establish new reduced fees for small on-site disposal systems with a capacity of less than 1,200 gallons per day that are covered by Water Pollution Control Facility (WPCF) permits.

Commissioner Castle moved adoption of the rule amendments as presented in Attachment A of the staff report. The motion was seconded by Commissioner Lorenzen and unanimously approved.

The Commission then decided to move Item J ahead on the agenda.

J. Request for Variance from New Source Review Rule by Anodizing, Inc.

Steve Greenwood, Administrator of the Air Quality Division, summarized the issues involved in this variance request. New Source Review rules for new major sources in the Portland ozone nonattainment area require use of best possible air pollution controls. Emissions remaining after control equipment application must be offset by reductions from other sources. Anodizing, Inc. obtained a new permit in 1988 but did not go through New Source Review because they opted to limit the operations of the new facility so that emissions would not reach the trigger level. They are now requesting a variance from New Source Review. The variance would allow the company to increase production and emit up to ten tons above the trigger level for five years, without meeting any of the New Source Review requirements. Anodizing, Inc. proposes to provide an offset for the increased uncontrolled emissions. The Department recommended denial of the variance request because the facility does not qualify for a variance under federal rules. Granting the variance under state rules would leave the company in violation of federal rules.

Chair Wessinger asked what would happen when the Portland area is returned to attainment. Mr. Greenwood responded that new source review is not required if the

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area is in attainment. However, the area must have an attainment plan to assure that it stays in attainment, and new source review could be a provision of the attainment plan, and, therefore, an attainment requirement.

Michael W. Davis, Anodizing, Inc./Coatings Division Manager, explained to the Commission that they had acquired Pacific Coatings and closed the facility. The result was a large reduction in emissions. They wanted to use ten tons of the reduction for the Anodizing expansion. He argued that the closure of Pacific Coatings more than offset the Anodizing increase, and the variance should be viewed as an offset rather than a precedent.

Lew Rink, President of Anodizing, Inc., stated that the earlier decision to avoid new source review was an economic decision that avoided an unfeasible expenditure. He stated that their variance request had been before the Department for one and a half years. He stated that the closure of Pacific Coatings resulted in a net 56-ton benefit to the airshed. He stated that the increase from 39.9 tons to 49 tons is significant to the company but small to the airshed. He also stressed that the variance was requested for only five years.

Chair Wessinger noted the difference of opinion on the authority to grant the variance and asked why the company thinks the Commission has authority to grant the variance. Mr. Rink said that EPA advised them that Oregon had the authority to grant the variance.

Director Hansen commented that the closure of Pacific Coatings was a significant benefit to the airshed. He stated that the state could grant the variance but the company would still be subject to enforcement by EPA. Steve Greenwood noted that new source review is a burdensome requirement, that the lowest achievable emission rates (LAER) are required without regard to cost, and offsets cannot replace the new source review requirement.

In response to a question from Chair Wessinger, Mr. Huston stated that the variance would not be legally defensible. He further noted that we just lost on a similar new source review issue in federal court.

Mr. Davis asked if the matter could be referred to EPA for a decision. Mr. Rink suggested that the potential basis for the earlier EPA advice to them was that Oregon set the trigger limit at 40 tons rather than the 100 tons specified in the federal requirements. Mr. Huston stated that the Court spoke to that issue in the recent decision and said that Oregon's 40-ton limit is the applicable limit.

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Mr. Rink then asked the Commission to table the matter to allow them to further explore the matter with EPA. Commissioner Castle stated that the Commission appear to have no alternative but denial.

Mr. Rink then stated that the company was withdrawing its variance application to allow them to further explore the legal issues. The Commission concurred in allowing the withdrawal of the application.

The Commission then returned to the order of the agenda as published.

G. Rule Adoption: Proposed Amendments to the State Revolving Fund (SRF) Rules

Director Hansen introduced this item and Martin Loring of the Water Quality Division staff provided additional explanation. The proposed rule amendments are intended to make more money available in the future for revolving fund loans and to assure that long-term funding is available for administrative costs.

Commissioner Whipple moved that the rule amendments as presented in Attachment A of the Staff report be adopted. The motion was seconded by Commissioner Castle and unanimously approved.

H. Proposal to Amend the EQC Bond Resolution Adopted in September 1991 to Include Approval for Use of Bond Proceeds for State Revolving Fund Match

Peter Dalke and Barrett McDougall, representing the Management Services Division, explained to the Commission that proceeds from the previous Pollution Control Bond sale had not been used as originally intended. So that Oregon's matching contribution can be used to capitalize the State Revolving Fund, the Commission must amend the September 18, 1991, bond issuance resolution authorizing transfer from the Pollution Control Bond Fund to the State Revolving Fund. This action will be more cost effective than scheduling another bond sale before spring 1993. The Attorney General and Bond Counsel had concurred in the proposed action.

Commissioner Lorenzen moved that the Department recommendation be approved. The motion was seconded by Commissioner Castle and unanimously approved.

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I. Request of the City of McMinnville for Approval of (1) an Alternative Design Criterion to that Specified by the Dilution Rule, (2) a Mass Load Increase for the Winter Period for BOD-5 and TSS, and (3) an Extension of the Deadline for Reducing Discharges to Meet the TMDL for the Yamhill River

Director Fred Hansen introduced the item to the Commission followed by a brief summary of the item by Dick Nichols of the Water Quality Division.

Don Schut, Public Works Director for the City of McMinnville, stated that the McMinnville City Council supported construction of the new sewerage facility to meet water quality standards but also noted that the cost of the new facility was quite expensive. He also indicated the city supported the Department's staff report recommendation.

Commissioner Castle moved that the Commission approve the three requests made by the City of McMinnville together with the supporting findings as presented in the Department staff report for Agenda Item I. The motion was seconded by Commissioner Lorenzen and approved unanimously.

Following the adoption of the motion, Fred Hansen stated that the city should be commended for their efforts in upgrading their sewage treatment facilities.

K. Recommendations of the State's Task Force on Motor Vehicle Emission Reductions in the Portland Area

John Kowalczyk of the Air Quality Division staff summarized information on the recommendations of the Task Force on Motor Vehicle Emission Reductions in the Portland Area. House Bill (HB) 2175 required the Governor to appoint a task force to study alternatives to reduce motor vehicle emissions and to make recommendations to DEQ, METRO, and the legislature. Under the Clean Air Act Amendments of 1990, the Portland area has been classified as a marginal non-attainment area for ozone and a moderate non-attainment area for carbon monoxide. The EPA compliance dates are late 1993 for ozone and late 1995 for carbon monoxide. Mr. Kowalczyk noted that vehicle miles traveled in the Portland area are increasing at

four times the rate of population growth. Attachment 7 of the staff report presents the recommendations of the Task Force. These include lawn and garden equipment emission standards, improvements in the Portland vehicle inspection program, credit for the Department of Land Conservation and Development (DLCD) vehicle travel reduction rule, and an employer trip reduction program. The task force also recommended a phased-in vehicle emission fee based on actual emissions and miles driven, however, after the Task Force completed its work, the Oregon Supreme Court ruled that the vehicle emission fee enacted by HB 2175 was constitutionally invalid.

In response to a question from Chair Wessinger, Director Hansen noted that the congestion pricing concept is still considered experimental. The task force has recommended pursuit of a demonstration program for this option. Commissioner Whipple asked about the relationship to the Vancouver area. Mr. Kowalczyk responded that Washington is pursuing control options as well. Commissioner Lorenzen commented that the fee should be pursued, even if fees are currently limited by the Constitution. Commissioner Castle indicated he was supportive of the recommendations in the report and noted that he did not remember anything like it and was concerned about the potential precedent. Director Hansen responded that the recommendations are different but the state will face very difficult problems if something is not done.

Commissioner Lorenzen moved approval of the report. The motion was seconded by Commissioner Castle and unanimously approved.

The Commission then returned to Agenda Item E which had been deferred earlier in the meeting.

E. Rule Adoption: Solid Waste Reduction and Recycling Rules (continued)

Department staff presented proposed modifications to the staff report in response to testimony presented earlier in the meeting. The specific amendments proposed were as follows:

Page A-38, Rule OAR 340-90-190

Section (3): delete the proposed addition which reads as follows:

Each unit is considered one residential generator.]

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Section (4): At the end of this section, add:

Where multi-family complexes are treated as single customers, the local government providing the yard debris service shall assure that yard debris service is provided at a level equivalent to service provided single family dwellings. Equivalent service shall be based on the amount of yard debris generated.

Local government shall make this determination and any related adjustment in service, no later than their next rate review process.

Commissioner Lorenzen moved that the proposed rules be adopted as presented in Attachment A of the staff report and with amendments to 340-90-40 and 340-90-190 as discussed and proposed by staff. The motion was seconded by Commissioner McMahan and unanimously approved.

The Commission then recessed the meeting for lunch with intent to reconvene at 12:45 p.m.

Upon reconvening the Commission elected to start with Agenda Item M.

M. Report to the Legislature on Implementation of the 1989 Toxics Use Reduction and Hazardous Waste Reduction Act

Stephanie Hallock, Administrator of the Hazardous and Solid Waste Division, introduced this report. The Toxics Use Reduction report to the legislature summarizes the activities of the program including conclusions reached as a result of the first three years of implementation. The report concludes that while the quasi-voluntary program is working for the larger generators, the program has not been as successful for the smaller facilities. The report also makes recommendations on ways to improve the program including quantitative measurement of chemical use and hazardous waste generation in Oregon.

Commissioner Whipple moved adoption of the report. The motion was seconded by Commissioner Castle and unanimously approved.

N. Report to the Legislature on the Conditionally Exempt Small Quantity Hazardous Waste Generator Pilot Project

Stephanie Hallock introduced this report. The 1989 legislature required the Department to study management and funding options for hazardous waste produced by Conditionally Exempt Generators (CEG). This report describes who CEGs are and summarizes the 1991-92 hazardous waste collection events held throughout the state. Other CEG activities, including technical assistance, CEG handbook production, generator workshops and waste management survey, are also discussed in the report.

Report recommendations included partial funding of a Metro pilot project, financial assistance to local governments for combined household/CEG collection events, discount subsidies for waste disposal at waste management companies, and continued work with trade associations and industry groups.

Commissioner Lorenzen commented on the need for this type of program and applauded the program.

Commissioner Castle moved approval of the report. The motion was seconded by Commissioner Lorenzen and unanimously approved.

L. Report to the Legislature on Exemptions for FDA Regulated Rigid Plastic Containers

Director Hansen introduced this item by noting that Senate Bill (SB) 66 established recycling-related criteria for rigid plastic containers sold in Oregon. He said the bill required the Department to report to the legislature about granting exemptions. The exemptions would affect generators of rigid plastic containers who cannot meet the recycled content criteria but still comply with Federal Drug Administration (FDA) regulations. He said he expected the issue to be extensively debated in the next legislative session.

Stephanie Hallock noted that the Department received lots of testimony on the matter, and the issue is not a simple one. The Department evaluated information assembled and testimony received and has attempted to make a recommendation that is implementable and in keeping with SB 66. Director Hansen noted that the Department report and recommendation goes beyond the narrow directive of the legislation and proposed statutory revision to accomplish the purpose of law.

The Department recommended that the law be changed to a 25 percent minimum recycled content law with credit given for reusable containers. Any container manufacturer or product packager whose rigid plastic containers do not have a minimum of 25 percent recycled content or are not reusable by January 1, 1995, must obtain an annual license until those containers reach the minimum 25 percent recycled content or are reusable. Annual licensing fees collected under this proposed program would be used for improving plastics recycling and recycled plastics markets in Oregon.

Bob Guttridge, representing the Association of Oregon Recyclers, opposed the recommendations of the Department and expressed support for an even stronger law.

Lauri Aunan, representing Oregon State Public Interest Research Group, stated that this is an issue of public concern, and the report should recommend no exemptions or delay and no weakening of the law. She also indicated that the license fees should be high. She expressed concern that DEQ's recommendation would reduce the options for compliance from four to two.

Jerry Powell stated that recovery should be enhanced, and no exemptions were needed.

Susan Brenner, representing Recycling Advocates, noted the need to reverse the trend to produce waste and expressed support for the spirit of SB 66. She stated that manufactures have a responsibility to comply with the 1991 legislation.

Jeanne Roy, representing Recycling Advocates, suggested that the Department needs to send the message that the requirements of the law are reasonable and can be met without exceptions. She noted that manufactures can always switch to alternative containers.

Lynda Gardner, an attorney with Gardner, Cosgrove & Gardner, presented testimony on behalf of two clients as follows:

- 1. Pharmaceutical Manufactures Association. This association supports the recommendation for clarification of the prescription drug exemption.
- 2. Abbott Laboratories. This company supports the recommendation in the report for medical devices, infant formula, and medical foods.

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Dan Colegrove, representing the Grocery Manufactures of America, noted that he represented people who use plastic containers and not the plastics industry. He expressed regret that the requirements of the law cannot be met. He indicated that he opposed the recommendations made by DEQ for a content-only option by 1995. He stated there was strong indication that this requirement could not be met. He indicated that California was the only other state with a requirement, and the California bill was similar to Oregon.

Catherine Beckley, representing the Cosmetic, Toiletry and Fragrance Association, read a prepared statement which expressed disappointment in changes to the earlier draft of the report. Her statement is made part of the record of the meeting.

The Commission then discussed the issues with staff and with persons testifying. Commissioner Whipple indicated that companies need to tell suppliers what they need rather than simply say it cannot be done. Ms. Hallock noted that recycled plastic is more expensive than virgin plastic. Also, only a couple of plastics are recyclable, and these are carrying the others, making the issue more difficult.

Chair Wessinger suggested that anything done differently that might work is a step in the right direction. Commissioner Whipple stated that she did not support an exemption, did not want to give anything away and was inclined to hold to the existing standard. Commissioner McMahan expressed concern about any changes that would have a result of undercutting California. Commissioner Lorenzen indicated that we need to take a position which results in reduction of the waste stream and conservation of resources. Commissioner Lorenzen also commented that the staff had done a good job in trying to achieve a very difficult balance. Commissioner Castle asked if the license fee could be strengthened. Commissioner McMahan expressed concern with the recommendation for removing options for those that can meet the 25 percent recycle rate. Director Hansen suggested that an option would be to maintain the recycling rate at 25 percent but limit it to resin types 3 through 7.

After further discussion, Commissioner Lorenzen moved to: 1) support the report's recommendation for no broad exemptions for rigid plastic containers holding FDA-regulated products; 2) support the recommendation for a licensing option; and 3) to adopt the report with modifications to the recommendations. Those modifications would include that all options and exemptions in the current law be retained and that the aggregate recycling rate option be changed so that it is applicable only to resins resin types 3 through 7 (i.e., resin types 1 and 2 are not to be counted in the aggregate recycling rate). The motion was seconded by Commissioner Castle and unanimously approved.

O. Report to the Legislature on the Status of Recycling in Oregon (implementation of 1983 and 1991 recycling legislation)

Ms. Hallock introduced this item noting that this was a routine report to the legislature and that hard data should be available for the report next year.

Commissioner Whipple moved approval of the report. The motion was seconded by Commissioner McMahan and unanimously approved.

P. Report to the Legislature on Long Term Funding of the Household Hazardous Waste Program

Ms. Hallock introduced this item noting that a work group from local government, the retail industry, solid waste management and environmental organizations recommended that the state's role in household hazardous waste be limited to the provision of technical assistance to local governments and a continued statewide education program. They recommended a phase out of state-operated collections programs over the next four to six years while shifting assistance to local program development.

Commissioner Whipple moved approval of the report. The motion was seconded by Commissioner Lorenzen and unanimously approved.

Q. Report to the Legislature on Implementation of Household Battery Legislation

Ms. Hallock introduced Bruce Lumper who assisted the Department in drafting and summarizing the report. Chair Wessinger asked whether household batteries could still be disposed in the garbage. Mr. Lumper indicated that batteries could be deposited in the garbage but that the batteries would eventually contain less of the potentially toxic heavy metal mercury.

Commissioner Lorenzen moved approval of the report. The motion was seconded by Commissioner McMahan and unanimously approved.

R. Report on Proposed Legislation for 1993 Legislative Session (Oral)

Olivia Clark of the Director's Office provided the Commission with a written report and table summarizing the bills being introduced by the Department.

S. Status Report on Budget (Oral)

Beth Woodrow, Budget Manager for the Department, provided summary information on the Department's budget request and briefly reviewed the materials.

T. Commission Member Reports (Oral)

Commissioner Whipple reported that the Governor's Watershed Enhancement Board (GWEB) is receiving a great deal of attention. GWEB has a history of successful cooperative efforts, and the executive branch continues to support the concept of onthe-ground demonstrations.

U. Director's Report (Oral)

- 1. Director Hansen handed out two letters to the Commission for their review and information. One was from John Williams regarding air toxics, and one was from Larry Tuttle and Valerie Kitchen of The Wilderness Society regarding the Department's draft interim hazardous air pollutant rule.
- 2. One rulemaking hearing had been authorized since the last meeting. This hearing will consider amendments to the solid waste rules to incorporate federal criteria for municipal solid waste landfills and other changes to protect public health and the environment.
- 3. DMV Demonstration Project The demonstration project to sell vehicle registration tags at the DEQ Inspection/Maintenance (I/M) station in Medford has been immediately successful. The project has been enthusiastically received by the public and by the news media, including favorable editorials in the Medford Mail Tribune and The Oregonian. The Division of Motor Vehicles (DMV) and DEQ launched the demonstration project to improve customer service by offering to process vehicle registrations at the inspection station along with the vehicle testing. The program will be evaluated to see if it should be implemented in the Portland stations as well.
- 4. Oxygenated Fuel Carbon monoxide levels were noticeably lower in the Portland area during the month of November, the first month of the federally mandated oxygenated fuel program. The average carbon monoxide level for November 1992 was 36.4 on the Air Pollution Index, compared to the November 1991 average of 49.1.

- 5. **SIP Revisions Submitted** The Department has submitted six State Implementation Plan (SIP) revisions to EPA to meet Clean Air Act requirements. The revisions covered emission inventory, small business assistance program, oxygenated fuels and new source review. Oregon remains one of only a handful of states that have met all Clean Air Act requirements on time.
- 6. Information Systems The Department reported on our information systems development efforts to the Legislative Committee on Data Processing on December 2. We explained our leadership efforts in state government to develop information systems using state-of-the-art integrated computer Assisted software engineering tools and an open systems approach. The open systems approach is now being fostered throughout state government. This effort will allow us to move toward a better agency wide information management system. We expect to budget 2.5 percent of our operating budget for systems development (estimated at \$2 to 3 million).
- 7. **ODOT** Facilities On December 9, we met with ODOT upper management and engineers to launch a program to provide technical assistance for high priority facilities and to develop a plan for statewide cross-media compliance at all facilities. We will be setting up a standing group to address potential problems and to look for pollution prevention opportunities.
- 8. **ODOT Meeting** The Oregon Transportation Commission will be sending an invitation to the Commission to attend a meeting with its members and the Land Conservation and Development Commission. The discussion would focus on land use and transportation issues as they relate to air quality.
- 9. **Multi-Media Inspections** DEQ has taken the lead from EPA for multi-media inspections in Oregon. The first inspection was conducted at Industrial Oil in Klamath Falls on December 9. We have had concerns about the facility based on citizen complaints and our observations of apparent hazardous waste on the site, evidence of past oil spills and the close proximity of the facility to the Klamath River. The Department sent a team of regional staff, EPA specialists and the Oregon State Police who procured and served an administrative search warrant.

There was no further business, and the meeting was adjourned at about 3:45 p.m.

Environmental Quality Commission

□ Rule Adoption Item ☑ Action Item	Agenda Item _
☐ Information Item	January 29, 1993 Meetin
Title: Approval of Tax Credit	Applications
Summary:	
	f report presents the Department's evaluation and fication of 13 tax credit applications with a total facility cost of
- 4 Air conditioner co	es with a total facility cost of \$316,722. colant recycling machines with a total facility cost of \$11,445. ted applications recommended by the Department of Agriculture of cost of \$181,003.
- 1 Reclaimed Plastic	ling facility with a total facility cost of \$156,887 facility with a total facility cost of \$6,660. lities with a total facility cost of \$39,685.
	ill related facility with a total facility cost of \$3,377,202.
has been reviewed by an	as a facility cost exceeding \$250,000 (Solid Waste Landfill) and independent contractor selected by the Department. The ment is provided with the application review report.
·	
	on:
<u>-</u>	credit certificates for 13 applications as presented in Attachment
Report Author	Michael Horns Jul Herry Division Administrator Director

December 29, 1992



ENVIRONMENTAL
QUALITY
COMMISSION

REQUEST FOR EQC ACTION

Meeting Date: January 29, 1993

	Agenda Item: _	В	
	Division:	MSD	
	Section:	Administration	
SUBJ	ECT: Approval of Tax Credit Applications.		
ACTIO	ON REQUESTED:		
	Work Session Discussion General Program Background Potential Strategy, Policy, or Rul Agenda Item for Current Meeting Other: (specify)		
	Authorize Rulemaking Hearing Adopt Rules Proposed Rules Rulemaking Statements Fiscal and Economic Impact Statement Public Notice	Attachment Attachment ent Attachment Attachment	
	Issue a Contested Case Order		
_	Approve a Stipulated Order Enter an Order Proposed Order	Attachment	
<u>_X</u>	Approve Department Recommendation Variance Request Exception to Rule Informational Report X Other: (specify)	Attachment Attachment Attachment Attachment _A	

811 SW Sixth Avenue Portland, OR 97204-1390 (503) 229-5696 Meeting Date: January 29, 1993

Agenda Item:

Page 2

Tax Credit Application Review Reports:

TC-2133

Cascade Forest Products

Clark 57-20 baghouse and associated

support equipment.

TC-3417

Fujitsu Microelectronics,

Inc.

Packed bed aqueous scrubbers and activated carbon off-gas adsorbers.

TC-3878

G & R Auto Wreckers, Inc.

RGF Ultrasorb Model SD-II closed loop oil/water separation and

recycle system.

TC-3882

Polk County Farmers'

Cooperative

Concrete wash pad with collection

trough, package wastewater

treatment system, and building to

house package system.

TC-3885

Lane International

Plastic granulator for reprocessing

reclaimed plastic.

TC-3904

Veldon D. Kropf

198' by 124' by 22' pole

construction, metal clad, grass

seed straw storage shed.

TC-3914

United Disposal Service,

Inc.

Collection depot including loading ramp, collection containers, oil collection facility, asphalt slab, storage and maintenance building, gate/house office, informational

signs, and security camera system.

TC-3915

William J. Stellmacher

Freeman 370T Baler and John Deere

2955 Tractor.

TC-3917

C & E Curtis Enterprises

Inc.

Auto air conditioning recycling machine.

TC-3920

Aaltonen & James, Inc.

Auto air conditioning recycling

machine.

TC-3921

Action Auto & Radiator

Auto air conditioning recycling

machine.

TC-3925

R & R Automotive, Inc.

Auto air conditioning recycling

machine.

Meeting Date: January 29, 1993 Agenda Item: B Page 3						
Tax Credit Application Review Reports With Facility Costs Over \$250,000:						
	em for two landfill evaporation pond,					
AUTHORITY/NEED FOR ACTION:						
<pre>X Required by Statute: ORS 468.150-468.190</pre>	Attachment Attachment					
DEVELOPMENTAL BACKGROUND:						
<pre> Advisory Committee Report/Recommendation Hearing Officer's Report/Recommendations Response to Testimony/Comments Prior EQC Agenda Items: (list)</pre>	AttachmentAttachmentAttachment					
Other Related Reports/Rules/Statutes:	Attachment					
Supplemental Background Information	Attachment					
REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:						
None.						
PROGRAM CONSIDERATIONS:						
None.						
ALTERNATIVES CONSIDERED BY THE DEPARTMENT:						

None.

Meeting Date: January 29, 1993

Agenda Item: I

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DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Environmental Quality Commission approve certification for the above identified tax credit applications.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Yes.

Note - Proposed January 29, 1993 Pollution Tax Credit Totals:

<u>Certificates</u>	<pre>Certified Costs*</pre>	<pre># of Certificates</pre>
Air Quality	\$ 316,722	2
CFC	11,445	4
Field Burning	181,003	2
Hazardous Waste	0	0
Noise	0	` 0
Plastics	6,660	1
Solid Waste - Recycling	156,887	1
Water Quality	39,685	2
Underground Storage		0
Solid Waste - Landfi	lls <u>3,377,202</u>	<u> </u>
TOTAL	\$ 4,089,604	13

1992 Calendar Year Totals through December 31, 1992

<u>Certificates</u>	<pre>Certified Costs*</pre>	<pre># of Certificates</pre>
Air Quality	\$ 1,877,836	14
CFC	309,899	110
Field Burning	1,103,655	17
Hazardous Waste	10,119,299	1
Noise	2,169,137	2
Plastics	120,025	7
Solid Waste - Recycling	621,601	8
Water Quality	3,388,428	15
Underground Storage	Tanks 2,910,376	45
Solid Waste - Landfi	lls <u>10,211,209</u>	<u> 5</u>
TOTAL	\$32,831,465	224

^{*} These amounts represent the total facility costs. To calculate the actual dollars that can be applied as credit, the total facility cost is multiplied by the determined percent allocable of which the net credit is 50 percent of that amount.

Meeting Date: Agenda Item:

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January 29, 1993

INTENDED FOLLOWUP ACTIONS:

Notify applicants of Environmental Quality Commission actions.

Approved:

Section:

Division:

Director:

Report Prepared By: John Fink

229-6149 Phone:

Date Prepared: December 29, 1992

JF:jf TCJAN93.ALT

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Jeld-Wen, Inc. Cascade Forest Products PO Box 1329 Klamath Falls, OR 97601

The applicant owns and operates a mill where dimension lumber is graded, ripped, cut to length and finger jointed into stock for milling windows, doors and frame components. The mill is located in Bend, Oregon.

Application was made for tax credit for an air pollution control facility.

2. <u>Description of Facility</u>

The claimed facility controls particulate emissions of the applicant's wood waste handling system. The facility consists of a Clark 57-20 baghouse and associated support equipment.

Claimed Facility Cost:

\$157,271.57

Costs were attributed to the following categories:

Baghouse & Ductwork: \$119,151.66

Support equipment

materials & labor: \$22,636.12

Jeld-Wen labor,

overhead & expenses: \$15,483.79

The applicant indicated on the application that equipment removed from service due to installation of the facility claimed in this application had a salvage value.

Salvage value of equipment

removed from service: \$8,000.00

Eligible facility costs:

\$149,271.57

Accountant's Certification was provided.

The applicant indicated the useful life of the facility is twenty years.

3. <u>Procedural Requirements</u>

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The statutes and administrative rules governing this facility are those which were in effect June of 1986.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was approved before application for final certification was made.
- b. On December 2, 1988 the Director withheld TC-2133 until noise controls were installed at the Cascade Forest Products plant site. On August 10, the applicant completed noise abatement work which improved the sound levels at noise sensitive properties. The applicant applied for and received an exception to OAR 340-35-035 for the remaining noise violations. As result this facility meets the conditions of ORS 468.180.
- c. Construction of the facility was substantially completed on September 18, 1986 and placed into operation on September 15, 1986. The application for final certification was submitted to the Department on April 20, 1987, within two years of substantial completion of the facility. The application was found to be complete on October 2, 1992.

4. <u>Evaluation of Application</u>

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution. This is in accordance with OAR Chapter 340-21-030. The air contaminant Discharge Permit for this source, 09-0014, item 2 requires the permittee to control particulate emissions. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The baghouse was installed to control the particulate emissions of the wood waste handling system. The particulate is generated by the ripping operations, the chop saws, and the finger jointing process. A 200 horse power fan located at the exhaust of the baghouse provides the draw to move material through the system. Particulate generated

by the milling operations is drawn into ducting located above the process equipment and into a main duct trunk which feeds into the baghouse. The material is filtered and collects at the bottom of the baghouse. A material handling fan draws the particulate from the baghouse, through ducting, and feeds it to a cyclone on top of the truck bin. The cyclone vents its exhaust to the baghouse and drops particulate in the truck bin.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

A portion of the waste product is converted into a usable commodity consisting of waste heat.

2) The estimated annual percent return on the investment in the facility.

The average annual cash flow is \$4,644.00 which results from the value of the waste heat less operating cost. Dividing the average annual cash flow into the cost of the facility gives a return on investment factor of 34. Using Table 1 of OAR 340-16-030 for a useful life of 20 years gives an annual return on investment of 0%. As a result, the percent allocable is 100%.

The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant indicated other filter systems were considered. Costs of all systems were comparable. The Clarke 57-20 was chosen due to references and past performance experience.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant indicated an annual cash flow of \$4,644.00 which results from a gross annual income of \$21,244.00 less operating costs of \$16,600. The annual income is realized through the reuse of waste heat which lowers heating costs. The annual cash flow from this facility has been included in the return on investment calculations.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

The applicant indicated on the application that there was a salvage value of \$8,000.00 for equipment removed from service due to the installation of the claimed facility. The facility cost has been adjusted for this salvage value. There are no other factors to consider in establishing the actual costs of the facility properly allocable to the control of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. <u>Director's Recommendation</u>

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$149,271.57 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-2133.

BKF:a LEGAL\AH70419

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Fujitsu Microelectronics, Inc. Gresham Manufacturing 3545 North First Street San Jose, CA 95134

The applicant owns and operates a semiconductor manufacturing plant in Gresham, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The claimed facility controls the emissions of gaseous pollutants from semiconductor manufacturing processes. The facility consists of packed bed aqueous scrubbers and activated carbon off-gas adsorbers.

Claimed Facility Cost: Costs were attributed to the following categories:

\$109,208.00

\$167,450.00

Scrubbers and adsorbers:

Mechanical & electrical installation:

\$40,301.00

Contractor labor

\$17,941.00

& expenses:

Accountant's Certification was provided.

The applicant indicated the useful life of the facility is 20 years.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

a. The request for preliminary certification was approved before application for final certification was made.

- b. On April 26, 1991 the Environmental Quality Commission approved a one-year extension for the applicant to file an application for pollution control facility tax credit certification.
- c. Construction, of the facility was substantially completed on April 1, 1989. The first phase of the facility was placed into operation on September 1, 1988. The application for final certification was submitted to the Department on March 1, 1992, within three years of substantial completion of the facility. The application was found to be complete on October 26, 1992.

4. <u>Evaluation of Application</u>

a. Rationale For Eligibility

The sole purpose of the facility is to control air The air contaminants controlled are toxic pollutants. The Department is currently developing rules under Title III, of the Clean Air Act Amendments of 1990, for the control of air In the interim, the Department is implementing guidelines that require new sources and major modifications to existing sources to quantify their emissions of air toxics. Proposed emission levels are evaluated relative to established Significant Emission Rates (SER) for each air toxic. New sources which generate air toxics above the SER are required to model concentration levels for site specific conditions to determine if emissions meet or exceed acceptable risk levels. The emission rates for each air toxic as controlled by the scrubbers, is below the SER. The control is accomplished by the elimination of air contaminants as defined in ORS 468.005.

The facility claimed in this application consists of seven packed bed water based scrubbers and twelve activated carbon adsorbers. Emissions of air toxics are directed to scrubbers via ducts. Each scrubber is dedicated to controlling the emissions from specific plant processes. Each scrubber has a recirculation pump which circulates water in the scrubber. A PH probe is mounted in the scrubber sump which measures variances in PH. As contaminants are adsorbed, the PH variance will reach a point initiating purging of the scrubbers. The effluent purged from the scrubbers is treated by

the plant's waste water treatment system, prior to discharge to city sewer.

The scrubbers in this plant control emissions of ammonia, acids, and dopants. The ammonia is used in the manufacture of circuit boards. The acids are used during the etching process and for final product clean up. The gasses arsine, phosphine, and boron triflouride are used as dopants in the ion implantation process. Adsorbing filters serve as an additional filter for-off gasses from processes operated at a near vacuum prior to the gas stream passing through the scrubbers.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

2) The estimated annual percent return on the investment in the facility.

The applicant indicates in the application there is no income or savings from the facility, so there is no return on the investment.

The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not identify alternative methods for achieving the same pollution control.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings or increase in costs as a result of the facility installation.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the control of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to the control of pollution. The sole purpose of the facility is to control a substantial quantity of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to control air pollution.
- c. The facility complies with DEQ statutes, rules, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. <u>Director's Recommendation</u>

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$167,450 with 100% allocated to pollution control be issued for the facility claimed in Tax Credit Application No. TC-3417.

BKF:a LEGAL\AH70418

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

G & R Auto Wreckers, Inc. Gary W. Standish & Robert W. Standish 4825 Ridge Drive N.E. Salem, OR 97303

The applicant owns and operates a wrecking yard in Independence, Oregon.

Application was made for tax credit for a water pollution control facility leased by the applicant. The applicant has provided authorization from the lessor to receive tax credit certification.

2. <u>Description of Facility</u>

The wastewater treatment facility consists of an RGF Ultrasorb Model SD-II, closed loop oil/water separation and recycle system.

Claimed Facility Cost: \$13,870 Applicant provided copies of invoices.

3. <u>Procedural Requirements</u>

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met statutory deadline in that installation of the facility was substantially completed on October 15, 1991 and the application for certification was found to be complete on November 6, 1992, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to prevent and control a substantial quantity of water pollution. This prevention and control is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

The applicant dismantles wrecked automobiles and sells the parts to the general public. As part of the operation the parts are pressure washed to remove oil and grease. The wastewater from the washing operation was allowed to pond on the ground and flow off site to a drainage ditch and eventually to the waters of the state.

In an effort to eliminate the above problem the applicant leased and installed a package treatment system to collect and treat the wash water. The system is an RGF Ultrasorb, Model SD-II. The package plant retains 98% of the contaminants. The oil and grease that is removed from the wash water is collected by an approved oil recycler.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

 The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

Waste oil recovered is collected and stored on site. A qualified oil recyler picks up the recovered oil for proper disposal. The applicant pays a used oil recyler for the disposal of the recovered oil.

2) The estimated annual percent return on the investment in the facility.

There is no revenue generated from this facility and therefore no return on investment.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant evaluated seven different types of equipment to achieve the same pollution control objective. The RGF Ultrasorb Model SD-II was selected due to compatibility with existing site conditions.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings from the facility. The cost of

maintaining and operating the facility is \$1,700 annually.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to prevent and control a substantial quantity of water pollution and accomplishes this purpose by the installation of an industrial wastewater treatment system.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$13,870 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3878.

Timothy C. McFetridge IW\WC10\WC10991.5 (503) 378-8240 November 17, 1992

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Polk County Farmers' Cooperative P.O. Box 47 Rickreall, Oregon 97371

The applicant owns and operates a machine shop at 185 West Main Extension in the city of Hillsboro, Oregon.

Application was made for tax credit for a water pollution control facility.

2. <u>Description of Facility</u>

The facility is a 30' by 40' concrete wash pad with collection trough and package unit consisting of a multimedia filter, carbon absorption, oil skimming and separation, aeration, and solids recovery. The facility also includes a building, to house the package unit, which is weatherized to prevent freezing. The function of the facility is to collect and treat wastewater generated in the degreasing and washing of parts and equipment and to recover and recycle heavy oil. Treated wastewater is disposed of to the sanitary sewer and solids are disposed of through approved methods. Construction of the facility commenced on March 30, 1992, and was completed on June 9, 1992. The facility was placed into operation on June 10, 1992.

The applicant is requesting a tax credit for the spill pad and package unit.

Claimed Facility Cost: \$25,816.12 consisting of: (Accountant's Certification was provided).

American Equipment Company Package Unit	\$ 5,537.00
Building Materials	\$ 767.68
Gutters	\$ 167.00
Plumbing	\$ 1,664.26

Concrete	\$ 1,865.85
Gravel	\$ 602.28
Steel Fabrication	\$ 892.00
Drywall	\$ 500.00
Sewer Connections	\$ 1,930.00
Electrical	\$ 468.50
Sheet Metal	\$ 829.30
Millwork	\$ 487.31
Excavation	\$ 445.00
Permits, Hook-up fees	\$ 3,052.09
Architectural fees	\$ 550.25
Labor	\$ 3,412.50
Overhead and Profit	\$ 2,645.10

3. <u>Procedural Requirements</u>

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met statutory deadline in that construction of the facility was substantially completed on June 9, 1992, and the application for certification was found to be complete on November 9, 1992, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of pollution.

Prior to construction, wastewater generated in the degreasing and washing of parts and equipment was simply allowed to drain to adjacent ground thereby negatively impacting soils and groundwater. The facility will prevent pollution by collecting wastewater and treating it to a level whereby it can be disposed of to the sanitary sewer. The facility will also allow for the recovery of used oil.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

Although the facility allows for the recovery of used oil, according to facility staff, it does not convert waste products (oil) into a salable commodity. A disposal fee is imposed by the recycler.

The percent allocable determined by using this factor would be 100%.

2) The estimated annual percent return on the investment in the facility.

The average annual cash flow for the facility is \$1,320. This value is derived by the income obtained from the steam cleaning of customer parts less operating costs.

Dividing the average annual cash flow into the cost of the facility gives a return on investment factor of 19.6 for a useful life of 10 years. This equates to an annual percent return on investment (ROI) of 0%.

Therefore, the portion of actual costs properly allocable to pollution control is 100%.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The facility indicated that the only alternative considered was a "closed loop" system. This system, with the same pad, was estimated to cost \$32,000 and was rejected due to higher expense.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings or increase in costs as a result of the facility installation.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to prevent a substantial quantity of pollution.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$25,816.12 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3882.

Doug Jones: DTJ TC-3882 (503) 229-6385 (x248) November 19, 1992

State of Oregon Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Lane International Lane T. Robertson PO Box 925 Tualatin, OR 97062

The applicant owns and operates a plastic product manufacturing facility at Tualatin, Oregon.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

Claimed Investment Cost: \$6,660.00 (Accountant's Certification was provided.)

The claimed equipment is a plastic granulator, Model G1012P1, 10 HP, 460 volt with three blade rotor, 5/16 screen, robot hopper, base and bin, which will be used for reprocessing reclaimed plastic prior to the manufacture of reclaimed plastic products.

3. Procedural Requirements

The investment is governed by ORS 468.925 through 468.965, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 14, 1992. The 30-day prior notice requirement was waived on October 15, 1992.
- b. The request for preliminary certification was approved on October 15, 1992, before the application for final certification was made.
- c. The investment was made on October 20, 1992, prior to June 30, 1995.

d. The request for final certification was submitted on November 25, 1992 and was filed complete on December 4, 1992.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to process reclaimed plastic.
- b. Allocable Cost Findings

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.960 have been considered and analyzed as indicated:

1) The extent to which the claimed collection, transportation, processing or manufacturing process is used to convert reclaimed plastic into a salable or usable commodity.

This factor is applicable because the sole purpose of this granulator is to process reclaimed plastic purchased from other companies. In-house scrap is being processed through an existing small granulator.

2) The alternative methods, equipment and costs for achieving the same objective.

The applicant indicated that they knew of no alternative method which could be utilized to process this product.

3) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection, transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product.

There are no other factors to consider in establishing the actual cost of the investment properly allocable to reclaiming and recycling plastic material.

The actual cost of the investment properly allocable to processing reclaimed plastic as determined by using these factors is 100%.

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment is eligible for final tax credit certification in that the equipment is necessary to process reclaimed plastic.
- c. The qualifying business complies with DEQ statutes and rules.
- d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 100%.

6. <u>Director's Recommendation</u>

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$6,660.00 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-3885.

WRB:b RECY\RPT\YB12059R (503) 229-5934 December 4, 1992

State of Oregon Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Veldon D. Kropf 25070 Peoria Road Harrisburg, Oregon 97446

The applicant owns and operates a grass seed farm operation in Linn County, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility described in this application is a 198' \times 124' \times 22' pole construction, metal clad, grass straw storage shed, located at 25070 Peoria Road, Harrisburg, Oregon. The land and buildings are owned by the applicant.

Claimed facility cost: \$99,003.54 (Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning.

The applicant has 1,550 acres of annual grass seed under cultivation. The applicant states that prior to using alternatives as many of the 1,550 acres of annual grass seed fields were registered and open field burned as the weather and smoke management program allowed. Acquisition of the straw storage facility provided an open field burning reduction of 500 acres and as the open field burning phasedown continues the storage facility will accommodate an additional 500 acres of open field burning reduction on the applicant's farm. Construction of the straw storage shed provides the applicant with reliable custom baling service.

4. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The facility has met all statutory deadlines in that:

Construction of the facility was substantially completed on August 20, 1992. The application for final certification was found to be complete on November 7, 1992. The application was submitted within two years of substantial completion of the facility.

5. Evaluation of Application

a. The facility is eligible under ORS 468.150 because the facility is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f))A): "Equipment facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

 The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing grass seed straw protection from inclement weather.

2. The estimated annual percent return on the investment in the facility.

The actual cost of claimed facility (\$99,003.54) divided by the average annual cash flow (\$6,295) equals a return on investment factor of 15.73. Using Table 1 of OAR 340-16-030 for a life of 20 years, the annual percent return on investment is 2.5%. Using the annual percent return of 2.5% and the reference annual percent return of 17%, 85% is allocable to pollution control.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is a savings of burn fees to the applicant as a result of the facility, but this is more than offset by flail chopping, plowing and disking expenses.

5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 85%.

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 85%.

7. Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$99,003.54, with 85% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-3904.

Jim Britton, Manager Smoke Management Program Natural Resources Division Oregon Department of Agriculture (503) 378-6792

jb:bmTC3904 December 24, 1992

Application No. T-3914

STATE OF OREGON Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

United Disposal Service, Inc. Santiam Sanitary Service PO Box 189 Sublimity, OR 97385

The applicant owns and operates a solid waste and recyclable materials collection service and recyclable materials collection depot in Sublimity, Oregon. Application was made for tax credit for a solid waste pollution control facility.

2. <u>Description of Facility</u>

The facility is a recyclable materials collection depot including loading ramp, collection containers, oil collection facility, asphalt slab, storage and maintenance building, gate house/office, instructional signs, and depot monitoring camera. Only 50 % of the project paving is used solely for recycling and only 20% of the storage, gatehouse, and maintenance building is used solely for recycling.

	Item	Cost	% Allocated to Recycling	Total
a.	Additional land	27,621	100%	\$ 27,621
b	Additional fencing	5,000	100%	5,000
c.	Site preparation & paving	89,700	50%	44,850
d.	Storage, gatehouse,	·		,
	maintenance building	303,329	20%	60,666
e	Informational signs	300	100%	300
f	Depot monitoring camera	3,500	100%	3,500
g.	Drop boxes	14,950	100%	14,950
Claime	ed facility cost:		-	\$ 156,887

An accountant's certification and invoices were provided.

3. <u>Procedural Requirements</u>

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The Facility met all statutory deadlines in that:

- a. Construction of the facility was begun in July 1, 1991 and substantially completed by June 1, 1992.
- b. The facility was placed into operation on June 1, 1992.
- c. The application for tax credit was submitted to the Department November 20, 1992, within two years of substantial completion of the facility.
- d. The application was found to be technically complete and was filed on December 4, 1992.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling. The applicant claimed only those portions of the complete recycling and solid waste collection depot which were used for recycling. Those portions used for solid waste collection were not included as a part of the "facility"
- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

This factor is applicable because the materials processed by the facility, glass, aluminium, steel, cardboard, newspaper, and used oil, are recovered for recycling and are sold as commodities.

The percent allocable by using this factor would be 100%

2) The estimated annual percent return on the investment in the facility.

The recycling facility was constructed as a part of a recycling program required by the state and local solid waste management programs. The recycling program is subsidized with income from solid waste collection services. The average annual cash flow for the recycling facility is a negative value because the cost of operation is greater than the sum of the income from the sale of recyclables plus the savings from reduced disposal fees. The percent return on investment is zero. As a result, the percent allocable is 100%

3) The alternative methods, equipment, and costs for achieving the same pollution control objective.

The applicant has not identified and is not aware of alternative methods for achieving the same objective. It is the Department's determination that the proposed facility is an acceptable method of achieving the pollution control objective.

4) Any related savings or decrease in costs which occur or may occur as a result of the installation of the facility.

There are no savings from this facility. The average annual operating cost exceeds the income from this facility and has been included in the ROI calculations.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water, or noise pollution or solid or hazardous waste, or top recycle of properly dispose of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to material recovery from solid waste.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. <u>Director's Recommendation</u>

Based upon the findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$156,887 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Applications No. T-3914.

WRB:wrb wp51/tax/tc3914rr.sta (503)229-5934 December 20, 1992

State of Oregon Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

William J. Stellmacher 30416 Stellmacher Drive SW Albany OR 97321

The applicant owns and operates a grass seed farm operation in Linn County, Oregon.

Application was made for tax credit for air pollution control equipment.

2. <u>Description of Claimed Facility</u>

The equipment described in this application is a Freeman 370T Baler and John Deere 2955 Tractor, located at 30416 Stellmacher Drive SW, Albany, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: Freeman 370T Baler \$41,500 JD 2955 Tractor \$40,500

\$82,000

(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 900 acres of perennial grass seed varieties under cultivation. The applicant indicates that prior to 1990 it was customary to register up to 700 acres and open field burn an average of 350 acres annually. The remaining acreage was baled off, propane flamed, and the straw stacks open burned.

In recent years the applicant has made efforts to eliminate open field burning and has also substantially reduced propane flaming and stack burning. His initial investment was in a straw storage shed and John Deere 300 stacker. He relied on custom balers to pick-up and package the straw in the fields then he would move it to fieldside or storage.

To provide greater certainty that the straw would be baled and removed from the field before the weather could damage it, the applicant has invested in his own tractor and baler. The applicant states that this positioning eliminates the need for open field burning and substantially reduces the need to propane flame.

4. <u>Procedural Requirements</u>

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16. The equipment has met all statutory deadlines in that:

Purchase of the equipment was substantially completed on May 26, 1992. The application was submitted on December 2, 1992 and the application for final certification was found to be complete on December 16, 1992. The application was submitted within two years of substantial purchase of the equipment.

5. Evaluation of Application

a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

b. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the equipment is used to recover and convert waste products into a salable or usable commodity.

The equipment promotes the conversion of a waste product (straw) into a salable commodity by providing the means to pick it up out of the fields and package it for storage where it is protected from inclement weather.

2. The estimated annual percent return on the investment in the equipment.

There is no annual percent return on the investment as applicant claims no annual cash flow.

The established average annual operating hours for tractors is set at 450 hours. To obtain a total percent allocable, the annual operating hours per implement used in reducing acreage open field burned is as follows:

Application No. TC-3915 Page 3

<u>Implement</u>	Acres worked	Acres/hr	Annual operating hours
Square baler	800	4	200
Total annual	operating hours		200

The total annual operating hours of 200 divided by the average annual operating hours of 450 produces a percent allocable of 44%.

Equipment	Claimed	Percent	Cost
	Cost	<u>allocable</u>	<u>allocable</u>
Freeman Baler	\$41,500	100%	\$41,500
John Deere Tractor	40,500	44%	<u>17,820</u>
Total	\$82,000	72%	\$59,320

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is an increase in operating costs of \$3,500 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment properly allocable to the prevention, control or reduction of air pollution.

There are no other factors to consider in establishing the actual cost of the equipment properly allocable to prevention, control or reduction of air pollution.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 72%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.

- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 72%.

7. Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$82,000, with 72% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-3915.

Jim Britton, Manager Smoke Management Program Natural Resources Division Oregon Department of Agriculture (503) 378-6792

jb:bmTC3915 December 17, 1992

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

C & E Curtis Enterprises Inc. 27400 NW St. Helens Road Scappoose, OR 97056

The applicant owns and operates an automotive repair establishment in Scappoose, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be ten years.

Claimed Facility Cost: \$2,599.95 (Costs have been documented)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

Installation of the facility was substantially completed on September 30, 1992. The facility was placed into operation on September 30, 1992. The application for final certification was submitted to the Department on December 7, 1992, within two years of substantial completion of the facility. The application was found to be complete on December 23, 1992.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as

defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

In determining the percent of the facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

2) The estimated annual percent return on the investment in the facility.

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$6.50/pound. The applicant estimated an annual coolant recovery rate of 40 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

o Electricity consumption of machine

- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant has identified no alternatives.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. <u>Director's Recommendation</u>

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2,599.95 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3917.

Brian Fagot:a LEGAL\AH70427 December 23, 1992

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Aaltonen & James, Inc. 11233 SE Foster Road Portland, OR 97266

The applicant owns and operates a wrecking yard in Portland, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be five years.

Claimed Facility Cost: \$2,745.00 (Costs have been documented)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

Installation of the facility was substantially completed on August 8, 1991. The facility was placed into operation on August 8, 1991. The application for final certification was submitted to the Department on December 11, 1992, within two years of substantial completion of the facility. The application was found to be complete on December 23, 1992.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as

defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

In determining the percent of the facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

2) The estimated annual percent return on the investment in the facility.

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.44/pound. The applicant estimated an annual coolant recovery rate of 100 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

o Electricity consumption of machine

- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant has identified no alternatives.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. <u>Director's Recommendation</u>

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2,745 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3920.

Brian Fagot:a LEGAL\AH70428 December 23, 1992

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Action Auto & Radiator 880 S Adams Drive Madras, OR 97741

The applicant owns and operates an automobile repair establishment in Madras, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be five years.

Claimed Facility Cost: \$3,000.00 (Costs have been documented)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

Installation of the facility was substantially completed on August 7, 1992. The facility was placed into operation on August 7, 1992. The application for final certification was submitted to the Department on December 11, 1992, within two years of substantial completion of the facility. The application was found to be complete on December 23, 1992.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as

defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

In determining the percent of the facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

2) The estimated annual percent return on the investment in the facility.

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.20/pound. The applicant estimated an annual coolant recovery rate of 200 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

o Electricity consumption of machine

- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant has identified no alternatives.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,000.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3921.

Brian Fagot:a LEGAL\AH70429 December 23, 1992

State of Oregon Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

R & R Automotive, Inc. 1250 SE 82nd Drive Gladstone, OR 97027

The applicant owns and operates an automotive repair establishment in Gladstone, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. <u>Description of Facility</u>

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be three years.

Claimed Facility Cost: \$3,100.00 (Costs have been documented)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

Installation of the facility was substantially completed on September 22, 1992. The facility was placed into operation on September 22, 1992. The application for final certification was submitted to the Department on December 14, 1992, within two years of substantial completion of the facility. The application was found to be complete on December 23, 1992.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as

defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

In determining the percent of the facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

2) The estimated annual percent return on the investment in the facility.

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$5.50/pound. The applicant estimated an annual coolant recovery rate of 60 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

o Electricity consumption of machine

- o Additional labor to operate machine
- o Machine maintenance costs
- o Depreciation of machine

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant has identified no alternatives.

4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

A distinct portion of this automobile air conditioning coolant recovery and recycling equipment makes an insignificant contribution to the principal purpose of the claimed facility. This coolant recovery equipment has the capability to return (recharge) coolant to automobile air conditioning systems. Recharge capabilities in coolant recovery and recycling equipment is not required by state or federal

law. The additional expense incurred in the purchase of equipment with recharge capabilities is not allocable to pollution control. The Department estimates the additional expense incurred is \$700.00.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 77%.

5. <u>Summation</u>

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 77%.

6. <u>Director's Recommendation</u>

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,100.00 with 77% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-3925.

Brian Fagot:a LEGAL\70430 December 23, 1992

Application No. T-3443

STATE OF OREGON Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Finley Buttes Limited Partnership dba/Finley Buttes Landfill Company Management Environmental, Inc. PO Box 61726 Vancouver, WA 98661

The applicant owns and operates a solid waste landfill in Boardman, Oregon. Application was made for tax credit for a solid waste pollution control facility.

2. <u>Description of Facility</u>

The facility is five groundwater monitoring wells, landfill liners and leachate collection systems for two landfill cells, and a leachate evaporation pond.

The monitoring wells, MW-2, MW-3, MW-4, MW-5, and BMW-1, are constructed of 4-inch diameter flush-threaded Schedule 80 PVC casing with machine-slotted, 0.020-inch slot size, diversified prepacked screen with 10 x 20 Colorado filter sand pack. The wells are constructed with flush-mounted locking steel casing to avoid damage. Well MW-2 is 299 feet, MW-3 is 267 feet, MW-4 is 325 feet, MW-5 is 363 feet, and BMW-1 is 286 feet.

The landfill liners and leachate collection system in the two cells, from bottom to top consist of a leak detection system consisting of a HDPE liner, sand, and pipes covered by a geotextile filter; a two-foot layer of selected native soil mixed with water and bentonite through a pug mill and placed on the cell floor in four compacted lifts; a 60 mil HDPE liner membrane; a protective cover of geotextile fabric; a network of six inch leachate collection pipes placed in one foot round drain rock, a protective geotextile fabric; and one foot of native soil.

The leachate evaporation pond is a 160 foot by 160 foot pond, double lined with drainage net between layers of HDPE.

Claimed facility cost: \$3,859,666 consisting of:

Waste cells and leachate collection Leachate evaporation pond Monitoring wells	3,532,701 88,189 238,776
Total	3,859,666
Less: Non allowable costs	(482,464)
Total eligible	3,377,202

An applicants Accountant's Certification was provided. A cost allocation review of this application by an independent contractor has identified \$482,464 in nonallowable costs claimed by the applicant. The eligible facility cost has been reduced for these nonallowable costs.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The Facility met statutory deadlines in that construction of the facility was begun in June 21, 1990, and substantially completed by November 1, 1990 and placed into operation on November 1, 1990. The application was submitted to the Department April 29, 1991, within two years of substantial completion of the facility. The application was found to be technically complete on September 25, 1992.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department (DEQ) and the federal Environmental Protection Agency (EPA), to prevent ground water pollution. The requirement is to comply with OAR 340-61, 40 CFR 258.40, and DEQ Solid Waste Permit number 394.
- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

 None, the facility does not recover or convert waste products, (leachate) into a salable or usable commodity.
- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment for this facility because the applicant claims there is no income derived from the monitoring wells, liner, or leachate collection system.

- The alternative methods, equipment, and costs for achieving the same pollution control objective.

 There are no alternatives, the liner and leachate collection system are specified requirements of DEQ Solid Waste Permit number 394.
- 4) Any related savings or decrease in costs which occur or may occur as a result of the installation of the facility.

 There are no savings realized from the installation of the facility.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water, or noise pollution or solid or hazardous waste, or top recycle of properly dispose of used oil.
 - a) The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional accounting review to determine if costs were properly allocated. This review was preformed under contract by the accounting firm of Coopers and Lybrand. Other than the adjustment for nonallowable facility costs, the cost allocation review of this application has identified no issues to be resolved.
 - b) There are no other factors to be considered in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department and federal Environmental Protection Agency to prevent ground water pollution.
- c. The facility complies with DEQ statutes and permit conditions.
- d. An independent accounting firm under contract with the Department has concluded that no further procedures be preformed on T-3443, other than the adjustment for nonallowable costs in this report.
- e. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. <u>Director's Recommendation</u>

Based upon the findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,377,202 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application No. T 3443.

WRB:wrb wp51\tax\tc3443rr.sta (503)229-5934 December 31, 1992

Coopers &Lybrand

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Fortland, Oregon 97201 : telephone (503) 227-8600

2700 First Interstate Tower

Environmental Quality Commission 811 S.W. Sixth Ave. Portland, OR 97204

At your request, we have performed certain agreed upon procedures with respect to Finley Buttes Landfill Company's (the Company) Pollution Control Tax Credit Application No. 3443 regarding the Finley Buttes Landfill Facility in Morrow County, Oregon (the Facility). The aggregate claimed Facility costs on the Application was \$3,859,666. The following agreed upon procedures and related finding are as follows:

- 1. We read the Application, Oregon Revised Statutes on Pollution Control Facilities Tax Credits-Sections 468.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits-Sections 340-16-005 through 340-16-050 (OARs).
- We discussed the Application and Statutes with John Fink of the DEQ.
- 3. We discussed the Application and Statutes with Jim Weisgerber, Controller, and Bryan Johnson, Engineering Consultant, of the Company and Bruce Bloch of Henton & Company, C.P.A., the Company's accountant.
- We inquired as to whether there were any direct or indirect Company costs charged to the Facility costs claimed in the Application. We were informed that no such costs were charged. Based on our review of supporting documentation discussed in item no. 5 below, there does not appear to be any direct or indirect Company costs claimed in the Application.
- We reviewed supporting documentation for 89% of the amount claimed on the Application through review of vendor invoices. All costs which we reviewed supporting the Application appeared to be from third party vendors.
- We discussed with Bryan Johnson, Engineering Consultant for the Company, the extent to which excavation costs were excluded from the Application. This was accomplished by reviewing specific contractor invoices (see item no. 5) with Mr. Johnson. determined that the Company had not properly excluded from the Application \$482,464 of excavation and other related costs billed by Delhur Industries. Accordingly, the Facility costs claimed on the Application should have been \$3,377,202 instead of \$3,859,666.

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except for the \$482,464 of costs noted in item no. 6 above. Had we performed additional procedures, or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and the DEQ in evaluating the Company's Pollution Control Tax Credit Application and should not be used for any other purpose.

Coopers - Lybrand

Portland, Oregon December 6,1992

Date: January 12, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item C-1, January 29, 1993, EQC Meeting

Pulp Mill Contested Case: Consideration of Agreement Regarding Enforceability of Dioxin and Other Provisions of the Order that are not

Subject to Reconsideration

At the July 23, 1992 EQC meeting, the Commission considered and granted petitions for reconsideration of the AOX related provisions of the April 16, 1992 Findings of Fact and Conclusions of Law and Final Order in the "Pulp Mill Contested Case" (appeal of NPDES Permit No. 100715 issued to the City of St. Helens on November 14, 1990, and NPDES Permit No. 100716 issued to James River II, Inc. on November 14, 1990). The order granting reconsideration, dated August 10, 1992, limited the scope of reconsideration to those provisions of the order relating to "...organochlorines other than dioxin (2,3,7,8 TCDD) including but not limited to the determination of the best available technology for controlling such discharges." The intent of the Commission was clear that the dioxin related provisions of the April 16, 1992 order were final and in effect.

On October 8 and 9, 1992, the City of St. Helens, Boise Cascade Corporation, and James River II, Inc., (hereafter referred to as Pulp Mills or Mills) petitioned the Court of Appeals for judicial review of the dioxin related provisions of the order. In preparing the petitions, the mills concluded that a question exists regarding interpretation of the Administrative Procedures Act and whether the dioxin related provisions of the April 16, 1992 order were final and ready for judicial review while other parts of the order were subject to reconsideration. As a result, the mills sought to clarify the question by filing motions for a summary determination of reviewability.

Upon review of the petitions and motions filed with the Court of Appeals, counsel for the Department concluded that a Stipulation and Agreement between the Mills and the Commission regarding the enforceability of the dioxin related provisions of the April 16, 1992 Order was appropriate. The basic purpose of the document is to assure that the dioxin provisions are in effect now, even though judicial review of these provisions may await resolution of the AOX issue.

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Fre out real A large print copy of this report is available upon request.

Memo To: Environmental Quality Commission Agenda Item C-1 January 29, 1993 Meeting Page 2

Notice has been provided to all parties in the Pulp Mill Contested Case that the Commission will consider a proposed **Stipulation and Agreement** between the mills and the agency at the January 29, 1993 regular EQC meeting. This notice advised that since the proposed Stipulation and Agreement is only for the purpose of clarifying the original intent, testimony would not be received at the meeting.

Recommendation for Commission Action

It is recommended that the Commission approve the proposed **Stipulation and Agreement** as presented in Attachment A of this report, and authorize the Director to execute the agreement on behalf of the Commission.

Attachments

- A. Proposed Stipulation and Agreement
- B. Notice to the Parties

Reference Documents (available upon request)

- 1. April 16, 1992 Findings of Fact and Conclusions of Law and Final Order
- 2. August 10, 1992 Order Granting Petitions for Reconsideration
- 3. Pulp Mill Petitions for Judicial Review and Motion for Summary Determination of Reviewability (October 8, 1992 and October 9, 1992)

Report Prepared By: Ha

Harold Sawyer

Phone:

229-5776

Date Prepared:

January 12, 1993

HLS:1 C1012993.c

STIPULATION AND AGREEMENT

1. James River II, Inc., Boise Cascade Corporation, the City of St. Helens, and the Environmental Quality Commission hereby enter into the following Stipulation and Agreement relating to National Pollutant Discharge Elimination System Waste Discharge Permit Nos. 100715 and 100716.

BACKGROUND

- Quality of the State of Oregon (DEQ) issued National Pollutant Discharge Elimination System Permit No. 100716 authorizing James River II, Inc.'s (James River's) pulp and paper mill at Wauna, Oregon to continue the discharge of wastewater into the Columbia River. The permit limited the discharge of 2,3,7,8 TCDD (TCDD or dioxin) effective November 15, 1993. The permit also limited the discharge of organochlorines measured as adsorbable organic halogens (AOX) effective November 15, 1995.
- 3. Also on November 14, 1990, DEQ issued National Pollutant Discharge Elimination System (NPDES) Permit No. 100715 to the City of St. Helens, Oregon (City). The permit authorized the continued discharge of effluent into the Columbia River from the City's sewage treatment plant, subject to specified conditions. These conditions included limits on TCDD, effective November 15, 1993, and limits on the discharge of organochlorines measured as AOX, effective November 15, 1995.

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- 4. Boise Cascade Corporation (Boise Cascade) operates a pulp and paper mill at St. Helens, Oregon, which discharges process and other effluent into the City's sewage treatment plant. The conditions of the City permit that limit discharges of TCDD and AOX are directed principally at discharges from Boise Cascade's mill into the City's treatment plant.
- 5. On December 3, 1990, both James River and the City requested a contested case review of permit conditions pursuant to OAR 340-45-035(9). Boise Cascade requested party status in the contested case concerning the City's permit on December 4, 1990. Other interested organizations also requested party status in the contested cases.
- 6. On December 21, 1990, the Environmental Quality
 Commission (EQC) granted the requests for contested case hearing
 and later consolidated them. The EQC also granted the requests
 for party status.
- 7. In the contested case proceedings, the City and the mills contested the TCDD and AOX provisions of the permits.
- 8. On April 16, 1992, the EQC issued its Findings of Fact and Conclusions of Law and Final Order in this proceeding (Order), which denied in substantial part the relief requested by the mills and the City. The order revised the NPDES permits issued to the City and James River.
- 9. On June 12, 1992, the mills and the City filed petitions for reconsideration or rehearing with the EQC. These

petitions were directed only at the AOX conditions of the permits.

10. By order dated August 10, 1992, the EQC granted the petitions for reconsideration. The order states in part:

"The Commission will reconsider those portions of its Findings of Fact and Conclusions of Law and Final Order relating to the mills' NPDES permit conditions regulating the discharge of organochlorines other than dioxin (2,3,7,8 TCDD) including but not limited to the determination of the best available technology for controlling such discharges."

Order Granting Petitions for Reconsideration at 2. A copy of the EQC's Ordering Granting Petitions for Reconsideration (Reconsideration Order) is attached.

11. On October 8, 1992, Boise Cascade and the City filed petitions for judicial review and motions for a summary determination of reviewability of the TCDD limits in the Oregon Court of Appeals. On October 9, 1992, James River filed a similar petition and motion.

STIPULATION

- 12. The mills, the City and the EQC recognize that there is presently a legal question whether the TCDD provisions of the Order are final for purposes of judicial review under Oregon law.
- 13. The mills, the City, and the EQC further recognize that the Court of Appeals may rule that the filing of the petitions for reconsideration or rehearing and the EQC's order granting reconsideration of the AOX limit had the effect of negating the finality of the April 16, 1992 Order under the state APA, even

with respect to TCDD. Such a ruling may also have the incidental effect of staying the TCDD limits for regulatory and enforcement purposes until the EQC issues a final order on AOX.

- 14. The mills, the City, and the EQC agree that the EQC did not intend by its Reconsideration Order on AOX to stay the effectiveness or enforceability of the TCDD limits or other permit limits unrelated to AOX.
- 15. Subject to paragraph 16 below, the mills and the City agree that all provisions of the NPDES permits unrelated to AOX are, for all regulatory and enforcement purposes, effective and enforceable in accordance with their terms.
- 16. Notwithstanding the agreement of the mills and the City as stipulated in paragraph 15 above, the mills and the City do not thereby waive any rights they may have now or in the future to judicial review of the TCDD limits. Further, the mills and the City do not waive any rights they may have now or in the future to request the EQC or a court to stay the TCDD limits for regulatory and enforcement purposes.

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signing by the Commission.

17. This stipulation and agreement shall be effective upon

dld LHE0012.ple

Before the Environmental Quality Commission of the State of Oregon

In the Matter of National Pollutant)
Discharge Elimination System Waste)
Discharge Permit No. 100715 issued to)
the City of St. Helens on November 14,)
1990,) NOTICE OF CONSIDERATION
,) of
and)
) Proposed STIPULATION AND
National Pollutant Discharge Elimination) AGREEMENT
System Waste Discharge Permit No.)
100716, issued to James River II, Inc.)
on November 14, 1990.)

Notice

- 1. On January 29, 1993, the Environmental Quality Commission, during the course of its regularly scheduled meeting, will consider a proposed **Stipulation and Agreement** which is intended to clarify the intent and enforceability of the dioxin related provisions of the April 16, 1992 Findings of Fact and Conclusions of Law and Final Order pending conclusion of the reconsideration of provisions related to AOX granted by order dated August 10, 1992.
- 2. The Commission meeting is scheduled to begin at 8:30 a.m. on January 29, 1993. This item is scheduled as the third item on the meeting agenda. Therefore, any parties in the proceeding wishing to be present when the Commission considers this matter should be present when the meeting begins.
- 3. Since this is a clarification of earlier Commission actions, the Commission will not receive oral testimony on this issue at the meeting. Written comments may be considered if they are received by each Commission member and the parties by no later than 5:00 p.m. on Thursday, January 21, 1993.
- 4. As part of its deliberations, the Commission may ask the Department or other parties to respond to questions. The Commission may make a determination on the matter at the meeting, or could elect to defer their decision until a later date.

Dated this 12th day of January, 1993.

On behalf of the Commission

Fred Hansen, Director

Department of Environmental Quality

State of Oregon Department of Environmental Quality

Memorandum[†]

Date: January 12, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item C-2, January 29, 1993, EQC Meeting

Pulp Mill Contested Case: Petition for Withdrawal of Order Granting

Reconsideration

By letter dated December 2, 1992, John Bonine, Western Environmental Law Clinic, filed with the Commission, on behalf of the Northwest Coalition for Alternatives to Pesticides and Columbia River United, a **Petition for Withdrawal of Reconsideration**. Mr. Bonine asked for consideration of his petition at the December 11, 1992 Commission meeting. By letter dated December 8, 1992, Mr. Bonine was advised that his petition would not be considered at the December 11 meeting, and that it had been referred to legal counsel for advice on statutory requirements governing consideration.

Counsel has advised that there are no prescribed procedures or timelines for acting on the **Petition for Withdrawal of Reconsideration**. The Commission is not required to hear argument on the petition, but may elect to do so.

Notice has been provided to all parties in the Pulp Mill Contested Case that the Commission will consider the **Petition for Withdrawal of Reconsideration** at the January 29, 1993 regular EQC meeting. This notice advised that the Commission would not receive oral testimony at the meeting and that any written argument should be received by each Commission member and the parties by no later than 5:00 p.m. on Thursday, January 21, 1993.

The Department is not aware of any information that would lead to a conclusion that the reasons for granting the reconsideration have changed.

Recommendation for Commission Action

It is recommended that the Commission deny the **Petition for Withdrawal of Reconsideration** and authorize the Director to execute an Order of Denial on behalf of the Commission.

[†]A large print copy of this report is available upon request.

Memo To: Environmental Quality Commission Agenda Item C-2 January 29, 1993 Meeting Page 2

Attachments

- A. Petition for Withdrawal of Reconsideration
- B. Notice to the Parties

Reference Documents (available upon request)

- 1. April 16, 1992 Findings of Fact and Conclusions of Law and Final Order
- 2. August 10, 1992 Order Granting Petitions for Reconsideration

Report Prepared By: Harold Sawyer

Phone: 229-5776

Date Prepared: January 12, 1993

HLS:1 C2012993.c



Western Environmental Law Clinic

Law Center · University of Oregon · Eugene, Oregon 97403 · 503-346-3823 · FAX: 503-346-3985

Michael D. Axline John E. Bonine Attorneys Kathryn Cannon Office Manager

December 2, 1992

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
DEC 04 1932

OFFICE OF THE DIRECTOR

William W. Wessinger, Chair Oregon Environmental Quality Commission 121 S.W. Salmon, Suite 1100 Portland, Oregon 97204

Dear Mr. Wessigner:

Enclosed please find Northwest Coalition for Alternatives to Pesticides and Columbia River United PETITION FOR WITHDRAWAL OF RECONSIDERATION with attachments. Also enclosed is a copy of Columbia River United Notice To File A Citizen Suit Against the Administrator of the United States Environmental Protection Agency. We hope that this matter can be discussed at the next Environmental Quality Commission meeting on December 11, 1992.

Thank you for your assistance in advance. If we can provide any further information or assistance please contact us.

Sincerely,

John Bonine

cc:

Transition Committee of the President-Elect Governor Barbara Roberts State Senator Dick Springer United States Senator Albert Gore Fred Hansen, Director of DEQ

enclosure

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF THE STATE OF OREGON

In the Matter of the)
NPDES Waste Discharge)
Permit No. 3754-J) .
James River II, Inc.,) NCAP/CRU's PETITION
Wauna Mill, and the NPDES Waste) FOR WITHDRAWAL OF
Discharge Permit No. 100715,) RECONSIDERATION
City of St. Helens)

The Northwest Coalition for Alternatives to Pesticides and Columbia River
United (NCAP/CRU) petition the Environmental Quality Commission (the
"Commission") to withdraw its August 10, 1992, order reconsidering its final order of
April 16, 1992.¹ We do so for three reasons: (1) The delay and uncertainty caused by
the period of "reconsideration" on the AOX limit is allowing the mills to frustrate
Oregon's duty to control the discharge of TCDD (dioxin) into this state's waters, due to
litigative maneuvering by the mills. (2) Reconsideration furthermore subverts the
purposes and requirements of the Clean Water Act (CWA) regarding "individual control
strategies" and will necessitate actions to stimulate EPA to intervene. (3) Finally, the
process of reconsideration requested by the mills is based on obtaining evidence that will

NCAP/CRU PETITION FOR WITHDRAWAL OF RECONSIDERATION - PAGE 1

This final order modified NPDES permits held by James River II, Inc., Boise Cascade Corp. ("the mills"), so as to contain limits on the discharge of organochlorine compounds of 1.5 kg of Adsorbable Organic Halides (AOX)/air dried metric ton of pulp produced (tp), effective November 15, 1995, and limits on the discharge of tetrachlorodibenzo-p-dioxin (TCDD) to achieve a water quality standard of 0.013 ppq, effective November 15, 1993. In early June, 1992, the mills petitioned the Commission to reconsider the AOX limit. On August 10, 1992, the Commission granted the mill's petition for reconsideration. The City of St. Helen's permit was also modified, however, the City of St. Helen's did not file a timely petition for reconsideration and therefore should not be part of these proceedings.

not be legally relevant under the statutory duties for "best available technology" for AOX.

Limits on both dioxin and organochlorines generally should have been in place by 1989 or 1990. The procedural actions by the mills are now pushing both the dates of final requirements and the dates of eventual compliance indefinitely into the future. The Commission has the authority to resolve the new aura of confusion.

I. RECONSIDERATION SHOULD BE TERMINATED TO STOP THE MILLS' PLAN TO FRUSTRATE REQUIRED CONTROLS ON TCDD

Reconsideration is allowing the mills to frustrate the process of protecting and restoring Oregon's waters. When the mills first approached the Commission and DEQ after the order of April 1992 they talked only of AOX. When this Commission granted reconsideration in August, it did so with an understanding that it might be changing the AOX limit.

In the Oregon State Court of Appeals, however, the mills are arguing that their petitions for AOX reconsideration and the Commission's August order mean that the TCDD limit is not final until after AOX reconsideration is completed sometime late next year.² In essence, the mills are taking advantage of reconsideration of the AOX limit in late 1993 to try to delay judicial review of the TCDD limit until 1994! This was not what they told the EQC they would do when they first asked for AOX relief, and surely it is not what the EQC intended.

See Appendix A (mills' motions for summary determination of reviewability in their cases before the State of Oregon Court of Appeals for judicial review of the TCDD limit).

II. RECONSIDERATION SHOULD BE TERMINATED TO AVOID A CITIZEN'S SUIT AGAINST THE EPA TO IMPOSE STRICTER CONTROLS

If, as the mills assert, reconsideration of the AOX limit suspends the *entire* April 1992 final order, including the TCDD limit, then Oregon has violated the Clean Water Act.

Oregon is legally required to adopt Individual Control Strategies (ICSs) for the discharge of TCDD from the mills. See CWA § 304(l)(1)(D).³ Oregon's failure to meet this duty requires EPA to assume Oregon's responsibility and to promulgate its own strategies and limits. See CWA § 304(l)(3).⁴ EPA has not done so because of a good faith reliance on Oregon's various promises to solve its own pollution problems. That reliance is now imperiled by the mills' litigation maneuvers and the status of inaction on the part of the State of Oregon.

CRU includes a copy of a notice of citizen suit seeking to cause EPA to assume Oregon's responsibility. See Appendix B. We will be arguing both legally and as a policy matter that the limits on TCDD that EPA, under new leadership starting in 1993, should adopt for the mills should include limits on other organochlorines that include dioxins and furans that are toxicologically equivalent to TCDD. Such new limits would consequently be stricter than the limits this Commission adopted in its final order.

³ Section 304(I)(1)(D) requires States to adopt ICSs, by February 4, 1989, for the discharge of toxic pollutants into waters which do not meet water quality standards. The Lower Columbia River does not meet the water quality standards for TCDD.

Section 304(l)(3) requires EPA, by June 4, 1990, to adopt ICSs for States which fail to carry out their duties under section 304(l)(1)(D).

III. RECONSIDERATION SHOULD BE WITHDRAWN BECAUSE THE MILLS DO NOT OFFER LEGALLY RELEVANT EVIDENCE

The mills do not plan to offer evidence that is legally relevant to the validity of the AOX limit.

The AOX limit is based on the Best Available Technology (BAT) standard. To formulate a limit based on the BAT standard, an agency must first determine what economically achievable technology obtains the greatest reduction of pollution discharge. This has already been determined to be oxygen delignification. Second, it must determine what level of pollutants are discharged by plants using this technology. The Commission decided this was 1.5 kg AOX/tp.⁵

Therefore, the only *legally* relevant evidence that could cause reconsideration is that which shows (1) that some other technology does *better* than oxygen delignification, (2) that oxygen delignification *cannot* achieve a discharge level as good as 1.5 kg AOX/tp, or (3) that oxygen delignification is too expensive to be BAT. The mills cannot achieve relief from limits calculated on the basis of the effectiveness of oxygen delignification by talking and offering evidence only on a different, weaker technology.

But the mills have not petitioned for reconsideration of the AOX limit on any of the bases involving oxygen delignification. (1) The mills offer to present to the Commission the level of AOX the mills will discharge after installing chlorine dioxide

See 40 CFR 125.3. The Oregon Department of Environmental Quality determined, and this Commission affirmed, that oxygen delignification is BAT for the mills' discharge of AOX, and that mills using this technology discharge 1.5 kg AOX/tp. Final Order at 18 (April 16, 1992). Although the limit is based on a specific technology, the polluter may achieve the limit by any means available.

substitution.⁶ Their aim of weakening the AOX limit is an acknowledgment that chlorine dioxide substitution does not do better than oxygen delignification. (If it did, this Commission would have to tighten the limit to reflect the lower discharges achieved by chlorine dioxide substitution.) If, by using chlorine dioxide substitution, the faills do not achieve the 1.5 kg AOX/tp, then such evidence is irrelevant because it does not show that chlorine dioxide substitution does better than oxygen delignification. (2) Nor does any evidence planned to be submitted by the mills show that plants using oxygen delignification discharge more than 1.5 kg AOX/tp. Such evidence would indeed be relevant — but the mills have no such evidence, because it does not exist. Oxygen delignification can do far better than 1.5 AOX. Indeed, it can achieve 0.2 to 0.3 AOX according to numerous documents. (3) The mills also have not submitted one piece of evidence that oxygen delignification is economically unachievable. While the mills may expect to bring in such arguments through the back door, in non-record allusions, the Commission's actions must be based on record evidence. If such evidence was formally admitted, it would certainly require a formal contested case proceeding presided by a newly designated hearing officer.

There is indeed evidence relevant to the validity of the AOX limit, but not that which the mills would like this Commission to hear. If reconsideration is not withdrawn, NCAP/CRU will show — both to the new leaders of EPA and in any relevant judicial

Reconsideration is being delayed until sometime between July 1, 1993, and November 30, 1993. "The Commission delayed the date for . . . reconsideration to allow time for the mills to complete equipment installations . . . [and] to secure . . . data on AOX performance levels that can be achieved with chlorine dioxide substitution." Letter dated 8/18/92 from William Wessinger, Chair, Oregon Environmental Quality Commission, to James River, Inc., and Boise Cascade, Corp.

and administrative forums, that new and significant information is available that chlorine-free bleaching is economically achievable. Such technology is BAT. More and more mills in the United States, and others in Canada and Europe, are switching to chlorine-free technology and discharging no AOX. We invite the Commission's particular attention to the brief reports in Appendix C. The AOX limit in the mills' NPDES permits should be zero. And we must be granted the opportunity, here or in other forums, to show this level of BAT.

IV. CONCLUSION

This Commission should withdraw reconsideration to comply with the CWA, clear up the confusion and uncertainty that the mills have caused, ensure the finality of the TCDD and AOX limits, and obviate the need for moving to alternative forums. This Commission should also withdraw reconsideration because the mills have no relevant evidence to offer. Withdrawing reconsideration will allow everyone to move forward to the goal of making the Columbia River safer, cleaner, and healthier for all.

cc: Governor Barbara Roberts

EPA Region IX

Transition Team of the President Elect
Senator Dick Springer
Senator Albert Gore

CERTIFICATE OF SERVICE

The undersigned hereby certifies that he is an intern of the Western Environmental Law Clinic and is a person of such age and discretion as to be competent to serve papers.

That on December 2, 1992, he served NCAP/CRU'S PETITION FOR WITHDRAWAL OF RECONSIDERATION to:

William W. Wessinger, Chair Oregon EQC 121 S.W. Salmon, Suite 1100 Portland, OR 97204

Emery N. Castle, Vice Chair Oregon EQC Oregon State University 307 Ballard Hall Corvallis, OR 97331

Carol W. Whipple, Member Oregon EQC 21755 Highway 138 West Elkton, OR 97436

Henry Lorenzon, Member Oregon EQC Corey, Buler, Rew, et al. P.O. Box 218 Pendleton, OR 97801

Linda McMahan, Member Oregon EQC Berry Botanic Garden 11505 S.W. Summerville Avenue Portland, OR 97219

Fred Hansen, Director Oregon DEQ 811 S.W. Sixth Ave., 6th Floor

The Honorable Arno H. Denecke 3890 Dakota Road S.E. Salem, OR 97302

John W. Gould Richard H. Williams Lane Powell Spears Lubersky 520 S.W. Yamhill Street, #800 Portland, OR 97204

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Peter M. Linden City Attorney City of St. Helens P.O. Box 278 St. Helens, OR 97051

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Linda Williams 1744 N.E. Clackamas Street Portland, OR 97232

Michael Campbell Stoel, Rives, et al. 900 S.W. 5th Ave., #2300 Portland, OR 97204

Richard Baxendale 506 National Building 1008 Western Ave. Seattle, WA 98104

Brian J. King Boise Cascade Corporation One Jefferson Square P.O. Box 50 Boise //Idaho 83728

Curtis Fisher

Attachments to this petition are available from DEQ upon request.

Before the Environmental Quality Commission of the State of Oregon

In the Matter of National Pollutant)
Discharge Elimination System Waste)
Discharge Permit No. 100715 issued to)
the City of St. Helens on November 14,) NOTICE OF CONSIDERATION
1990,	of
and) PETITION FOR WITHDRAWAL) OF RECONSIDERATION
National Pollutant Discharge Elimination)
System Waste Discharge Permit No.)
100716, issued to James River II, Inc.)
on November 14, 1990.)

Notice

- 1. On January 29, 1993, the Environmental Quality Commission, during the course of its regularly scheduled meeting, will consider a **Petition for Withdrawal of Reconsideration** filed by letter dated December 2, 1992 on behalf of Northwest Coalition for Alternatives to Pesticides and Columbia River United.
- 2. The Commission meeting is scheduled to begin at 8:30 a.m. on January 29, 1993. This item is scheduled as the third item on the meeting agenda. Therefore, any parties in the proceeding wishing to be present when the Commission considers this matter should be present when the meeting begins.
- 3. The Commission will not receive oral testimony on this issue at the meeting. Written comments may be considered if they are received by each Commission member and the parties by no later than 5:00 p.m. on Thursday, January 21, 1993.
- 4. As part of its deliberations, the Commission may ask the Department or other parties to respond to questions. The Commission may make a determination on this matter at the meeting, or could elect to defer a decision until a later date.

Dated this 12th day of January, 1993.

On behalf of the Commission

Fred Hansen, Director

Department of Environmental Quality

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF THE STATE OF OREGON

In the Matter of)	
Columbia River United's)	NOTICE OF CONSIDERATION
Petition for Rulemaking)	

- 1. On January 21, 1993, Columbia River United filed a petition for rulemaking with the Environmental Quality Commission. The petition seeks adoption of a rule which would require every pulp mill to (1) meet a monthly average discharge limit of 1.5 kg AOX/ADMT of pulp produced as soon as feasible but no later than June 1, 1993, and (2) eliminate the discharge of organochlorines as soon as feasible but not later than January 31, 1996 through the use of totally chlorine-free technology.
- 2. The Environmental Quality Commission will consider the petition at its next regularly scheduled meeting on January 29, 1993. Persons wishing to be present when the matter is considered should be there when the meeting begins at 8:30 a.m. The meeting will be held in Conference Room 3a at the Department of Environmental Quality offices at 811 S. W. 6th Avenue in Portland, Oregon.
- 3. Consideration will be pursuant to the Attorney General's Uniform Rule OAR 137-01-070 regarding a Petition to Promulgate a Rule. This rule requires the Commission to either deny the petition or initiate rulemaking within 30 days of receipt of the petition.
- 4. Oral presentations will not be received.

DATED this 22 day of January, 1993.

On behalf of the Commission

Fred Hansen, Director

Department of Environmental Quality

Certificate of Mailing

I certify that I mailed the attached NOTICE OF CONSIDERATION to each of the following persons on January 22, 1993:

William W. Wessinger, Chair Environmental Quality Commission 121 S. W. Salmon, Suite 1100 Portland, OR 97204

Emery N, Castle, Vice Chair Environmental Quality Commission Oregon State University 307 Ballard Hall Corvallis, OR 97331

Henry Lorenzen, Member Environmental Quality Commission Corey, Byler, Rew, Lorenzen, & Hojem P.O. Box 218 Pendleton, OR 97801

Carol A. Whipple, Member Environmental Quality Commission 21755 Hwy. 138 West Elkton, OR 97436

Linda R. McMahan, Member Environmental Quality Commission The Berry Botanic Garden 11505 S. W. Summerville Avenue Portland, OR 97219

Mr. Michael D. McIntyre Associate General Counsel Boise Cascade Corporation One Jefferson Square P.O. Box 50 Boise, Idaho 83728-0001' Michael R. Campbell Stoel Rives Boley Jones & Grey 900 S. W. Fifth Avenue, # 2300 Portland, Oregon 97204

The Honorable Arno H. Denecke 3890 Dakota Road, S. E. Salem, Oregon 97032

Larry Edelman Assistant Attorney General Oregon Department of Justice 1515 S. W. Fifth Avenue, Suite 410 Portland, Oregon 97201

John W. Gould Richard H. Williams Lane Powell Spears Lubersky 520 S. W. Yamhill Street, Suite 800 Portland, Oregon 97204

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Linda Williams 1744 N. E. Clackamas Street Portland, Oregon 97232

John Bonine Curtis Fisher Western Environmental Law Clinic Law Center University of Oregon Eugene, Oregon 97403

William C. Carpenter Sorenson Law Office Lane Building Suite 303 P.O. Box 10836 Eugene, Oregon 97440 Columbia River Inter-Tribal Fish Commission 975 S. E. Sandy Blvd. Suite 202 Portland, Oregon 97214

Oregon Trout 6261 S. W. 47th Place Portland, Oregon 97721

Oregon Salmon Commission 13 S. W. 2nd Street, Suite C P.O. Box 1033 Newport, Oregon 97365

Oregon Rivers Council P.O. Box 309 Eugene, Oregon 97440

Harold L. Sawyer

Inter/Intra Program Coordinator

Department of Environmental Quality

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF THE STATE OF OREGON

In the Matter of Columbia River United's Petition for Rulemaking Before the Oregon Environmental Quality Commission

PETITION FOR RULEMAKING

January 19, 1993

This Petition Is
Printed on
CHLORINE-FREE
Bleached Paper

JAN 21 KAS

- 1. Pursuant to ORS 183.390 and the Attorney General's Uniform and Model Rule 137-01-070, Columbia River United ("CRU"), P.O. Box 667 Bingen, Washington 98605, petitions the Oregon Environmental Quality Commission ("Commission") to adopt a new rule as authorized by ORS 468.020(1). The proposed rule will prohibit the discharge of organochlorines by Oregon pulp mills as soon as feasible but no later than January 31, 1996. The text of the proposed rule is set out at the end of this petition.
- 2. New and significant information is available that totally chlorine-free technology is in use in this country and other nations. Pursuant to OAR 137-01-070, CRU submits the following reasons for the adoption of the rule:
- A. Pulp & Paper International reports that <u>as of March</u> 1992, at least eight mills were producing softwood kraft pulp totally chlorine-free. The trade journal stated:

Chlorine-bleached pulp is in fact carrying a penalty in some markets which will encourage an even faster shift in the future into new bleaching techniques by pulp producers.

See Appendix A. Further, at least ten other mills are actively considering adding chlorine-free technology to their operations.

B. In September 1992, Louisiana Pacific Corporation voluntarily decided to <u>eliminate all chlorine</u> uses in its Samoa, California kraft pulp bleaching plant. Louisiana Pacific decided:

that it made more economic sense to simply not use chlorine, since without it the biological wastes in the

water could be incinerated along with other products from the process.

See Appendix B.

- C. One month following the Louisiana Pacific decision, the Union Camp Corporation began operation of a chlorine-free pulp mill in Franklin, Va. "Union Camp's new process doesn't compromise the brightness or strength of its paper ... While the initial capital costs are somewhat higher than constructing a traditional bleach plant, operating costs are substantially lower." See Appendix C.
- 3. The Clean Water Act requires that permit limitations be based on "the best available technology economically achievable" (BAT). Section 301(b)(2)(F). CRU provides new and significant information that BAT is totally chlorine-free for kraft bleach pulp mills. Therefore, the Commission must adopt this rule to comply with the Clean Water Act and to protect the integrity of Oregon's waters and human health.
- 4. The proposed rule provides:

Every pulp mill shall:

- (a) Meet a monthly average discharge limit of 1.5 kg AOX/ADMT² of pulp produced as soon as feasible but no later than June 1, 1993; and
- (b) Eliminate the discharge of organochlorines as soon as feasible but not later than January 31, 1996 through the use of totally chlorine-free technology.
- 5. The following parties will likely take interest in this proposed rule:

Boise Cascade Corporation c/o Michael R. Campbell Stoel, Rives, Boley, et al 900 S.W. Fifth Avenue, Suite 2300 Portland, Oregon 97204

Tanners' Council of America, Inc v. Train, 540 F.2d 1188, 1195 (4th Cir. 1976) (EPA "may look to the best performer in the industry and even assess technologies that have not been applied as long as the record demonstrates that there is a reasonable basis to believe that the technology will be available..."). N.R.D.C v. E.P.A., 822 F.2d 104, 115 (D.C. Cir 1987) (following the holding in Tanners' Council of America).

A limit on the discharge of organochlorine compounds in units of kilograms of adsorbable organic halogens (AOX) per air dried metric tons (ADMT) of pulp produced.

James River II, Inc. c/o John Wiley Gould Lane, Powell, Spears & Lubersky 520 S.W. Yamhill Street, Suite 800 Portland, Oregon 97204-1383

Pope & Talbot Corporation c/o Jay T. Waldron Schwabe, Williamson & Wyatt 1211 S.W. Fifth Avenue Portland, Oregon 97204

Columbia River Inter-Tribal Fish Commission 975 S.E. Sandy Blvd. Suite 202 Portland, Oregon 97214

Oregon Trout 6261 S.W. 47th Place Portland, Oregon 97721

Oregon Salmon Commission 13 S.W. 2nd Street, Suite C P.O. Box 1033 Newport, Oregon 97365

Oregon Rivers Council P.O. Box 309 Eugene, Oregon 97440

and other groups concerned with fish, wildlife, human health and the environment.

Respectfully submitted,

CURTIS FISHER

Legal Intern for Columbia River United

Dated this 19th day of January, 1993.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that he is an intern of the Western Environmental Law Clinic and is a person of such age and discretion as to be competent to serve papers.

That on January 19, 1993, he served CRU'S PETITION FOR RULEMAKING to:

William W. Wessinger Chair, Oregon EQC 121 S.W. Salmon, #1100 Portland, OR 97204

Emery N. Castle Vice Chair Oregon EQC Oregon State University 307 Ballard Hall Corvallis, OR 97331

Carol W. Whipple Member, Oregon EQC 21755 Highway 138 West Elkton, OR 97436

Henry Lorenzen Member, Oregon EQC Corey, Byler, et al. P.O. Box 218 Pendleton, OR 97801

Linda McMahan Member, Oregon EQC The Berry Botanic Garden 11505 S.W. Summerville Portland, OR 97219

Fred Hansen, Director Oregon DEQ 811 S.W. Sixth Av., 6 Fl. Portland, OR 97204 Hon. Arno H. Denecke 3890 Dakota Road S.E. Salem, OR 97302

John W. Gould Lane, Powell, et al. 520 S.W. Yamhill #800 Portland, OR 97204

Larry Edelman Asst. Attorney General Oregon Dept. of Justice 1515 S.W. Fifth, #410 Portland, OR 97201

Michael Huston Asst. Attorney General Oregon Dept. of Justice 1515 S.W. Fifth, #410 Portland, OR 97201

Peter M. Linden City Attorney City of St. Helens P.O. Box 278 St. Helens, OR 97051

Jay T. Waldron Schwabe, Williamson 1211 S.W. Fifth Avenue Portland, OR 97204 Michael Campbell Stoel, Rives, et al. 900 S.W. 5th, #2300 Portland, OR 97204

Richard Baxendale 1008 Western Av., #507 Seattle, WA 98104

Brian J. King Boise Cascade Corp. One Jefferson Square P.O. Box 50 Boise, Idaho 83728

Columbia River Inter-Tribal Fish Commission 975 S.E. Sandy, #202 Portland, OR 97214

Oregon Trout 6261 SW 47th Place Portland, OR 97721

Oregon Rivers Council P.O. Box 309 Eugene, OR 97440

CURTIS FISHER

APPENDIX A

Market pulp producers are moving fast to supply pulps bleached without chlorine compounds. John Pearson reports on which companies make these grades, where and in what quantities.

More tonnage set to reach the markets

IGH-VOLUME, capital-intensive industries like pulp and paper are not known for their rapid responses to market demand. Yet the market pulp industry in 1992 is reacting fast to the new demand for chlorine-free pulps.

To find out how fast the development is taking place, PPI has conducted a survey of who makes chlorine-free pulps for the market, where and in what quantities. We telefaxed the companies listed in PPI's Market Pulp Survey for details of their capabilities. Before presenting the results, it is worth explaining the nomenclature used here:

• Totally-chlorine-free, or TCF, pulp is bleached without the use of any chlorine compounds whatsoever.

• Elementally-chlorine-free, or ECF, pulp is bleached without the use of elemental chlorine - Cl₂. But often other chlorine compounds, most noticeably chlorine dioxide, are used in the bleachery.

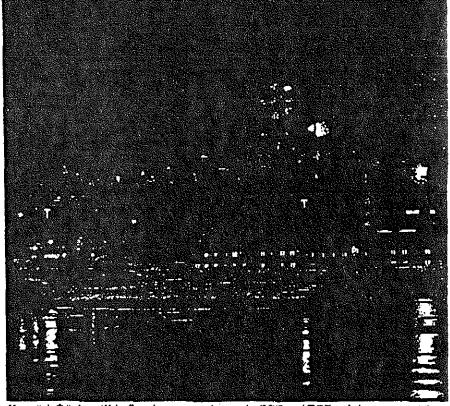
What is the driving force?

The environmental movement in Europe is at the roct of the chlorine-free pulp business. Particularly in Germany, environmentalists have claimed that chlorine compounds formed in the bleachery and expelled with the mill effluent could be harmful to human health. Although there is no evidence to substantiate this viewpoint, the industry has found itself on the defensive, and paper producers riding the environmental tide have consequently been seeking suppliers of chlorine-free market pulp grades.

The issue came to a head when the environmental group Greenpeace published a fake edition of the news magazine Der Spiegel, called Das Plagiat, on lightweight-coated paper made from chlorine-free pulps.

Price effect gives impetus

A price premium opening up for TCF market pulp has stimulated more pulp producers to invest in low- or zero-chlorine. During late-February, ECF



Kornäs' Gävle mill in Sweden was a pioneer in ECF and TCF pulping.

Company and mill name	Location :	Type of pulp made	ECF Bleeching process	Market ca: (tons/yr)
Cascades Port Cartier	Port Cartier, Que, Canada	CTMP	Peroxide	200,000
Durango	Durango, Mexico	CTMP	Peroxide	70,000
Fibreco	Taylor, BC, Canada	CTMP	Peroxide	180,000
Louisiana-Pacific	Chelwynd, BC, Canada	CTMP	Peroxide	175,000
Metsä-Seria	Lielahti, Finland	CTMP	Peroxide	100,000
Millar Western	Whitecourt, AL, Canada	Sftwd + aspen CTMI		475,000
	Meadow Lake, Sask, Can.	Sitwd + aspen CTMF		(total 2 mills)
Norské Skog	Folia, Norway	CTMP	Peroxide	85,000
Quesnel River Pulp	Quesnel, BC, Canada	CTMP	Peroxide	150,000
Rottneros Rockhammar	Frovi. Sweden	CTMP	Peroxide	55,000
Pottneros	Rottneros, Sweden	CTMP	Peroxide	90,000
Slave Lake Pulo Corp.	Slave Lake, AL, Canada	Aspen CTMP	Peroxide	110,000
Stone-Consolidated	Bathurst, NB, Canada	CTMP	Peroxide	90,000
Stora Cell	Skochall, Sweden	CTMP	Peroxide	65,000
Temcell	Temiscaning, Que, Canada	CTMP	Peroxide	220,000
Vaggeryd Cell	Vaggeryd, Sweden	CTMP	Peroxide	75,000
Winstone Pulp	Ohakune, New Zealand	CTMP	Peroxide	120,000

pulp was selling for around \$20/ton CIF more than pulp bleached with chloring gas, at \$540/ton. Observers comment that from being a premium for the ECF grade, this price is now becoming the

norm. Chlorine-bleached pulp is in factorying a penalty in some marks which will encourage an even fast shift in the future into new bleachitechniques by pulp makers.

Company and	DUCING TOTALLY-CHLO	Type of pulp made		ready in operation (or startup date)	Market cepacity (tons/yr)
Aepa Bruk	Aspa Bruk, Sweden	Stiwd kraft	•	Yes	115,000
Atholville Pulp	Athoville, NB, Canada	Sulfite	Oxygen + peroxide	Yes	120,000
Bonegaard Industries	Sarpsborg, Norway	Sitwd sulfite (dissolving + paper grade)	Oxygen + peroxide	Yes	160,000
O-INI	Figueira da Foz, Portugal	Eucalyptus kraft		1993-94	Note
Celbi Cellulose Attisholz	Luterbach, Switzerland	Sitwd sulfite	EOP. EÒP-P. EOP-P-P	Yes	49,000
CANDIORA WIRRIDG	Chighten's Authoriting	Hdwd sulfite	EOP. EOP-P. EOP-P-P	Yes	23,000
Ence	Pontevedra, Spain	Eucalyptus kraft	4	Yes	170,000
Holmens Bruk	Wargons Bruk, Sweden	Sullite	Peroxide	Yes	15,000
Holtzmann Papier	Maxau, Germany	Sulfite	Peroxide	Yes	40,000
Howe Sound	Howe Sound, BC, Canada	Sftwd		Mid 1992	Note
Koranās	Gävis, Sweden	Kraft fluff pulp	Oxygen + peroxide	Yes	Note
Metsä-Botnia	Kaskinen, Finland	Sftwd + hdwd kraft	MCC cook-O-P-enzyme ble		Note
INDUC DANKS	Kerni, Finland	Sitwd + howd kraft	MCC cook-O-P-enzyme ble		100,000
Metsä-Seltu	Äänekoski, Finland	Sitwd + hdwd krait	•	1993	
MoDo Paper	Domsjö, Sweden	Sulfite	Oxygen + peroxide	Yes	240,000
Nob	Vallvik, Sweden	Sttwd kraft	Oxygen + peroxide	1992-93	Note
Norske Skog	Tofte, Norway	Sftwd + eucalyptus kraft	Oxygen + peroxide (Lignox		385,000
SCA Wifeta-Östrand	Timrå, Sweden	Hdwd + sftwd kraft	Oxygen + peroxide (Lignox		Note
Schwäbische Zellstoff	Ehingen, Germany	Hdwd sulfite	Oxygen + peroxide (EOP-F	Yes	40,000
Södra Cell	Mörrums Bruk, Sweden	Sitwd + Hdwd kraft	Oxygen + peroxide	Yes	1,080,000
	Mönsterås, Sweden	,			(total a
	Värö Bruk, Sweden				three mills
Stora Cell	Skutskär, Sweden	Kraft fluff pulp	Q-Eop	Yes	330,000
	Nonsundets Bruks, Sweden	Sltwd kraft	O-Eop	Yes	275,000
Stora Forest Ind.	Pt Hawkesbury, NS, Canada	Sulfite	Peroxide (XP)	Yes	Note
Stora Papyrus	Nymölia, Sweden	Sftwd + hdwd suffite	Oxygen + peroxide	Yes	40,000
Sunila	Sunita, Finland	Sitwo kraft	Oxygen + enzymes + pero	xide Yes	100,000

MARKET PULP COMPANIES STUDYING OR CONDUCTING TRIALS WITH TCF PULP GRADES

Argentina Alto Parana Espirito Santo, Brazil Aracruz Celulose Arauco y Constitución Arauco + Constitución, Chile Harmac Div., BC, Canada MacMillan-Blocdel Malette Kraft Pulp Smooth Rock Falls, Ont., Canada Miramichi Pulp & Paper Newcastle, NB, Canada MoDo Paper Husum, Sweden Soporcel Lavos, Portugal Suzano Suzano, Brazil Oulu, Finland Veltsiluoto

Your invitation to join the list

Obtaining information for a survey such as this is not easy, and, despite our best endeavors, there may be some mills which are unintentionally omitted.

PPI therefore extends an invitation to any pulp producer making elementally-chlorine-free (ECF) and totally-chlorine-free (TCF) grades but not listed here to get in contact with us. We shall make sure that your mill is brought to the attention of PPI readers in future editions. This survey will also be updated on an annual basis in PPI's March edition.

Kraft producers face the cost

While TCF processes using peroxide and oxygen extraction for sulfite pulps have been available for several years, kraft pulp producers have had to rethink their processes, first substituting chlorine dioxide for chlorine in ECF bleaching, and then investing in TCF processes.

The latter include peroxide bleaching in acid and basic conditions, plus multiple-stage oxygen and enzyme bleaching processes. In the near future, new processes involving ozone bleaching will probably join the list.

In all cases, the pulp producers face investment costs and often higher operating costs than for pulps bleached in the traditional way. This extra cost will eventually result in a permanent price differential for

and the second section of the second

ECF and TCF pulps on the markets. It will also, in the longer term, result in higher prices for paper. The ultimate end-user's environmental credentials will then be put to the test. Most pulp producers are biding their time to see how the markets develop. At present, it is mainly the Nordic nations with their strong record of environmental innovation who are forging ahead with the new processes.

Brightness is the problem

Achieving normal levels of brightness (90% ISO) is not yet possible with TCF processes, particularly on softwood pulps. (However, PPI believes that one major pulp producer is on the point of announcing a breakthrough in this field.)

Typically, TCF softwood pulps are

being made at around 80% ISO brightness, with hardwood pulps at 85%. Again, the end-consumer of paper products is likely to have to accept lower brightness as the price of environmental friendliness.

Don't forget the mechanicals

an and the state of the state o

It is important in discussing chlorinefree pulps to remember that mechanical market pulps are peroxide bleached. For good measure, PPI has therefore also included a list of the world's market chemithermomechanical pulp (CTMP) suppliers, plus some market stone groundwood producers.

The increasing availability of these pulps often at relatively high brightnesses of 80% ISO, could be extremely important, especially in "woodfree" office papers.

ompany and nama	Location	1100 Or Park theory	ECF bleaching A process	dready in operation (or startup date)	capac (tons/
* .	**	Howd kraft		Yes	210,00
	Alizay, France	Sitwd kraft	O-D-Eo-D-E-D	Yes	400,0
	Claiborne, AL, USA	Cittle (8 or)	D-E-D	Yes	40.0
	Argentina &:	Olfun iam.	O-D-Eo-D-E-D	Yes	·· No
aoruz Celulose	Espirito Santo, Brazil	Casal bas man		Yes	160,0
pregaard Industries	Sarpsborg, Norway	Office Action	H-P-D Kenney		100,0
		fologodithis a babon sinaat			040.0
anadian Pacific FP	Gold River, BC, Canada		D-Eop-D	Yes	240,0
	Dryden, Ont., Canada		DW-Eo-D-E-D	Yes -	100,00
	Thunder Bay, Ont., Canada	Sitwd + hdwd kraft	DW-Eo-D-E-D, D-Eo-D-E-	D Yes	200,0
	La Tuque, Que., Canada	Sttwd kraft	D-E-D	Yes	150,0
adhaa Duba 8 Dance	Quesnel, BC, Canada		• •	Yes Yes	240,0
ariboo Pulp & Paper	St. Gaudens, France	sflwd, howd kraft	• 14	Yes	320,0
DRA	St. Gaudens, France	Eucalyptus kraft	D-Eop-D-Ep-D	Yes	No
elbi	Figueira da Foz, Portugal	Sftwd kraft	D-EoPD-E-D	Yes	22,0
elgar Pulp	Castlegar, BC, Canada	- ·	0-2090-2-0	Yes	180,0
elulosas de Asturias	Armental, Spain	Howd kraft	COD D E- D E D EOD		52,0
ellulose Attisholz	Luterbach, Switzerland	Sitwd sulfite	EOP-D-Eo-D-E-D or EOP-	D-P Yes	12,0
	•	Hdwd sulfite	EOP-D-EO-D-E-D or EOP-		13,0
ell, du Pin Tartas	Tartas, France	Sttwd sulfate	* State of the sta	· · · Yes	140,0
elulosa rauco y Constitución	Arauco, Chile	Sftwd kraft	D-Eop-D-E-D	Yes	350,0
elulose do Calma	Constancia, Portugal	Suifite		Yes	120,0
OUIDER GO ORIGINA	Albergaria, Portugal	· · · · · · · · · · · · · · · · · · ·	•		(at two m
4400	narolyana, rytuyal	Sitwd + helwd kraft	D-Eop-D-E-D	Late 1992	240.0
MPC	Laia, Chile		_ = = = = = = = = = = = = = = = = = = =	Yes	360,0
enibra	Beto Oriente, Brazil	Eucalyptus kraft	O-D-Eo-D-D	Mill trials only	050,
aishowa Canada	Peace River, Alberta	Sitwd + howd kraft	0-0-60-0-0		175,0
nce	Pontevedra, Spain	Eucalyptus kraft	•	Yes	
nce	Huelva, Spain	Eucalyptus kraft	<u>-</u>	Yes	225,0
owe Sound	Howe Sound, BC, Canada	Sitwo kraft	D-EO-DN-D	Yes	N
gesund Paperboard	lggesund, Sweden	Sitwd kraft	O-D-Eop-D-D	Yes	60.0
2	lggesund, Sweden	Hdwd kraft	D-Eop-D-Eo-D	Yes	30,0
maa Rivar-Marathan	Marathon, Ont., Canada	Sftwd kraft	D-Eop-D-E-D	Yes	175,
aukas	Kaukas, Finland	Hdwd kraft	D-Eo-D-E>-D	Yes	50,
orenas	Gävie, Sweden	Kraft fluff pulp	D-Eo-D-D	Yes	120,
		Sulfite pulp	D-10-0-0	Yes	175,
eykam-Mürztaler	Gratkom, Austria		5 E. B E 5		1/5,
lacMillan-Bloedel	Harmac Div., BC, Canada	Kraft	D-Eo-D-E-D	Yes	365,
latette Kraft Pulo	Smooth Rock Falls, Canada	Sitwd kraft	D-Eo-D-En-D	Yes	120,
tetsä-Botnia	Kaskinen, Finland	Sitwd + hdwd kraft	D-Eop-D-E-D	Yes	420,
	Kemi, Finland	Sttwd + howd kraft	D-Eor-D-D	Yes	350,
letsä-Sellu	Åånekoski, Finland	Sftwd kraft	D-Eop-D-Eo-D	Yes	250,
	·	Howd kraft	D-Eop-D-Eo-D	Yes	200,
limedahi Dula & Dana	Newcastle, NB, Canada	Stiwd kraft		Yes	105.
loDo Paper	Husum, Sweden	Sitwo kraft		Yes	165.
•	Husum, Sweden	Howd kraft	O-D-E-D-E-D	Yes	
ldo			マーン・モーン・ヒーン		120.
	Valivik, Sweden	Sftwd kraft		Yes	200,
orske Skog	Tofte, Norway	Sitwo + eucalyptus kraft	O-D-Eo-P-D-D	Yes	385,
orthwood Pulp	Prince George, BC, Canada	Sitwd kraft	D-EOD-E-D	Yes	510,
ondercei	Chihuahua, Mexico	Sitwo kraft	D-Eop-D-P	Yes	170
ortucei	Cacia, Portugal	Eucalyptus kraft	D-Eo-D-E>-D	Yes	180.
ortucel	Setubal, Portugal	Eucalyptus kraft		Yes	360
alccor	South Africa	Sulfite dissolving pulp	D-Eo-D-H	1994	
CA Wifsta-Östrand	Timra, Sweden	Howd + stwd kraft	O-D-E-D-E-D		525.
cott Maritimes	New Glasgow, NS, Canada	80% sftwd/20% hdwd blend	D-Eo-D-E-D	Yes	320,
ödra Cell	Mörrums Bruk, Sweden			Yes	250,
ONIA OCH		Sftwd + hdwd kraft	D-Eor-D-E-D	Yes	950
	Mönsterås, Sweden	`, .			(tot
	Värð Bruk, Sweden		· · · · · · · · · · · · · · · · · · ·		three n
oporcel	Lavos, Portugal	Eucalyptus kraft	D-E0-D-E2-D	Yes	250.
tora Cell	Skutskar, Sweden	Kraft fluff pulp	O-D-Eop-D-Ep-D	Yes	130.
	Norrsundets Bruks, Sweden	Sftwd kraft	O-D-Eop-D-En-D	Yes	
•	Gruvon, Sweden	Sftwd kraft	O-D-Eop-D-Ep-D		275,
tora Forest Ind.	Pt Hawkesbury, NS, Canada		D-E-D-E-D	Yes	80,
tora Papyrus	Nymölla, Sweden	Sitwd + hawd suffite		Yes	Ŋ
tracel			O+P+E-D-O+P+E-D-ED		50,
unila	Strasbourg, France	Sulfite	*	Yes	140.
	Sunita, Finland	Sitwd kraft	O-M/D-E-P-D-E-D O-M/D-E-P-D	Yes	300,
eltsiluoto	Kemi, Finland	Sftwd + hdwd kraft	-	Dalaa iwata 1	4.0
	Kemijarvi, Finland		-	Being implemented	40,
	Oulu, Finland	Sftwd + hdwd kraft	- AAE- 655	Being implemented	210,
risatorest (Kymmene)	Jakahetad Ciniana	Sitwd + howd kraft	0-D-Eo-D-E-D	Yes	180,
	TOTAL CHICALO	Sttwd + howd kraft	•	Yes	140,

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APPENDIX B

45TH STORY of Level 1 printed in FULL format.

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King Communications Group, Inc.

Environment Week

September 17, 1992

SECTION: No. 36, Vol. 5; ISSN: 1041-8105

LENGTH: 994 words

HEADLINE: Louisiana Pacific Will Build Nation's First Bleach-Free Pulp Plant

BODY:

Louisiana Pacific Corp., in a precedent setting settlement with the Environmental Protection Agency and the Surfrider Foundation, agreed to eliminate all chlorine uses in its Kraft pulp bleaching plant at Samoa, California, making it the first chlorine-free pulp plant in the U.S. and the second in the world.

By 1995, the company plans to have on-line a combined oxygen dilignification, hydrogen peroxide and sodium bisulfite treatment to bleach pulp.

The action was immediately hailed by environmentalists as a key breakthrough in the effort to convert the U.S. paper industry to non-chlorine technologies. "The agreement is quite significant," said Keith Romig, environmental officer of the United Paperworkers International Union in Nashville, the major proponent of eliminating chlorine from paper plant operations to protect worker safety.

Currently, Romig says, the most aggressive action to back out chlorine in the U.S. is an ozone-based bleaching process now being installed at a Union Camp plant in isle of Wright, Virginia. While Union Camp will eliminate the use of elemental chlorine and therefore virtually all creation of dioxin as a by-product, its process still has a chlorine dioxide finishing stage to bring paper quality up to normal industry standards.

Louisiana Pacific immediately acknowledged that paper made from the "Absolutely Chlorine Free" (ACF) pulp will not have the high brightness and strength values needed for some commercial products. But the company hopes to develop "environmental" markets for ACF products, which are similar to the existing markets for recycled paper and plastics products.

LP notes there is already a movement among European publishers to use chlorine free paper. Earlier this year, Time Inc. responded to a Greenpeace letter writing campaign by pledging to use chlorine free paper for its magazines when the paper became commercially available. LP officials say they are seeking information about the Time pledge.

Greenpeace officials, however, say they now understand that Time has withdrawn its chlorine free pledge. In protest, the group plans to call for a cott of Time starting in early October (See related story).

Mark Floegel, head of the Greenpeace Pulp and Paper campaign, said his group welcomed the Louisiana Pacific move. "This kind of commitment gives a

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green light to the market and other producers," Floegel said. He added that he lieved several other paper companies were working on similar processes.

In a statement, Louisiana Pacific chairman Harry Merlo said: "We are about to produce a product, knowing full well that, at present, the market isn't there to support it. Our expectation is that in the interest of a cleaner environment consumers will accept paper products that are not quite as bright as they are accustomed to using."

Merlo added that the paper company hoped to "fine tune" its process so that the quality of its pulp "would not be far off" from chlorine bleached pulp.

Louisiana Pacific had already installed an oxygen-base delignification process at the 250,000 ton per year plant in 1989, which removes about 50 percent of the colored light from the pulp without use of chlorine. Similar systems have been installed at six other U.S. plants. It also began experiments with a chlorine-free second stage, but continued to use its existing chlorine-based process for its commercial pulp production.

Also in 1989, however, the Louisiana Pacific plant was hit with a lawsuit, filed in U.S. District Court in San Franc

isco, by EPA and the Surfriders Foundation, the latter representing West Coast surfing groups. The groups charged the wastewater discharged from the plant into the Pacific Ocean off Humboldt County contains toxics and threatened the health of both marine life and surfers.

In September, 1991, Louisiana Pacific reached a first settlement in the case which was already precedent setting because the company agreed to carry out toxicity studies using live organisms, and gear treatment technology to the results. The company also agreed to pay a \$2.9 million fine and extend its outfall pipe further into the ocean.

Based on that agreement, the company began studying ways to develop a new biological treatment unit to bring its wastewater up to the standards required under the consent decrees. It eventually decided that it made more economic sense to simply not use chlorine, since without it the biological wastes in the water could be incinerated along with other by-products from the process.

Therefore, under the new plan, it will simply not build a biological treatment plant and improve its boiler system to reduce odors and emissions. The boiler will meet the toughest air pollution rules imposed on any U.S. paper plant, the company said. The company will also install new equipment to steam strip methanol and turpentine from the pulp.

The new plan was accepted by EPA and Surfrider under a modification to the original settlement, submitted to the court Sept. 10. EPA officials said the plan was "an excellent example of pollution prevention," and urged other companies to adopt the same practices.

Louisiana-Pacific says it has already spent \$70 million to upgrade its plant Samoa, including the cost of the oxygen delignification unit. Installing the .rther equipment to make the process totally chlorine-free will cost another \$10 million more, according to a spokesman.

Samoa is Portland, Oregon-based, Louisiana Pacific's only pulp plant. The pany sells pulp to papermakers, but does not make any paper itself. Louisiana Pacific has already developed a plywood substitute called strand oriented board which uses small wood chips and does not require cutting down large old growth trees. The company said the new pulp process continues this effort to innovate to meet environmental objectives.

Author: PAUL KEMEZIS

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SUBJECT: Environment (EV)

PTS-ACC-NO: 1636091

PTS-LOAD-DATE: 1992 Week 42

APPENDIX C

2ND STORY of Level 2 printed in FULL format.

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October 18, 1992, Sunday, FINAL EDITION

SECTION: BUSINESS; Pg. 12; ZONE: N

LENGTH: 402 words

HEADLINE: New plant makes paper chlorine-free

BYLINE: Journal of Commerce.

DATELINE: WAYNE, N.J.

BODY:

Union Camp Corp., based here, has begun operating a chlorine-free pulp -bleaching plant at its 1,850 ton-a-day Franklin, Va., printing and writing paper mill.

The process employs patented state-of-the-art ozone technology to provide major, cost-effective environmental benefits. By using ozone and oxygen as its primary bleaching agents, instead of the usual chlorine, the Franklin plant's process dramatically reduces the amount of chlorinated organics produced, including dioxin and chloroform, Union Camp said.

"The most significant achievement of this new technology is our ability to recycle most of the bleach plant's waste water," said Wells Nutt, president of nion Camp Technology, the subsidiary responsible for Union Camp's proprietary pulp manufacturing technology. "This means we will discharge much less effluent than before," he said.

Union Camp's move is illustrative of a paper-processing industry effort to reduce chlorine use. In 1995, such use is expected to drop about 20 percent from 1990 levels, estimates Chem System Inc. of Tarrytown, N.Y., a consulting firm. In 1990, U.S. paper producers accounted for 14 percent of domestic chlorine consumption.

Union Camp's new process doesn't compromise the brightness or strength of its paper, the company said. Though initial capital costs are somewhat higher than constructing a traditional bleach plant, operating costs are substantially lower, Union Camp said.

The new plant is the major component in a \$114 million modernization of the Franklin mill's pulp processing system. The mill is about 50 miles southwest of Norfolk.

By recycling effluents, the process cuts by as much as 90 percent the oxygen consumed. Significantly, effluent color is reduced, and the total water required for the process is 45 to 95 percent less than conventional systems.

The process results from more than 10 years of Union Camp research and development on paper bleaching. Researchers tested the process' viability with a three-year pilot-plant program at the company's white paper mill in Eastover, C. Traditional pulp -bleaching plants employed by the white paper industry

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Chicago Tribune, October 18, 1992

are major contributors to mill effluent loads.

Union Camp will sell the proprietary process, for which 18 patents are issued or pending. It has formed a worldwide marketing alliance with Sunds Defibrator AB of Sweden, a leading maker of bleaching equipment.

TERMS: NEW JERSEY; TECHNOLOGY; PROFILE

Environmental Quality Commission ☐ Rule Adoption Item Agenda Item 🚣 January 29, 1993 Meeting ☐ Information Item Title: Proposed Temporary Amendments to Pollution Control Facilities Tax Credit Rule **Summary:** The Commission has announced its intent to amend the pollution control facilities tax credit rule. This announcement was made after the Commission determined that, for certain types of businesses, the existing tax credit rule does not adequately allow the Department and Commission to consider the portion of a facility cost properly allocable to pollution control as specified in ORS 468.190 and OAR 340-16-030. In response to the Commission's announcement, the Department has developed a set of rule amendments that will change the return on investment and percent allocable evaluation procedures for applicants where it is determined that pollution control facilities are integral to the operation of the applicant's business. These amendments include the addition of appropriate definitions, and the addition of a new methodology for evaluating the return on investment and percent allocable to pollution control. The amendments have been drafted to apply to all tax credit applications received on or after February 1, 1993. The Department is proposing that these amendments be adopted on a temporary basis pending adoption of permanent rule amendments through the appropriate rulemaking procedures. The permanent rule amendment process has been initiated and will be completed within the 180 days that temporary rules are effective.

Department Recommendation:

Adopt the proposed findings as presented in the staff report and the proposed temporary amendments to the pollution control facilities tax credit rule as presented in Attachment A to the staff report.

Report Author

Division Administrator

Director

January 14, 1993

[†]A large print copy of this report is available upon request.

State of Oregon Department of Environmental Quality

Memorandum[†]

Date: January 12, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item E, January 29, 1993 EQC Meeting

Proposed Temporary Amendments to Pollution Control Facilities Tax

Credit Rule

Background

At the October 16, 1992 meeting, the Commission announced its intent to amend the Pollution Control Facilities Tax Credit Administrative Rule, OAR Chapter 340, Division 16. The Commission determined at this meeting that, for certain types of businesses, the existing rule is flawed in the methodology used to determine the facility return on investment (ROI) and percent allocable to pollution control. The Commission also announced that it intended for these rule amendments to apply as quickly as possible. This staff report and proposed temporary rule amendments address the Commission's directive.

A complete text of OAR 340-16-005 to 340-16-050 including the proposed amendments is included as Attachment A. Tables 1 and 2 used in evaluating the facility return on investment and percent allocable are also included in Attachment A. A discussion of the proposed amendments is included as Attachment B. Finally, the Department has prepared a Fiscal and Economic Impact Statement and this is included as Attachment C.

Issues to be Addressed by this Temporary Rule

Under the current provisions of ORS 468.190 and OAR 340-16-030, the Commission is required to consider five factors in determining the portion of facility costs properly allocable to pollution control. These five factors are:

- a) The extent to which the facility is used to recover and convert waste products into a salable and usable commodity.
- b) The estimated annual percent return on the investment in the facility.

[†]A large print copy of this report is available upon request.

Memo To: Environmental Quality Commission Agenda Item E January 29, 1993 Meeting Page 2

- c) The alternate methods, equipment and costs for achieving the same pollution control objective.
- d) Any related savings or increases in costs which occur as a result of the installation of the facility.
- e) Any other factors relevant to establishing the portion of the actual cost of the facility properly allocable to pollution control.

Factor (b) is the primary mechanism the Department uses to determine the percent properly allocable to pollution control. Using this factor, the facility return on investment and percent allocable determinations are made based on the expected economic benefits (average annual cash flow) derived over the useful life of the facility.

In certain industries, pollution control facilities represent virtually the entire asset base of individual businesses. This makes it very difficult, and in many instances impossible, to separate the economic benefits that may result from construction or installation of pollution control facilities from the operations of the business as a whole. For example, some highly profitable businesses may not be able to generate income without the claimed pollution control facilities. In other industries, pollution control facilities may be installed in response to demand by third parties for these types of facilities and not necessarily as a direct result of environmental requirements. Because of the language in the existing rule, an applicant may claim that a narrowly defined facility has no direct income associated with it, and the Department is unable to consider the profitability of the entire business.

This temporary rule amendment will expand the existing percent allocable determination to identify instances where pollution control facilities are considered integral to the operation of the applicant's business. For such businesses, the existing return on investment and percent allocable determinations will be replaced by a mechanism that compares the applicant's industry rate of return to a reference rate of return. The proposed amendment contains a provision that allows the applicant to request that a more comprehensive cash flow evaluation methodology be used, however, this will require the applicant to submit detailed financial information in order for the Department to evaluate the facility return on investment.

The comprehensive cash flow evaluation methodology that would be employed in this instance is an incremental analysis that will compare cash flow for the business including the claimed pollution control facility to cash flow assuming that the claimed pollution control facility was not constructed. This incremental cash flow will allow the Department and Commission to consider the true economic benefits that an applicant realizes from installation or construction of the facility.

Memo To: Environmental Quality Commission Agenda Item E January 29, 1993 Meeting Page 3

In addition, the current reference rate of return (percent return before taxes on stockholders' equity) will be replaced by percent profit before taxes on total assets. This change will apply to all applicants. The rationale for using a reference rate related to total assets rather than stockholders' equity is included in Attachment B.

The temporary rule amendments have been drafted to apply to all applications received on or after February 1, 1993. The Attorney General's Office has advised that it may not be possible to apply these rule amendments retroactively, therefore, the Department has not proposed retroactive application of either temporary or permanent rule amendments.

No amendments of a non-essential nature have been included with this proposal.

Authority to Address the Issue

ORS 468.190(3) specifically authorizes the Commission to adopt rules establishing the methods to be used to determine the portion of facility costs properly allocable to the prevention, control or reduction of pollution. The Commission has previously adopted rules for this purpose as contained in OAR 340-16-030.

Pursuant to ORS 183.335(5), the Commission may adopt, amend or suspend a rule on a temporary basis and without prior notice or hearing, where it finds that failure to act promptly will result in serious prejudice to the public interest. The proposed findings in this staff report address this issue.

Rules adopted under ORS 183.335(5) are effective for a period not to exceed 180 days. The Department is proposing that identical, or nearly identical, rule amendments be pursued immediately through permanent rule adoption processes.

Alternatives and Evaluation

The Department has concluded that the goal of the Commission's directive cannot be accomplished within the existing tax credit rule and, therefore, rule amendments are required. The primary alternative to adoption of temporary rule amendments is the adoption of permanent rule amendments. Considering the time required to evaluate public input and formally adopt rule amendments, the Department is concerned that numerous applications could be submitted under the provisions of the existing rule and this will have a significant negative impact on the State's general fund. Since tax credits certified may be claimed by the applicant over a period of 10 years, the cumulative negative impact resulting from tax credits certified would continue well into the future.

Memo To: Environmental Quality Commission Agenda Item E January 29, 1993 Meeting Page 4

The Department explored several alternate methods that could be used to establish the facility return on investment and percent allocable. We believe that the recommended methodology is the most equitable way of addressing the intent of the tax credit statute and the Commission's directive. In addition, the selected alternative is relatively simple to employ and allows prospective applicants to make a quick determination of whether a pollution control facility has a return on investment, and whether the applicant will need to submit detailed information to support a lower return on investment.

Summary of Any Prior Public Input Opportunity

The proposed rule amendments were developed through an internal review of the current procedures. No public input was solicited in developing the proposed temporary rule amendments. The Commission will have 180 days from the date the temporary rule amendments are filed with the Secretary of State to adopt permanent rule amendments. There will be significant opportunity for public input during the permanent rule adoption process.

The Department mailed letters in early November to 18 commercial landfill operators in the state informing them of the Commission's intent to amend the tax credit rule and indicating that the proposed amendments might impact future tax credit applications submitted by these firms. Two of the parties receiving this letter have acknowledged receipt of the letter either in writing or verbally. No other comments have been received on the Commission's position on the rule amendments.

Proposed Findings

- 1) Pursuant to ORS 468.190(1), the Environmental Quality Commission is required to consider five factors in establishing the portion of pollution control facility costs properly allocable to pollution control.
- The Commission and Department of Environmental Quality have identified a serious flaw in the existing tax credit rules related to the determination of the facility return on investment and percent allocable to pollution control as specified in ORS 468.190(1)(b).
- 3) This flaw does not allow the Department to effectively factor out economic benefits for certain businesses and industries as specified in ORS 468.190 and OAR 340-16-030.

Memo To: Environmental Quality Commission Agenda Item E January 29, 1993 Meeting

Page 5

- 4) This flaw overstates the percent allocable to pollution control for certain industries and consequently, allows the applicant to receive tax credit certification in amounts exceeding what it would otherwise be eligible for.
- 5) Failure to promptly adopt these temporary rule amendments will result in considerable loss of future State income tax revenue from tax credits claimed, and will result in serious prejudice to the public interest.
- 6) Failure to promptly adopt these temporary rule amendments to clarify the method for calculating the extent of tax credit eligibility may adversely affect potential future applicants who might plan for and initiate construction of facilities in anticipation of receiving tax credit benefits as determined using the existing rule.

Recommendation for Commission Action

It is recommended that the Commission adopt the proposed findings as presented in this report and the temporary amendments to the pollution control facilities tax credit rule as presented in Attachment A.

Attachments

- A. Full text of existing rule and proposed amendments, including Tables 1 and 2 as referenced in the rule.
- B. Discussion of proposed rule amendments.
- C. Fiscal and Economic Impact Statement.

Reference Documents (available upon request)

1. ORS 468.150 to 468.190, Pollution Control Facilities Tax Credit Statutes.

2. ORS 183.325 to 183.410, Adoption of Rules.

Approved:

Section:

Division:

Report Prepared By:

By: John Fink

Phone: 229-6149

Date Prepared: December 29, 1992

OREGON ADMINISTRATIVE RULES FOR POLLUTION CONTROL TAX CREDITS CHAPTER 340, DIVISION 16

[Note: words stricken are deletions; words underlined are additions.]

340-16-005 PURPOSE

The purpose of these rules is to prescribe procedures and criteria to be used by the Department and Commission for issuance of tax credits for pollution control facilities. These rules are to be used in connection with ORS 468.150 to 468.190 and apply only to facilities on which construction has been completed after December 31, 1983, except where otherwise noted herein.

340-16-010 DEFINITIONS

- (1) "Circumstances beyond the control of the applicant" means facts, conditions and circumstances which applicant's due care and diligence would not have avoided.
- (2) "Commission" means Environmental Quality Commission.
- (3) "Department" means Department of Environmental Quality.
- (4) "Facility" means a pollution control facility.
- (5) "Like-for-like replacement cost" means the current price of providing a new facility of the same type, size and construction materials as the original facility.
- (6) "Material recovery process" means any process for obtaining from solid waste, hazardous waste or used oil, by presegregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. This does not include any process in which the major purpose is the production of fuel from solid waste, hazardous waste or used oil which can be utilized for heat content or other forms of energy. It does not include any type of process which burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process which burns waste if such device is otherwise eligible for pollution control tax credit under these rules.
- (7) "Principal purpose" means the most important or primary purpose. Each facility may have only one principal purpose.
- (8) "Reconstruction or replacement" means the provision of a new facility with qualities and pollution control characteristics equivalent to the original facility. This does not include repairs or work done to maintain the facility in good working order.
- (9) "Sole purpose" means the exclusive purpose.
- (10)(a) "Spill or unauthorized release" means the discharge, deposit, injection, dumping, spilling, emitting, releasing, leakage or placing of oil, hazardous materials or other polluting substances into the air or into or on any land or waters of the state, as defined in ORS 468.700, except as authorized by a permit issued under ORS Chapter 454, 459, 468 or 469, ORS 466.005 to 466.385, ORS 466.880(1) and (2), 466.890 and 466.995(1) and (2) or federal law while being stored or used

for its intended purpose.

- (b) For purposes of determining eligibility for tax credits under these rules, polluting substances released into the environment in conjunction with operation of a previously approved facility or activity where such facility or activity was operated in compliance with requirements imposed by the Department or the Federal Environmental Protection Agency, and where the polluting substances which must now be cleaned up are determined by the Department to have been an unanticipated result of the approved facility or activity and are not deemed to be a "spill or unauthorized release."
- (11) "Substantial completion" means the completion of erection, installation, modification, or construction of all elements of the facility which are essential to perform its purpose.
- (12) "Useful life" means the number of years the claimed facility is capable of operating before replacement or disposal.

340-16-020 PROCEDURES FOR RECEIVING TAX CREDIT CERTIFICATION

- (1) Filing of Application:
 - (a) A written application for tax credit certification shall be made to the Department on a form provided by the Department;
 - (b) The application shall be submitted within two years of substantial completion of construction of the facility. Failure to submit a timely application shall make the facility ineligible for tax credit certification;
 - (c) The Commission may grant an extension of time to submit an application if circumstances beyond the control of the applicant would make a timely filing unreasonable;
 - (d) An extension shall only be considered if applied for within two years of substantial completion of construction of the facility. An extension may be granted for no more than one year. Only one extension may be granted;
 - (e) Within 30 days of receipt of an application, the Department shall request any additional information that applicant needs to submit in order for the application to be considered complete. The Department may also require any other information necessary to determine whether the construction is in accordance with Department statutes, rules and standards;
 - (f) An application shall not be considered filed until all requested information is furnished by the applicant, and the Department notifies the applicant in writing that the application is complete and ready for processing;
 - (g) An application may be withdrawn and resubmitted by applicant at any time within two years of substantial completion of construction of the facility without paying an additional processing fee, unless the cost of the facility has increased. An additional processing fee shall be calculated by subtracting the cost of the facility on the original application from the cost of the facility on the resubmitted application and multiplying the remainder by one-half of one percent;

- (h) If the Department determines the application is incomplete for processing and the applicant fails to submit requested information within 180 days of the date when the Department requested the information, the application will be rejected by the Department unless applicant requests in writing additional time to submit requested information;
- (i) If the application is submitted after the two year period following substantial completion and the applicant has not filed an extension request, the application will be rejected by the Department.

(2) Commission Action:

(a) Notice of the Department's recommended action on the application shall be mailed at least seven days before the Commission meeting where the application will be considered unless the applicant waives the notice requirement in writing. The Commission shall act on an application for certification before the 120th day after the filing of a complete application. The Commission may consider and act upon an application at any of its regular or special meetings. The matter shall be conducted as an informal public informational hearing, not a contested case hearing, unless ordered otherwise by the Commission;

(b) Certification:

- (A) If the Commission determines that the facility is eligible, it shall make appropriate findings and certify the actual cost of the facility and the portion of the actual cost properly allocable to pollution control, material recovery or recycling as set forth in ORS 468.190. Each certificate shall bear a separate serial number for each such facility;
- (B) The actual cost or portion of the actual cost certified shall not exceed the taxpayer's own cash investment in the facility or portion of the facility;
- (C) No determination of the proportion of the actual cost of the facility to be certified shall be made until a complete application is filed;
- (D) If two or more facilities constitute an operational unit, the Commission may certify such facilities under one certificate;
- (E) A certificate is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.116 if erection, construction or installation of the facility was completed and certified before December 31, 1995;
- (F) Certification of a pollution control facility qualifying under ORS 468.165(1) shall be granted for a period of 10 consecutive years. The 10-year period shall begin with the tax year of the person in which the facility is certified under this section. However, if ad valorem tax relief is utilized by a corporation organized under ORS Chapter 61 or 62 the facility shall be exempt from ad valorem taxation, to the extent of the portion allocable, for a period of 20 consecutive years, or 10 years if construction is commenced after June 30, 1989 and completed before December 31, 1990,

from the date of its first certification by the Commission;

- (G) Portions of a facility qualifying under ORS 468.165(1)(c) may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of ORS 316.097(8) or 317.116 whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion of a facility.
- (c) Rejection: If the Commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to pollution control, material recovery or recycling than was claimed in the application for certification, the Commission shall cause written notice of its action, and a concise statement of the findings and reasons therefore, to be sent by registered or certified mail to the applicant.
- (3) Appeal: If the application is rejected by the Commission for any reason, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to pollution control, resource recovery or recycling, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection of the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the Commission.

340-16-025 QUALIFICATION OF FACILITY FOR TAX CREDITS

- (1) "Pollution control facility" or "facility" shall include any land, structure, building, installation, excavation, machinery, equipment or device, or alternative methods for field sanitation and straw utilization and disposal as approved by the Field Burning Advisory Committee and the Department, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person, which will achieve compliance with Department statutes and rules or Commission orders or permit conditions before certification, where applicable, if:
 - (a) The principal purpose of the facility is to comply with a requirement imposed by the Department, the Federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil. To meet the definition of principal purpose, the facility must be established to comply with the environmental requirements specified in this subsection for the control, reduction, or prevention of pollution, or for the material recovery of solid waste, hazardous waste or used oil. Other benefits of economic value that are a result of the facility, are not eligible for tax credit and must be eliminated through the return on investment calculation; or

- (b) The sole purpose of the facility is to prevent, control or reduce a substantial quantity of air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil. In order to meet the definition of sole purpose, the only function or use of the facility must be the control, reduction, or prevention of pollution, or, for the material recovery of solid waste, hazardous waste or used oil. Sole purpose is not applicable where the facility is established in response to the environmental requirements identified in subsection (a) of this section. Other benefits of economic value which result from the facility are not eligible for tax credit and must be eliminated through the return on investment calculation.
- (2) Such prevention, control or reduction required by this subsection shall be accomplished by:
 - (a) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468.700;
 - (b) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468.275;
 - (c) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the Commission;
 - (d) The use of a material recovery process which obtains useful material from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 468.850;
 - (e) The treatment, substantial reduction or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005; or
 - (f) Approved alternative field burning methods and facilities which shall be limited to:
 - (A) Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning;
 - (B) Propane flamers or mobile field sanitizers which are alternatives to open field burning and reduce air quality impacts; and
 - (C) Drainage tile installations which will result in a reduction of grass seed acreage under production.
 - (g) Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases. This does not include any facility installed, constructed or used for cleanup after a spill or unauthorized release has occurred.
- (3) "Pollution control facility" or "facility" does not include:
 - (a) Air conditioners;

- (b) Septic tanks or other facilities for human waste;
- (c) Property installed, constructed or used for moving sewage to the collecting facilities of a public or quasi-public sewerage system;
- (d) Any distinct portion of a pollution control facility that makes an insignificant contribution to the principal or sole purpose of the facility including the following specific items:
 - (A) Office buildings and furnishings;
 - (B) Parking lots and road improvements;
 - (C) Landscaping;
 - (D) External lighting;
 - (E) Company or related signs; and
 - (F) Automobiles.
- (e) Facilities not directly related to the operation of the industry or enterprise seeking the tax credit;
- (f) Asbestos abatement; or
- (g) Replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued under ORS 468.170, except:
 - (A) If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the Department, the Federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the cost of the new facility and the like-for-like replacement cost of the original facility; or
 - (B) If a facility is replaced or reconstructed before the end of its useful life then the facility may be eligible for the remainder of the tax credit certified to the original facility.
- (h) Property or facilities installed, constructed or used for cleanup of emergency spills or unauthorized releases. This includes any facility installed, constructed or used for cleanup after a spill or unauthorized release has occurred.
- (4) Any person may apply to the Commission for certification under ORS 468.170 of a pollution control facility or portion thereof erected, constructed or installed by the person in Oregon if:
 - (a) The air or water pollution control facility was erected, constructed or installed on or after January 1, 1967;
 - (b) The noise pollution control facility was erected, constructed or installed on or after January 1, 1977;
 - (c) The solid waste facility was under construction on or after

January 1, 1973, or the hazardous waste, used oil, material recovery, or recycling facility was under construction on or after October 3, 1979, and if:

- (A) The facility's principal or sole purpose conforms to the requirements of ORS 468.155(1);
- (B) The facility will utilize material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005 or used oil as defined in ORS 468.850:
 - (i) By mechanical processing or chemical processing; or
 - (ii) Through the production, processing, presegregation, or use of:
 - (I) Materials which have useful chemical or physical properties and which may be used for the same or other purposes: or
 - (II) Materials which may be used in the same kind of application as its prior use without change in identity.
- (C) The end product of the utilization is an item of real economic value;
- (D) The end product of the utilization, is competitive with an end product produced in another state; and
- (E) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.
- (d) The hazardous waste control facility was erected, constructed or installed on or after January 1, 1984 and if:
 - (A) The facility's principal or sole purpose conforms to the requirements of ORS 468.155(1); and
 - (B) The facility is designed to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.
- (5) The Commission shall certify a pollution control, solid waste, hazardous waste or used oil facility or portion thereof, for which an application has been made under ORS 468.165, if the Commission finds that the facility:
 - (a) Was erected, constructed or installed in accordance with the requirements of ORS 468.165(1);
 - (b) Is designed for, and is being operated or will operate in accordance with the requirements of ORS 468.155; and
 - (c) Is necessary to satisfy the intents and purposes of and is in accordance with the applicable Department statutes, rules and standards.

340-16-030 DETERMINATION OF PERCENTAGE OF CERTIFIED FACILITY COST ALLOCABLE TO POLLUTION CONTROL

(1) Definitions:

- (a) "Annual incremental cash flow" means the estimated annual cash flow for each year of the useful life of a claimed pollution control facility integral to the applicant's business calculated as follows:
 - (A) Calculate the applicant's annual cash flow with the claimed facility by subtracting the annual operating expenses for the applicant's business from the gross annual income for the applicant's business for each year of the useful life of the claimed facility; and
 - (B) Calculate the applicant's annual cash flow assuming that the claimed facility was not erected, constructed, or installed by subtracting the annual operating expenses for the applicant's business using this assumption from the gross annual income for the applicant's business using this assumption for each year of the useful life of the claimed facility; and
 - (C) Subtract the applicant's annual cash flow assuming that the claimed facility was not erected, constructed, or installed from the annual cash flow with the claimed facility for each year of the useful life of the claimed facility.
- (a) (b) "Annual operating expenses" means the estimated costs of operating the claimed facility or the applicant's business if pollution control facilities are integral to the operation of the applicant's business, including labor, utilities, property taxes, insurance, and other cash expenses, less any savings in expenses attributable to installation of the claimed facility. Depreciation, interest expenses, and state and federal taxes are not included.
- (b) (c) "Average annual cash flow" means the estimated average annual cash flow from the claimed facility for the first five full years of operation calculated as follows:
 - (A) Calculate the annual cash flow for each of the first five full years of operation by subtracting the annual operating expenses from the gross annual income for each year; and
 - (B) Sum the five annual cash flows and divide the total by five. Where the useful life of the claimed facility is less than five years, sum the annual cash flows for the useful life of the facility and divide by the useful life.
- (c) (d) "Claimed facility cost" means the actual cost of the claimed facility minus the salvage value of any facilities removed from service. Certification of the actual cost of the claimed facility must be documented by a certified public accountant for facilities with a claimed facility cost over \$20,000;

- (d) (e) "Gross annual income" means the estimated total annual income from the claimed facility or the applicant's business if pollution control facilities are integral to the operation of the applicant's business, derived from sale or reuse of recovered materials or energy or any other means including savings that may occur as a result of the facility;
 - (f) "Internal rate of return" means the rate of return that will equate the present value of annual incremental cash flows over the useful life of the claimed facility with the present value of the claimed facility cost.
 - (q) "Pollution control facilities integral to the operation of the applicant's business" means that the business is unable to operate or is only able to operate at reduced income levels, without the claimed pollution control facility. Such instances include, but are not limited to, commercial solid waste and hazardous waste landfills, solid and hazardous waste recycling businesses, and environmental service providers. Factors that the Department may use to determine whether pollution control facilities are integral to the operation of the business include:
 - (A) Pollution control facilities represent in excess of 25 percent of the total assets of the business; or
 - (B) The claimed pollution control facilities were erected, constructed, or installed in response to market demand for such pollution control facilities. This may occur as the result of requirements imposed by the Department, the Federal Environmental Protection Agency or regional air pollution authority, on parties unaffiliated with the applicant; or
 - (C) Erection, construction, or installation of the claimed facility and any previously certified pollution control facilities, allows the applicant to generate gross revenues at least 50 percent greater than would have been generated in the absence of the claimed facility and any previously certified pollution control facilities; or
 - (D) The applicant's operating expenses related to operation of the claimed facilities and any previously certified pollution control facilities are at least 50 percent of the operating expenses of the applicant's business.
- (e) (h) "Salvage value" means the value of a facility at the end of its useful life minus what it costs to remove it from service. Salvage value can never be less than zero.
- (2) In establishing the portion of costs properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil for facilities qualifying for certification under ORS 468.170, the Commission shall consider the following factors and make appropriate findings regarding their applicability:
 - (a) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity;
 - (b) The estimated annual percent return on the investment in the facility;

- (c) The alternative methods, equipment and costs for achieving the same pollution control objective;
- (d) Related savings or increases in costs which occur or may occur as a result of the installation of the facility; or
- (e) Other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.
- (3) The portion of actual costs properly allocable shall be from zero to 100 percent in increments of one percent. If zero percent, the Commission shall issue an order denying certification.
- (4) In considering the factors listed in this rule, the Commission may determine in its findings that one or more factors are more important than others and may assign different weights to the factors when determining the portion of costs properly allocable to pollution control.
- (5) When considering the estimated annual percent return on investment in the facility, subsection (2)(b) of this rule, for applicants where pollution control facilities are integral to the operation of the business, and for applications received on or after February 1, 1993, the following steps will be used:
 - (a) Using the applicant's primary four digit Standard Industrial Classification (SIC):
 - (A) Determine the industry median profit before taxes as a percent of total assets for the five years prior to the year of completion of the claimed facility from Robert Morris Associates, Annual Statement Studies; and
 - (B) Determine the industry average profit before taxes as a percent of total assets by summing the median profit before taxes as a percent of total assets for the five years prior to the year of completion of the claimed facility and divide by five. Where five years are not available, sum the number of years that are available and divide by the number of years.
 - (b) Determine the reference annual percent return on investment from Table 2. Select the reference percent return from Table 2 that corresponds with the year construction was completed on the claimed facility. For each future calendar year not shown in Table 2, the reference percent return shall be the five-year average of the rate of return before taxes on total assets for all United States manufacturing corporations for the five years prior to the calendar year of interest;
 - (A) If the industry average profit before taxes as a percent of total assets is greater than the reference rate of return, the percent allocable would be 0 percent;
 - (B) If the industry average profit before taxes as a percent of total assets is less than the reference rate of return, the percent allocable will be determined from the following formula:

$P_A = \frac{(RROI - IROI)}{RROI} X 100$

where:

 P_A is the percentage of actual costs properly allocable to pollution control in percent, rounded off to the nearest whole number.

IROI is the industry average annual profit before taxes as a percent of total assets.

RROI is the reference annual percent return on investment from Table 2.

- (c) If the Annual Statement Studies do not list the industry median profit before taxes as a percent of total assets for the applicant's primary four digit SIC, the applicant and the Department will determine whether an alternate SIC is appropriate for the applicant's business. If no alternate SIC is appropriate, the percent allocable will be determined using the procedures in subsection (d) of this rule.
- (d) If an applicant whose pollution control facilities are determined by the Department to be integral to the applicant's business is dissatisfied with the percent allocable determination made using the procedures in subsections (5)(a) and (5)(b) of this rule, or if no SIC is appropriate for the applicant's business, the applicant will furnish the following information to the Department:
 - (A) An income statement, balance sheet, statement of cash flows, and federal and state tax returns (if applicable) for the applicant's business for the applicant's three fiscal years prior to the date of submission of the application. If three years of such statements are not available, the applicant will submit information for the years that are available.
 - (B) Revenue and expense projections, and cash flow projections for the applicant's business beginning with the year the application is submitted and continuing for the entire useful life of the pollution control facility. The level of detail of these projections shall be substantially equivalent to the level of detail of information submitted in subsection (A). The Department may elect to provide the applicant with a worksheet for this purpose.
 - (C) Revenue and expense projections, and cash flow projections for the applicant's business for the entire useful life of the claimed facility and assuming that the claimed pollution control facility is not erected, constructed or installed.
 - (D) A projection of the applicant's future capital expenditures for pollution control facilities.
 - (E) A letter signed by the applicant authorizing the Department to contract with an independent certified public accountant to review the financial information provided by the applicant. The applicant will agree to reimburse the Department for the cost of this review.

- (F) Using the information submitted in subsections (A) through (D), the Department will calculate an Internal Rate of Return for the claimed facility by considering the claimed facility cost and annual incremental cash flow. The Internal Rate of Return will be compared to the reference rate of return:
 - (i) If the applicant's Internal Rate of Return is greater than the reference rate, the percent allocable will be 0 percent.
 - (ii) If the applicant's Internal Rate of Return is less than the reference rate, the percent allocable will be determined by the following formula:

$$P_A = \frac{(RROI - IRR)}{RROI} X 100$$

where:

PA is the percentage of actual costs properly allocable to pollution control in percent, rounded off to the nearest whole number.

IRR is the Internal Rate of Return for the claimed facility.

RROI is the reference annual percent return on investment from Table 2.

- (5) (6) When considering the estimated annual percent return on investment in the facility, subsection (2)(b) of this rule, and for applicants where pollution control facilities are not integral to the operation of the business, the following steps will be used:
 - Determine the claimed facility cost, average annual cash flow and useful life of the claimed facility. The Department may require additional information on or documentation of gross annual income estimates for evaluation purposes;
 - Determine the return on investment factor by dividing the (b) claimed facility cost by the average annual cash flow;
 - Determine the annual percent return on investment by using Table 1. At the top of Table 1, find the number equal to the useful life of the claimed facility. In the column under this useful life number, find the number closest to the return on investment factor. Follow this row to the left until reaching the first column. The number in the first column is the annual percent return on investment for the claimed facility. For a useful life greater than 30 years, or percent return on investment greater than 25 percent, Table 1 can be extended by utilizing the following equation:

$$I_R = \frac{1 - (1 + i)^{-n}}{i}$$

where:

 I_R is the return on investment factor.

i is the annual percent return on investment. n is the useful life of the claimed facility.

- (d) Determine the reference annual percent return on investment from Table 2. Select the reference percent return from Table 2 that corresponds with the year construction was completed on the claimed facility. For each future calendar year not shown in Table 2, the reference percent return shall be the five-year average of the rate of return before taxes on stockholders' equity total assets for all United States manufacturing corporations for the five years prior to the calendar year of interest;
- (e) Determine the portion of actual costs properly allocable to pollution control from the following equation:

$P_A = \frac{(RROI - ROI)}{RROI} X 100$

where:

 ${\tt P}_{\tt A}$ is the percentage of actual costs properly allocable to pollution control in percent, rounded off to the nearest whole number.

ROI is the annual percent return on investment from Table

RROI is the reference annual percent return on investment from Table 2.

If ROI is greater than or equal to RROI, then the portion of actual costs properly allocable to pollution control shall be zero percent.

340-16-035 PROCEDURE TO REVOKE CERTIFICATION

- (1) Pursuant to the procedures for a contested case under ORS 183.310 to 183.550, the Commission may order the revocation of the final tax credit certification if it finds that:
 - (a) The certification was obtained by fraud or misrepresentation; or
 - (b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or recycling or disposing of used oil as specified in such certificate, or has failed to operate the facility in compliance with Department or Commission statutes, rules, orders or permit conditions where applicable.
- (2) As soon as the order of revocation under this section has become final, the Commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.
- (3) If the certification of a pollution control or solid waste, hazardous waste or used oil facility is ordered revoked pursuant to subsection (1)(a) of this rule, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405, 316.097 and 317.116.

- (4) Except as provided in subsection (5) of this rule, if the certification of a pollution control or solid waste, hazardous waste or used oil facility is ordered revoked pursuant to subsection (1)(b) of this rule, the certificate holder shall be denied any further relief provided under ORS 307.405, 316.097 or 317.116 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final.
- (5) Once a determination has been made under section (1) of this rule, the Commission may revoke tax credits held for any facility or piece of equipment which is for the purpose of preventing, controlling, reducing, or eliminating pollution to the same media and which is at a location adjacent to the non-complying facility.
- (6) Upon notification by the certificate holder that the facility has been inspected by DEQ and found to be in compliance, the Commission may reinstate any revoked tax credit certification if the Commission finds the non-complying facility has been brought into compliance.
- (7) If the Commission reinstates certification, the Commission shall notify the Department of Revenue or the county assessor of the county in which the facility is located that the tax credit certification is reinstated for the remaining period of the tax credit, less the period of revocation. The period of revocation would be from the date the Commission revokes the certificate to the date the Commission reinstates the certificate.
- (8) The Commission may withhold revocation of a certificate when operation of a facility ceases if the certificate holder indicates in writing that the facility will be returned to operation within five years time. In the event that the facility is not returned to operation as indicated, the Commission shall revoke the certificate.

340-16-040 PROCEDURES FOR TRANSFER OF A TAX CREDIT CERTIFICATE

To transfer a tax credit certificate from one holder to another, the Commission shall revoke the certificate and grant a new one to the new holder for the balance of the available tax credit following the procedure set forth in ORS 307.405, 316.097, and 317.116.

340-16-045 FEES FOR TAX CREDIT CERTIFICATION

- (1) An application processing fee of one-half of one percent of the cost claimed in the application of the pollution control facility to a maximum of \$5,000 shall be paid with each application. However, if the application processing fee is less than \$50, no application processing fee shall be charged. A non-refundable filing fee of \$50 shall be paid with each application. No application is complete until the filing fee and processing fee are submitted. An amount equal to the filing fee and processing fee shall be submitted as a required part of any application for a pollution control facility tax credit.
- (2) Upon the Department's receipt of an application, the filing fee becomes non-refundable.
- (3) The application processing fee shall be refunded in whole if the application is rejected.
- (4) The fees shall not be considered by the Environmental Quality Commission as part of the cost of the facility to be certified.

- (5) All fees shall be made payable to the Department of Environmental Quality.
- (6) Notwithstanding subsection (1), the Department may increase the processing fee above the maximum of \$5,000, when an application necessitates an unusually extensive evaluation or analysis to determine the portion of the facility allocable to pollution control or material recovery.

340-16-050 TAXPAYERS RECEIVING TAX CREDIT

- (1) A person receiving a certificate under this section may take tax relief only under ORS 316.097 or 317.116, depending upon the tax status of the person's trade or business except if the taxpayer is a corporation organized under ORS Chapter 61 or 62, or any predecessor to ORS Chapter 62 relating to incorporation of cooperative associations, or is a subsequent transferee of such a corporation, the tax relief may be taken only under ORS 307.405.
- (2) If the person receiving the certificate is an electing small business corporation as defined in section 1361 of the Internal Revenue Code, each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.
- (3) If the person receiving the certificate is a partnership, each partner shall be entitled to take tax credit relief as provided in ORS 316.097, based on that partner's pro rata share of the certified cost of the facility.
- (4) Upon sale, exchange or other disposition of a facility written notice must be provided to the Department of Environmental Quality by the company, corporation or individual for whom the tax credit certificate has been issued. Upon request, the taxpayer shall provide a copy of the contract or other evidence of disposition of the property to the Department of Environmental Quality.
- (5) The company, corporation or individual claiming the tax credit for a leased facility must provide a copy of a written agreement between the lessor and lessee designating the party to receive the tax credit and a copy of the complete and current lease agreement for the facility.
- (6) The taxpayer claiming the tax credit for a facility with more than one owner shall provide a copy of a written agreement between the owners designating the party or parties to receive the tax credit certificate.

TABLE 1

RETURN ON INVESTMENT PERCENTAGE

BASED ON R.O.I. FACTOR (FACILITY COST/AVRG. ANNUAL CASH FLOW)

AND THE EXPECTED USEFUL LIFE OF THE NEW FACILITY

01/06/84

EXPECTED USEFUL LIFE IN YEARS										
R.O.I.	1	2	3	4	5	ė.	7	8	9	10
0.00	1.000	2.000	3.000	4.000	5.000	6.000	7-000	3.000	9.000	10.000
0.25	0.998	1-993	2.935	3.975	4.943	5.948	6.931	7.911	5.359	9.864
0.50	0.995	1.985	2.970	3.950	4.926	5-896	5.8.2	7.823	8.779	9.730
0.75	0.993	1.976	2.956	3.926	4.889	5.840	6.795	7.737	8.672	9.600
1.00	0.990	1.970	2.941	3.902	4.853	5.795	6.725	7-652	8.506	9.471
1.25	0.988	1.963	2.927	3-878	4.818	5.746	6.663	7.563	8.402	9.346
1.50	0.985	1.956	- 2.912	3.854	4.733	5.697	6.598	7.486	8.301	9.222
1.75	0.953	1.949	2.898	3.831	4.748	5.649	6.535	7.405	8.200	9.101
2.00	0.920	1.942	2.884	3.308	4.713	5.601	6-472	7.325	8.162	8.983
2.25	0.978	1.934	2.870	3.755	4.679	5.554	6.410	7.247	8.066	3.346
2.50	0.976	1.927	2.856	3.762	4.546	5.503	5.349	7.170	7.971	8.752
2.75	0.973	1.920	2.842	3.739	4.613	5.462	6.289	7.094	7.878	3.540
3.00	0.971	1.913	2.329	3.717	4.580	5-417	6.230	7.020	7.786	8.530
3.25	G.969	1.907	2.815	3.695	4.547	5.373	5.172	6.946	7.696	3.422
3.50	0.966	1.900	2.802	3.673	- 515	5.329	6.115	0.574	7.003	8.317
3.75	0.964	1.893	2.738	3.651	4-463	5.285	6.055	0.3/4	7.521	3.213
,	0.043									
4-00	0.962	1.886	2.775	3.630	4.452	5.242	6-002	6.733	7.435	9.111
4.25	0.959	1.879	2.762	3-609	4-421	5-200	5.947	6-664	7.351	3.011
4-50	0.957	1.873	2.749	3.588	4.390	5.158	5-893	6.590	7.267	7.913
4.75	0.955	1.866	2.736	3.547	4-340	5.117	5.834	4.529	7.188	7.816
5.00	0.952	1.859	2.723	3.546	4.329	5.676	5.786	6.403	7.108	7.722
5.25	0.050	1.853	2.711	3.525	4-300	5.035	5.734	6.393	7.029	7.629
5.50	0.949	1.346	2.498	3.505	4.270	4.996	5.683	6.335	6.952	7.538
5.75	0.946	1.840	2.585	3.485	4.241	4.956	5.632	0.272	3.876	7.442

ž.				XPECTED U						
A.O.I.	11	12	13	14	15	16	17	18	19	50
3.00	11.000	12.000	13.000	14.000	15.000	16.000	17.000	13.000	19.000	20.000
0.25	10.337	11.307	12.775	13.741	14.704	15.665	14.623	17.580	18.533	19.48
0.50	10.677	11.619	12.554	13.459	14-417	15.340	16.257	17.173	18-082	18.98
0.75	10.521	11.435	12.342	13.243	14.157	15-024	15.905	16.779	17.647	13.50
1.00	10.368	11.255	12.134	13.004	13.865	14.713	15.562	16.398	17.225	15.04
1.25	10.218	11.079	11.930	12.771	13.601	14.420	15.230	16.030	16.819	17.59
1.50	10.071	10.908	11.732	12.543	13.343	14.131	14-905	15-673	16.426	17.15
1.75	9.927	10.740	11.538	12.322	13.093	15.550	14.595	15.327	16.046	10.75
2.00	9.787	10.575	11.348	12.106	12.849	13.572	14.292	14.992	15.678	14.35
2.25	9.449	10.415	11.144	11.396	12.612	13.313	13.998	14.663	15.323	15.96
2.50	9.514	10.258	10.933	11.591	12.321	13.055	13.712	14.353	14.979	15.53
2.75	9.382	10.104	10.507	11.491	12.157	12.805	13.435	14.049	14.646	15.22
3-00	9.253	9.954	10.635	11.295	11.938	12-561	13.156	13.754	14.324	14.27
3.25	9.126	9.807	10.467	11, 105	11.725	12.324	12.905	13.467	14.312	14.53
3.50	9.002	9.663	10.303	10.721	11.517	12.094	12.651	13.195	13.710	14.21
3.75	3.860	9.523	10.142	10.740	11.315	11.870	12.405	12.920	13.417	13.49
4.00	3.760	9.385	4.924	10.563	11.113	11.552	12.106	12.057	13-134	13.59
4.25	3.644	9.250	9.633	10.391	10.927	11.440	11.733	12.406	12.359	13.29
4-50	3.527	9.119	9.653	10.223	10.740	11.234	11-707	12.160	12.573	13.00
4-75	5.417	3.990	9.537	10.059	10.557	11.033	11.452	11.921	12.735	12.73
5.00	3.306	8.863	9.394	9.899	10.320	10.833	11.274	11.690	12.085	12.46
5.25	5.198	8.740	9.254	9.742	10.206	10.647	11.004	11.465	11.843	12.20
5.50	8.093	8.619	9.117	9.590	10.035	10.462	10.645	11.246	11.608	11.95
5.75	7.999	8.500	8.983	9.441	9,873	10.232	13.555	11.034	11.379	11.70

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RETURN ON INVESTMENT PERCENTAGE

BASED ON 9.0.1. FACTOR (FACILITY COST/AVEG. ANNUAL CASH FLOA)

AND THE EXPECTED USEFUL LIFE OF THE NEW FACILITY

01/04/34

			1	XPECTED US	EXPECTED USEFUL LIFE IN YEARS										
4.0.1.	21	22	23	24	25	26	27	`23	29	10					
0.00	21.000	22.000	23.000	24.000	25.000	25.000	27.000	28.000	29.000	10.00					
0.25	20.433	21.380	22.324	23.266	24.235	25.143	26.077	27.010	27.940	23.55					
0.50	19.888	20.784	21.676	22.563	23.446	24.324	25.198	26.063	26.933	27.79					
0.75	19.363	20.211	21.053	21.359	22.719	23.542	24.359	25.171	25.976	26.77					
1.29	18.357	17.650	20.456	21.243	22.023	22.795	23.540	24.316	25.066	25.30					
1.25	13.370	19.131	19.832	20.624	21.357	22.051	22.794	23.503	24.200	24.29					
1.55	17.900	13.621	19.331	20.030	20.720	21.399	22.008	22.727	23.376	24.01					
1.73	17.445	14.130	18.801	17.461	23.109	23.745	21.372	21.987	22.592	23.15					
2.30	17.011	17.653	18.292	18.914	19.523	20.121	20.707	21.291	21.344	22.39					
2.35	16.570	17.203	17.803	13.389	15.742	19.523	20.072	20.408	21.132	21.64					
2.50	10.183	10.745	17.332	17.335	13.424	14.951	19.464	19.965	20.454	20.97					
2.75	15.793	15.343	16.879	17.401	17.908	13.402	18.853	19.351	19.806	20.24					
3.00	1515	15.727	15.444	16.936	17.413	17.877	18.327	18.744	19.138	19.60					
3.23	15.050	15.545	16.024	16.458	15.938	17.373	17.795	15.203	13.599	13.98					
3.5û	14.698	15.167	15.620	14.G58	1022	15.393	17.265	17.687	18.036	18.39					
3.75	14.358	14.203	15.232	15.645	14.043	16.427	14.797	17.154	17.498	17.52					
4.00		14.451	14.857	15.247	15.622	15.983	16.330	16.663	16.954	17.29					
4-25	13.712	14.112	14.496	14.864	15.217	15.55á	15.881	1=.193	14.492	16.77					
4.50	13.405	13.78+	14.148	14.495	14.525	15.147	15.451	15.743	16.022	14.28					
4.75	13.108	13.463	13.812	14.141	14.454	14.753	15.039	15.312	15.572	15.52					
5.00	12.821	13.163	13.439	13.799	14.094	14.375	14.643	14.898	15.141	15.37					
5.25	12.544	12.548	13.176	13.469	13.747	14.012	14.253	14.502	14.723	14.94					
5.50	12.275	12.583	12.375	13.152	13.414	13.662	13.895	14.121	14.333	14.53					
5.75	12.015	12.308	12.534	12.346	13.093	13.325	13.547	13.750	13.954	14.14					

	v		Ē	XPECTED U	SEFUL LIF	IN YEAR	s · ·			
X .										
2.0.1.	1	2	3	4	5	6	7	±	9	10
4.00	0.943	1.833	2.673	3.465	4.212	4.917	5.582	6.210	5.802	7.360
5.25	0.941	1.827	2.661	3.445	4.184	4.879	5.533	0.149	6.728	7.274
6-50	0.937	1.321	2.648	3.426	4.154	4.641	5.485	6.089	6.454	7.189
5.75	0.937	1.314	2.536	3-406	4.128	4.304	5.437	6.030	6.585	7.105
7.00	0.935	1.803	2.624	1.387	4.100	4.747	5.389	5.971	0.515	7.024
7.25	0.932	1.502	2.612	3.365	4.073	- 4.730	5.343	5.914	6.4-7	6.943
7.50	0.930	1.795	2.601	3.349	4.046	4.674	5.297	5.857	6.379	0.864
7.75	0.928	1.789	2.539	3.331	4-019	4.658	5.251	5.802	6.312	6.786
2.00	0.925	1.783	2.577	3.312	3.993	4.523	5.206	5.747	6.2-7	6.710
\$.25	0.924	1.777	2.500	3.294	3.947	4.556	5.162	5.093	5.182	0.035
8.50	0.722	1.771	2.554	. 3.276	3.941	4.554	5.119	5.539	0.117	6.561
8.75	0.920	1.765	2.543	3.255	3.915	4.520	5.075	5.567	0.057	6.489
9.00	0.917	1.759	2.531	3.240	3.890	4:486	5.033	5.535	5.995	6.418
9.25	0.915	1.753	2.520	3.222	3.865	4.453	4.991	5.484	5.735	6.343
7.50	0.713	1.747	2.559	3.204	3.240	4.420	4.450	5.433	5.875	6.27%
9.75	0.911	1.741	2.495	3.137	3.815	4.357	4.909	5.124	5.817	0.211
10.00	0.909	1.730	2.447	3.170	3.791	4.355	4.863	5.235	5.759	6.145
10.25	0.907	1.730	2.476	3.153	3.767	6.324	4.829	5.237	5.702	6.079
10.50	0.905	1.72+	2.465	3.110	3.743	4.292	4.737	5.239	5.045	6.015
19.75 &	0.903	1.718	2.454	3.119	3.719	4.261	4.751	5.192	5.591	5.911
11.00	0.701	1.713	2.444	3.102	3.696	4.231	4.712	5.140	5.537	5.889
11.25	0.299	1.707	2.433	1.046	3-673	4.200	4.574	5.161	5.434	5.828
11.50	0.397	1.701	2.421	3.070	3.550	4.170	4.637	5.056	5.431	5.763
11.75	0.995	1.294	2 - 412	3.053	3.527	4.141	4.600	5.011	5.379	5.709

TABLE 1

RETURN ON INVESTMENT PERCENTAGE

BASED ON R.O.I. FACTOR (FACILITY COST/AVRG. ANNUAL CASH FLOW)

AND THE EXPECTED USEFUL LIFE OF THE NEW FACILITY

01/06/84

_			EX	PECTED US	FUL LIF	IN YEAR	;			
X R-0.1.	11	12	13	14	15	16	17	18	19	20
6.00	7.887	8.384	8.853	9.295.	9.712	10.106	10.477	10.525	11.158	11.470
6.25	7.737	8.270	8.725	9.153, 1	9.556	9.935	10.291	10.027	10.943	11.241
6.50	7.689	8.159	8.400	9.014	9.403	9.768	10.111	10.432	10.735	11.019
6.75	7.593	8.050	8.477	8.878	9.253	9.405	9.935	10.243	10.532	10.803
7.00	7.499	7.943	8.358	8.745	9.105	9.447	9.763	10.059	10.336	10.594
7.25	7.406	7.838	3.240	6.616	3.966	9.292	9.595	9.480	10.145	10.391
7.50	7.315	7.735	8.125	8.489	8.827	9.142	9.434	9.706	9.959	10.194
7.75	7.226	7.635	5.014	3.365	8.692	8.995	9.276	9.537	9.779	10.004
8.00	7.139	7.536	7.904	3.244	8.559	8.851	9.122	9.372	9.504	9.813
8.25	7.053	7.439	7.796	8.126	5.430	8.712	5.971	9.212	9.433	9.638
8.5C	6.969	7.345	7.691	8.010	8.304	3.575	8.825	9.055	9.208	9.453
8.75	6.836	7.252	7.582	7.597	8.181	3.442	5.633	3.904	9.107	9.294
9.00	6.305	7.161	7.487	7.784	8.061	8.313	2.544	8.756	8.950	9.127
9.25	6.726	7.071	7.388	7.678	7.943	8.180	8.403	5.012	8.798	b.962
9.50	6.547	0.924	7.291	7.572	7.825	8.062	3.276	6.471	2.650	5.812
9.75	6.570	6.398	7.196	7.468	7.716	7.942	1.147	9.335	8.505	8.661
19.00	6-495	6.814	7.103	7.367	7.606	7.324	8.022	3.201	8.305	8.514
10.25	6.421	6.731.	7.012	7.267	7.499	7.709	7.599	3.072	8.228	8.370
10.50	6.348	6.0.0	5.923	7.170	7.394	7.596	7.779	7.945	8.095	8.231
10.75	6.277	6.570	6.836	7.075	7.291	7.486	7.603	7.222	7.966	8.095
11.00	6.207	6-492	6.750	6.982	7.194	7.379	7.547	7.702	7.239	7.983
11.25	6.138	6.416	6.466	5.291	7.093	7.274	7.438	7.554	7.716	. 7.835
11.50	5.070	0.341	6.553	6.301	6.997	7.172	7.329	7.470	7.594	7.710
11.75	6.003	0.267	6.543	6.714	6.903	7.072	7.223	7.358	7.480	7.588

7			٤	XPECTED U	SEFUL LIF	E IN YEAR	\$,	
P.Q.1.	21	22	23	24	25	26	27	28	29	30
4.00	11.764	12.042	12.303	12.550	43 344	41 00:	******		****	
6.25	11.521	11.784	12.032		2.783	13.003	13.211	13.400	13.591	13.765
6.50	11.285	11.535	11.770	12.266	12.485	12.692	12.887	13.070	13.242	13.404
6.75	11.057	11.294		11.991	12.198	12.392	12.575	12.746	12.907	13.059
••••	112037	11.274	11.517	11.725	11.921	12.104	12.275	12.436	12.566	12.727
7.00	10.836	11.061	11.272	11.469	11.654	11.826	11.937	12.137	12.275	12.409
7.25	10.521	10.836	11.036	11.222	11.396	11.558	11.709	11.850	11.931	
7.50	10.413	10.417	10.307	10.953	11.147	11-299	11.441			12.104
7.75	10.212	10.406	10.555	10.752	10.907	11.050		11.573	17.696	11.810
			.0.303	.02.752	104 907	:1.030	11.184	11.397	11.422	11.529
5.00	10.617	10.201	10.371	10.529	10.675	10.310	10.935	11.051	11.158	11.253
8.25	9.527	10.002	10.164	10.313	10.451	10.578	10.696	10.204	10.905	1C 997
a.50	7.644	9.310	9.763	19.104	10.234	10.354	10.465	10.566		
8.75	9.465	9.623	9.769	9.902	10.025	10.133	10.403	10.337	10-540	10.747
			, ,	77742	10.023		10.242	10-227	10.425	10.508
7.00	9.292	9.442	9.580	9.737	9.823	9.929	10.027	10.110	10.172	40 37/
9.25	9.124	9.267	9.398	9.517	9.627	9.727	9.819	9.903	9.980	10.274
9.50	9.961	9.097	9.221	9.334	9.438	9.532	7.619	9.903	9.769	13.050
9.75	5.503	3.932	9.049	9.157	9.254	9.343				9.035
		******	,,,,,,	74127	7.634	7.343	9.425	9.493	9.505	9.627
10.00	5-549	3.772	8.343	3.735	9.077	9.101	9.237	7.307	9.370	A . 19
10.25	5.499	8.616	3.722	3.518	9.905	8.984	9.050	9.171	9.130	9.427
10.50	8.354	8.465	E.366	5.457	8.739	3.81.				9.234
10.75	5.212	8.318	5.414	8.500	8.575		9.831	9.942	8.797	9.047
				6.300	4-312	8.645	8.712	3.769	8.821	8.665
11.00	8.075	2.176	5.266	8.348	3.422	3.488	8.548	8.402	3.650	3.694
11.25	7.941	. 4.637	5-123	3.201	3.270	3.333	5.334	3.440	5.435	8.525
11.50	7.811	7.903	7.984	3.055	5.124	8.183				
11.75	7 655	7,772	7.850	7.919	7.981	3.037	8.236	3.285	1.126	-01-3
				1 6 7 1 7	/ • ¥3	3.437	2.037	3.131	8.171	3.207

TABLE 1

TABLESTON OF THE TRANSPORT PE

RETURN ON INVESTMENT PERCENTAGE

BASED ON R.O.I. FACTOR (FACILITY COST/AVRG. ANNUAL CASH FLOW)

AND THE EXPECTED USEFUL LIFE OF THE NEW FACILITY

OT/O6/84

_			E:	KPECTED US	EFUL LIFE					
X R.O.I.	1	2	3	4	5	6	7	8	9	10
12.00	0.893	1.690	2.402	3.037	3.605	4.111	4.564	4.968	5.328	5.65
12.25	0.871	1.685	2.392	3.021,		4.082	4.525	4.925	5.278	5.59
12.50	0.889	1.679	2.331	3-006	3.561	4.054	4.492	4.882	5.228	5.53
12.75	0.887	1.674	2.371	2.990	3.539	4.026	4.457	4.840	5.180	5.48
13.00	0.835	1.668	2.361	2.974	3.517	3.998	4.423	4.799	5.132	5.42
13.25	0.883	1.663	2.351	2.959	3.496	3.970	4.338	4.752	5.084	5.37
13.50	0.881	1.657	2.341	2.944	3.475	3.941	4.355	4.718	5.038	5.32
13.75	0.879	1.652	2.331	2.929	3.454	3.915	4.321	4.678	4.992	5.24
14.00	0.877	1.647	2.322	2.914	3.433	3.589	4.238	4.639	4.946	5.21
14.25	0.875	1.641	2.312	2.399	3.413	3.962	4.256	4.000	4.902	5.16
14.50	0.873	1.035	2.302	2.884	3.392	3.815	4.224	4.562	4.558	5.11
14.75	0.871	1.631	2, 293	2.349	3.372	3.810	4.192	4.524	4.814	5.06
15-00	0.470	1.426	2.283	2.855	3.352	3.784	4.100	4.487	4.772	5.01
15.25	0.868	1.421	2.274	2.841	3.332	3.752	4.129	4 - 451	4.729	4.97
15.50	0.866	1.615	2.264	2.326	3.313	3.734	4.099	4.415	4.668	4.92
15.75	0.254	1.610	2.255	2.512	3.293	3.707	4.062	4.379	4.647	4.37
16.00	0.362	1.605	2.246	2.798	3.274	3.685	4.039	4.344	4.607	4.83
14.25	0.840	1.600	2.237	2.784	3.255	3.660	4.009	4.309	4.507	4.78
10.50	0.358	1.595	2.228	2.770	3.235	3-630	3.930	4.274	4.527	4.74
16.75	0.857	1.590	2.219	2.757	3.215	3.613	3.951	4.241	4.489	4.70
17.00	0.855	1.585	2.210	2.743	3.199	3.589	3.922	4.207	4.451	4.05
17.25	0.853	1.580	2.201	2.730	3.161	3.546	3.894	4.174	4-413	4.61
17.50	0.551	1.575	2.192	2.716	3.163	3.543	3.864	4.142	4.376	4.57
17.75	0.849	1.570	2.183	2.703	3.145	3.520	3.839	4.109	4.339	4.53

7.										
1.0.1.	11	12	13	14	15	16	17	18	19	50
12.00	5.433	6.194	0.424	6.628	4.311	6.974	7.120	7.250	7.364	7.45
12.25	5.973	6.123	6.344	0.544	4.721	6.673	7.019	7.143	7.255	7.35
12.50	5.310	6.053	6.270	6.462	5.633	6.785	6.920	7.040	7-147	7.24
12.75	5.748	5.985	6.195	6.381	0.547	6.693	6.823	4.937	7.041	7.13
13.00	5.687	5.915	6.122	6.302	6.462	6.604	4.729	6.340	6.938	7.02
13.25	5.527	5.852	6.050	5.225	0.150	4.510	6.63?	6.743	4.537	0.92
13.50	5.548	5.797	5.979	6.149	6.299	6.431	4.547	5.549	6.739	6.21
13.75	5.510	5.723	5.910	4.075	6.220	6.347	6.459	6.557	. 6.644	6.72
14.00	5.453	5.440	5.842	4.002	6.142	6.265	4.373	0.457	6.550	٤٠.٥
14.25	5.397	5.599	5.775	5.931	5.066	6.155	6.239	6.390	5.459	6.52
14.50	5.341	5.533	5.710	5.861	5.992	6.100	6.234	6.294	6.370	0.43
14.75	5.237	5.479	5-646	5.792	5.919	6.629	6.126	6.210	0.243	6.34
15.06	5.234	5.421	5.583	5.724	5.247	5.954	6.047	6.128	5.178	5.25
15.25	5.151	5.363	5.521	5.053	5.777	5.891	5.970	0.948	6.115	4.17
15.50	5.130	5.307	5.461	5.574	5.737	5 . 803	5.395	5.969	5.034	6.09
15.75	5.079	5.252	15.401	2.230	5.641	5.738	5.929	5.593	5.755	6.00
16.00	5.029	5.197	5.342	5.465	5.575	5.003	5.749	5.513	5.877	5.92
16.25	4.977	5.144	5.285	5.40e	5.511	5-601	5.578	5.745	5.832	5.55
15.50	4.931	5.071	5.222	5.340	5.447	5.534	5.607	5.073	5.728	5.77
16.75	4.283	5.039	5.173	5.257	5.335	5.469	5.541	5.503	5.655	5.70
17.00	4.836	4.988	5.114	5.229	5.324	5.405	5.475	5.524	5.584	5.52
17-25	4.790	4.933	5.065	5.172	5.264	5.343	5.410	5.457	5.515	5.55
17.50	4.745	4.389	5.012	5.117	5.206	5.281	5.346	5.401	5.447	5.42
17.75	4.700	4.641	4.900	5.042	5.148	5.221	5.283	5.336	5.341	5.41

TABLE 1

AETURN ON INVESTMENT PERCENTAGE BASED ON R.D.I. FACTOR (FACILITY COST/AVRG. ANNUAL CASH FLOW) - AND THE EXPECTED USEFUL LIFE OF THE HEW FACILITY 01/J0/84

			· E	XPECTED US	SEFUL LIFE	IN YEAR	S			
7 7.0.1.	21	22	23	24	25	26	27	25	29	30
12.00	7.562	7.645	7.718	7.784	7.843	7.896	7.943	7.984	a.022 1	8.05
12.25	7.442	7.521	7.591	7.653.	7.709	7.759	7.803	7.842	7.377	7.90
12.50	7.326	7.401	7.447	7.526	7.579	7.620	7.667	7.704	7.737	7.70
12.75	7.212	7.283	7.347	7.403	7.453	7.497	7.536	7.571	7.402	7.62
13.00	7.102	7.170	7.230	7.283	7.330	7.372	7.409	7.441	7.470	7.49
13.25	5.994	7.059	7.116	7.166	7.211	7.250	7.295	7.316	7.343	7.36
13.50	6.889	6.951	7.035	7.053	7.095	7.132	7.165	7.194	7.219	7.24
13,75	6.787	6.845	6.897	4.942	6.982	7.017	7.048	7.075	7.099	7.12
14.00	6-687	5.743	5.792	6.335	6.373	6.906	6.935	4.941	6.983	7.00
14.25	6.590	6.643	6.690	6.731	6.766	4.798	6.325	0.249	6.970	4.88
14.50	4.495	6.546	6.590	6.629	6.663	6.693	6.718	6.741	6.701	0.77
14.75	6.403	5 - ≈51	6.493	6.530	5.562	5.590	4.415	6.030	4.654	6.67
15.00	6.312	6.359	6.399	4.434	6.484	6.491	6.514	6.534	6.551	6.56
15.25	4-225	6.269	6.307	6.340	6.369	4.394	6.415	6.434	0.450	0.46
15.50	6.139	6.181	6.217	6.249	6.276	4.299	6.320	6.337	5.353	0.30
15.75	4.055	0.095	ċ.130	3.159	6.185	6.208	5.227	6.243	0.258	a.27
16.00	5.973	. 0.011	6-044	6.073	6.097	6.118	6.136	6.152	6.166	6.17
16.25	5.893	5.930	5.961	5.783	6.011	6.031	6.046	6.063	4.076	6.08
16.50	5.815	5.250	5.880	5.905	5.927	5.940	5.962	5.976	5.788	5.99
16.75	5.739	5.772	5.801	5.825	5.846	5.864	5.879	5,892	5.903	5,91
17.00	5.645	5-596	5.723	5.746	5.766	5.783	5.795	5.310	5.520	5.82
17.25	5.592	5.622	5-648	5.670	5.689	5.705	5.712	5.730	5.740	5.74
17.50	5.521	5.550	5.574	5.595	5.413	5.625	5.641	5.052	5.661	5.44
17.75	5.452	5.479	5.502	3.522	5.537	5.553	5.565	5.575	5.534	5.59

- z			£)	PECTED US	EFUL LIFE	IN YEARS				
R.O.I.	1	2	3	4	5	٠ ه	7	3	9	10
18.00	0.847	1.500	2.174	Z-490	3.127	3.498	3.812	4.078	4.303	4.494
19.25	0.846	1.561	2.166	2.677	3.110	3.475	3.785	4.046	4.267	4.454
18.50	0.344	1.556	2.157	2.564	3.092	3.453	3.758	4.015	4.232	4.415
18.75	0.542	1.551	2.148	2-651	3.075	3.431	3.732	3.985	4-198	4.377
19.00	0.840	1.547	2.140	2.639	3.058	3.410	3.706	3.954	4.163	4.339
19.25	0.839	1.542	2.131	2.526	3.041	3.388	3.680	3.925	4.130	4.302
19.50	0.837	1.537	2.123	2.613	3.024	3.347	3.455	3.895	4.096	4.255
19.75	0.435	1.532	2.115	2.401	3.007	3.346	3.629	3.244	4-003	4.225
20.00	0.833	1.525	2.106	2.589	2.991	3.325	3.605	3.837	4.031	4.192
20.25	0.832	1.523	2.093	2.577	2.974	3.305	3.580	3.857	3,799	4.157
20.50	0.530	1.519	2.090	2.564	2.955	3.285	3.556	3.781	3.967	4.122
20.75	0.825	1.514	2.082	2.552	2.942	3.245	3.532	3.753	3.936	4.08
21.00	0.526	1.509	2.074	2.540	2.926	3.245	3.508	3.726	3.205	4.054
21.25	0.825	1.505	2.066	2.529	2.910	3.225	3.434	3.497	3.975	4.021
21.50	0.523	1.500	2.058	2.517	2.295	3.205	3.461	3.672	3.545	3.999
21.75	0.821	1.496	2.050	2.505	2.179	3.180	3.438	3.043	3.815	3.455
22.00	0.820	1,492	2.042	2.494	2.564	3.167	3.416	3.419	3.786	3.923
22.25	0.813	1.467	2.034	2.482	2.545	3.145	3.393	3.593	3.757	3.392
22.50	0.316	1.483	2.027	2.471	2.533	3.129	3.371	3.563	3.729	3.550
22.75	0.215	1.478	2.019	2.457	2.513	3.111	3.347	3.543	3.701	3.830
23.00	0.813	1.474	2.011	2.448	2.203.	3.092	3.327	3.518	3.673	3.799
23.25	0.211	1.470	2.004	2.437	2.789	3.074	3.306	3.493	3.446	3.749
23.50	G.510	1.445	1.996	2.426	2.774	3.056	3.264	3.469	3.619	3.740
23.75	0.508	1.461	1.949	2.415	2.750	3.035	1.203	3.445	3.592	3.711

TABLE 1

RETURN ON INVESTMENT PERCENTAGE

BASED ON R.O.I. FACTOR (FACILITY COST/AVRG. ANNUAL CASH FLOW)

AND THE EXPECTED USEFUL LIFE OF THE HEW FACILITY

01/04/84

			EX	PECTED US	EFUL LIFE	IN YEARS				
7 R.O.I.	11	12	13	14	15	76	17	18	19	20
18.00	4.656	4.793	4,910	5.008	5.092	5.162	5.222	5.273	5.316	5.35
18.25	4.613	4.746	4.840	4.955	5.036	5.105	5.102	5.211	5.253	5.28
18.50	4.570	4.700	4.810	4.903	4.782	5.048	5.104	5.151	5.191	5.22
18.75	4.528	4.455	4.762	4.852	4.928	4.992	5.044	5.091	5.130	5.16
17.30	4.486	4.611	4.715	4.302	4.876	4.938	4.990	5.033	5.070	5.10
19.25	4.446	4.567	4-665	4.753	4.824	4.884	4.934	4.970	5.012	5.04
19.50	4-406	4.523	4.622	4.705	4.774	4.532	4.850	4.921	4.954	4.93
19.75	4.346	4.481	4.577	4.657	4.724	4.780	4.827	4.866	4.898	4.92
20.00	4.327	4.439	4.533	4.611	4.675	4.730	4.775	4.212	4.343	4.57
20.25	4.289	4.395	4.489	4.565	4.628	4.680	4.723	4.760	4.790	4.31
20.50	4.251	4.358	4.446	4.520	4.581	4.631	4.673	4.703	4.737	4.76
20.75	4.214	4.313	4.434	4.475	4.534	4.583	4.024	4.457	4.605	4.70
21.00	4.177	4,273	4.362	4.432	4.489	4.535	4.576	4.003	4.635	4.65
21.25	4.141	4.240	4.321	4.389	4.444	4.490	4.523	4.559	4.535	4.00
21.50	4.105	4,202	4.231	4.347	4.401	4.445	4.431	4.511	4.536	4.55
21.75	4.070	4.164	4.242	4.305	4.353	4.400	4.436	4-465	4.458	4.50
22.00	4.035	4.127	4.203	4.255	4.315	. 4.357	4.391	4.419	4.442	4.45
22.25	4.001	4.G91	4-164	4.224	4.274	4-314	4.347	4.574	4-396	4.41
22.50	3.965	4.055	4.127	4.135	4.233	4.272	4.303	4.329	4.350	4.36
22.75	3.935	4.020	4.090	4.146	4.193	4.230	4-261	4-286	4.304	4.32
23.00	3.902	3.985	4.053	4.198	4.153	4.129	4.219	4.243	4.263	4.27
23.25	3.870	3.951	4.017	4.071	4.114	4-149	4.178	4.201	4.220	4.23
23.50	3.833	3.917	3.982	4.034	4.076	4.110	4.139	4.150	4.173	4.19
23.75	3.807	3.884	3.947	3.997	4.013	4.071	4.098	4.120	4.137	4.15

<u>.</u>		EXPECTED USEFUL LIFE IN YEARS											
R.O.I.	21	22	53	24	25	24	27	28	29	30			
13.00	5.334	5.410	5.432	5.451	5.467	5.480	5.492	5.502	5.510	5.51			
18.25	5.317	5.342	5.363	5.381		5.409	5.420	5.429	5.437	5.44			
18.50	5.252	5.270	5.296	5.313	5.328	5.340	5.350	5.359	5.366	5.37			
13.75	5.139	5.212	5.231	5.247	5.261	5.272	5.242	5.290	5.297	5.30			
19.00	5.127	5.147	5.167	5.132	5.195	5.206	5.215	5.223	5.229	5.23			
19.25	5.066	5.087	5.104	5.119	5.131	5.141	5.150	5.157	5.103	5.14			
19.50	5.007	5.026	5.043	5.057	5.067	5.073	5.686	5.093	5.099	5.10			
19.75	4.948	4.967	4.983	4.796	5.007	5.017	5.024	5.031	5.034	5.04			
20.00	4.591	4.909	4.925	4.937	4.948	4.95c	4.904	4.970	4.975	4.77			
20.25	4.835	4.353	4.867	4.279	4.859	4.697	4.904	4.910	4.915	4.91			
20.50	4.731	4.797	4.211	4.823	4.832	4.0.0	4.8-5	. 6 5 2	4.354	4.57			
20.75	4.727	4.743	4.75¢	4.767	4.776	4.723	4.790	4.795	4.729	4.30			
21.00	4.675	4.690	4.703	4.713	4.721	4.728	4.734	4.739	4.743	4.74			
21.25	4.624	4.e38	4.650	4.660	4.668	4.074	4.680	4.455	4.638	4.69			
21.50	4.573	4.587	4.596	6.608	4.115	4.022	4.527	31	5 ل ن ه	4.03			
21.75	4.524	4.537	4.548	4.557	4.544	4.570	4.575	4.579	4.582	4.53			
22.00	4.476	4.488	4.499	4.507	4.514	4.520	4.524	4.528	4.531	4.534			
22.25	4.428	4.440	4.450	4.455	4.465	4.470	4.475	4.473	4.431	4.494			
22.50	4.332	4.393	4.403	4.410	4.417	4.422	4.425	4.429	4.432	4.434			
22.75	4.336	4.347	4.355	4.364	4-369	4.374	4.375	4.381	4.344	4.35			
23.00	4.292	4.302	4.311	4.315	4.323	4.323	4.332	4.335	4.337	4.339			
23.25	4.243	4.258	4.255	4.273	4.278	4.282	4.28a	4.289	4.291	4.293			
23.50	4.205	4.214	4.222	4.225	4.234	4.238	4.241	4.244	4.246	4.248			
23.75	4.163	4.172	4-179	4.135	4,190	4.194	4.197	4,200	4.202	4.203			

RETURN ON INVESTMENT PERCENTAGE
BASED ON R.O.I. FACTOR (FACILITY COST/AVRG. ANNUAL CASH FLOW)
AND THE EXPECTED USEFUL LIFE OF THE NEW FACILITY

TABLE 1

01/06/84

			 •	IN YEARS	FUL LIFE	PECTED USE	EX			
10	9	8	7	6	5	4	3	2	1	% ?.0.1.
3.65	3.566	3.421	3.242	3.020	2.745	2.404	1.981	1.457	0 004	24 03
3.65	3.539	3.398	3.222	3.003	2.731	5.383,	1.974	1.457	0.806 0:805	24.00 24.25
3.62	3.514	3.375	3.201	2.986	2.717	2.383	1.967	1.448	0.803	24.25
. 3.59	3.488	3.352	3.181	2.968	2.703	2.372	1.959	1.444	0.802	24.75
3.5	3.403	3.329	3.101	2.951	2.689	2.362	1.952	1.440	0.800	25.00
:====::	*********		*****	20222222			*******	*****	*****	*****
				IN YEARS	FUL LIFE	KPECTED US	Ę			ž
20	19	15	17	16	15	14	13	12	11	a.o.I.
4.1	4.097	4.080	4.059	4.033	4.001	3.962	3.912	3.851	3.776	24.00
4.0	4.057	4.041	4.021	3.996		3.950,	3.879	3.819	3.745	24.25
4.0	4.018	4.003	3.093	3.957	3.929	3.592	3.845	3.787	3.715	24.50
3.9	3.930	1.965	3.945	3.923	3.894	3.858	3.812	3.756	3.686	24.75
3.9	. 3.942	3.928	3.910	. 3,887	3.859	3.824	3.760	3.725	3.656	25.00
				IN YEARS	EFUL LIFE	CPECTED US	E			
30	5.6	28	27	59	25	24	23	5.5	21	.1.C.S
4.1	4.159	4.157	4.154	4.151	4.147	4.143	4.137	4.130	4.121	24.00
4.1	4.116	4.114	4.112	4.109	4.106	4.101	4.076	4.089	4.081	24.25
4.0	4.075	4.073	4.071	4.068	4.065	4.060	4.055	4.049	4.041	24.50
4.0	4.034	4.032	4.030	4.028	4.024	4.020	4.015	4.009	4.002	24.75
3.9	3.994	3.992	3.990	3.988	3.985	3.981	3.976	3.970	3.963	25.00

Table 2

Reference Annual Percent Return on Investment
For Applications Received Before February 1, 1993

Year Construction Completed	Reference Percent <u>Return</u>
1977	21.0
1978	21.9
1979	22.5
1980	23.0
1981	23.6
1982	23.4
1983	21.5
1984	19.9
1985	18.5
1986	17.4
1987	16.1
1988	17.1
1989	18.3
1990	18.3
1991	18.1
1992	17.0

Calculation of the reference percent return was made by averaging the average annual percent return before taxes on stockholders' equity for all manufacturing corporations as found in the Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations, published by the U.S. Department of Commerce, Bureau of the Census, for the five years prior to the year shown.

Table 2

Reference Annual Percent Return on Investment
For Applications Received on or After February 1, 1993

Year ConstructionCompleted	Reference Percent Return
1989	7.3
1990	7.3
1991	7.2
1992	6.8

Calculation of the reference percent return was made by averaging the average annual percent return before taxes on total assets for all manufacturing corporations as found in the <u>Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations</u>, published by the U.S. Department of Commerce, Bureau of the Census, for the five years prior to the year shown.

1/93

DISCUSSION OF PROPOSED RULE AMENDMENTS

<u>Definition of "Annual Incremental Cash Flow"</u> <u>OAR 340-16-030(1)(a)</u>, <u>Page A-8</u>

A definition of annual incremental cash flow has been added to the rule. The existing rule contains a definition for average annual cash flow, however, this existing definition will not be adequate for the method of analysis that will be employed to determine percent allocable in the amended rule.

<u>Definition of "Internal Rate of Return"</u> OAR 340-16-030(1)(f), Page A-8

A definition of Internal Rate of Return (IRR) has been added to the rule. This is a relatively standard definition of the IRR that has been modified to reflect the other definitions in the rule. It was necessary to provide a definition of the IRR since the amended rule proposes that this technique be used to determine the percent allocable for certain types of businesses.

<u>Definition of "Integral" Pollution Control Facilities</u> <u>OAR 340-16-030(1)(g)</u>, <u>Page A-9</u>

The Department has concluded that no one factor can be used to determine whether pollution control facilities are integral to the operation of the applicant's business. In addition to identifying a limited set of industries in the amended rule (commercial landfills, recycling businesses, and environmental service providers), the Department felt that it was reasonable to provide a set of factors that could be used to determine when this is the case. These factors are the percent of the total assets represented by pollution control facilities, whether the pollution control facilities were installed in response to market demand for such facilities, the extent to which the total revenue of the applicant is increased by the presence of pollution control facilities, or the extent to which the operating expenses of the business are related to operation of pollution control facilities. Additional factors could be used, however, the Department believes that the above factors will identify most instances where pollution control facilities are integral to the operation of the business.

Calculation of Facility Percent Allocable Where Pollution Control Facilities are Integral to the Operation of an Applicant's Business OAR 340-16-030(5)(a) through (c), Pages A-10 and A-11

For facilities identified by the above definitions, the amended rule will change the method used to determine the percent allocable to pollution control. The primary method of analysis will compare the average rate of return (profit before taxes as a percent of total assets) for the applicant's industry, as determined from the applicant's primary four digit Standard Industrial Classification (SIC), to the reference rate of return. The industry average rate of

return will be obtained from a standard and widely available reference source. If the industry average rate of return is greater than the reference rate, the percent allocable will be 0 percent. If the industry average rate of return is less than the reference rate, the percent allocable will be determined using the same formula as in the existing rule. The determination made by this method will be relatively simple and will not involve an extensive evaluation. These rule amendments will change the method of analysis only for applicants that are subject to the "integral" pollution control facilities definition.

Example Using the Proposed Methodology

The following is an example of the use of the proposed methodology for an applicant whose primary four digit SIC is 4953, "Refuse Systems." The reference source definition for this SIC is as follows:

"Systems primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, waste treatment plants, landfills, or other sites of disposal of such materials. Does not include companies primarily engaged in collecting and transporting refuse without disposal."

The industry rate of return as taken from the reference source is:

	For Statement Dates Ending March 31, 5 1988 1989 1990 1991 1992 A								
% Profit Before Taxes to Total Assets	9.3%	9.6%	7.8%	9.0%	7.4%	8.6%			
Number of statements	187	189	206	226	268				

From this analysis, the industry average profit before taxes as a percent of total assets is 8.6 percent. The reference rate of return for facilities completed in 1992 is 6.8 percent. Since the industry median rate of return is higher than the reference rate of return, the percent allocable for facilities in this industrial classification as determined using the proposed methodology is 0 percent.

The reference source uses financial statements and tax returns dated over a period of time rather than as of a specific date. For example, the column indicating statement dates ending March 31, 1992 includes all financial statements and tax returns submitted for this SIC with fiscal years ending between April 1, 1991 and March 31, 1992. The number of statements indicates the sample size of financial statements and/or tax returns used by the reference source to compile the industry data.

Comprehensive Cash Flow Evaluation Methodology OAR 340-16-030(5)(d), Pages A-11 and A-12

Under the existing rule, the return on investment and percent allocable are determined by evaluating the cash flow resulting from the claimed facility. Annual cash flow is defined as the difference between gross annual income from the facility and the gross annual expense of operating the claimed facility. The resulting cash flow is averaged over the first five years of operation of the facility. The claimed facility cost and average annual cash flow are used to determine a return on investment factor, which is used to determine the facility return on investment over the useful life of the facility. Finally, the facility return on investment is compared to the reference rate of return to determine the percent allocable.

The Department has identified several problems with this methodology as it applies to certain types of facilities, including:

- o For many types of facilities, it is difficult to determine annual income and expense.

 This is a particular problem in industries where pollution control facilities represent a substantial portion of the "productive" assets of the business.
- o A facility may generate substantial cash flow beyond the five year time frame used in the analysis, but before the end of its useful life.

The proposed method of evaluating the cash flow resulting from construction or installation of a facility will involve a comparison of the applicant's cash flow after installation of the facility to a base line cash flow assuming that the facility had not been installed. This will allow the Department to evaluate the incremental cash flow directly attributable to installation of a facility. These incremental cash flows over the useful life of the facility versus the cost of the claimed facility will be used to calculate an internal rate of return. The calculated internal rate of return will be compared to the reference rate of return to determine the percent allocable.

The rule will be amended to include a listing of the information that the applicant will be required to submit in order for the Department to perform this analysis. In addition, the applicant will be required to provide authorization for the Department to contract with an independent certified public accountant, at the applicant's expense, to assist in analyzing the applicant's financial information. OAR 340-16-045(6) currently provides that the Department can increase the application processing fee when an application involves an unusually extensive analysis to determine the portion of the facility cost allocable to pollution control.

Change in Reference Rate of Return OAR 340-16-030(6)(d), Page A-12

Return before taxes on Stockholders' Equity (ROSE) is the measure that is currently used as the reference rate of return in the percent allocable determination. The source for this data is

the <u>Ouarterly Report for Manufacturing</u>, <u>Mining and Trade Corporations</u>, published by the U.S. Department of Commerce, Bureau of the Census. The reference rate is calculated by averaging the annual percent return before taxes for the five years prior to the year the pollution control facility was completed.

One of the assumptions implicit by using ROSE is that funds for pollution control investments are derived solely from equity investors. It is doubtful that this is the case. Typically, equity represents less than 50 percent of the capital structure of the firm. It is more likely that the marginal dollar of investment in pollution control is derived from either internally generated cash, debt, or a combination of debt and equity.

Pollution control facilities are assets of the business. When given the choice of investing in pollution control assets or in productive assets, the business will choose to invest in the productive assets unless the pollution control investment generates a return at least equal to the return that the business achieves on productive assets. On the other hand, if a business could generate a higher return on pollution control investments than on productive assets, it would make these investments regardless of environmental regulations. It is unreasonable for a firm to expect that pollution control investments should be judged on a criteria different than other assets and, therefore, the Department believes that a reference rate of return based on profit before taxes as a percent of total assets is appropriate.

Other reference rates could be used. For example, a measure commonly used by companies to evaluate a corporation's performance is return on invested capital. This measure is similar to return on total assets, however, the return is calculated using only the assets that are considered productive assets. While this rate as a reference has some validity, it is not a published rate and there are interpretation issues in defining productive assets. This would require the Department to calculate the reference from other source data.

Sources of Reference Rate and Industry Data

The current reference is based on an average of all manufacturing firms and does not consider industry differences. The <u>Quarterly Report</u> contains data for manufacturing firms by two digit SIC and it is conceivable that this level of detail could be used to develop a table of reference rates by manufacturing industry. Few other sources are readily available for this type of data and applying such a table to non-manufacturing industries would be a difficult task.

Robert Morris Associates (RMA) publishes detailed financial data by four digit Standard Industrial Classification in their <u>Annual Statement Studies</u>. Commercial lenders and financial executives rely heavily on this data to evaluate financial performance relative to industry standards. This publication is generally available in major libraries or from the RMA. The data is compiled from actual financial statements and tax returns submitted to RMA by member banks. The 1992 edition includes data generated from over 95,000 statements. Each edition contains five years of historical data.

While the <u>Studies</u> contain financial information for a wide range of industries, there are some SICs that are not covered. In the event that the industry data reference source does not contain information specific to the applicant's industry, the Department and applicant will determine whether an alternate SIC is applicable. In the event that no alternate is applicable, the applicant will be required to submit detailed financial information.

Effective Date of Rule Amendments OAR 340-16-030(5), Page A-10

Rule amendments adopted pursuant to ORS 183.335 become effective on filing with the Secretary of State. The proposed rule amendments stipulate that these rule amendments would apply to applications received on or after February 1, 1993. The Department anticipates that if the proposed amendments are adopted by the Commission at the January 29, 1993 meeting, it will be possible to file the amended rule with the Secretary of State by February 1.

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal for Proposed Temporary Amendments to Pollution Control Facilities Tax Credit Rule

Fiscal and Economic Impact Statement

Introduction

The Department is proposing temporary amendments to the pollution control facilities tax credit rule that would change the method used to determine the portion of the facility cost properly allocable to pollution control. These amendments would apply primarily to applicants and industries that have pollution control facilities as an integral part of their business activities.

The likely overall impact of the proposed amendments will be a reduction in the amount of tax credits certified. Since the Department has no control over the type, number, or total claimed facility cost of applications that could potentially be submitted, it is difficult for the Department to estimate the total possible fiscal and economic impact of the proposed rule amendments.

The Department estimates that these rule amendments would have applied to approximately 14 applications that were certified by the Commission in calendar year 1992 representing a total certified cost of \$21 million. This total represents less than 10 percent of the number of certificates issued in 1992, but approximately two-thirds of the total amount of tax credits certified in 1992.

These amendments will not result in an increase in the number of tax credit applications submitted, in total claimed facility costs, or in total certified costs. Any facilities or portions of facilities currently ineligible for program benefits will remain ineligible.

General Public

The general public likely will not incur any additional costs as a result of the proposed rule amendments.

Tax credits certified by the Commission can be claimed by a certificate holder as a direct credit against the certificate holder's State income tax liability, or for cooperatives and non-profit corporations, as a credit against ad valorem taxes. Since the proposed amendments will result in a loss or reduction of program benefits for some applicants, these credits will not be available to the applicant. Consequently, the general public will benefit from increases in income or ad valorem tax collections.

The Department expects that commercial landfill operators in the state will realize a reduction in program benefits. Since these landfill operators provide land disposal services for municipal solid waste collectors, it is possible that the landfill operators use potential pollution control tax credits to reduce fees charged to dispose of solid waste. Fees for disposal of solid waste are determined by a number of factors including competition from both in-state and out-of-state firms, transportation costs, etc. The Department has no evidence to suggest that the expectation of pollution control facilities tax credits impact landfill operators' fee structures.

Small Business

These rule amendments will apply primarily to businesses where pollution control facilities are integral to the operation of the businesses. Typically, this will be in capital intensive industries. While a large number of small businesses utilize the tax credit program (primarily for CFC recovery equipment and Underground Storage Tank upgrades), the Department does not expect that a large number of small businesses will be impacted by the proposed rule amendments.

Some small waste recycling businesses and environmental service providers could realize a reduction in or loss of program benefits. For this to be the case, however, these businesses would have to be profitable to such an extent that the proposed percent allocable determinations would reduce their potential benefits. There is little rationale for the State to subsidize otherwise profitable businesses through the use of tax credits. In addition, pollution control facilities installed by these types of businesses are generally discretionary and are not installed in response to environmental requirements.

All applicants will have the opportunity to provide detailed financial information where they believe that the proposed rule does not adequately consider their specific financial situation. This could present a greater application preparation burden and expense for some small businesses in highly profitable industries.

Large Business

Large businesses with significant amounts of capital invested in pollution control facilities are the most likely parties to be directly impacted by the proposed rule amendments. These businesses will likely see a reduction in program benefits. As is the case for small businesses, this reduction will occur only for profitable businesses. In

addition, any applicant adversely impacted by these amendments will have the opportunity to provide the Department with information necessary to determine the facility return on investment and percent allocable through an alternate methodology.

Local Governments

Local governments are not eligible for the tax credit program certification and, therefore, a reduction in program benefits will not have a direct financial impact on local governments.

The tax credit program statutes and rules do allow cooperatives and non-profit corporations to claim credits against ad valorem taxes. A reduction in tax credit program benefits to such organizations could potentially result in an increase in ad valorem tax collections by local governments. Any such increase would likely be small since few of the organizations these rule amendments are likely to affect are cooperatives or non-profit corporations.

State Agencies

The Department is already involved in processing tax credit applications and the proposed rule amendments will not impact staffing or budget requirements. The amendments could result in fewer tax credit applications being submitted and a reduction in workload for Department staff. Such a reduction would also be accompanied by a reduction in program revenue from tax credit application fees.

The changes in the methodology used to calculate the facility return on investment and percent allocable could simplify application processing. This may reduce the number of Department staff hours required to process tax credit applications.

There should be no impact on other agencies.

Assumptions

There are no quantitative assumptions used in this analysis. As noted above, it is difficult for the Department to estimate the magnitude of the fiscal and economic impact of the proposed rule amendments because the Department has little influence over the type or number of applications that may be submitted.

Environmental Quality Commission

	Rule Adoption	Item
	Action Item	
X	Information I	tem

Agenda Item <u>F</u>
January 29, 1993 Meeting

Title:

Report on Tualatin Basin Nonpoint Source Control Program Implementation and Compliance Date

Summary:

There have been a number of accomplishments in the area of NPS control in the Tualatin subbasin since TMDLs were set and implementation efforts began. In spite of these accomplishments, it now appears that the TMDL for phosphorus will not be achieved by the June 30, 1993 compliance date set in rule. Because of the establishment of the TMDL, NPS control efforts have been focused almost entirely on phosphorus even though concerns exist with several other water quality parameters.

The Commission has the authority to allow activities to continue in the Tualatin watershed even if TMDLs are not achieved by the compliance date (without the need to change the date in the rule). Conditions under which such authorization would occur have not been established. Accomplishments, problems, and alternatives for action are presented. Discussion is requested.

Department Recommendation:

It is recommended that the Commission discuss the report and provide guidance to the Department regarding preferred options for proceeding with pollution control efforts in the Tualatin subbasin after the June 30, 1993, TMDL compliance date, and discuss any rule changes that may need to be developed.

Report Author Division Director
Administrator

January 13, 1993

[†]A large print copy of this report is available upon request.

Date: January 12, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item F, January 29, 1993, EQC Meeting

Report on Tualatin Basin Nonpoint Source Control Program Implementation and Compliance Date

Statement of Purpose

This agenda item is intended to provide an update on the status of efforts to control nonpoint source (NPS) water pollution in the Tualatin River subbasin and meet a June 30, 1993 compliance date. The Tualatin River and its tributaries have a number of NPS pollution problems that have resulted in degradation of water quality. The purpose of the NPS control efforts is to improve the overall water quality of the river and its tributaries, and to achieve a Total Maximum Daily Load (TMDL) for total phosphorus. The TMDL was set at a level that is intended to limit algae growth to prevent violations of water quality standards for dissolved oxygen and pH. Prevention of these water quality standard violations would help to protect the designated beneficial uses of the river. It now appears that full achievement of the TMDLs will not occur by the compliance date set in rule. The Department expects to return to the Environmental Quality Commission (Commission, EQC) at a future meeting with recommendations as to how to proceed beyond the compliance date. Discussion and input on this report by the Commission is sought.

Background

The Tualatin River and its tributaries have been known to have serious NPS related water pollution problems for several years. There are concerns with turbidity, low dissolved oxygen, temperature, bacteria, sediment and nutrients (phosphorus). Beneficial uses affected include municipal water, irrigation, fish, other aquatic life, recreation and aesthetics.

 $^{^{\}dagger}\!\!A$ large print copy of this report is available upon request.

On July 8, 1988, the Commission adopted a rule which established TMDLs for total phosphorus and ammonia nitrogen in The rule set a compliance date of June the Tualatin River. 30, 1993, for achieving the TMDLs. In a separate EQC action, target dates were set for development of plans, by Designated Management Agencies (DMAs), to implement programs which would result in achievement of the TMDLs. Most of these plans were approved by the Commission in 1990. The plan for reducing NPS pollution from agricultural sources has twice been approved for a limited duration pending further improvements to the The current limited approval for agriculture will expire at the end of April of 1993. Implementation of all plans is underway.

The DMAs, specified in rule, with responsibility for development and implementation of NPS control plans are: Washington, Clackamas, and Multnomah Counties, all incorporated cities in the Tualatin River and Lake Oswego subbasins, the Oregon Department of Agriculture (ODA), and the Oregon Department of Forestry (ODF). A Surface Water Management Authority was established in Washington County under the auspices of Unified Sewerage Agency (USA). A single Urban Area Surface Water Management Plan was developed by USA which covers most of the cities in the basin and the urban portions of Washington County. The cities of Portland, Lake Oswego, and West Linn developed separate management plans. Clackamas County, Multnomah County, ODA and ODF also developed separate plans.

In addition to their NPS control plan, USA was required to undertake facilities planning to determine how sewage treatment plants in the basin would be upgraded to meet the TMDL requirements. The Commission approved USA's Wastewater Facilities Plan in August of 1990. Construction is now nearing completion. The ammonia nitrogen TMDL has been achieved and phosphorus from sewage treatment plants has been greatly reduced. The remaining phosphorus reductions needed will have to come from nonpoint source reductions. Depending on how it is approached, control of NPS pollution will also go a long way toward solving the other problems of the river and its tributaries (turbidity, sediment, bacteria, temperature).

NPS Accomplishments to Date:

There have been a number of accomplishments in the area of NPS pollution since the TMDL requirements were adopted. Major accomplishments include:

- ► Completion and beginning of implementation of Program Plans.
- Phosphate detergent ban.
- Establishment and implementation of Surface Water Management Districts and fees.
- Establishment and implementation of a federal Hydrologic Unit Area to address agricultural water quality concerns in the Dairy and McKay Creeks areas.
- ▶ Identification of potential Best Management Practices (BMPs) and beginning of implementation.
- Development of Surface Water Quality Facilities Technical Guidance Handbook; installation of some facilities.
- Erosion Control Ordinances for most jurisdictions.
- Establishment of fee mechanism to charge a fee in-lieu of building on-site storm water treatment facilities.
- Demonstration projects implemented in both agricultural and urban areas.
- Public Education/Information programs implemented.
- Container Nursery program established and implemented.
- Monitoring programs established.

Water Quality Results:

Monitoring data indicate that there have been dramatic reductions in ammonia nitrogen and phosphorus concentrations in the lower river over the last two years. The TMDL for ammonia nitrogen has been achieved. The TMDL for total phosphorus has not been achieved. The observed reductions are due primarily to improvements at USAs two large sewage treatment plants. Phosphorus concentrations up stream of these facilities have not changed significantly (see figures

in Attachment 1). At this time it appears that, in spite of dramatic improvements in point source contributions, the TMDL compliance date for phosphorus will not be met. In a few cases, where problems related to specific confined animal feeding operations (CAFO) have been identified and corrected, improvements have been seen in tributary streams. In general, however, above the sewage treatment plants and on the tributaries there have been few demonstrated improvements in water quality parameters of concern (nutrients, bacteria, sediment, temperature) to date. Monitoring of demonstration projects have shown, however, that reductions in the concentration of pollutants leaving demonstration sites can be achieved. Wide-spread implementation of practices would be expected to result in improvements of water quality in the river and its tributaries.

Institutional Barriers and Technical Questions:

The DMAs, Department, and others have identified a number of constraints which have affected the implementation of some NPS controls and, therefore, inhibited progress toward meeting the June 30, 1993, compliance date established in 1988. The major difficulties include:

- ► Tendency to focus efforts only on phosphorus while not addressing other water quality parameters of concern.
- Complicated regulatory requirements and timeliness of obtaining permits for construction of pollution reduction facilities.
- Questions about "background" and groundwater contributions of phosphorus.
- Pending Revisions to TMDLs, Waste Load Allocations (WLA), Load Allocations (LA).
- ▶ Establishment of new stormwater permit programs.
- ▶ Lack of adequate authorities.
- Funding.
- Need for basin- or subbasin-wide approaches.

Authority of the Commission with Respect to the Issue

The rule which established the TMDLs for the Tualatin River subbasin (OAR 340-41-470 (3) (a)) states that after June 30. 1993 "no activities shall be allowed ..." that cause the monthly median concentrations of total phosphorus to exceed specified values at specified points "without the specific authorization of the Commission" (see Attachment 2 for complete text of the rule). The rule provides no guidance as to the conditions under which the Commission would authorize further activities.

Because it now appears that the compliance date will not be met, the Commission will need to consider, prior to June 30, 1993, whether activities that contribute to NPS pollution should be allowed to continue in the watershed. If activities are to be authorized, the Commission will need to consider whether the authorization should be across the board or whether specific activities should be disallowed or restricted in some way. Other issues that may need to be dealt with include: whether the authorization should end at a specified date, after which re-consideration would occur; whether conditions under which authorization can occur should be defined; whether the Department should propose rule making to deal with specific problem areas on an interim basis while other authorities or approaches are being developed.

Alternatives and Evaluation

Relative to the compliance date, there are at least five alternatives for proceeding with efforts to reduce NPS pollution after June 30, 1993:

1. No Action.

Under this option the compliance date would be allowed to pass with no further action taken by the Commission or the Department.

Pros: No rule changes or Commission action needed. The DMAs would be allowed to continue implementing programs as they are now.

Cons: No clear direction as to any needed changes in implementation. No specific schedules for actions to occur beyond June 30, 1993. Potential for law suit.

2. Change the Compliance Date in the Rule.

In this scenario the June 30, 1993 compliance date in the current rule would be changed to some future date. Schedules could be set-up to achieve the TMDL goals prior to the new date.

Pros: Neither the river nor any of the DMAs would be in non-compliance with the TMDL rule because the compliance date would not have past.

Cons: It would be extremely difficult to specify what the new date should be. Changing the date would not change the fact that the river currently does not comply with water quality standards and has not for some time.

3. Stipulated Final Order.

A stipulated final order (SFO) could be negotiated with each DMA.

Pros: An SFO is a legal settlement of a case usually involving failure to comply with conditions of a permit. Once entered into, the SFO would provide an enforceable schedule for coming into compliance. No rule change would be needed.

Cons: An SFO may give the impression that DMAs are in non-compliance because of poor performance and are under an enforcement action. Would result in rigid compliance schedules. SFOs may not be appropriate tools for use with other state agencies (ODA/ODF).

4. EQC Authorization with Memorandum of Agreement.

The EQC could authorize activities to continue and direct the Department and DMAs to enter into some form of Memorandum of Agreement (MOA) indicating how and when the DMAs will proceed with implementation of NPS controls.

Pros: More flexibility than with an SFO. MOA can be modified as conditions and information change. No rule change necessary.

Cons: Because an MOA is not a legal settlement of a case, there may be more potential for court challenges.

5. EQC Authorization with Clarification of Conditions for Authorization and Implementation and Compliance Schedule.

This option is similar to alternative 4 in that the EQC would be using its authority to allow activities to continue after the June 30, 1993, but conditions under which activities would be allowed would be clarified and an enforceable compliance schedule would be added.

Pros: Conditions under which future activities could be authorized would be included in the rule. One of the conditions could be that DMAs be adhering to detailed and enforceable implementation and compliance schedules which have been approved by the Department or Commission. This would accomplish several of the benefits of an SFO without the stigma associated with non-compliance.

Cons: Specifying, in rule, the conditions under which future activities can be authorized may reduce flexibility in future authorizations.

The Department currently favors alternative 5. Schedules under this alternative could include having DEQ prepare temporary rules as necessary to deal with some issues on an interim basis while other authorities or approaches are developed.

Summary of Public Input Opportunity

The public has been involved in these issues for several years. The Department held public hearings prior to bringing the TMDL rule to the Commission for proposed adoption in 1988. The Department also held public hearings on the nonpoint source pollution control program plans prior to bringing those to the Commission for consideration in 1990. Some of DMAs have held public forums and hearings of their own -- all have been involved in public awareness/education programs. Earlier in January of this year, the Department conducted information meetings to inform the public of results of a Tualatin River Study mandated by the 1991 legislature. The public will have the opportunity to review and respond to the study results. The Department will conduct formal public hearings, prior to bringing any recommended rule changes and/or new implementation and compliance schedules to the Commission.

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Conclusions

- There have been a number of accomplishments in the area of NPS control in the Tualatin subbasin since implementation efforts began.
- A number of technical questions remain and are likely to remain for some time.
- ▶ Institutional barriers have been identified.
- The compliance date for achieving TMDLs for total phosphorus in the Tualatin subbasin will not be met.
- The Commission has the authority to allow activities to continue in the Tualatin watershed even if TMDLs are not achieved by the date established in the rule. Conditions under which such authorization can occur have not been established.
- Alternatives for action relative to the impending compliance date have been identified and need discussion.

Intended Future Actions

Prior to June 30, 1993, the Department, working with the DMAs and the public, will develop any necessary proposed rule language and new implementation and compliance schedules, hold public hearings, and return to the Commission with recommended actions.

<u>Department Recommendation</u>

It is recommended that the Commission accept this report, discuss the matter, and provide advice and guidance to the Department regarding options for proceeding with pollution control efforts in the Tualatin subbasin after the June 30, 1993 TMDL compliance date, and regarding any potential rule changes that should be developed.

<u>Attachments</u>

Attachment 1: OAR 340-41-470

Attachment 2: Total Phosphorus Concentrations

Reference Documents (available upon request)

Nonpoint Source Control Plans received to fulfill the requirements of OAR 340-41-470 (3). Received from:

Unified Sewerage Agency of Washington County City of Portland City of Lake Oswego City of West Linn Clackamas County Multnomah County Oregon Department of Agriculture Oregon Department of Forestry

Approved:

Section:

Division:

Report Prepared By: Mitch Wolgamott

Phone:

229-6691

Date Prepared: December 24, 1992

DMW:crw SW\WC10\WC11063.5 January 13, 1993

Special Policies and Guidelines

340-41-470 (1) In order to preserve the existing high quality water for municipal water supplies and recreation, it is the policy of the EQC to prohibit any further waste discharges to the waters

(a) The Clackamas River Subbasin;

(b) The McKenzie River Subbasin above the Hayden Bridge (river mile 15);

(c) The North Santiam River Subbasin.

(2) The Environmental Quality Commission shall investigate, together with any other affected state agencies, the means of maintaining at least existing minimum flow during the summer low flow

(3) In order to improve water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/1 chlorophyll a action level stated in OAR 340-41-150, the following special rules for total maximum daily loads, waste load allocations, load allocations, and implementation plans are

established:

(a) After completion of wastewater control cilities and implementation of management plans proved by the Commission under this rule and no later than June 30, 1993, no activities shall be allowed and no wastewater shall be discharged to the Tualatin River or its tributaries without the specific authorization of the Commission that cause the monthly median concentration of total phosphorus at the mouths of the tributaries listed below and the specified points along the mainstream of the Tualatin River, as measured during the low flow period between May 1 and October 31*, of each year, unless otherwise specified by the Department, to exceed the following criteria:

Mainstream (RM)	<u>ug/I</u>	<u>Tributaries</u>	<u>ug/l</u>
Cherry Grove (67.8) Dilley (58.8) Golf Course Rd. (52.8) Rood Rd. (38.5) Farmington (33.3) Elsner (16.2) Stafford (5.4)	20 40 45 50 70 70	Scoggins Cr. Gales Cr. Dairy Cr. McKay Cr. Rock Cr. Fanno Cr. Chicken Cr.	60 45 45 45 70 70

(b) After completion of wastewater control facilities and implementation of management plans approved by the Commission under this rule and no later than June 30, 1993, no activities shall be allowed and no wastewater shall be discharged to the Tualatin River or its tributaries without the specific authorization of the Commission that cause

he monthly median concentration of ammoniatrogen at the mouths of the tributaries listed pelow and the specified points along the mainstream of the Tualatin River, as measured between May 1 and November 15*, of each year, unless otherwise specified by the Department, to exceed the following target concentrations:

Mainstream (RM)	ug/I	Tributaries	<u>ug/1</u>
Cherry Grove (67.8) Dilley (58.8) Golf Course Rd. (52.8) Rood Rd. (38.5) Farmington (33.3) Elsner (16.2) Stafford (5.4)	30 40- 50 1000 850 850	Scoggins Cr. Gales Cr. Dairy Cr. McKay Cr. Rock Cr. Fanno Cr. Chicken Cr.	30 40 40 40 100 100

(c) The sum of tributary load allocations and waste load allocations for total phosphorus and ammonia-nitrogen can be converted to pounds per day by multiplying the instream criteria by flow in the tributary in cfs and by the conversion factor 0.00539. The sum of load allocations waste load allocations for existing or future nonpoint sources and point source discharges to the mainstream Tualatin River not allocated in a tributary load allocation or waste load allocation may be calculated as the difference between the mass (criteria multiplied by flow) leaving a segment minus the mass entering the segment (criteria multiplied by flow) from all sources plus instream assimilation;

(d) The waste load allocation (WLA) for total phosphorus and ammonia-nitrogen for Unified Sewerage Agency of Washington County is determined by subtracting the sum of the calculated load at Rood Road and Rock Creek from

the calculated load at Farmington;

(e) Subject to the approval of the Environmental Quality Commission, the Director may modify existing waste discharge permits for the Unified Sewerage Agency of Washington County and allow temporary additional waste discharges to the Tualatin River provided the Director finds that facilities allowed by the modified permit are not inconsistent and will not impede compliance with the June 30, 1993 date for final compliance and the Unified Sewerage Agency is in compliance with the Commission approved program plan;

f) Within 90 days of the adoption of these rules, the Unified Sewerage Agency of Washington County shall submit a program** plan and time schedule to the Department describing how and when the Agency will modify its sewerage facilities to comply with this rule. The program plan shall include provisions and time schedule for developing and implementing a management plan under an agreement with the Lake Oswego Corporation for addressing nuisance algal growth in Lake

(g) Within 18 months after the adoption of these rules, Washington, Clackamas, Multnomah Counties and all incorporated cities within the Tualatin River and Oswego Lake subbasins shall submit to the Department a program plan** for controlling the quality of urban storm runoff within their respective jurisdictions to comply with the requirements of subsections (a) and (b) of this section;

(h) After July 1, 1989, Memorandums of Agreements between the Departments of Forestry and Agriculture and the Department of Environmental Quality shall include a time schedule for submitting a program plan** for achieving the requirements of subsections (a) and (b) of this section. The program plans shall be submitted to the Department within 18 months of

the adoption of this rule;

(i) Within 120 days of submittal of the program plans** and within 60 days of the public hearing, the Environmental Quality Commission shall either approve or reject the plan. If the Commission rejects the plan, it shall specify a compliance schedule for resubmittal for approval and shall specify the reasons for the rejection. If the Commission determines that an agency has not made a good faith effort to provide an approvable plan within a reasonable time, the Commission may invoke appropriate enforcement action as allowed under law. The Commission shall reject the plan if it determines that the plan will not meet the requirements of this rule within a reasonable amount of time. Before approving a final program plan, the Commission shall reconsider and may revise the June 30, 1993 date stated in subsections (a), (b), and (e) of this section. Significant components of the program plans shall be inserted into permits or memorandums of agreement as appropriate;

 (i) For the purpose of assisting local governments in achieving the requirements of this rule,

the Department shall:

(A) Within 90 days of the adoption of these rules, distribute initial waste load allocations and load allocations among the point source and nonpoint source management agencies in the basin. These allocations shall be considered interim and may be redistributed based upon the conclusions of the approved program plans;

the approved program plans;
(B) Within 120 days of the adoption of these rules, develop guidance to nonpoint source management agencies as to the specific content of

the programs plans;

(C) Within 180 days of the adoption of these rules, propose additional rules for permits issued to local jurisdictions to address the control of storm water from new development within the Tualatin and Oswego Lake subbasins. The rules shall consider the following factors:

(i) Alternative control systems capable of complying with subsections (a) and (b) of this

section;

(ii) Maintenance and operation of the control systems;

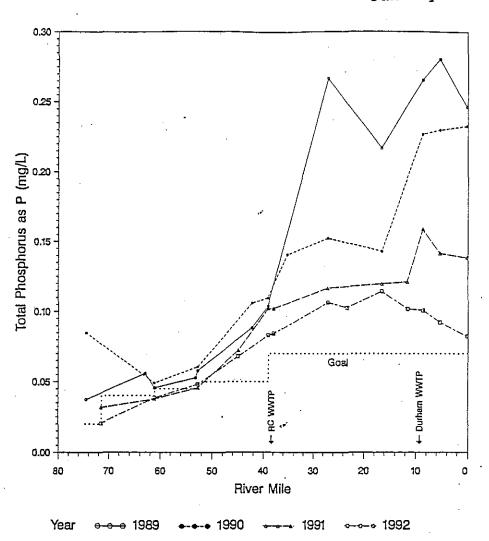
(iii) Assurance of erosion control during as well

as after construction.

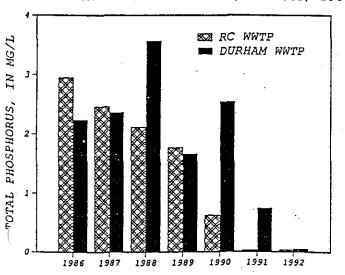
(D) In cooperation with the Department of Agriculture, within 180 days of the adoption of this rule develop a control strategy for addressing the runoff from container nurseries.

Total Phosphorus Mean Concentrations May - October

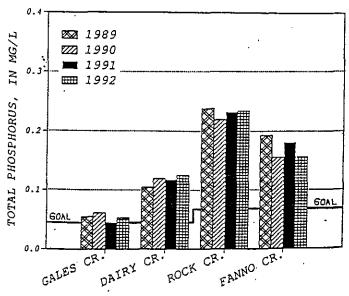
Attachment 2 Agenda Item F January 29, 1993, EQC Meeting



TOTAL PHOSPHORUS CONCENTRATION IN EFFLUENT FROM WASTE-WATER TREATMENTS PLANTS, MAY-OCT, 1986-92



PHOSPHORUS CONCENTRATION IN FOUR TUALATIN TRIBUTARIES, MAY-OCT, 1989-92



Environmental Quality Commission

☐ Rule Adoption Item

Action Item

☐ Information Item

Agenda Item <u>G</u>
January 29, 1992 Meeting

Title:

Request by Mapleton Commercial Area Owners Association for Waiver or Reduction in Domestic Waste Discharge Annual Compliance Determination Fee

Summary:

OAR 340-45-070(2) allows the Commission to reduce or suspend an annual compliance determination fee based on hardship. Based on the following facts Department staff concluded a hardship condition exists in Mapleton:

- 1. The Mapleton area economy is a timber depressed economy.
- 2. There are a very limited number of system users: thirteen small businesses and five residences. The number of users are not expected to increase.
- 3. Because the number of users is unlikely to increase, the system has about twice the capacity needed to treat the influent sewage.
- 4. Debt service and operation costs to the 18 users are extremely high, resulting in extremely high monthly payments.
- 5. The average monthly payments for residences and small businesses in Oregon for capital and operation costs is \$14 to \$22 per month. This compares with about \$170 per month for small businesses in Mapleton and \$106 for residences.
- 6. The annual compliance determination fee amounts to about \$60 per user per year--about 60 times higher than the average cost per household statewide.
- 7. The treatment system is unique--a small recirculating gravel filter serving a very small number of users but with a surface water discharge. The system requires an NPDES permit and a certified system operator.

Department Recommendation:

The Department recommends that the Commission suspend the annual compliance determination fee for the Mapleton Commercial Area Owners Association for fiscal year 1992-93 and for subsequent fiscal years until such time as the system users have paid off their loans used to finance the local share of the capital costs. It is further recommended that the Commission direct staff to prepare a proposed amendment to the annual compliance determination fee schedule (OAR 340-45-075(4) such that Mapleton would pay the same annual compliance fee as systems now included in category F. A change in classification would reduce the Mapleton Commercial Area Owners Association annual compliance determination fee from \$1,035 to about \$465.

ANIMUS (Julas)
Report Author

Mychael Hours

Director

Administrator

Date: January 12, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject: Agenda Item G, January 29, 1993 EQC Meeting

Request by Mapleton Commercial Area Owners

<u>Association for Waiver or Reduction in Domestic Waste</u>

Discharge Annual Compliance Determination Fee

Statement of the Issue

The Commission is being asked to reduce or waive the annual compliance determination fee for the Mapleton Commercial Area Owners Association (Mapleton) due to hardship. OAR 340-45-070(2) authorizes the Commission to take this action. Mapleton initially requested Commission consideration on September 17, 1992; documentation supporting the request was received November 30, 1992.

Background

The Mapleton sewerage system was constructed in 1989 in response to a 70 percent on-site system failure rate in the commercial area of the community. The treatment facility is a recirculating gravel filter with a capacity of 24,000 gallons per day. Highly treated effluent is discharged to the Siuslaw River.

There are 18 users of the Mapleton system (13 commercial users The 18 users utilize about one-half of the and 5 residences). treatment capacity. The commercial establishments are small rural businesses with water use and waste strength similar to single-family residences; an exception is a 42-unit mobile home park.

The area economy is timber based and severely depressed. of three area mills have shut down and the third mill has recently curtailed operations. Future growth and increased utilization of the sewerage system are not expected.

[†]A large print copy of this report is available upon request.

The household income in the Mapleton area was about \$13,000 in 1980. Although disaggregated results of the 1990 census are not yet available, the 1990 household income for the Mapleton area is probably about \$16,000, or similar to the statewide average for rural household income.

Construction of the Mapleton system was financed with an Oregon Community Development grant for \$319,000. An additional \$128,000 was financed locally. Financial and related assistance from Lane County and the Siuslaw Valley Bank reduced the local cost to system users to about \$85,000.

The 18 system users are financing the local share through loans from the Siuslaw Valley Bank. Payments to the bank by each commercial user are about \$107 per month; payments by each residential user are about \$86 per month. The 18 system users are financing operation and maintenance costs through user charges. Current charges are \$64 per month for each commercial user, and \$20 per month for each residential user. The total charges are about \$171 per month for each commercial user, and \$106 per month for each residential user.

The monthly user payments for debt retirement and for operation and maintenance of the Mapleton system are much higher than in other areas of the state. This is not because the capital and operation costs are too high, but because there are a very limited number of users over which to spread the costs. Statewide, user charges for both debt retirement and system operation combined generally range from \$14 to \$22 dollars a month for residential users and small commercial establishments. Federal agencies such as the Farmers Home Administration and the Environmental Protection Agency are reluctant to extend grant funds for sewerage projects if they conclude that a community lacks the financial capability to pay for the system. Generally, these agencies do not like to extend grant funds if local share costs result in user charges greater than about \$24 a month.

The annual compliance determination fee for Mapleton is \$1,035. This amounts to about \$5 per month per user or \$60 per year. Last spring, Water Quality Division staff analyzed the impact of domestic waste treatment permit fees on domestic rate bases and concluded that the impact statewide amounted to about \$1 per user per year. The \$5 per month cost per user will increase operation and maintenance costs above current charges.

Memo To: Environmental Quality Commission

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Authority to Address the Issue

The Commission establishes compliance determination fees for domestic waste sources to cover the water quality program's cost to conduct compliance activities. There has been substantial compliance activity and oversight of the Mapleton sewerage system since its construction, and consequently, there has been an associated cost for performing these activities. However, the rules allow the Commission to waive all or part of the fee for hardship. OAR 340-45-070 specifically states "The Commission may reduce or suspend the annual compliance determination fee in the event of a proven hardship." The Commission considered a similar request in July 1991 by the City of Butte Falls. The request was denied. There have been no other requests for waiver or reduction of the annual compliance determination fee.

Alternatives and Evaluation

- Suspend the Annual Compliance Determination Fee. Commission can suspend the fee based on proven hardship. Although criteria which would demonstrate proven hardship have not been established, it is clear that the monthly debt service and system operation charges incurred by users of the Mapleton sewerage system are extremely high. This is because the capital and operation costs are spread over a very limited number of users. There are no known comparable charges anywhere in the State. In addition, the charges necessary to cover only the cost of the compliance determination fee are \$5 per user per month. This is 60 times higher than the average household cost The Mapleton users are further disadvantaged statewide. by paying for a system with substantial treatment capacity which will probably never be utilized.
- Reduce the Annual Compliance Determination Fee. 2. Another viable option would be to reduce the fee to be comparable with fees for similar treatment systems. Treatment systems with recirculating gravel filters normally rely on subsurface disposal. The annual compliance determination fee for such systems with greater than 20,000 gallons per day capacity is about \$465. The Mapleton system is similar to these systems except that the method of disposal is discharge to the Siuslaw River, rather than subsurface discharge. The Mapleton Association has made a partial payment of \$258. The additional cost to Mapleton for this year would be about \$207.

Memo To: Environmental Quality Commission

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Other reduction options could also be considered. One possibility would be reduce the fee to \$150 annually. This amount is the minimum annual compliance determination fee now charged for domestic waste sources.

- 3. Suspend and Reduce the Annual Compliance Determination Fee. The Commission could consider suspending the fee for fiscal year 1992, and establishing a reduced fee in subsequent years. A fee suspension for this year would recognize the severe financial position now faced by Mapleton; a reduced fee in the future would continue the financial assistance but would also recover a portion of the Department's cost for compliance activities.
- 4. **Do Not Suspend or Reduce the Fee.** The Commission could choose this alternative if it is not convinced that a proven hardship exists.

Alternatives 1 (suspend the fee) and 2 (reduce the fee) will not have any significant fiscal impact (beyond the immediate fee reduction) on domestic waste treatment permit fee revenues. Based on information submitted by Mapleton and information contained in the Water Quality Division permit files, Mapleton appears to be a unique situation. The high monthly payments are due to a very small number of users financing and operating a new system. There is substantial excess capacity which adds to capital and operation costs. Mapleton is also unique in that the treatment system is a small recirculating gravel filter with a surface water discharge rather than a subsurface discharge.

Findings and Conclusions

- * The Mapleton sewerage system serves only 18 users (13 commercial establishments and 5 residences).
- * The total cost of the new sewerage system was \$450,000 with \$85,000 financed by the 18 system users.
- * The Mapleton area is a timber depressed economy.
- * It is unlikely that there will be additional users of the Mapleton system.
- * Debt service and operation and maintenance costs to the 18 users are extremely high, resulting in extremely high monthly charges.

- * The annual compliance determination fee amounts to about \$60 per user per year--about 60 times higher than the average cost statewide.
- * The rules pertaining to proven hardship do not include any criteria for demonstrating hardship.
- * Based on information regarding the depressed economy, small number of users, high debt and operation costs, high monthly charges, and comparable user charges for other sewerage systems in the State, it appears that a proven hardship exists for users of the Mapleton sewerage system.
- * Based on available information Mapleton is in a unique situation--a very small number of users financing and operating a new system, and a system with a surface water discharge.
- * Based upon the specific circumstances, the Mapleton Association has proven a hardship, consistent with OAR 340-45-070(2), which warrants some reduction in the annual compliance determination fee.

Recommendation for Commission Action

It is recommended that the Commission suspend the annual compliance determination fee for the Mapleton Commercial Area Owners Association for fiscal year 1992-93 and for subsequent fiscal years until such time as the system users have paid off their loans used to finance the local share of the capital costs. It is further recommended that the Commission direct staff to prepare a proposed amendment to the annual compliance determination fee schedule (OAR 340-45-075(4)) such that Mapleton would pay the same annual compliance fee as systems now included in category F (systems larger than 20,000 gallons per day which dispose of treated effluent via subsurface means A change in classification would reduce the Mapleton Commercial Area Owners Association annual compliance determination fee from \$1,035 to about \$465. The proposed amendments would be prepared after the above noted loans are paid off. At that time the Commission would have the opportunity to further review the Mapleton financial situation and could choose to reduce the annual fee to an amount lower than \$465, or suspend it entirely.

<u>Attachments</u>

- A. Background information prepared by Water Quality Division staff.
- B. Letter dated September 17, 1992, requesting reduction or waiver of annual compliance determination fee.
- C. Supporting documentation dated November 24 1992, "Request for Waiver of Annual Compliance Determination Fee."

Approved:

Section:

Municipal Waste Barbara a. Bruton

Division:

Water Quality Will 1

Report Prepared By: Thomas J. Lucas

Phone:

229-5065

Date Prepared: December 24, 1992

TJL:hs:cw MW\WC10\WC11059.5 January 8, 1993

BACKGROUND INFORMATION

A. Sewerage System

Based on documented on-site system failures in the Mapleton business area (about 70 percent failure rate) a facility plan was prepared in 1986, and a sewage collection, treatment, and disposal system was constructed in 1989.

The treatment system is a recirculating gravel filter with National Pollutant Discharge Elimination System permit limits of 10 milligrams per liter of biological oxygen demand and total suspended solids with disinfection and discharge to the Siuslaw River at river mile 20.2. The rated capacity is 24,000 gallons per day. The Mapleton sewerage system is unusual in that most recirculating gravel filter systems utilize subsurface disposal rather than a surface water discharge.

B. Service Area

The service area is restricted to the Mapleton business area. There are 13 commercial users and 5 residential users of the system. The 13 commercial establishments are small businesses, and one 42-unit mobile home park.

The facility plan estimated 32 users upon completion of construction, and projected an eventual 64 users. Other estimates ranged from 30 users at completion of construction to an eventual 43 users. The Lane County Boundary Commission ultimately determined the service area of the Mapleton Commercial Area Owner's Association. Several residences and businesses who were initially projected to join declined and consequently the Boundary Commission did not include them within the system boundary.

Economy and Future Growth:

The economic situation in the Mapleton area is severely depressed due to reduction in timber based employment. Two of the three area lumber mills have shut down and a third has substantially curtailed operations. There is no other known potential for economic growth.

It is doubtful that there will be additional users added to the Mapleton system. If this is the case, the existing users will be paying for the entire 24,000 gallons per day capacity. About 12,000 gallons will be unused capacity.

C. Project Costs

The initial facility plan estimates for the entire system were about \$286,000. By the time the system was built total project costs had increased to about \$437,000. Reasons for the substantial increase are not fully known but appear to be due to rapidly rising construction costs in the late 1980s and bid delays.

D. Capital Financing

Due to the rapid increase in costs, a larger than expected debt burden was placed on the system users. The financing was accomplished as follows:

Grant — Oregon Community Development	\$319,000
Assistance — Siuslaw Valley Bank	\$ 13,000
Assistance — Lane County	\$ 20,000
Hookup costs to 13 businesses	\$ 65,000
Hookup costs to 5 residences	\$ 20,000

The business and residential property owners received loans to pay the capital costs from the Siuslaw Valley Bank at about 9 percent interest for five years. The capital cost to each business was \$5,000, and \$4,000 to each residence. The loan payment per month is as follows:

Monthly	Payments -	- Commercia	1 \$	107	per	month.
	-	- Residence	s \$	86	per	month.

E. Operation and Maintenance Financing

The facility plan estimated user costs at \$18.65 per month initially with costs declining to \$13.12 per month after about ten years. The reason for the projected cost decline was the projected addition of new customers. After the service area was determined by the Lane County Boundary Commission, Mapleton set the costs at \$40 per month for each commercial user and \$20 per month for each residential user. The rate difference does not appear to be based on flows but rather on ability to pay.

Operation and maintenance costs have increased substantially since the system was constructed. In addition to waste treatment permit fee increases, the costs for system operations, water and power purchases, liability insurance, operating supplies, and office expenses have all increased. The most dramatic increases have been in insurance (from \$88 to \$1,061 annually) and system operation (\$480 to \$5,760 annually). In addition to increased operation costs,

Mapleton's contingency fund has been depleted due to a DEQ requirement to replace 90 cubic yards of filter media at a cost of \$2,646. The current operation and maintenance costs are as follows:

Monthly Payments - Commercial \$ 64 per month. - Residences \$ 20 per month.

F. Total User Costs

Total monthly costs for system users are as follows:

Commercial \$171 per month Residences \$106 per month

G. Costs in Other Communities

Sewer user charges in most other communities are increasing rapidly as costs for capital, labor, and supplies increase. Statewide, the residential user charges vary substantially but are generally in the range of \$14--\$22 per month. This charge, in most situations, applies both to capital costs for replacement or upgrade of system facilities and for operation and maintenance. Commercial user charges vary but are generally based on flows and are often calculated in residential equivalents. Small businesses usually pay about the same or slightly more than residences.

H. Financial Capability

Federal agencies such as EPA and the Farmers Home Administration provide grants for sewerage facilities. Generally, these agencies will not extend a grant if the remaining local share is beyond the communities' ability to pay. As noted above, Mapleton commercial users are paying \$171 per month for debt retirement and operation and maintenance; residences are paying \$106 per month. Farmers Home Administration is very reluctant to extend a grant if the debt service per year is greater than 1 percent of median household income. Mapleton area household income is estimated to be about \$16,000 per year. The debt service for Mapleton would amount to about \$13 per month. Generally, Farmers Home does not want total sewer user charges to exceed \$24 per month per user. EPA requires a more complex analysis but is also reluctant to award a grant if the user charges are over \$24 per month per user.

I. Impact of Domestic Waste Treatment Permit Fees

The current annual compliance determination fee for Mapleton is \$1,035. Mapleton's classification is Da (less than 1 MGD capacity with a surface water discharge). The \$1,035 fee amounts to about \$5 per month per user or \$60 per year. Last spring the Water Quality Division analyzed the impact of domestic waste treatment permit fees on municipal rate bases and concluded that the impact statewide amounted to about \$1 per user per year. The fee impact for small systems with the same classification as Mapleton is much less than that experienced by Mapleton. The fee impact for sewerage system users in the City of Lowell, for example, is about \$4 per user per year.

In July 1992, annual compliance determination fee invoices were mailed out to the 480 domestic waste sources. While there was substantial concern expressed by many communities (100-120 phone calls and letters), most communities have paid their fees. Of total billings of about \$1,400,000, less than \$6,500 remains unpaid. Mapleton has paid \$258 in fees, leaving a balance of \$777. There are about 20 other small communities who have not yet paid their fees or who have made partial payment. Two of these communities are strongly objecting to the fee amounts, and may appeal to the Commission for a fee waiver or reduction.

Information Sources

Peter Thurston, Lane County Economic Development Coordinator.

James Estes, President, Mapleton Commercial Area Owners Association.

Teri Laurence, Member, Mapleton Commercial Area Owners Association, "Request for Waiver of Annual Compliance Determination Fee," November 1992.

Bud Fisher, Loan Officer, Farmers Home Administration.

Norman Sievertson, Construction Grants Project Officer, U.S. Environmental Protection Agency.

Dick Knowles, Project Manager, Economic Development Department.

Christa Pruett, Siuslaw Valley Bank.

Tom Poage Engineering and Surveying, "Wastewater Study for the Commercial District of Mapleton," Oregon, 1986.

MAPLETON COMMERCIAL AREA OWNERS ASSOCIATION

P.O. Box 96, Mapleton OR 97453

Sept. 17, 1992

Department of Environmental Quality Water Quality Division 811 SW Sixth Avenue Portland OR 97204

Attention: Barbara A. Burton

Dear Barbara Burton:

This will acknowledge receipt of DEQ's invoice VQ93DON-0429, dated July 28, 1992, for the fiscal year 1992-93, a copy of which is enclosed.

We note that our fee for DEQ's compliance oversight has risen from \$755 last year to \$1,035 this year - an increase of nearly 30 percent. Divided by the number of hookups - 20 - on our system, this fee represents a cost of approximately \$1 a week per hookup. Our patrons already are paying \$64 a month for service, and our contingency fund was recently depleted by \$2,646 due to DEQ's requirement that we add filter rock to the treatment plant.

From previous correspondence we understand that Hebo, for instance, pays the same fee as we. Hebo has nearly four times as many hook-ups. Contrast our situation with theirs, and you will probably agree that this fee constitutes a hardship.

We further feel that requiring a higher fee from systems that discharge into public waters because of the possibility - no matter how slight - of contaminating those waters is inequitable.

Under provisions of ORS 340.45-070 (2), we request that this fee be reduced or waived, due to hardship to this association.

At this time we are forwarding our check for \$258.75 - one-fourth of this greatly increased fee - in hopes that further payments will be much smaller.

Cordially,

James P. Estes, President, for the Board of Directors

cc: Sen. Peg Jolin

Rep. Larry Campbell

Lane County Commissioner Ellie Dumdi Peter Thurston, Lane County staff

MAPLETON COMMERCIAL AREA OWNERS' ASSOCIATION

"REQUEST FOR WAIVER OF ANNUAL COMPLIANCE DETERMINATION FEE"

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EXHIBIT "I" - LANE COUNTY/MAPLETON (SWOT) ANALYSIS

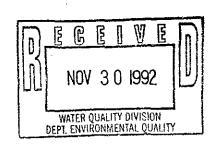


EXHIBIT "A"

STATEMENT OF FACTS/SUMMARY

Basis of Harddhip and Exceptional Burden Upon Individual Property Owners.

- (1) While economic decline and rising costs certainly contribute to the current hardship. One area stands out and must carry the heaviest weight in the commissions' consideration that a hardship exists. The overwhelming and undeniable factor evidencing the hardship is that, less than half the projected members/users came on line. Participation fell far below the projected figures consistently referred to throughout the studies, and which were relied upon and the basis to which the property owners used to determine and establish the feasibility of going ahead with the project.
- (2) To further demonstrate the hardship, each member was required to pay extra capital to build a contingency fund to cover the short fall of members. To compound the hardship, the substantial increase in hook-up fees was not enough, and no portion of our contingency fund was left in tact upon completion of the facility. The hardship was created at the beginning and the MCAOA has never been able to correct it. Had even a small portion of the contingency fund been retained, we would have been O.K., as it is the current situation pretty much dictates the association, will not be able to maintain the viability of the facility if some abatement of expenses is not forthcomming relatively soon.
- (3) The MCAOA members have demonstrated discipline and their dedication to the facility by their self-imposed rate increase. The increase was substantial, from \$40.00 to \$64.00 per month for commercial users. The commercial users elected to take the full increase, sparing the residential users from an increase. However, increased operating fees and costs are already creating the need to again increase rates, and it looks like residential users will not be spared this time.
- (4) The businesses are carrying the heaviest burden. Because of multiple hook-ups several members pay \$148.00 per month for sewer service. Add this to the new water rates (some business fees set at \$36.73 and \$76.73) per month, actual water usage is then added to this base charge. You must agree that the cost of water and sewer service each month has become substantial and excessive.

SUMMARY

- (5) That, with the winter months upon us and the local timber mill announcing the plant lay-offs, it is very unlikely that businesses or residents will continue to keep-up and make timely payments at the current rates, let alone meet any new rate, set by the impending increase.
- (6) All indications are that, the membership cannot withstand another rate increase at this time. If one is unavoidable or forced upon them, then it will have significant repercussions and major impact upon the association as

a whole, which will be beyond the members ability to resolve.

- (7) The operating funds of the association are pretty much depleted each month to meet its debt obligations. The savings account was wiped out by the recent gravel repair (\$2,646.00) requirement. Therefore, it has been clearly demonstrated that the association can not tolerate or withstand even one non-payment of a user fee. The association just simply is not in a position to operate if all the user fees are not collected each and every month.
- (8) Attached to this Exhibit "A" is a letter to you, dated 8/5/91. It is simply to demonstrate that the MCAOA has attempted to communicate this situation and its relief for quite some time. They have referenced the HEBO and DEXTER facilities, which distribute the compliance fee between in excess of 100 users. The fact that the MACOA is required to pay the same fee amount, distributed between a mere 14 individuals is just not equitable. The fact is that the MACOA should have, from its inception, been charged under a lesser classification, perhaps under DEQ's guidelines for "Lagoons", based on its low flow rate.

In view of the herein contained facts, it becomes vastly important that the MCAOA actively pursue, and obtain a decision from the commission one way, or the other, of their requests to waiver the compliance fee. Any consideration or decision by the commission at the January 28-29, 1993 meeting, that leans favorably toward the MCAOA in an abatement, reduction, or temporary waiver, of the compliance fee will be greatly appreciated and will certainly help to rebuild the emergency/contingency fund now depleted. Lastly it bears special note, that the above stated \$2,646.00 repair money took the association several years to build. Needless to say it was devastating and most discouraging to see it wiped out so swiftly, to come to the realization we are just beating our heads against a brick wall, with no relief in sight.

HARDSHIP REVIEW

- (a) No Start-up Funds/Operating Revenue
- (b) Limited Hook-ups/User Participation
- (c) Excessive Operating Increases
- (d) Excessive User Rate Increases
- (e) Local Economic Decline
- (f) Present Lack of Diversity



MAPLETON COMMERCIAL AREA OWNERS' ASSOCIATION, INC. P. O. Box 96

Mapleton, Oregon 97453

August 5, 1991

Ms. Barbara A. Burton
Water Quality Division
Department of Environmental Quality
811 S. W. Sixth Avenue
Portland, OR 97204

SUBJECT: DEQ Annual Compliance Determination Fee

Dear Ms. Burton:

As per our phone conversation of 7-22-91, I will attempt to explain the precarious situation of the Mapleton Commercial Area Owners' Association (MCAOA):

\$1,035.00

- A. Our current budget of annual expenses is \$11,184. Of this amount, \$755.00 is for the subject fee. In other words, this fee is 6.8% of our current operating costs. This seems extreme!
- B. It should be noted that we currently have only 18 hooked-up establishments (users). This includes 5 residences @ \$20.00/Mo. and 13 businesses @ \$64.00/Mo. The \$64.00 business rate includes a very recent 60% increase. As you can see, these rates are unreasonably high. It should be further noted that these rate payers in this economically depressed area are having real financial problems.
- C. Please understand that we are currently processing only about 12,000 gallons/day of effluent, and the resulting treated discharge to the Siuslaw River is very pure.

With the above in mind, and pursuant to OAR 340-45-070, the Board of Directors of MCAOA hereby requests suspension of the Subject fee for 1991. We also hereby request reduction of the 1990 Fee and/or adjustment in due date.

Thank you very much for your help and attention.

Sincerely,

W. J. Zach

Secretary, MCAOA

cc: Larry L. Campbell, Speaker of the House Commissioner Ellie Dumdi

Mr. Al Peake

EXHIBIT "B"

SUPPORT LETTERS

(1)	Letter,	Plant Opera	tor Wage Increase	Details	Highlighted
(2)	Letter,	2/26/91 RE:	Rate Increases	Details	Highlighted
(3)	Letter,	5/27/91 RE:	Monthly Shortfall	Details	Highlighted
(4)	Letter,	8/18/92 RE:	Plant Repairs	Details	Highlighted
(5)	Letter,	7/18/92 RE:	Debt Schedule	Details	Highlighted

From Charles E.Davis, Operator
Mapleton Water District
Box 435

Mapleton, Oregon 97453

- To Mapleton Commercial Are Owners Association 01953 Highway 126 Mapleton, Oregon 97453
- bject Letter of facts as known to the above referenced operator concerning the current contract in effect between the Association and Mapleton Water District.
 - 1. My employment with the Water District requires that I operate said District in compliance with the governing Ordinance and the appropriate State and Federal laws. The hours being flexible, whether one, two or twenty four hours per day whatever is necessary to maintain proper operation. It is this flexibility that makes the job desirable.
 - 2. It follows that any work performed for the Association must come out of off-duty or "free "time."

When first approached I was informed that the job would require approximately twenty hours per month.

- 3.I proposed a wage scale of \$10.00 per hr., quite reasonable by industry standards, for only the actual hrs.worked. To illustrate, the septic tank screen cleaning at Me-N-U market, I understand will cost approx. \$60.00, could have been done for about \$10.00 each for the Market and Frank's.
- 4. Just previous to the signing of the current contract I was told by then secretary, Marilla Kessel, that the Association was woefully short of funds and that the \$200.00 per month payment must include the associated increases in payroll tax incurred by the Dist.It should further be noted that the \$200.00 figure was arrived at by 20 hrs X \$10.00 per hr. and that the thirty hr.limitation did not guarantee thirty hr.s work per mo. There is a schedule attached prepared from the current wage scales at the City of Florence to illustrate that this scale is about one half that of comparable work in this area.
- 5. I reluctantly agreed with the understanding, I thought, that this would be upgraded at a later date. This has NOT been done.
- 6. No upgrade of time required has been done as required by article two.
- 7. The actual facts are that DEQ regires DAILY effluent monitoring this means Saturday, Sunday, Christmas or any other holiday. There is also a monthly composite sample of both influent(dirty water) and effluent(clean water) taken every six hrs. for a period of twenty four hours.
 - 8. I am unaware of any move by the Association to review this agreement during the month of March, as required by the second sentence of Article four. Therefore any wage settlement must be retroactive to to March 31,1990.
 - 9. It is hereby requested that the attached the attached points of negotiation be addressed at once and without further further delay noting that the Association was verbally informed of my displeasure with the current agreement earlier this summer. And to date no proposal from the Association has been received.

Sincerely/

Mode: 10/89-3/90-Wage increased from \$200 mo. Xo the Present \$480.04 (only 6 mos into operations)

Charles E, Davis

A. Paris

ON THE PARTY OF

MAPLETON COMMERCIAL AREA OWNERS' ASSOCIATION & Siuslaw Valley Bank P. O. Box 96 Mapleton, Oregon 97453

February 26, 1991

Subject: (1) User fee (rate) increase

(2) Preventative maintenance, Owner's septic tank

Mr. & Mrs. Rolland P. Laurence P. O. Box 38 Mapleton, OR 97453

Dear MCAOA member:

- (1) Since December 1990 we have had an increase of about 240% for direct labor costs to operate the sewer plant. Yes, this means that labor costs have way more than doubled. Your Board of Directors has made every effort to keep these costs as low as possible. However, it is obvious that a substantial increase in monthly operating fees will soon be required. The Bylaws of MCAOA state that operating fees will be set at the annual meeting. It is possible that we will not be able to hold out until August, in which case a special membership meeting would have to be called. Your Board of Directors is now in the process of evaluating the figures to determine our exact financial position. We wish to hereby inform you of the likely rate increase. As further facts and figures are known, we will notify you.
- (2) Recently, several of the commercial "heavy-use" septic tanks have experienced inlet and screen plugging problems. This is an individual tank problem, and thus, the tank owner'responsibility. It has become obvious that these problems are chiefly due to lack of preventative maintenance. Also, we are still learning how to operate these tanks.

At this time we are recommending that the tank screen/outlet assembly be periodically pulled, inspected and cleaned. We believe the following schedule is adequate: heavy users-every two months, moderately heavy users-every three months, single residential user-every six months.

Note that this maintenance can be done fairly easily and quickly by the tank owner. However, we have had several requests to have the plant operator perform this. The MCAOA Board of Directors would consider setting up a program to have the necessary inpection and cleaning performed.

The estimated cost of such a procedure is \$15.00 per each inspection/cleaning. The additional amount of the monthly bill is estimated as follows:

Inspect/clean every 2 Mo.....Add \$7.50 to Mo. bill

Inspect/clean every 3 Mo.....Add \$5.00 to Mo. bill

Inspect/clean every 6 Mo.....Add \$2.50 to Mo. bill

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MAPLETON COMMERCIAL AREA OWNERS' ASSOCIATION % Mapleton Branch, Siuslaw Valley Bank P. O. Box 96, Mapleton, OR 97453

Mr. & Mrs. Rolland P. Laurence P. O. Box 38 Mapleton, OR 97453

May 27, 1991

Subject: Special Membership Meeting

Dear MCAOA Member:

In our letter to you of February 26, 1991, your Board of Directors informed you that a substantial increase in operating fees (rates) may soon be necessary. We have determined that this is indeed the case; at this time, our budgeted shortfall in revenue is \$382.00 per month. Accordingly, the Board of Directors has adopted the following proposed rate schedule:

Residence.....\$20.00/Mo. Commercial.....\$64.00/Mo.

The proposed date of implementation of the new, increased rate is July 1, 1991.

Our Association Bylaws require that operating fees be set at the annual meeting of members. Therefore, a rate increase will require approval by the membership at a special meeting called for the purpose of amending the Bylaws (and setting new rates). Therefore, we are calling the required special meeting as follows:

Place: Mapleton Office, Siuslaw Valley Bank, Mapleton, Ore. Time: 7:00 PM, Tuesday, June 11, 1991

Please make every effort to attend and vote. If you cannot attend, please make sure that your proxy vote is in order. Thank you for your attention and co-operation.

Sincerely,

W. J. Zach

Secretary, MCAOA

Enclosure: Proxy form

11/2/92

MAPLETON COMMERCIAL AREA OWNERS ASSOCIATION

P.O. Box 96, Napleton OR 97453

August 18, 1992

Report to the members:

Operation and maintenance

Your sewer system has been operating smoothly and efficiently this past year. The co-operation we have received from the Mapleton Water District and its operator, Charlie Davis, who is also our system operator, has been outstanding. Our reports to the state Department of Environmental Quality, which oversees our operation, are consistently good. The effluent leaving the plant and going into the Siuslaw River are reported to be cleaner than the river water itself.

The co-operation we have received from the City of Florence and its Public Works Department, which processes - at no charge to the association - all our tests required by the state, has also been excellent.

A system flaw developed this spring, which has now been corrected. Settling of the river rock in the processing tanks caused exposure of the pipes that spray gray water into the tanks. As these pipes are polyvinyl chloride (PVC), sunlight would have degraded them fairly soon. In addition, graywater was being spouted into the air, which was unsightly as well as odoriferous.

Correcting the settling problem required approximately 90 yards of washed river rock, which we contracted to have placed. The cost was \$2646, and the contractor was Teddy Bear of Florence. Your board feels that, although this cannot be considered a design flaw, it was a phenomenon that should have been anticipated by the designing engineer or the contractor or both — not to mention the state and county experts who passed on the plans. We also feel, however, that the possibility of recouping this outlay from either the engineer or the contractor is nil. In short, we are stuck with it.

Finances

As you will remember, your board found it necessary last year to raise operating fees in order to keep the association solvent. The increase was necessitated by our new contract with the water district for the services of the system operator, which more than doubled our monthly operating cost. With the increase in fees, we were still able to set aside a modest sum each month for contingencies. Covering the exposed sprayer pipes nearly wiped out that fund, but we are hopeful that no further increase in fees will be necessary any time soon.

The fee we pay to the Department of Environmental Quality has been \$755 a year - the same fee paid by Dexter, which has around 100 hookups vs. our 20. We have protested vigorously to DEQ and to our member of the Oregon house, Rep. Larry Campbell, but to no avail.

nde: Vrankhis 8/18/92 Report fee was already increased (See Next Pg.)

Report to the members, 7/18/92 - Page 2

Now we are faced with another increase: DRQ's fee for the fiscal year from July 1, 1992, to June 30, 1993, is \$1,035. This means that each hookup is paying about \$50 a year to the state for its monitoring of the system. We probably should protest this increase, perhaps even more vigorously than before.

Oregon Administrative Rules 340-45-070 (2) states in part: "The Director [of DEQ] may alter the due date for the annual compliance determination fee upon receipt of a justifiable request from a permittee. The Commission [Environmental Quality Commission] may reduce or suspend the annual compliance determination fee in the event of a proven hardship." (Emphasis added) We attempted last year to get the fee, then \$755, reduced or waived, but to no avail.

We are currently taking in \$844 a month - \$10,128 a year - in sewer fees. Our outlays are (yearly total, monthly average, for year from July 1, 1991, to June 30, 1992)

Department of Environmental Quality:	62.92	755.00	\$1,035.00
Mapleton Water District, for system operations:	480.04	5,760.48	\ _ \ \
Mapleton Water District, for water:	25.93	311.15	Saryun Waler Rades Ethibit "G"
Central Lincoln PUD, for power:	73.66	883.90	
Liability insurance (required by the state):	88.44	1,061.29	#1,253.00
Chemicals and other operating supplies:	11.67	140.04	
Postage and other office expenses:	10.93	131.16	
	753.59	9,044.00	*

EXHIBIT "C"

WASTEWATER STUDY/TOM POAGE ENGINEER (1985)

Excerpts from this study total eight (8) pages as follows:

- (1) "Conclusions and Recommendations", more specifically item (6) on the page. Engineer's cost estimate highlighted.
- (2) "Current Situation", and more specifically labeled Table 1 Existing Establishments, as highlighted. (User Participation)
- (3) "Service Boundary Area Map", service area highlighted.
- (4) "Future Situation", Labeled Estimated Flows.
- (5) "Summary of Costs", Alternative highlighted, "Selection and Rationale", pertinent details highlighted.
- (6) "User Fees for Selected Alternative", details highlighted.
- (7) "<u>User Costs</u>", details highlighted.
- (8) "Newspaper Article of Project", Dated October 17, 1985, details highlighted.

The above supports and demonstrates the basis to which property owners concluded they could afford the system. Even with anticipating construction increases to the original estimates, the original construction costs were low enough, and the participation was high enough, that any reasonable increase, could be easily distributed and still affordable.

This was not even close, construction costs soured way beyond the estimates and user participation to distribute the costs fell on (14) individuals--Not Equitable At All!

WASTEWATER STUDY

FOR THE

COMMERCIAL DISTRICT

0F

MAPLETON, OREGON

PREPARED BY

TOM POAGE ENGINEERING AND SURVEYING, INC. 1065 HIGH STREET, SUITE 3 EUGENE, OREGON 97401 PHONE: 485-4505

CHAPTER 1

CONCLUSIONS AND RECOMMENDATIONS

- 1. Currently, the Mapleton Commercial District relies on individual waste disposal systems that are in immediate need of repair or replacement. Sanitary surveys were conducted and show that nearly 70% of all systems in the District are failing or marginal condition. No septic and drainfield system has had a major successful overhaul in the past 10 years.
- 2. Based on the alternatives of no action, replacement of individual systems, a community system with on-site treatment and disposal, and a community system with the conventional treatment and discharge, the community system with on-site treatment and disposal was the most desirable method on the basis of cost, feasibility, and desirability.
- 3. A system of on-site disposal, comprised of a pressure collection system with users having individual septic tanks and effluent pumps, collected to a central pump station and then delivered to a suitable preselected site into a recirculating pea gravel filter and into seepage trenches was the most cost effective.
- 4. The selected alternative is the most simplistic. The operation and maintenance of the alternative can be directed by a local association. A intergovernmental agreement between Lane County, The Port of Siuslaw, and a local association would gaurantee the operation and maintenance of the wastewater system for years to come.
- 5. According to FEMA maps, there are areas in the Commercial District that exist both in and out of the floodway. The proposed alternative solves the health hazard that exists in and out of the floodway, but promotes growth only outside the floodway.
- 6. It is the recommendation of the engineer for Lane County to submit a grant application to fund a Commercial District sewage system in the next grant cycle. It is the Engineer's estimate that the selected alternative will cost \$ 286,131. The Commercial District shall also use volunteer labor, land donation values, and cash to meet the grant match requirements. The commercial District shall also use volunteer labor, land donation values, and cash to meet the grant match requirements.
- 7. The selected alternative and the means of governing the sewage system has the backing of the local task force that was selected by the Board of County Commissioners, and after several public meetings held at Mapleton, the business and residential community of the Commercial District also support the decision to apply for funding of the selected alternative.

CURRENT SITUATION

Currently, the Commercial District consists of both commercial and residential establishments. The following table summarizes the existing establishments:

TABLE 1 - EXISTING ESTABLISHMENTS

<u>Establishment</u>	Total	<u>In-Use</u>	Vacant
Commercial	18	14	4
Residential	12	10	2
Apartments	1	6 units	-

Does not include 42 trailer spaces in trailer park.

Thirty-three percent of the Commercial District is undeveloped and the designated zoning in the area is Community Commercial. The undeveloped lots in the district may either be residential or commercial depending on Lane County Planning Departments interpretation of land use on proposed lots within the Commercial District. Figure 3 depicts the amount of undeveloped lots in the Commercial District.

HISTORY OF WASTEWATER STUDIES

3

In 1968 and 1976, Lane County Environmental Health Officials conducted sanitary surveys of the wastewater disposal systems in Mapleton. The studies concluded that nearly all the systems in the Commercial District were either failing or marginal. Failure was defined as untreated effluent entering open waters or surfacing. The County's conclusion was to upgrade the individual systems or build a community wastewater treatment plant, as proposed in a 1976 facilities plan by URS Engineering Company of Seattle. The wastewater treatment plant was overwhelmingly defeated by the people of the community and according to Lane County, no improvement or construction permits have been issued to the Commercial District area since the 1976 survey.

In 1984, business persons from the Mapleton Community requested that Lane County submit an application for wastewater technical assistance to the State of Oregon Community Development Program. In 1985 the County recieved a grant fund from the State of Oregon to study the Mapleton wastewater problem in the Commercial District. A task force was appointed by the Board of County Commissioners to

FIGURE 3 UNDEVELOPED LOTS SHADED AREAS SIUSLAW -7-

Future Situation, Cont.....

ESTIMATED FLOWS

Establishments	Current	Future
Commercial	7,160 gpd	11,560 gpd
Residential	4,000 gpd	6,475 gpd
Inflow/Infiltration	750 gpd	2,265 gpd
TOTAL FLOW	11,910 gpd	22,650 gpd

The strength of the sewage depends on the type of collection system and type of user. With subsurface treatment the chemical characteristics will effect the size of area needed. For conventional treatment, it will effect the method of treatment. The Commercial District's sewage is expected to be easily treated. There are no known sources of toxic materials or abnormal levels of heavy metals. The biological and nutrient levels are expected to be typical of domestic sewage. The estimated characteristics of the sewage are shown below.

BIOCHEMICAL OXYGEN DEMAND (BOD 5) = 0.20 lbs/capita/day

SUSPENDED SOLIDS (SS) = 0.20 lbs/capita/day

NITROGEN = 0.03 lbs/capita/day.

PHOSPHORUS = 0.01 lbs/capita/day

SUMMARY OF COSTS

Alternative 1A. Drainfield at Cite A

Phase 1 - 12,000 gpd Phase 2 - 24,000 gpd	\$265,741 \$322,981
Alternative 1A - Drainfield at Site B Phase 1 - 12,000 gpd Phase 2 - 24,000 gpd	\$277,691 \$334,931
Alternative 1B - Drainfield at Site A Phase 1 - 12,000 gpd Phase 2 - 24,000 gpd	\$286,131 × \$315,116
Alternative 1B - Drainfield at Site B Phase I - 12,000 gpd Phase 2 - 24,000 gpd \$327,066	\$298,081
Alternative 2 - Package Treatment	\$412,691

SELECTION AND RATIONALE

We feel Alternative 1B - Drainfield at Site A is the best choice. This system requires low maintenance, does not discharge into the river, is out of the floodplain, requires the least amount of room of the non-discharging systems, and allows for growth in small increments. This alternative costs more in phase 1 because of building a 24,000 gpd recirculating filter while only processing 12,000 gpd. However, when growth occurs and the system increases to 24,000 gpd, the cost is less than the other types of non-discharging system.

Site A is preferred over Site B because it is closer to the Commercial District, it already has a topographic map, power is available, the slopes are more uniform, and only one owner is involved. All these factors make the overall costs about \$12,000 cheaper at Site A. (No land costs have been added.)

Alternative 1B takes into account today's needs and has a built-in ability to grow. The filter is built to handle a doubling of Mapleton's daily flow. When more growth occurs small cells (600 lineal feet of drainfield) are added to the system.

Alternative 1B will require about 4 acres while Alternative 1A will require 6.5 acres. Site A is owned by the U.S. Forest Service. The Mapleton Ranger District has indicated that they would allow the drainfield providing it does not interfere with their future development and that an equivalent site is not available on private lands. Alternative 1B requires about 4 acres. There is at least 14 acres of suitable land near and around the chemical storage building. There should be ample room for the drainfield plus Forest Service growth.

Site B is a private site with suitable soils. However, it is more expensive to use and there are possibly three owners that would be involved - Bonneville Power, Champion Lands and Davidson Industries. Bonneville Power has said it would be acceptable to place the drainfield under their powerlines. Champion Lands and Davidson Industries have not given a yes or no at the time of this writing.

User Fees for Selected Alternative

An estimate of the cost per year to the user has been made by making the following assumptions.

- 1. All pumps in the system will have a 20 year life.
- 2. All electrical controls and floats will have a 20 year life.
- 3. The recirculating filter will have a 50 year life.
- 4. The drainfield will have a 40 year life.
- 5. The drainfield, filter, sewer lines, and lot facilities will receive regular maintenance.
- 6. The first 5 years the replacement cost will be based on 32 users, the next 5 years on 48, and after that 64 users.
- 7. Alternative 1B would be used.

Pumps and Controls	1-5 Years	5-10 Years	10-50 Years
(All costs are per year unless otherwi	se noted)		
Individual Pumps (\$600/unit) Pump Station (\$1200/unit) Recirculating Pump (\$3900/unit)	\$ 480 60 97	\$ 720 90 97	\$ 960 120 97
Drainfield	567	600	724
Filter	1,003	1,003	1,003
Misc. (fence, electricity)	375	375	375
Maintenance			
Lot Facility Pressure Sewer Filter Pumping Interceptor Tanks	880 250 750 350	1,100 350 850 450	1,600 500 1,000 700

Operation Costs	1-5 <u>Years</u>	5-10 Years	10-50 <u>Years</u>
Collection System Filter Drainfield	1,000 1,000 350	1,000 1,000 450	
User Costs			
Total per year Cost per User per Month	\$7,162 \$ 18.65	\$8,085 \$ 14.03	\$10,079 \$ 13.12
Du Just Horse years - Ver	\$64.00	and \$20.0	•

AROUND THE REGION

Plan addresses sewage problem

By LARRY BACON
The Register-Grand

MAPLETON — Officials say it may cost less than expected to fight Mapleton's buttle against considerable seepage of untreated sewage into the Sioslaw River.

A Eugene engineering firm is in the process of completing a plan for a system that will provide sewage disposal for businesses and homes in the heart of the worst-affected area. The sewage problem has plugued Mapleton for more than 15 years.

Tom Poage Engineering and Surveying Inc. says a sewage collection system with a community drainfield could be built to serve about 30 homes and businesses for \$206,000.

The Pouge plan calls for each business or residence to have at least one sewage collection tank and a pump. Sewage would be pumped to a central collection point, and then up a hill on the west side of Highway 126 to U.S. Foreis Service property tentatively identified for a three-acre community drainfield.

Randy Cox, a Mapleton pharmacy owner and member of a local task force that has been working on the sewer problem for more than a year, says Mapleton residents like the design and the price of Poage's system.

"We were very pleased, it's an effective and relatively maintenancefree system at a very affordable cust to the community," he says.

The plan for the system was developed with an \$8,000 federal grant awarded in 1985 and administered by the Lane County Housing Authority and Community Services Agency. Task force numbers and Poage Engineering are optimistic about chances for receiving a grant to pay most of the cost of the new system.

"I think they will get it. There is a definite health hazard up there," says Poage engineer Met Damewood,

Peter Thurston, a community development specialist with the housing authority, has tentative plans to Seek a federal Department of Housing and Orbin Development community "block grant" for the project. State lottery funds are unother possibility, he says.

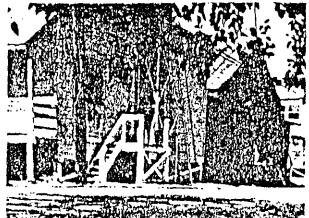
If all goes well, Thurston hopes the sewer system could be done by November 1986. It is unclear who would overvee the project and operate the system.

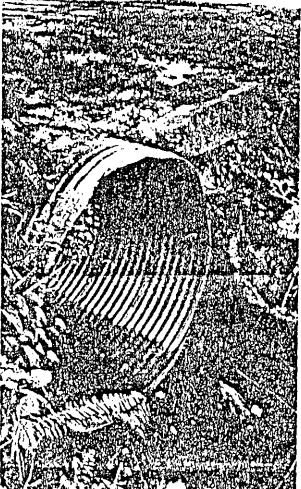
Thurston and task force members last week asked Port of Sustaw commissioners to take that responsibility, But Port Attorney David Clark doubts if the port could do so.

"It doesn't look like the port has the legal ability to own and operate a wistewater sewage disposit system," Clark says.

Lane County has such authority, he says, and the port and the county might "boolstrap" the port into a sewer system management position through an intergovernmental agreement between the port and the county. Port commissioners have asked him to investigate that possibility.

"I feel it is the responsibility of the port district to help the people on this program," says Port President Stuart Jubiston of Florence "After all the





Tainted water flows from a culvert in Mapleton

river belongs to all of us, and it's up to us to protect it."

Meanwhite, Cox says the project has virtually unanimous support from affected property owners who, like himself, haven't liked the Idea of putting sewage in the river. Because of the sewage problem, a building mora torium now exists that prevents the opening of new businesses or the expansion of existing ones.

The row of old buildings between Highway 126 and the river are the remaints of the town's original business district. Some were built in days when the river was regorded as an an ceptable and logical way to dispose of sewage.

The area's soil type makes the use of septic system drainfields unfeasible, and the lots are so small that in most cases there is inadequate room for drainfields. Individual septic systems also have been subject to periodic damage from flooding over the years.

Damewood estimates that at least half the individual septic systems in the area proposed for the new community system are failing. The area runs tess Highway 126 from the highway bridge to the former Champion International mill site now owned by Davidson Industries.

. "Fifty percent of the systems are falling, 10 percent are marginal, 10 percent are unobservable and 30 percent are good," he says.

At least one business has a sewer outfall running directly to the river, Damewood says, and in other locutions, sewage effluent seeps to the river from septic tanks or drainfields. In some cases, buildings are constructed over the top of the druinfield so no repairs can be made, he says.

The proposed system would serve 18 businesses, 12 residences and a sixunit apartment building. One of the businesses is a small trailer park.

Poage estimates the current businesses and residences generate about 11,180 gations of sewage a day. The proposed system would accommodate 12,000 gattons per day and could be expanded to handle more at a relatively low cost.

Regardless of what kind of grant is sought, Thurston says, benefiting properly owners will likely be expected to share in some of the cost. He has told them the local matching share will probably be about 25 percent.

How the local cost would be divided among properly owners has yet to be determined, but Cox says one-way to handle it might be to require each properly, owner, to buy the sewage holding tank required for the home or business. Sewer line easements and the drainfield site might also count loward the community's shure of the cost, Thurston says.

The sewer system is expected to be relatively inexpensive to operate. Cox says costs are expected to be about \$10 per month per user.

The severity of the sewer problem in Mapleton came to light us a result of Lane County studies in 1968 and 1976.

The 1968 study showed that 49 percent of the sepic systems in the Mapleton area were failing or marginal. The 1976 study showed that percentage had dropped to 17 percent, but it still identified the core area addressed by the lutest study as having serious sewage problems.

A push for incorporation resulted from the 1968 report, but voters in 1974 defeated incorporation by an overwhelming majority.

A community sewer system was one of the goals of the incorporation advocates. The 1976 study said a communitywide system would cost in excess of \$1.7 million and that Idea was dropped because of the high cost.

Cox is confident a grant can be obtained, but he admits if none is available the sewer project may be stalled. The local economy is in a stump, and Cox doesn't unicipate support for creating a new city or sewer district that could levy taxes to pay for a sewer system.

If county health officials, the state Department of Environmental Quality, or the state Health Division decide to get lough, however, the homes and businesses could face deadlines for pollution abatement.

The state also has the authority to force formation of a county service district or sewer district without a public vote to deal with health hazards

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Port agrees to take part in sewer project

By BILL CALDER
For The Register-Guard

FLORENCE — An intergovernmental agreement that would enable Mapleton property owners to implement and manage a proposed sewage treatment plan came a step closer to reality Wendsday night when Port of Siuslaw commissioners voted to enter into the agreement.

A local sewage treatment task force and Lane County health officials have asked the port to provide support services and to act as a local authority to oversee a proposed treatment plan that would help solve a serious sewage discharge problem that has plagued the community for more than 15 years.

An engineering firm that is working on a treatment plan found that more than half the septic tanks in the Mapleton core area are failing. At least one business discharges sewage directly into the river. Other drainfields badly in need of repair are inac-

cessible because buildings are built on top of them.

Studies conducted by the county in 1968 and 1976 labeled the problem as "serious," particularly in the area along the west side of the Siuslaw River, where most businesses are located.

Subsequent efforts after the 1968 study to incorporate the community and to use taxes to finance a sewage treatment facility failed.

Earlier this year, an \$8,000 community block grant was awarded to Lane County to develop a plan to solve the sewage seepage and discharge problem. Tom Poage Engineering and Surveying Inc. is completing the plan that would serve about 30 homes and businesses.

The Poage plan calls for individual pumps and holding tanks to be installed for each property along the half-mile stretch from the Highway 126 bridge to the old Champion Mill site. A central collection tank and

pump would then move the effluent uphill to a drainfield on U.S. Forest Service land.

The Poage plan, expected to cost about \$206,000, has pleased local task force members who have been spearheading the drive to find a solution to the problem. The task force and the county expect to build the system with grant money but the long range maintenance and operation of the system would be the responsibility of the property owners.

Under the terms of the intergovernmental agreement, the property owners would have to incorporate themselves as a legal entity before entering into the agreement. Randy Cox, a representative from the Mapleton task force, said the property owners intend to incorporate as the Mapleton Wastewater Management Company. He gave port commissioners a signed statement to that effect Wednesday night.

Still at issue is the question of who will pay for legal fees associated with the incorporation and intergovernmental agreement. Although port officials agreed to provide assistance once

the system is built, they were not in favor of helping the property owners incorporate.

Port attorney David Clark estimated the legal costs to property owners for the incorporation and intergovernmental agreement at \$500 to \$1,000.

Cox said the task force only has about \$400 left from the \$8,000 county grant. Legal fees associated with a new grant application cannot be reimbursed if the grant is awarded.

Port commissioners were reluctant to accept any financial responsibility for the sewage system but generally agreed that the terms of the intergovernmental agreement were acceptable. The port would provide certain support services and administrative assistance but the financial obligation would be the burden of the property owners' group.

Lane County would be the ultimate authority and would have the power to force compliance on owners who refused to hook up to the system. The county would also be the lead agency on the grant application and would build the system.

EXHIBIT "D"

NEWS ARTICLES

- (1) Various New Articles, in support of;
 - (a) User participation/parcels to be served
 - (b) Grant funds and estimated costs
 - (c) Misc. information as highlighted

Rogers opposes sewer plan

County offers to help form district to solve Mapleton problem

MAPLETON — The chairman of the Lane County Board of Commissioners told a group of Mapleton residents Thursday night that he opposes having the county operate a sewage collection system expected to alleviate a problem that has been plaguing property owners in the Mapleton business district for more than 15 years.

Chairman Bill Rogers said, however, that the county will continue to assist local property owners in finding the best way to organize a governmental, private or special district entity that would operate a sewage collection system in the business district.

Mapleton residents and business owners in an area south of Highway 126 have been seeking a solution to a sewage seepage problem for several years. The county and the state Department of Environment Quality have allowed businesses to discharge sewage into the Siuslaw River in violation of state law because because of a lack of money with which to build a collection system designed by Tom Poage Engineering Inc.

The Eugene engineering firm, in a study two years ago, found that 70 percent of all septic tanks within the Mapleton business district boundary were in "failing or marginal condition.

2/27/87 REGISTER GUARD

Last week, the state Intergovernmental Relation: Divi-

sion announced it had approved a request for \$319,000 in community development block grant funds to help pay for the system.

Several options were presented for discussion by Rogers, county legal counsel Teresa Wilson and Lane County Local Government Boundary Commission representative Steve Gordon. The boundary commission, appointed by the governor, oversees the creation of new special districts and governmental entities. Gordon said the commission looks most favorably on an organizational method that uses existing government agencies, such as Lane County or perhaps the Port of Sluslaw, as a lead agency.

Port of Siusiaw attorney David Clark ruled out the possibility of the port operating the system but said it has provided and will continue to provide administrative assistance until the business owners could decide how best to proceed.

Other options discussed included forming a county service district, incorporating Mapleton and forming a special sewer district. Most people at the meeting ruled out the possibility of forming a city and Gordon said the boundary commission would not look favorably on a county service district because it would be too much government for a system that may only serve about 30 parcels of land.

Two cities win, Lowell misses federal grant

By HARRY ESTEVE The Revister-Guard

The Lane County towns of Mapleton and Oakridge came out winners, but Lowell was the big loser in this year's allotment of federal block grants, which were announced Wednesday in Salem.

Mapleton will receive \$319,000 to improve sewer service to 30 property owners, while Oakridge will get \$157,000 to renovate a community center that has fallen into disrepair, according to the announcement from Gov. Neil Goldschmidt's office.

Other communities receiving funding included Harrisburg, Brownsville, Veneta and Coos Bay, Lane and Coos counties also were awarded grants.

For the second consecutive year, the city of Lowell fell just under the cutoff line, missing another chance at \$500,000. The money would have been used to help pay for a \$1.5 million project to build a sewage treatment plant below Dexter Dam.

The \$4 million pool of federal funds is administered by the state intergovernmental Relations Division (IRD), which this year received grant applications from 43 communities, totaling \$13,458,000 in requests:

Lana Holman, a project coordinator for the division, said Lowell was denied because

Turn to GRANI, Page 2C

2/19/87 REGISTER GUARD

ores of Engineers, which leases the a reel to the Lowell School District. Sor and residents want the land kept in t as an outdoor education area.

ir Thurston, Lane County's communication of development manager who he Lowell plan the sewer system, said he was that the Lowell City Council contork on the treatment facility and try again to get a community development blo

link it will be very difficult to achieve t 1988, deadline for a fully functioning s Thurston said. "But I think on the oth hey can still do it in 1988 sometin

Mapleton sewer plan given green light Meeting set for Thursday

will determine next step

By LOGAN HARRIS Of The Siuslaw News

A sewage problem that has plagued the Mapleton commercial district for over 17 years may soon see a resolution if a recent announcement by Gov. Neil Goldschmidt is any indication.

The city of Mapleton was among 47 Oregon cities and counties receiving over \$7.5 million in 1987 Oregon Community Development (OCD) funds, according to an announcement made by the governor last Wednesday, Feb. 18.

Mapleton will receive \$319,281 in OCD funds, essentially giving the community the green light to establish a sewage treatment system to replace failing or marginal septic systems in the commercial core area.

A meeting of the Mapleton Commercial Area Owners Association will take place at the Mapleton Elementary School Board Room Feb. 26, at 7 p.m. The purpose of the meeting will be to

cuss all possible means for providas perpetual management of the system, as well as any other concerns held by community members and affected land owners.

Scheduled to attend the meeting are Lane County Commissioners Bill

We may have to vote it down if we can't afford it." Land owner Leon Berry

Rogers and Ellie Dumdi, as well as Peter Thurston, community development coordinator for the county housing authority who has been involved in the project for some four years. The engineer who undertook an \$8,000 study. to develop a plan for the new system in 1985 will also attend the meeting.

Thurston was pleased that the Mapleton project was awarded the \$319,281, but indicated that the amount fell short of the original request. Mapleton had asked for \$333,781.

"The grant was funded substantial-'he way it was presented," he said. ut they cut way back on the administration allowance?'

Thurston indicated that of three considerations for public works projects (project construction, engineering and administration), the Intergovernmental Relations Division (which monitors the administract

the OCD program) cut back on funding of administration for projects.

Untreated sewage flowing directly or seeping below ground into the Siuslaw 34 River because of failing or marginal septic systems is the crux of Mapleton's problem. The severity of the problem ... came to light as a result of Lane County studies in 1968 and 1976. The studies suggested that individual septic systems should be upgraded in the area or the town should incorporate and a community wastewater treatment district should be formed.

Mapleton residents, however, overwhelmingly opposed incorporation in 1974 and poor soil and other physical restraints have prohibited the upgrading of individual systems.

Tom Poage Engineering and Surveying Co. completed a plan in 1985 that would serve 18 businesses, 12 houses and a six-unit apartment complex within the target area.

Leon Berry, a land owner in the tark get area, questions the feasibility of the Poage engineering plan for cost effect tiveness.

"There is the possibility we may not?" be able to afford it," notes Berry. "We ! need more information on the monthly breakdown of what we will pay.

"I'm not against getting a new sew on er system or the formation of the sewer district," Berry added, "But we need some of these engineer's facts and figures brought out in the open. We may have to vote it down if we can't afford it!"

That information should be available at Thursday's meeting. The meeting will also explore which means of organization and intergovernmental cooperation should be established to manage the prospective facilities.

According to Lane County Commissioner Bill Rogers, alternatives include: 1), a local association of owners (corporation); 2), a sanitary district; and 3), a county service district.

The association of owners would provide for a local corporation of property owners to own and operate the facilities constructed with grant funds and local funds. County and/or Port involvement may occur by contract. The local property owners have taken steps to form an association, so this alternative is in process. The state DEQ has expressed concern about a private organizational structure because there would be no taxation, as-

Continued on page 7-A

sessment or enforcement authority.

The sanitary district is a municipal corporation formed under state law to manage the sewer facility. The board

of directors is elected from and by the residents of the service area. The Lane County Board of Commissioners approves formation of the district, according to Rogers...

The sanitary district owns the facilities. Principal advantages include local control with municipal authority to tax and assess local property to run the system. The main disadvantage is that there are lew permanent residents of the commercial area to make up the district board, Rogers said.

The county service district provides infor the county board of commissioners to be the board of directors of a district to serve the Mapleton commercial area. Full ownership, power to assess, and enforcement rests with the County Service District Board. A local association of owners may be involved in an advisory capacity and/or as a contractor to operate and maintain the system for the district.

In all cases where a community facility is implemented the Lane County Boundary Commission will have to give its approval.

"We've still got a lot of work ahead of us, but we're further than we've ever been (to a resolution)," noted Marilla Kessel, the pro tem chairwoman for the Mapleton Commercial Area Owners Association. "We'll find out our next step at Thursday's meeting."

There is little doubt that the struggle for an adequate sewage treatment system in the Mapleton commercial

district is far from resolved, but with the news of the grant award last week affected landowners can see the light at the end of the tunnel.

The news is also positive for economic development for the Mapleton area. Until the problem is solved, a building moratorium exists in Mapleton that prohibits the opening of new wi businesses or the expansion of existing ones.

The Mapleton Saler

Vol. IX, No 10, August 21, 1989

and Siuslaw Oregonian

Sewer system nears date for star

Sept. 1 may be celebration time for downtown Mapleton.

Around that time, the area's sewer system is expected to be operating, at least experimentally.

The contracting firm of D.U. Kee, which has been installing the system since spring, estimates that the system will be completed before the end of this month, and oper-

ating on a test basis by the first of September.

Members of the Mapleton Commercial Area Owners Association, which will own the plant after Lane County accepts it from the contractor, are being notified of the Sept. 1 startup date, and reminded that monthly operating fees are due then.

The Siuslaw Valley Bank's

Mapleton office will accept payments and deposit them in the association's account, as is done for water bills.

Completion of the wastewater treatment plan is the climax of a struggle lasting more than 10 years.

The struggle, helped along by Rep. Larry Campbell, County Commissioner Ellie Dumdi and Peter Thurston of the county economic development department, finally bore fruit with the award of a \$319,000 state grant, to be matched by local funds of \$70,000.

After a year of bureaucratic wrangling over design, permits, agreements between the county and the local association, and other complications,

See SEWER, Page 3

of all took up Vees Required 1/3/87

The late Ode, to which it was amounced that was all owners - come and ine " was owned taking to those who Paid their Hook- up Weed by the \$131/89 healine.

Jo Discover that (14) lulir, hads was the aftent of asso. Membership was shocking - oul of forled no Recourse to Members to Backout.

Sewer

From Page 1

bids were invited late last year and opened in December.

They were all too high; the nearest was Kee's \$344,000 bid, which was approved.

Then the modification process began, to bring the cost down.

That work done, the Kee firm broke ground March 27 at the treatment plant site, next to the Siuslaw Valley Bank's office.

The association's boundaries run from just north of the Siuslaw River bridge to just south of the Forest Service office, and include nearly all

the land between Highway 126 and the river. Some parcels were excluded because of being in the river's floodway and being undeveloped.

Not all properties within the boundaries are in the association; some owners have kalendaries.

Each property in the system will have its own specially designed septic tank, and a gravity flow system will carry wastewater to the treatment plant.

There it will be filtered in a pea gravel filter, chlorinated to purify it, then dechlorinated before it goes into the Siuslaw River.

EXHIBIT "E"

LCLGB AGENDA/STAFF NOTES 3/3/88

- (1) Excerpts from this Agenda/Staff Notes is in support of;
 - (a) Construction costs
 - (b) User Participation/Parcels to be served
 - (c) System Layout/Boundary Map
 - (d) Misc. Information as highlighted

AGENDA

LANE COUNTY LOCAL GOVERNMENT BOUNDARY COMMISSION

Leaburg Community Center Leaburg, Oregon

March 3, 1988 7:30 p.m.

- I. CALL TO ORDER ROLL CALL
- II. NEW BUSINESS PUBLIC HEARING

Merger of the Nimrod Rural Fire Protection District into the McKenzie Rural Fire Protection District

A. BC File F MK 88 - 09

Joint Resolution by Nimrod RFPD and McKenzie RFPD Boards

Located along the McKenzie Highway from Ben and Kay Dorris Park

to approximately the community of Blue River

Area: ±31.29 square miles combined

Estimate of population: 6,141 combined

Annexation of Territory to the City of Eugene (Willow Creek Islands)

B. BC File C EU 88 - 09
Resolution 4076 of the City of Eugene
Located in southwest Eugene, south of West 11th Avenue between
Bertelsen Road and Terry Street
Acres: 283
Estimate of population: 20

Sewer System Establishment (Mapleton)

C. BC File X S 88 - 10
Petition by Lane County
Located in the community of Mapleton, generally from the
intersection of Highway 126 and Highway 36 southerly, north of
and including the U. S. Post Office, east of Highway 126 and
west of Siuslaw River

Area: ±25.7 acres-to be served
Estimate of population: 30

- III. OTHER BUSINESS
 - A. Urban-Rural Lands Synposium (attachment)
 - B. Status of Marxen Annexation (C EU 87 29)
 - C. Other

Sewer System Establishment (Mapleton)

11.C. BC File X S 88 - 10
Petition of Lane County
(Mapleton Sewer)
Action under ORS 199.464 of
the boundary commission law
Received February 2, 1988
Action to be taken by
May 2, 1988

Advertised in the REGISTER-GUARD on February 13, 1988 Notices mailed February 18, 1988 Notice of public hearing posted in area and Lane County courthouse on February 14, 1988

Description

Located in Mapleton, generally from the intersection of Highway 126 and Highway 36 southerly to the U.S. Post Office, east of Highway 126 and west of the Siuslaw River

Area: 25.7 acres to be served

*Estimate of population: 30

Applicable comprehensive plan: Lane County Rural Comprehensive Plan (acknowledged September 1984) and Lane County Coastal Resources Management Plan (adopted 1980, amended 1982 and 1983)

Existing land use: Commercial, industrial, residential

Existing zoning in Lane County: RR-1, rural residential; C-2, neighborhood commercial; C-3, commercial; CR, rural commercial; and M-3, heavy industrial, with /DMS, dredged material/mitigation site; /RD, residential development; and /MD, mixed development overlay zones

Existing public services: Fire (Siuslaw Rural Fire Protection District #2), water (Mapleton Water District), roads (Lane County/Oregon State Highway), police (Lane County Sheriff/Oregon State Police), schools (District 32), on-site sewage disposal system, electric (Central Lincoln PUD)

Reason for System Establishment

Lane County and the Mapleton Commercial Area Owners Association desire a private sewer system to serve the commercial area of Mapleton, Oregon, an area with a high percentage of failing septic systems and a history of septic system failure.

In conformance with OAR 191-05-065(3), these staff notes are incorporated as part of the record of the boundary commission's public hearing of March 3, 1988.

This proposal was filed with the boundary commission in accordance with ORS 199.464 by petition from Lane County on behalf of the Mapleton Commercial Area Owners Association on February 2, 1988.

The proposal filed with the commission included all necessary items:

Initiating letter
Filing fee
Assessor's map
Legal description

Boundary commission information form

Facility Plan, including project description, discussion of environmental impacts, technical feasibility study, and financial feasibility study Draft Management Agreement between Lane County and the Association Mapleton Commercial Area Owners Association Articles of Incorporation and Bylaws

DEQ preliminary approval letter

This proposal is in the Mapleton commercial area, east of Highway 126 and west of the Siuslaw River. The area extends for about three-quarters of a mile, from Washington Street, just north of the intersection of Highways 36 and 126, south to the end of the commercial area (refer to Maps II-C-1 and II-C-2).

Property ownership, acreage, and zoning are shown in Exhibit II-C-1. There are 39 tax lots wholly within the proposed service area and 4 tax lots partially within the proposed service area. Seventeen tax lots are zoned commercial, 25 tax lots are zoned residential, and one tax lot is zoned industrial. Sixteen of the 39 tax lots are undeveloped.

Exhibit II-C-2 is a memo from Peter Thurston to the boundary commission. It contains background information on the history of sewage disposal problems in Mapleton, the service area boundary, the citizen involvement process, the sewerage and wastewater treatment facility, economic feasibility, environmental review, and comprehensive plan compliance.

The proposed private sewage system will provide primary and secondary treatment with a design capacity of 24,000 gallons per day. Twenty-five connections are planned currently and an additional 18 (12 commercial and 6 residential) connections are possible in the future.

The proposed private sewage system consists of:

- a package sewage treatment plant, utilizing a pea gravel filter, chlorination and declorination equipment, and a 4-inch outfall into the Siuslaw River
- 1,630 lineal feet of 4-inch diameter feeder line
- 2,710 lineal feet of 4-inch diameter pipe
- 2,000 lineal feet of 2-inch diameter pipe
- 2 pump stations

BOUNDARY COMMISSION REFERRALS

Boundary commission referrals were sent to the Mapleton Water District, Lane County Land Management Division, Lane County Board of Commissioners, Lane County Environmental Health Division and the Oregon State Department of Environmental Quality. No comments were received by February 24, 1988.

BOUNDARY COMMISSION STANDARDS - STAFF ANALYSIS

In this section of the staff notes, each of the applicable boundary commission standards are addressed. These standards are derived from ORS 199 and the boundary commission's policy administrative rule [OAR 191-30-020(4)].

- 3. This proposal involves creation of a private sewer system to serve 42 parcels in the Mapleton area with a total area of 25.7 acres. The area is presently developed with commercial and residential uses, and is zoned RR-1, rural residential; C-2, neighborhood commercial; C-3, commercial; CR, rural commercial; M-3, heavy industrial; with /DMS, dredged material/mitigation site; /RD, residential development; and /MD, shorelands mixed development overlay zones. The property is also subject to the Coastal Resources Management Plan of Lane County.
- 4. The system includes a package sewage treatment plant, an outfall into the Siuslaw River, feeder line and sewer lines to serve individual parcels and two pump stations. Sewage will receive secondary treatment and will be dechlorinated before discharge.

Provide an impartial forum for resolution of local jurisdictional questions. Consider the affects of the boundary change on other units of governments. ORS 199.410(1)(b) and 199.410(2)(c)

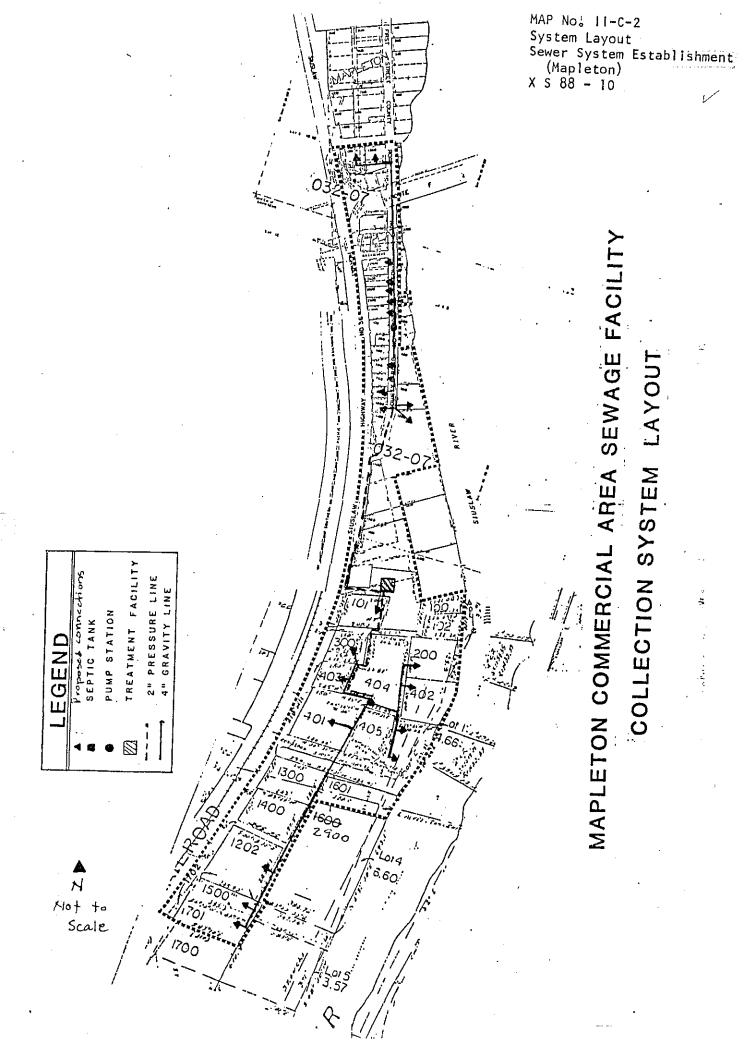
- 5. The boundary commission held a public hearing on March 3, 1988. Notice of the public hearing was given in accordance with ORS 199 provisions. All interested parties were given a reasonable opportunity to be heard.
- 6. The proposal was coordinated with Lane County, the Mapleton Water District and the Oregon State Department of Environmental Quality (DEQ). No comments or objections have been submitted to the boundary commission regarding this proposal. Lane County is working directly with the DEQ to address their concerns and requirements as part of the permit process required for project construction.

Consider the orderly determination and adjustment of local government boundaries to best meet the needs of Lane County and Oregon. Consider alternative solutions where intergovernmental options are identified and make decisions based on the most effective long-range option among identified alternatives. ORS 199.410(1)(a) and 199.410(2)(c)

7. Creation of this private sewage treatment system is the most logical and economical method for alleviating the sewage disposal problems of the Mapleton commercial area. No other private or public sewer providers exist in the vicinity of the project area.

Make boundary commission determinations which are consistent with acknowledged local comprehensive plans. Assure an adequate quality and quantity of public services required in the comprehensive plan to meet existing and future growth. For major boundary changes, there must be assurance that the proposed unit of government is financially viable. ORS 199.410(1)(d), 199.410(2)(b), and 199.410(2)(d)

8. The site of the proposed sewage treatment facility is designated residential in the Lane County Rural Comprehensive Plan which was acknowedged by LCDC in September 1984, and is zoned RR-1 (rural residential), with /MD (mixed development), /FP (floodplain) and /DMS (dredge material/mitigation site) overlay zones. Sewer lines can be sited in all of the zones located within the proposed system area. The Lane Code, Chapter 16.231 (4)(r) conditionally permits the siting of sewage treatment



THE SEMERAGE AND WASTEWATER TREATMENT FACILITY

Those properties that elect to join the system will be provided with connection via on-site interception tanks and a sewerage pipe sytem to a treatment facility located within the Service Area. The facility itself will consist of a recirculating pea gravel filter, followed by a disinfectant process, dechlorination and, after complete treatment, discharge into the Siuslaw River.

The facility has a design capacity of 24,000 gallons per day. Although this represents a relatively small system, the engineer has concluded that the capacity would handle the current wastewater flows, and normal growth within the proposed Service Area. Growth of the Commercial District is constrained by existing neighboring development, Highway 126 and the Siuslaw River. Growth is further limited by the Service Area's location within the floodplain and floodway.

ECONOMIC FEASABILITY

An extensive review of the financial viability of the system was completed by Tom Poage Engineering and Surveying, Inc. as part of its Facility Plan (attached). A review was made of the initial construction costs of the system and of projected operation and maintenance costs. Both these figures were within the original amounts the Association had been quoting its members and to which the members agreed at the time they joined the Association.

The vast majority of construction costs will be met by the grant from the Oregon Economic Development Department. The "user match" portion of the construction budget has been underwritten by Siuslaw Valley Bank. Siuslaw Valley Bank has also agreed to pay the initial charges of all residential owner-occupants over the age of 65 to ensure that no party is subject to undo hardship in the community's effort to alleviate the current health threat.

Using the latest available operation and maintenance figures, the engineer has reaffirmed that the user charges for residential customers should not exceed the originally envisioned \$40 a month. The Association reaffirmed its ability to pay these fees at a meeting in January 1988. The Association and its attorney are currently developing System Use Rules and Charges to ensure most equitable distribution of user fees. From the beginning, Association members have unanimously agreed that commercial properties should bear a greater percentage of the system costs.

ENVIRONMENTAL REVIEW

An extensive environmental review has been undertaken by Lane County and project engineer, Tom Poage Engineering and Surveying, Inc. A substantial portion of that review is summarized in the Facility Plan. Both the Oregon State Department of Fish and Wildlife and the Oregon Department of Environmental Quality have agreed that the project will have no negative

EXHIBIT "F"

NEWS ARTICLES/TIMBER ECONOMIC DECLINE

- (1) Various News Articles in support of;
 - (a) Recent Economic Timber Decline as it effects the Mapleton Community

Davidson cutting 50 jobs

By BOB SERRA Of The Siuslaw News

Workers at Davidson Industries saw and chip mills in Mapleton have been put on notice that the company will lay off about 50 permanent employees sometime between now and the end of the year.

Davidson spokesman Aubrey Pendergrass said on Monday that the

We've never had a permanent layoff like that. We've gotten smaller through attrition over the past years, but we've never reached a point where normal attrition isn't enough.

Aubrey Pendergrass

employees were notified of the layoffs during a company meeting Sept.

"We've put the crew on notice that sometime between now and Thanks-giving or the end of the year we will reduce our work force by about 50 people," Pendergrass said.

He attributed the layoffs to a poor log supply that will not allow the company to sustain its current level of production. The layoffs are not market related, he said.

The layoffs will affect both Davidson's lumber mill and chipping plant. The chip mill currently is running at about half capacity, and the lumber mill will be reduced to one single shift of workers, Pendergrass said.

The mills currently employ between 150 and 160 permanent workers.

The layoffs will be the largest in the company's history, Pendergrass said.

""We've never had a permanent layoff like that. We've gotten smaller through attrition over the past years, but we've never reached a point where normal attrition isn't enough with the timber supply available," he said.

Bermanent Ray-offs

City discusses future with county

By ALICIA DE NICOLA Of The Siuslaw News 9/23/92

The future of Florence and the direction of its growth dominated conversation Monday night when the Lane County Commissioners traveled to the coast to dine with the Florence City Council and city staff.

Commissioner Jack Roberts did not attend.

Topping the agenda was an attempt to reach a consensus on an urban transition agreement for the city and county to follow in order

to facilitate the city's annexation of future property within the urban growth boundary north and east of Florence.

"The idea of an urban transition agreement was introduced two years ago, and we'd like to bring it back before the board," said city Planning Director Laura Gillispie.

While the county commissioners said they were supportive of the idea of an agreement, they added that financial constraints within the county due to loss of O & C timber receipts would play a part in their enthusiasm toward an agreement.

Continued from page 1-A

"We are in the process of looking at a lot of reorganization within county departments," said County Commissioner Ellie Dumdi. "And I wonder if it would be a better idea if we moved farther along in that process before we discuss this because of budgetary constraints."

Commissioner Steve Cornacchia added that considerations were different in the past with previous agreements that the county has made with other cities.

Continued on page 11

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Council-

"Considerations at that time," Cornacchia said, "were more the interest of the cities having a say in the urban growth boundaries around them and their willingness to take over those functions; that was the primary motivation. Now, however, financial consideration, as far as the county is concerned, becomes paramount."

Jerry Rust, however, said that the commissioners were aware that Florence was the hottest growth area in the county and suggested the possibility of a full-fledged consolidation with Florence.

But City Councilor Roger McCorkle told commissioners that the county's current codes within the urban growth boundary presented problems to the city as it annexed those areas.

"When we annex property in the urban grow" area, it's a real problem with any standards that

have been met that don't even come close to meeting city standards," McCorkle said. "Then we have to deal with the problem at a later time. If there's a way of working out steps so that the county, within the urban growth boundary at least...could simply raise their standards to a little closer with the city's,"

The commission promised to have its staff analyze its workload and meet with Gillispie to discuss the issue.

In addition to an urban transition agreement, city council members also discussed the city jail with commissioners, prefacing the discussion with an acknowledgment of the county's budget concerns.

The Florence City Jail was inspected last year by the National Institute of Corrections (NIC). In its report the NIC called the jail a legal liability and suggested that a

new jail be constructed.

Commissioners suggested that Florence should complete a fullscale study to decide whether a jail is even cost effective for the city.

While city council members have been in consensus that a new jail should be top priority, City Manager Ken Hobson said just such a study is currently under way.

Third on the meeting agenda was the all-events center project. The city explained their latest step in appointing a committee to move the project forward. While Mayor Wilbur Ternyik said that he promised the commissioners that the city council would not come back to the commission to ask for more money, there were people in the community who believed that some of the future county room taxes should be returned to Florence for the all-events center.

Corna 1 said he didn't know

that the idea of additional funds from the county had ever been presented to the county.

"I don't know that it's ever been presented to us to look at the entire construction costs," Cornacchia said. "I'm not saying it's inappropriate, I'm saying it's never come here....I'm not giving you a commitment that I'm now going to give you the full cost....Before we go further and say you have to find all the rest, I'm just suggesting that someone think about there maybe other help in the room tax that hasn't been asked for yet."

To wrap up the meeting, Lane County Land Management Division Manager Roy Burns gave a synopsis of the county's proposed Clear Lake Watershed Protection Zone management plan, and the city renewed its commitment to wells and staying neutral on the Heceta issue.

State of Oregon Department of Environmental Quality

Memorandum

Date: January 20, 1993

To:

Environmental Quality Commission

From:

Harold Sawyer

Subject:

Agenda Item 1, January 28, 1993 Work Session

Presentation and Discussion of Findings on Wastewater Treatment

Costs - A Case Study

Attached is the December 31, 1992 Review Draft of a report entitled "Wastewater Treatment Costs - A Case Study" prepared by OSU Graduate Student Brett Fried.

This study and report was triggered by Commission discussions during the deliberations on the proposed waste load allocation for the James River Halsey Recycle Facility.

Brett will make a brief presentation at the beginning of the work session and will participate in the discussion.

Environmental Quality Commission

☐ Rule Adoption Item		
X Action Item		Agenda Item <u>I</u>
☐ Information Item		January 29, 1992 Meeting
Title: Bond Issuance Resolut	ion for Series 1993 A Pollution Co	ontrol Bonds
Summary:		
bonds. As part of the Multnomah County, the of Portland and Gresh Revolving Funds by seintends to sell advance interest savings of app	implementation plan for the protect the Department purchases Special A am. The Department also funds the elling pollution control bonds. In the refunding bonds to retire Series 1 roximately \$5 million. The Depart of a resolution authorizing the satisfact of these purposes.	ssessment bonds from the Cities are required 20% match for State this sale, the Department also 977 bonds, resulting in a net etment is seeking the
Department Recommend	ation:	
	nmends the Commission adopt the with the supporting findings preseng issuance of bonds.	
	Rydia Daylor	Jell Hanse
Report Author	Division Administrator	Director

January 20, 1993

[†]A large print copy of this report is available upon request.

Date: January 12, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject: Agenda Item I, January 29, 1993, EQC Meeting

Bond Issuance Resolution for Series 1993 A Pollution Control Bonds.

Statement of the Issue

The Department is seeking authorization to issue and sell not more than \$85 million in pollution control bonds. Proceeds from these bonds will be used to:

- 1) Purchase special assessment bonds from the City of Portland in an amount not to exceed \$60 million.
- 2) Fund the Sewer Assessment Deferral Loan Program (SADL) and provide the State match for the State Revolving Fund (SRF); and
- 3) Refund the outstanding Series 1977 Pollution Control Bonds.

The new bond sale is scheduled to take place along with a sale of bonds for the Department of Housing and Community Services in April, 1993. The refunding bonds may be sold at that time or as a separate negotiated sale.

Background

1) At its June 29, 1990 meeting the Commission approved Intergovernmental Agreements between the Department and the Cities of Portland and Gresham. The agreements are part of the implementation plan for the protection of drinking water in mid-Multnomah county. The agreements establish a mechanism for financing sewer construction; it calls for the Department to purchase Special Assessment Bonds (SABs) issued by the cities with simultaneously issued State of Oregon Pollution control Bonds. To date the Department has purchased \$13.845 million in City of Portland SABs and \$5.255 million in City of Gresham SABs.

[†]A large print copy of this report is available upon request.

Memo To: Environmental Quality Commission Agenda Item \underline{I} January 12, 1993 Meeting Page 2

- 2) The Department estimates it will require \$2.98 million in State match for the SRF during the third and fourth quarters of calendar 1993 and \$2.5 million in funding for the SADL program.
- 3) In addition, the Department is seeking authorization to sell approximately \$18 million in advance refunding bonds. The proceeds from the refunding bonds will be used to refund the outstanding Series 1977 bonds, and restructure the debt service schedule. This refunding is part of an overall restructuring plan which should, when coupled with a redemption of the 1980 bonds, result in a net interest savings of up to \$5 million. The 1977 bonds will be called on the next principal payment date which is May 1, 1993.

Authority to Address the Issue

The Commission has the authority to authorize the issuance of bonds and the uses to which the proceeds may be put under ORS 468.195 - .260 and ORS 468.427(2). In addition, all proposed uses of bond proceeds are set forth in the Department's legislatively approved budget for the 1991 - 1993 biennium. The proposed amounts of the bond sale are within the bonding limits approved by the 1991 Legislature in both the Department's budget and the overall bond bill (Chapters 642 and 646, 1991 Oregon Laws.)

Alternatives and Evaluation

The sale of Pollution Control Bonds is currently the only mechanism available for the financing of these programs. If the Commission does not act at its January meeting, the Department will be unable to participate in the joint bond sale scheduled for April, 1993. The alternative is a later stand-alone sale by the Department which would be considerably more expensive as the costs of bond issuance would have to be borne solely by the Department, rather than be shared with another agency. The costs of an original bond issue tend to be relatively fixed and inelastic with respect to size of bond issue.

Memo To: Environmental Quality Commission Agenda Item $\frac{I}{1993}$ Meeting Page 3

Summary of Any Prior Public Input Opportunity

The issuance of bonds and use of bond proceeds was discussed in the Governor's Recommended Budget for the 1991/93 biennium and with the Joint Legislative Committee on Ways and Means during the budget review and approval process.

In addition, there was opportunity for public input at the following Commission meetings:

May 25, 1990. Agenda Item N dealt with pollution control bonds, background on the intergovernmental agreement provisions and future bond sale for mid-Multnomah County sewers

June 29, 1990. Agenda Item O was a review of the intergovernmental agreement provisions and authorization of bond sales for mid-Multnomah County sewers.

August 10, 1990. Agenda Item M2 contained authorization to issue bonds, review of bond purchase agreements and approval for the purchase of special assessment bonds.

September 18, 1991. Agenda Item I was authorization to issue pollution control bonds.

June 1, 1992. Agenda Item J authorized issuance of pollution control bonds and purchase of special assessment bonds.

December 11, 1992. Agenda Item H authorized use of bond proceeds for SRF match, as well as SADLP, Orphan Site cleanup and purchase of special assessment bonds.

Conclusions

- The Commission has the authority to authorize the bond sales and use of proceeds.
- The sale of bonds is the only mechanism available to provide funds for these programs.
- Bond proceeds will be used to finance programs authorized by the Legislature and to carry out the policy aims of the Commission
- It is more economical and efficient for the Department to participate in the April bond sale than to sell new bonds on its own at some other time.

Memo To: Environmental Quality Commission

Agenda Item $\frac{I}{1993}$ Meeting

Page 4

Recommendation for Commission Action

It is recommended that the Commission adopt a RESOLUTION AUTHORIZING AND REQUESTING ISSUANCE OF BONDS as presented in Attachment A of the Department Staff Report together with the supporting findings presented above.

Attachments

Resolution Α.

Reference Documents (available upon request)

- ORS 468.195 to 468.260, ORS 468.427(2) 1.
- Chapters 642 and 646, 1991 Oregon Laws 2.
- 3. OAR 340-81-005-100

Approved:

Report Prepared By: Barrett MacDougall

Phone: 229-5355

Date Prepared: December 30, 1992

RESOLUTION AUTHORIZING AND REQUESTING ISSUANCE OF BONDS

The Environmental Quality Commission of the State of Oregon finds:

- A. The Department of Environmental Quality (the "Department") has entered into intergovernmental agreements with the cities of Portland and Gresham (the "Cities"). The intergovernmental agreements contemplate that the State of Oregon will issue general obligation pollution control bonds to finance the purchase of special assessment improvement bonds or other obligations of the Cities (the "Assessment Bonds"). The Cities will issue the Assessment Bonds to finance sewer system improvements in mid-Multnomah County pursuant to the Mid-County Sewer Implementation Plan. It is now desirable to authorize issuance of general obligation pollution control bonds to finance the purchase of the Assessment Bonds which the Cities propose to issue this calendar year in accordance with the intergovernmental agreements.
- B. At its 1991 regular session, the Oregon Legislature authorized and directed the Department to fund the State's assessment deferral loan program and the local match for the State Revolving Fund program through the issuance of general obligation pollution control bonds. It is now desirable to authorize issuance of general obligation pollution control bonds to finance a portion of the costs of these programs.
- C. It may be possible to refund outstanding general obligation pollution control bonds to produce debt service savings and to favorably restructure permanent debt. It is now desirable to authorize issuance of general obligation pollution control bonds to refund outstanding bonds.
- D. Oregon Revised Statutes, Section 286.031, provides that all bonds of the State of Oregon shall be issued by the State Treasurer.

The Environmental Quality Commission of the State of Oregon hereby resolves:

Section 1. Issue. The State Treasurer of the State of Oregon is hereby authorized and requested to issue State of Oregon general obligation pollution control bonds ("Pollution Control Bonds") in amounts which the State Treasurer determines, after consultation with the Director of the Department or the Director's designee, will be sufficient to purchase the Assessment Bonds to be issued by the Cities this calendar year, to fund the assessment deferral loan program, to fund the State Revolving Fund program, to refund outstanding bonds to produce debt service savings and favorably restructure permanent debt, and to pay costs associated with issuing the Pollution Control Bonds. The Pollution Control Bonds shall mature, bear interest, be subject to redemption, be in such series, and otherwise be issued and sold upon the terms established by the State Treasurer after consultation with the Director of the Department or the Director's designee.

Section 2. Tax Exempt Status. The Department shall comply with all provisions of the internal Revenue Code of the 1986, as amended (the "Code") which are required for interest of the Pollution Control Bonds to be excludable from gross income under the Code. The

Department shall take all steps required so that the Pollution Control Bonds will not be "private activity bonds" under Section 141 of the Code, and will not be "arbitrage bonds" under Section 148 of Code. The Department shall pay any rebates or penalties which may be due to the United States in connection with the Pollution Control Bonds under Section 148 of the Code. The Director of the Department or the Director's designee may enter into covenants, on behalf of the Department, regarding the maintenance of the tax-exempt status of the Pollution Control Bonds.

Section 3. Other Action. The Director of the Department or the Director's designee may, on behalf of the Department, execute any agreements or certificates, and take any other action of the Director or the Director's designee reasonably deems necessary or desirable to issue and sell the pollution Control Bonds, to purchase the City's Assessment Bonds, to fund the assessment deferral loan program and the State Revolving Fund program, and to refund bonds in accordance with this resolution.

Environmental Quality Commission

x Rule Adoption Item

☐ Action Item

☐ Information Item

Agenda Item J January 28-29, 1993 Meeting

Title:

Proposed adoption of Air Quality Division housekeeping amendments, Oregon Administrative Rules Chapter 340, Division 13, 14 and 20 through 34.

Summary:

The proposed amendments to DEQ air quality regulations are intended to address only housekeeping issues. This includes updating statutory citations, removing passed compliance dates and outdated regulations, and correcting typographical and grammatical errors. The amendments have no known administrative, legal or economic affect. The goal of the amendments is to streamline agency rules and generally make them clearer.

The rule amendments were primarily developed through internal staff review of the rules. One housekeeping issue came from the public comments made as a part of the triennial rule review process. (This review is described in more detail in an informational report included on this meeting agenda). An advisory committee or task force was not involved in the review of this rule package since the amendments were not intended to address substantive issues.

One public comment was received on this rule package. The writer raised concerns that some of the amendments were, in fact, substantive. As a result, two amendments were removed from the package and will be proposed in another rule making at a later date. The staff also discovered a few additional housekeeping changes during the public comment period. These amendments are also included for adoption at this time.

Department Recommendation:

It is recommended that the Commission adopt the amendments regarding housekeeping changes to air quality rules as presented in Attachment A of the Department Staff Report. For rules which are currently part of the State Implementation Plan (as identified by a footnote to that effect under each applicable rule), the amendments are adopted as revisions to the State of Oregon Clean Air Act Implementation Plan under OAR 340-20-047.

Report Author

Division

Director

Administrator

January 6, 1993

[†]A large print copy of this report is available upon request.

State of Oregon

Department of Environmental Quality

Memorandum

Date: December 29, 1992

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item J, January 28-29, 1993, EQC Meeting

Proposed adoption of Air Quality Division housekeeping amendments, Oregon Administrative Rules Chapter 340, Divisions 13, 14, and 20

through 34.

Background

This rule adoption package contains a proposal by the Department of Environmental Quality (Department) concerning rule amendments regarding housekeeping changes to the air quality regulations. This proposal would clean up the air quality regulations to the extent of correcting citations, removing outdated requirements, reconciling seemingly inconsistent requirements, and removing passed compliance dates.

On October 22, 1992, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on the proposed rules which would make numerous housekeeping changes to the Department's air quality rules.

Pursuant to the authorization, hearing notice was published in the Secretary of State's <u>Bulletin</u> on November 1, 1992. Notice was mailed to the mailing list of those persons who have asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action on October 21, 1992.

A Public Hearing was held November 24, 1992 with Andy Ginsburg serving as Presiding Officer. The Presiding Officer's Report (Attachment C) indicates that no oral testimony was presented at the hearing.

Written comment was received through November 25, 1992. The one comment received is included in Attachment D.

Department staff have evaluated the comment received (Attachment E). Based upon that evaluation, modifications to the initial rulemaking proposal are being recommended by the Department. These modifications are summarized below and detailed in Attachment F.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments and the changes proposed in response to those comments, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

Issue This Proposed Rulemaking Action is Intended to Address

This proposed rulemaking action is intended to address housekeeping issues in the air quality rules. These include incorrect citations and references, grammatical and typographical mistakes, unclear applicability, unnecessary and expired references and dates, and rule numbering issues. The rulemaking is not intended to address substantive issues.

Authority to Address the Issue

Oregon Revised Statutes 183.545 through 183.555 and 468.020.

<u>Process for Development of the Rulemaking Proposal (including alternatives considered)</u>

The package of proposed amendments was developed as an offshoot of the Department's Periodic Rule Review process described in a separate informational item for this EQC meeting. Rule Review included both a public review and an internal review of the Department's rules.

The housekeeping issues raised during the Rule Review have been compiled into this package of rules. While they are predominantly issues raised by staff, one housekeeping issue was raised during the public comment period for the Rule Review. Because of the housekeeping nature of these amendments, no advisory committees or task forces were formed or consulted.

One alternative considered by the Air Quality Division was to incorporate these housekeeping amendments into substantive rulemaking as rules are otherwise amended.

This alternative was rejected because of the large number of housekeeping amendments necessary throughout the air quality regulations.

Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.

The most common housekeeping changes are the correction of citations. These changes were necessary because Legislative Counsel reorganized Oregon Revised Statute (ORS) Chapter 468 into three chapters. Previously, Chapter 468 established the Department's administrative authority, and the air and water programs. In 1991, Chapter 468 was divided into a new Chapter 468 containing the Department's general administrative authority, Chapter 468A containing Oregon's air quality laws, and Chapter 468B containing Oregon's water quality laws. All references to the ORS were checked and updated where necessary.

Other housekeeping changes include correcting grammatical and typographical mistakes; correcting references within and to other rules; in divisions with several subdivisions, clarifying the range of rules covered by a subdivision; removing unnecessary references and dates; and deleting rules where compliance dates had passed.

One housekeeping change results from a public comment received from Northwest Aluminum Company during the Rule Review process covered in an separate informational item for this EQC meeting. The change involves a 28-day litmus test contained in OAR 340-25-285(1)(a). Northwest Aluminum pointed out that the test is technologically outdated and repetitive considering other testing requirements contained in the rules. The Department agrees that this testing requirement provides the same information as other existing testing requirements and is technologically outdated. Therefore, deleting it has no substantive effect.

Because of the housekeeping nature of the proposal, there are no significant issues involved.

Summary of Significant Public Comment and Changes Proposed in Response

Only one comment was received from the public regarding this package of rules (see Attachment D). The commenter indicated that four of the proposed housekeeping changes were in fact substantive in nature. This raises the issue of the adequacy of the public notice for making such changes.

Staff agrees that two of the changes are in fact substantive (one increasing stringency of open burning rules and the other relaxing vehicle inspection rules). Staff recommends removing these two changes from the housekeeping amendments and proposing them at a later date as part of other substantive rule making. Staff believes that all other changes are housekeeping and non-substantive as explained in Attachment E.

Staff is also proposing a few additional housekeeping changes identified during the public comment period. These changes include revising the note identifying air quality regulations which are part of the State Implementation Plan; adding the city of Brookings to the list of cities which have open burning restrictions under OAR 340-23-055; correcting typographical errors in 340-24-320(6) and (7); and renumbering the rules in Divisions 28 and 29 and placing them in Division 30. These changes are more fully explained in Attachment F.

One other difference between the proposal presented for public hearing and the proposal in Attachment A is that the current package contains new rules adopted since the public notice. This includes the Oxygenated Fuel rules (OAR 340-22-440 through 340-22-640, and 340-20-136), amendments to the New Source Rules (340-20-220 through 340-20-276), and the Emission Statement regulations (340-20-450 through 340-20-480). These regulations were not part of the periodic rule review process. With one minor exception which required renumbering definitions, no housekeeping changes to these rules are proposed at this time.

Summary of How the Proposed Rule Will Work and How it Will be Implemented

Housekeeping amendments have no administrative, legal or economic affect. The goal of these amendments is to streamline agency rules, remove outdated requirements and compliance dates and generally make the rules more understandable.

The proposed amendments will be filed with the Secretary of State's office upon adoption. Otherwise, as these are housekeeping amendments, there are no new substantive requirements to be implemented.

Recommendation for Commission Action

It is recommended that the Commission adopt the amendments regarding housekeeping changes to air quality rules as presented in Attachment A of the Department Staff Report for Agenda Item J. For rules which are currently part of the State Implementation Plan

(as identified by a footnote to that effect under each applicable rule), the amendments are adopted as revisions to the State of Oregon Clean Air Act Implementation Plan under OAR 340-20-047.

Attachments

- A. Rule (Amendments) Proposed for Adoption
- Supporting Procedural Documentation: В.
 - **Public Notice**
 - Rulemaking Statements (Statement of Need)
 - Fiscal and Economic Impact Statement
 - Land Use Evaluation Statement
- Presiding Officer's Report on Public Hearing C.
- Written Comment Received D.
- Department's Evaluation of Public Comment E.
- F. Changes to Original Rulemaking Proposal Made in Response to Public Comment

Approved:

Section:

Division:

Report Prepared By: Yone C. McNally and

Andrew D. Ginsburg

Phone:

229-5143/229-5581

Date Prepared:

January 6, 1993

YCM/ADG eqcadopt.rep January 6, 1993

ATTACHMENT A OREGON ADMINISTRATIVE RULES CHAPTER 340,

DIVISIONS 13, 14

AND

20 THROUGH 34

Copies of Attachment A are available by request.

DIVISION 13

WILDERNESS, RECREATIONAL, AND SCENIC AREA RULES

Environmental Standards for Wilderness Areas

Statement of Policy

340-13-005 Wilderness areas represent a natural resource of unique importance. Congress has protected such areas by enacting the Wilderness Act, P.L. 88-577, 16 U.S.C. Sec. 1131, et seq. Those wilderness areas located within the geographical limits of the state are a major part of the cultural heritage of the citizens of Oregon and are a key element in developing and maintaining tourism and recreation as a viable industry. Thus, the environment of wilderness areas is deserving of the highest level of protection and safeguarding by the state in order to preserve Oregon's unique primitive and natural land areas. The Wilderness Act allows certain activities in wilderness areas. Most of these have minimal present impact on the environment. However, mining and some other activities allowed by the Wilderness Act pose a serious threat of a substantial harm to the unique environment of wilderness areas. Therefore, it is declared to be the policy and purpose of the Department of Environmental Quality to maintain the environment of wilderness areas essentially in a pristine state and as free from air, water, and noise pollution as is practically possible and to permit its alteration only in a manner compatible with recreational use and the enjoyment of the scenic beauty and splendor of these lands by the citizens of Oregon and of the

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35, f. 2-15-72, ef. 3-1-72

Definitions

United States.

340-13-010 As used in {these rules, unless otherwise required by context}this Division:

- (1) "Commission" means the Environmental Quality Commission.
- (2) "Department" means the Department of Environmental Quality.
- (3) "Opacity" means the degree to which emissions reduce the transmission of light or obscure the view of an object in the background.
- "Wilderness Area" means an area designated as wilderness by the Congress of the United States pursuant to Public Law 88-577, 16 U.S.C., Sec. 1131, et seq.

(5) "Person" means the federal government, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35 f. 2-15-72, ef. 3-1-72

Emission Permit Requirements

340-13-015[After the effective date of these rules:]

- (1) No person shall commence or initiate any activity other than emergency or recreational in a wilderness area which causes the emission of air contaminants, water pollutants or noise in excess of the standards set forth in [-rule] OAR 340-13-020[-section-](1)[-of these rules] without first applying for and receiving a permit from the Department.
- (2) The permit shall be in addition to and not in lieu of other permit requirements of federal, state or local governments.
- (3) Application for the permit shall be made on forms supplied by the Department. The application shall be made no less than 90 days prior to the proposed date of commencing the activity.
- (4) An application for a permit may be considered at a public hearing before the Commission or its authorized representative. At least 20 days' notice of the hearing shall be provided to the applicant and to any other interested person who has requested notice.
- (5) The Commission shall consider the testimony, data and views presented at the public hearing and either approve or disapprove a permit for the proposed activity according to its evaluation of whether the air, water and noise emissions from the activity are consistent with the policy and environmental standards as set forth in [rules] OAR 340-13-005 and 340-13-020.
 - (6) Any permit issued for an activity within a wilderness shall be properly conditioned to achieve the policy objectives and environmental standards of rules OAR 340-13-005 and 340-13-020 and may be modified by the Department after a hearing before the Commission or its authorized representative.

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35, f. 2-15-72, ef. 3-1-72

Environmental Standards 340-13-020

- (1) Except as provided in section (2) of this rule, no person engaged in an activity other than emergency or recreational within a wilderness area shall:
 - (a) Cause, suffer, allow, or permit any emission of air contaminants greater than 5 percent opacity.
 - (b) Discharge any waste into waters or conduct any activity which causes or is likely to cause:
 - (A) Any measurable increase in color, turbidity, temperature, or bacterial contamination;
 - (B) Any measurable decrease in dissolved oxygen;
 - (C) Any change in hydrogen ion concentration (pH); or
 - (D) Any toxic effect on natural biota.
 - (c) Cause, suffer, allow or permit the emission of noise from any source or sources which noise causes the maximum ambient sound pressure level to exceed 50 dbA at any point at least 50 feet from any source.
- (2) Subject to the permit requirements in rule 340-13-015, the Department may permit the emission of air contaminants greater than 5 percent opacity, but not to exceed 10 percent opacity and noise from any source or sources causing the maximum ambient sound pressure level to exceed 50 dbA at any point at least 50 feet from any source, but not to exceed 75 dbA at such distance.

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35, f. 2-15-72, ef. 3-1-72

Penalties

340-13-025 In addition to and not in lieu of any other judicial redress, a person violating these rules this Division shall be subject to criminal prosecution as provided by Oregon Law.

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35, f. 2-15-72, ef. 3-1-72

National Emergency

340-13-030 The Governor of Oregon may suspend[these rules] the requirements in this Division for the duration of any national emergency.

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35, f. 2-15-72, ef. 3-1-72

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 13 - DEPARTMENT OF ENVIRONMENTAL QUALITY

New Wilderness Areas

340-13-035 [These rules]This Division shall not apply to any wilderness area established after January 1, 1972, by the United States until a public hearing on the possible application of [these] this Division or other rules thereto shall have first been held by the Commission.

Stat. Auth.: ORS Ch. <u>468 and 468A</u> Hist.: DEQ 35, f. 2-15-72, ef. 3-1-72

DIVISION 14

PROCEDURES FOR ISSUANCE, DENIAL, MODIFICATION, AND REVOCATION OF PERMITS

Purpose

340-14-005 The purpose of these regulations this Division is to prescribe uniform procedures for obtaining permits from the Department of Environmental Quality as prescribed by Oregon Revised Statutes (ORS) [449.083; Chapter 406, Oregon Laws 1971; and Chapter 648, Oregon Laws 1971] 459.205, 468A.045 and 468B.050.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 459, 468, 468A & 468B Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72

Exceptions

340-14-007 The procedures prescribed in this Division do not apply to the issuance, denial, modification and revocation of the following permits: National Pollutant Discharge Elimination System (NPDES) permits issued pursuant to the Federal Water Pollution Control Act Amendments of 1972 and acts amendatory thereof or supplemental thereto, as prescribed [in] by OAR [340-45-005 through 340-45-065]Chapter 340, Division 45; Resource Conservation and Recovery Act (RCRA) permits as prescribed by OAR Chapter 340, Division 106; and the Underground Storage Tank (UST) permits as prescribed by OAR[340-150-010 through 340-150-067] Chapter 340, Division 150.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 459, 468, 468A & 468B Hist.: DEQ 53(Temp), f. & ef. 6-21-73; DEQ 58, f. 9-21-73, ef. 10-15-73; DEQ 13-1988, f. & cert. ef. 6-17-88

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 14 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Definitions

340-14-010 As used in these regulations unless otherwise required by context this Division:

- (1) "Department" means Department of Environmental Quality.
 Department actions shall be taken by the Director as defined herein.
- (2) "Commission" means Environmental Quality Commission.
- (3) "Director" means Director of the Department of Environmental Quality or the Director's authorized deputies or officers.
- (4) "Permit" means a written permit issued by the Department, bearing the signature of the Director, which by its conditions may authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities or emit, discharge or dispose of wastes in accordance with specified limitations.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>459</u>, 468, <u>468A & 468B</u> Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 13-1988, f. & cert. ef. 6-17-88

Type, Duration, and Termination of Permits 340-14-015

- (1) Permits issued by the Department will specify those activities, operations, emissions and discharges which are permitted as well as the requirements, limitations and conditions which must be met.
- (2) The duration of permits will be variable, but shall not exceed ten (10) years, except for permits issued to "confined animal feeding operations" pursuant to ORS [468.740 as amended by House Bill 3445]468B.050. Those permits shall not expire, but may be revoked or modified by the director or may be terminated upon request by the permit holder. The expiration date will be recorded on each permit issued. A new application must be filed with the Department to obtain renewal or modification of a permit.
- (3) Permits are issued to the official applicant of record for the activities, operations, emissions or discharges of record and shall be automatically terminated:
 - (a) Within 60 days after sale or exchange of the activity or facility which requires a permit;

- (b) Upon change in the nature of activities, operations, emissions or discharges from those of record in the last application;
- (c) Upon issuance of a new, renewal or modified permit for the same operation;
- (d) Upon written request of the permittee.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>459</u>, 468[.020], <u>468A & 468B</u> Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 125, f. & ef. 12-16-76; DEQ 21-1990, f. & cert. ef. 7-6-90

Application for a Permit 340-14-020

- (1) Any person wishing to obtain a new, modified, or renewal permit from the Department shall submit a written application on a form provided by the Department. Applications must be submitted at least 60 days before a permit is needed. All application forms must be completed in full, signed by the applicant or the applicant's legally authorized representative, and accompanied by the specified number of copies of all required exhibits. The name of the applicant must be the legal name of the owner of the facilities or the owner's agent or the lessee responsible for the operation and maintenance.
- (2) Applications which are obviously incomplete, unsigned, or which do not contain the required exhibits (clearly identified) will not be accepted by the Department for filing and will be returned to the applicant for completion.
- (3) Applications which appear complete will be accepted by the Department for filing.
- (4) Within 15 days after filing, the Department will preliminarily review the application to determine the adequacy of the information submitted:
 - (a) If the Department determines that additional information is needed it will promptly request the needed information from the applicant. The application will not be considered complete for processing until the requested information is received. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request;

- (b) If, in the opinion of the Director, additional measures are necessary to gather facts regarding the application, the Director will notify the applicant that said measures will be instituted, and the timetable and procedures to be followed. The application will not be considered complete for processing until the necessary additional fact-finding measures are completed. When the information in the application is deemed adequate, the applicant will be notified that this application is complete for processing.
- (5) In the event the Department is unable to complete action on an application within 45 days of closing of public comment or closing of the hearing record under OAR 340-14-025(2) and (3), the applicant shall be deemed to have received a temporary or conditional permit, such permit to expire upon final action by the Department to grant or deny the original application. Such temporary or conditional permit does not authorize any construction, activity, operation or discharge which will violate any of the laws, rules, or regulations of the State of Oregon or the Department of Environmental Quality.
- (6) If, upon review of an application, the Department determines that a permit is not required, the Department shall notify the applicant in writing of this determination. Such notification shall constitute final action by the Department on the application.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>459</u>, 468, <u>468A & 468B</u> Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 13-1988, f. & cert. ef. 6-17-88

Issuance of a Permit 340-14-025

(1) Following determination that it is complete for processing, each application will be reviewed on its own merits.

Recommendations will be developed in accordance with the provisions of all applicable statutes, rules and regulations of the State of Oregon and the Department of Environmental Quality.

- (2) If the Department proposes to issue a permit, public notice ofrece proposed provisions prepared by the Department will be forwarded for comment to the applicant and persons required to be notified pursuant to ORS Chapter 183. The Department may also notify other interested persons at the discretion of the Department for comment. All comments must be submitted in writing 14 within 30 calendar days from the commencement of the public notice period if such comments are to receive consideration prior to final action on the application.
- (3) If, within 14 days after commencement of the public notice period, the Department receives written requests from ten (10) persons, or from an organization or organizations representing at least ten persons, for a public hearing to allow interested persons to appear and submit oral or written comments on the proposed provisions, the Department shall provide such a hearing before taking final action on the application, at a reasonable place and time and on reasonable notice. Notice of such a hearing may be given, in the Department's discretion, either in the notice accompanying the proposed provisions or in such other manner as is reasonably calculated to inform interested persons.
- (4) The Department shall take final action on the permit application within 45 days of the closing of public comment under section (2) of this rule, or, if a public hearing is held under section (3) of this rule, within 45 days of closing of such hearing's record. Regarding solid waste disposal permits under ORS 459.245, consideration of such public comment or record shall constitute good cause for extension of time to act on such applications. The Department may adopt or modify the proposed provisions or recommend denial of a permit. In taking such action, the Department shall consider the comments received regarding the proposed provisions and any other information obtained which may be pertinent to the application being considered.
- (5) The Department shall promptly notify the applicant in writing of the final action taken on an application. If the Department recommends denial, notification shall be in accordance with the provisions of OAR 340-14-035. If the conditions of the permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the permit issued shall be attached to the notification.

(6) If the applicant is dissatisfied with the conditions or limitations of any permit issued by the Department, the applicant may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of issuance of the permit. Any hearing held shall be conducted pursuant tof the regulations of the Department OAR Chapter 340, Division 11.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>459</u>, 468, 468A & 468B Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 13-1988, f. & cert. ef. 6-17-88

Renewal of a Permit

340-14-030 The procedure for issuance of a permit shall apply to renewal of a permit. If a completed application for renewal of a permit is filed with the Department in a timely manner prior to the expiration date of the permit, the permit shall not be deemed to expire until final action has been taken on the renewal application to issue or deny a permit.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 459, 468, 468A & 468B Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72

Denial of a Permit

340-14-035 If the Department proposes to deny issuance of a permit, it shall notify the applicant by registered or certified mail of the intent to deny and the reasons for denial. The denial shall become effective 20 days from the date of mailing of such notice unless within that time the applicant requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department OAR Chapter 340, Division 11.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 459, 468, 468A & 468B Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72

Modification of a Permit

340-14-040 In the event that it becomes necessary for the Department to institute modification of a permit due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes, the Department shall notify the permittee by registered or certified mail of its intent to modify the permit. Such notification shall include the proposed modification and the reasons for modification. The modification shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department] OAR Chapter 340, Division 11. A copy of the modified permit shall be forwarded to the permittee as soon as the modification becomes effective. The existing permit shall remain in effect until the modified permit is issued.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>459, 468, 468A & 468B</u> Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72

Suspension or Revocation of a Permit 340-14-045

(1) In the event that it becomes necessary for the Department to suspend or revoke a permit due to non-compliance with the terms of the permit, unapproved changes in operation, false information submitted in the application or any other cause, the Department shall notify the permittee by registered mail of its intent to suspend or revoke the permit. Such notification shall include the reasons for the suspension or revocation. The suspension or revocation shall become effective 20 days from the date of mailing of

such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department OAR Chapter 340, Division 11.

(2) If the Department finds that there is a serious danger to the public health or safety or that irreparable damage to a resource will occur, it may, pursuant to applicable statutes, suspend or revoke a permit effective immediately. Notice suspension or revocation must state the reasons for such action and advise the permittee that he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 90 days of the date of suspension and shall state the grounds for the request. Any hearing shall be conducted pursuant to the regulations of the Department OAR Chapter 340, Division 11.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>459, 468, 468A & 468B</u> Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72

Special Permits

340-14-050 The Department may waive the procedures prescribed in OAR 340-14-025 and issue special permits of duration not to exceed 60 days from the date of issuance for unexpected or emergency activities, operations, emission or discharges. Said permits shall be properly conditioned to insure adequate protection of property and preservation of public health, welfare and resources. Application for such permits shall be in writing and may be in the form of a letter which fully describes the emergency and the proposed activities, operations, emissions or discharges.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 459, 468, 468A & 468B Hist.: DEQ 42, f. 4-5-72, ef. 4-15-72

AIR POLLUTION CONTROL DIVISION 20 GENERAL

Highest and Best Practicable Treatment and Control Required
340-20-001 Notwithstanding the general and specific
emission standards and regulations contained in this Division,
the highest and best practicable treatment and control of air
contaminant emissions shall in every case be provided so as to
maintain overall air quality at the highest possible levels, and
to maintain contaminant concentrations, visibility reduction,
odors, soiling and other deleterious factors at the lowest
possible levels. In the case of new sources of air contamination,
particularly those located in areas with existing high air
quality, the degree of treatment and control provided shall be
such that degradation of existing air quality is minimized to the
greatest extent possible.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Exceptions

340-20-003 Except as provided in [ORS 468.450]468A.020 and this rule, [the provisions of these rules]OAR Chapter 340, Divisions 20 through 34 do not apply to:

- (1) Agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, except for field burning regulated pursuant to OAR Chapter 340, Division 26.
- (2) Use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals, except for field burning regulated pursuant to OAR Chapter 340, Division 26.
- (3) [Barbeque]Barbecue equipment used in connection with any residence.
- (4) Agricultural land clearing operations or land grading.
- (5) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families, except woodstoves regulated pursuant to OAR Chapter 340, Division 34.
- (6) Fires set or permitted by any public officer, board, council or commission when such fire is set or permission given in the performance of such duty of the officer for

the purpose of weed abatement, the prevention or elimination of a fire hazard, or the instruction of employees in the methods of fire fighting, which is in the opinion of such officer necessary, or from fires set pursuant to permit for the purpose of instruction of employees of private industrial concerns in methods of fire fighting, or for civil defense instruction.

(7) The propagation and raising of nursery stock, except boilers used in connection with the propagation and raising of nursery stock.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72

Registration

Registration in General

340-20-005 (The text of this rule is changed in its entirety) Any air contaminant source not subject to the Air Contaminant Discharge Permit rules, OAR 340-20-140 through 340-20-185, shall register with the Department upon request pursuant to OAR 340-20-005 through 340-20-015. [The following air contaminant sources, not under the jurisdiction of a regional air pollution control authority, shall register with the Department no later than March 1, 1971, and annually thereafter as required by this rule:

- (1) Aluminum reduction plants.
- (2) Hot mix asphalt plants.
- (3) Rendering plants.
- (4) Kraft and sulfite pulp mills.
- (5) Installations operating wigwam waste burners.
- (6) Plywood, particle board, and fiberboard plant sites.
- (7) Open burning refuse disposal sites receiving more than 500 tons/year of refuse.
- (8) Thermal-electric power generating plants.
- (9) Other contaminant sources shall register with the Department when so requested.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

Registration Requirements 340-20-010

- (1) Registration shall be completed within 30 days following the mailing date of the request by the Department.
- (2) Registration shall be made on forms furnished by the Department and completed by the owner, lessee of the source, or agent.
- (3) The following information shall be reported by registrants:
 - (a) Name, address, and nature of business;
 - (b) Name of local person responsible for compliance with these rules;
 - (c) Name of person authorized to receive requests for data and information;
 - (d) A description of the production processes and a related flow chart;
 - (e) A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property;
 - (f) Type and quantity of fuels used;
 - (g) Amount, nature, and duration of air contaminant emissions;
 - (h) Estimated efficiency of air pollution control equipment under present or anticipated operating conditions;
 - (i) [Amount and method of refuse disposal] Any other information requested by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

Re-registration 340-20-015

- (1) Once a year upon the annual date of registration, a person responsible for an air contaminant source shall reaffirm in writing the correctness and current status of the information furnished to the Department.
- (2) Any change in any of the factual data reported under OAR 340-20-010(3) shall be reported to the Department, at which

time re-registration may be required on forms furnished by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

Notice of Construction and Approval of Plans

Requirement

340-20-020 No person shall construct, install, or establish a new source of air contaminant emission of any class listed in OAR 340-20-025(1) and not under the jurisdiction of a regional air quality control authority without first notifying the Department in writing.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

Scope

340-20-025

- (1) This regulation shall apply to the following classes of sources of air contaminant emission:
 - (a) Air pollution control equipment;
 - (b) Fuel burning equipment rated at 400,000 BTU per hour or greater;
 - (c) Refuse burning equipment rated at 50 pounds per hour or greater;
 - (d) Open burning operations;
 - (e) Process equipment having emission to the atmosphere;
 - (f) Such other sources as the Department may determine to be potentially significant sources of air contamination.
- (2) New construction, installation or establishment includes:
 - (a) Addition to or enlargement or replacement of an air contamination source:

(b) A major alteration or modification of an air contamination source that may significantly affect the emission of air contamination.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72

Procedure

340-20-030

- (1) Notice of Construction. Any person intending to construct, install, or establish a new source of air contaminant emissions of a class listed in OAR 340-20-025(1) shall notify the Department in writing on a form supplied by the Department.
- (2) Submission of Plans and Specifications. The Department may within 30 days of receipt of a Notice of Construction require the submission of plans and specifications for air pollution control equipment and facilities and their relationship to the production process. The following information may also be required:
 - (a) Name, address, and nature of business;
 - (b) Name of local person responsible for compliance with these rules;
 - (c) Name of person authorized to receive requests for data and information;
 - (d) A description of the production processes and a related flow chart;
 - (e) A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property;
 - (f) Type and quantity of fuels used;
 - (g) Amount, nature and duration of air contaminant emissions;
 - (h) Estimated efficiency of air pollution control equipment under present or anticipated operating conditions;
 - (i) Amount and method of refuse disposal;
 - (j) The Department may require corrections and revisions to the plans and specifications to insure compliance with applicable rules, orders and statutes.

- (3) Notice of Approval:
 - (a) The Department shall upon determining that the proposed construction is in the opinion of the Department in accordance with the provisions of applicable rules, order, and statutes, notify the person concerned that construction may proceed;
 - (b) A Notice of Approval to proceed with construction shall not relieve the owner of the obligation of complying with applicable emission standards and orders.
- (4) Order Prohibiting Construction:
 - (a) If within 60 days of receipt of the items set forth in section (2) of this rule the Director determines that the proposed construction is not in accordance with applicable statutes, rules, regulations and orders, the Director shall issue an order prohibiting the construction, installation or establishment of the air contamination source. Said order is to be forwarded to the owner by certified mail;
 - (b) Failure to issue such order within the time prescribed herein shall be considered a determination that the proposed construction, installation, or establishment may proceed, provided that it is in accordance with plans, specifications, and any corrections or revisions thereto, or other information, if any, previously submitted, and provided further that it shall not relieve the owner of the obligation of complying with applicable emission standards and orders.
- (5) Hearing. Pursuant to law, a person against whom an order prohibiting construction is directed may within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, state the grounds for hearing, and be mailed to the Director of the Department of Environmental Quality. The hearing shall be conducted pursuant to the applicable provisions of ORS Chapter 183.
- (6) Notice of Completion. Within thirty (30) days after any person has constructed an air contamination source as defined under OAR 340-20-010(1), he shall so report in writing on a form furnished by the Department, stating the date of completion of construction and the date the source was or will be put in operation.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 5-1989, f. 4-24-89 & cert. ef. 5-1-89

Compliance Schedules 340-20-032

- (1) The Department shall attempt to encourage voluntary cooperation of all persons responsible for an air contamination source, as defined by ORS 468[.275]A.005(4). To facilitate this cooperation and provide for a progressive program of air pollution control, the Department may negotiate with such persons a schedule of compliance. The schedule will set forth the dates and terms and conditions by which the person responsible for an air contamination source shall comply with applicable air quality rules or statutes:
 - (a) The schedule may be in lieu of a hearing and shall be in writing and signed by the Director of the Department or his designated officer and an authorized agent of the person responsible for the air contamination source. After the schedule is executed by both parties, it shall be confirmed by order of the Department;
 - (b) Compliance schedules providing for final compliance at a date later than 18 months from the date of execution shall contain requirements for periodic reporting and increments of progress toward compliance, at intervals of less than 18 months;
 - (c) No compliance schedule shall allow emissions on a permanent basis in excess of applicable standards and rules.
- (2) In the event a negotiated schedule of compliance cannot be established, the Department may set a show cause hearing as provided by ORS 468.090 at a date and time designated as to why an order implementing a schedule proposed by the Department should not be adopted, or take such other authorized action as may be warranted.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

340-20-033.02 [Renumbered to 340-20-140]

340-20-033.04	[Renumbered	to	340-20-145]
340-20-033.06	[Renumbered	to	340-20-150]
340-20-033.08	[Renumbered	to	340-20-155]
340-20-033.10	[Renumbered	to	340-20-160]
340-20-033.12	[Renumbered	to	340-20-165]
340-20-033.14	[Renumbered	to	340-20-170]
340-20-033.16	[Renumbered	to	340-20-175]
340-20-033.18	[Renumbered	to	340-20-185]

Sampling, Testing and Measurement of Air Contaminant Emissions

Program

340-20-035 As part of its coordinated program of air quality control and preventing and abating air pollution, the Department of Environmental Quality may:

- (1) Require any person responsible for emissions of air contaminants to make or have made tests to determine the type, quantity, quality, and duration of the emissions from any air contamination source.
- (2) Require full reporting of all test procedures and results furnished to the Department in writing and signed by the person or persons responsible for conducting the tests.
- (3) Require [continual] continuous monitoring of specified air contaminant emissions and periodic regular reporting of the results of such monitoring.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

Stack Heights and Dispersion Techniques 340-20-037

(1) Title 40, Code of Federal Regulations, Parts [51.1(ff) thru (kk), 51.12(j) and (k), and 51.18(l), as amended on July 8, 1985 in the Federal Register (50 FR 27892)]51.100(ff)

- through 51.100(kk), 51.118, 51.160 through 51.166, as published on July 1, 1991, is by this reference adopted and incorporated herein, concerning stack heights and dispersion techniques.
- (2) In general, the rule prohibits the use of excessive stack height and certain dispersion techniques when calculating compliance with ambient air quality standards. The rule does not forbid the construction and actual use of excessively tall stacks, nor use of dispersion techniques; it only forbids their use in calculations as noted above.
- (3) The rule has the following general applicability. With respect to the use of excessive stack height, stacks 65 meters high or greater, constructed after December 31, 1970, and major modifications to existing plants after December 31, 1970 with stacks 65 meters high or greater which were constructed before that date, are subject to this rule, with the exception that certain stacks at federally-owned, coal-fired steam electric generating units constructed under a contract awarded before February 8, 1974, are exempt. With respect to the use of dispersion techniques, any technique implemented after December 31, 1970, at any plant is subject to this rule. However, if the plant's total allowable emissions of sulfur dioxide are less than 5,000 tons per year, then certain dispersion techniques to increase final exhaust gas plume rise are permitted to be used when calculating compliance with ambient air quality standards for sulfur dioxide:
 - (a) Where found in the federal rule, the term "reviewing agency" means the Department of Environmental Quality (DEQ), Lane Regional Air Pollution Authority (LRAPA), or the U.S. Environmental Protection Agency (EPA), as applicable;
 - (b) Where found in the federal rule, the term "authority administering the State Implementation Plan" means DEQ, LRAPA, or EPA;
 - (c) The "procedures" referred to in 40 CFR 51.18(1) are the New Source Review procedures at DEQ (OAR 340-20-220 to 340-20-276) or at LRAPA (Title 38), and the review procedures for new, or modifications to, minor sources, at DEQ (OAR 340-20-020 to 340-20-030, 340-20-140 to 340-20-185) or at LRAPA (Title 34 and OAR 38-045);
 - ([4]d) Where "the state" or "state, or local control agency" is referred to in 40 CFR 51.12(j), it means DEQ or LRAPA;

- (e) Where 40 CFR 51.1(kk) refers to the prevention of significant deterioration program and cites 40 CFR 51.24, it means the EPA-approved new source review rules of DEQ or LRAPA (see 40 CFR 52.1987), where they cover prevention of significant deterioration;
- Where found in the federal rule, the terms (f) "applicable state implementation plan" and "plan" refer to the programs and rules of DEQ or LRAPA, as approved by EPA, or any EPA-promulgated regulations (see 40 CFR Part 52, Subpart MM).

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1986, f. & ef. 5-12-86

Methods

340-20-040

- (1) Any sampling, testing, or measurement performed under this regulation shall conform to methods for file at the Department of Environmental Quality contained in the Department of Environmental Quality's Source Sampling Manual or to recognized applicable standard methods approved in advance by the Department.
- The Department may approve any alternative method of (2) sampling provided it finds that the proposed method is satisfactory and complies with the intent of these regulations and is at least equivalent to the uniform recognized procedures in objectivity and reliability, and is demonstrated to be reproducible, selective, sensitive, accurate and applicable to the program.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 15, f. 6-12-70, ef. 9-11-70

Department Testing

340-20-045 The Department, instead of requesting tests and sampling of emissions from the person responsible for an air contamination source, may conduct such tests alone or in conjunction with said person. If the testing or sampling is performed by the Department, a copy of the results shall be provided to the person responsible for the air contamination source.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

Records; Maintaining and Reporting 340-20-046

- (1) Upon notification from the Director of the Department of Environmental Quality, all persons owning or operating a stationary air contaminant source within the state shall commence to keep and maintain written records of the nature, type and amounts of emissions from such source and other information as may be required by the Director to determine whether such is in compliance with applicable emission rules, limitations or other control measures.
- (2) The records shall be prepared in the form of a report and submitted to the Department of Environmental Quality on a semi-annual basis commencing with the first full semi-annual period after the Director's notification to such persons owning or operating a stationary air contaminant source of these record-keeping requirements. Except as may be otherwise provided by rule, semi-annual periods are January 1; to June 30, July 1; and; to December 31.
- (3) The reports required by this rule shall be completed on forms approved by the Department of Environmental Quality and shall be submitted within 30 days after the end of each reporting period.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 44(Temp), f. & ef. 5-5-72; DEQ 48, f. 9-20-72, ef. 10-1-72

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

"State of Oregon Clean Air Act 1 Implementation Plan"

340-20-047 This implementation plan, consisting of Volumes 2 and 3 of the State of Oregon Air Quality Control Program, contains control strategies, rules and standards prepared by the Department of Environmental Quality and is adopted as the implementation plan of the State of Oregon pursuant to the Federal Clean Air Act, as amended.

[NOTE: Revisions to the State of Oregon Clean Air Act Implementation Plan become federally enforceable upon approval by the the United States Environmental Protection Agency. If any provision of the federally approved Implementation Plan conflicts with any provision adopted by the Commission, the Department shall enforce the more stringent provision.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.305] & 468A Hist.: DEQ 35, f. 2-3-72, ef. 2-15-72; DEQ 54, f. 6-21-73, ef. 7-1-73; DEQ 19-1979, f. & ef. 6-25-79; DEQ 21-1979, f. & ef. 7-2-79; DEQ 22-1980, f. & ef. 9-26-80; DEQ 11-1981, f. & ef. 3-26-81; DEQ 14-1982, f. & ef. 7-21-82; DEQ 21-1982, f. & ef. 10-27-82; DEQ 1-1983, f. & ef. 1-21-83; DEQ 6-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84; DEQ 25-1984, f. & ef. 11-27-84; DEQ 3-1985, f. & ef. 2-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 5-1986, f. & ef. 2-21-86; DEQ 10-1986, f. & ef. 5-9-86; DEQ 20-1986, f. & ef. 11-7-86; DEQ 21-1986, f. & ef. 11-7-86; DEQ 4-1987, f. & ef. 3-2-87; DEQ 5-1987, f. & ef. 3-2-87; DEQ 8-1987, f. & ef. 4-23-87; DEQ 21-1987, f. & ef. 12-16-87; DEQ 31-1988, f. 12-20-88, cert. ef. 12-23-88; DEQ 2-1991, f. & cert. ef. 2-14-91; DEQ 19-1991, f. & cert. ef. 11-13-91; DEQ 20-1991, f. & cert. ef. 11-13-91; DEQ 21-1991, f. & cert. ef. 11-13-91; DEQ 22-1991, f. & cert. ef. 11-13-1991; DEQ 23-1991, f. & cert. ef. 11-13-91; DEQ 24-1991, f. & cert. ef. 11-13-91; DEQ 25-1991, f. & cert. ef. 11-13-91; AQ 14, f. & ef. 1-30-92; DEQ 1-1992, f. & cert. ef. 2-4-92; DEQ 3-1992, f. & cert. ef. 2-4-92; DEQ 7-1992, f. & cert.

ef. 3-30-92; AQ 20-1992, f. & cert. ef. 8-3-92; AQ 21, f. 10-30-92, ef. 11-1-92; AQ 22, f. & ef. 11-2-92; AQ 23, f. & ef. 11-12-92

Definitions

340-20-050 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 81, f. 12-5-74, ef. 12-25-74]

Statement of Policy

340-20-055 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 81, f. 12-5-74, ef. 12-25-74]

Applicability

340-20-060 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 81, f. 12-5-74, ef. 12-25-74]

Requirements

340-20-065 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 81, f.12-5-74, ef. 12-25-74]

Public Hearing

340-20-070 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 81, f. 12-5-74, ef. 12-25-74]

Rules for Indirect Sources

Policy

340-20-100 The Commission finds and declares Indirect Sources to be air contamination sources as defined in ORS [468.275]468A.005. The Commission further finds and declares that the regulation of Indirect Sources is necessary to control the concentration of air contaminants which result from Motor Vehicle Trips and/or Aircraft Operations associated with the use of Indirect Sources.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 110(Temp), f. & ef. 3-17-76; DEQ 118, f. & ef. 8-11-76 [ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Jurisdiction and Delegation

340-20-105 The Commission finds that the complexity or magnitude of Indirect Sources requires state-wide regulation and assumes or retains jurisdiction thereof. The Commission may, however, when any Regional Authority requests and provides evidence demonstrating its capability to carry out the provisions of these rules relating to Indirect Sources, authorize and confer jurisdiction upon such Regional Authority to perform all or any of such provisions within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 110(Temp), f. & ef. 3-17-76; DEQ 118, f.& ef. 8-11-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Definitions

340-20-110

As used in OAR 340-20-100 through 340-20-135:

- (1) "Air Quality Maintenance Area (AQMA)" means any area that has been identified by the Department having the potential for exceeding any State ambient air quality standard.
- (2) "Air Quality Maintenance Area (AQMA) Analysis" means an analysis of the impact on air quality in an AQMA of emissions from existing air contaminant sources and emissions associated with projected growth and development.
- (3) "Aircraft Operations" means any aircraft landing or takeoff.
- (4) "Airport" means any area of land or water which is used or intended for use for the landing and takeoff of aircraft, or any appurtenant areas, facilities, or rights-of-way such as terminal facilities, parking lots, roadways, and aircraft maintenance and repair facilities.
- (5) "Associated Parking" means a parking facility or facilities owned, operated, and/or used in conjunction with an Indirect Source.
- (6) "Average Daily Traffic" means the total traffic volume during a given time period in whole days greater than one day and less than one year divided by the number of days in that time period, commonly abbreviated as ADT.

- (7) "Commence Construction" means to begin to engage in a continuous program of on-site construction or on-site modifications, including site clearance, grading, dredging, or landfilling in preparation for the fabrication, erection, installation, or modification of an Indirect Source. Interruptions and delays resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.
- (8) "Commission" means Environmental Quality Commission.
- (9) "Department" means the Department of Environmental Quality.
- (10) "Director" means the Director of the Department or Regional Authority and authorized deputies or officers.
- (11) "Expressway" means a divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections.
- (12) "Freeway" means an Expressway as defined in section (9) of this rule with full control of access.
- (13) "Highway Section" means a highway of substantial length between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study or multi-year highway improvement program.
- (14) "Indirect Source" means a facility, building, structure, or installation, or any portion or combination thereof, which indirectly causes or may cause mobile source activity that results in emissions of an air contaminant for which there is a State standard. Such Indirect Sources shall include, but not be limited to:
 - (a) Highways and Roads;
 - (b) Parking Facilities;
 - (c) Retail, Commercial, and Industrial Facilities;
 - (d) Recreation, Amusement, Sports, and Entertainment Facilities;
 - (e) Airports;
 - (f) Office and Government Buildings;
 - (g) Apartments and Mobile Home Parks;
 - (h) Educational Facilities;
 - (i) Hospital Facilities;
 - (j) Religious Facilities.
- (15) "Indirect Source Construction Permit" means a written permit in letter form issued by the Department or Regional Authority having jurisdiction, bearing the signature of the Director, which authorizes the permittee to commence construction of an Indirect Source under construction and operation conditions and schedules as specified in the permit.

- (16) "Indirect Source Emission Control Program (ISECP)" means a program which reduces Mobile Source emissions resulting from the use of the Indirect Source. An ISECP may include, but is not limited to:
 - (a) Posting transit route and scheduling information;
 - (b) Construction and maintenance of bus shelters and turn-out lanes;
 - (c) Maintaining mass transit fare reimbursement programs;
 - (d) Making a car pool matching system available to employees, shoppers, students, residents, etc.;
 - (e) Reserving parking spaces for car pools;
 - (f) Making parking spaces available for park-and-ride stations;
 - (g) Minimizing vehicle running time within parking lots through the use of sound parking lot design;
 - (h) Ensuring adequate gate capacity by providing for the proper number and location of entrances and exits and optimum signalization for such;
 - (i) Limiting traffic volume so as not to exceed the carrying capacity of roadways;
 - (j) Altering the level of service at controlled intersections:
 - (k) Obtaining a written statement of intent from the appropriate public agency(s) on the disposition of roadway improvements, modifications, and/or additional transit facilities to serve the individual source;
 - (1) Construction and maintenance of exclusive transit ways;
 - (m) Providing for the collection of air quality monitoring data at Reasonable Receptor and Exposure Sites;
 - (n) Limiting facility modifications which can take place without resubmission of permit application.
- "Indirect Source Operating Permit" means a written permit in letter form issued by the Department or Regional Authority having jurisdiction, bearing the signature of the Director or designee, which authorizes the permittee to operate an indirect source.
- "Mobile Source" means self-propelled vehicles, powered by internal combustion engines including, but not limited to, automobiles, trucks, motorcycles, and aircraft.
- "Off-street Area or Space" means any area or space not located on a public road dedicated for public use.

[(19)](20)	"Parking and Traffic Circulation Plan" means a plan
	developed by a city, county, or regional government or
	Regional Planning Agency, the implementation of which
	assures the attainment and maintenance of the state's
	ambient air quality standards.
[(20)](21)	"Parking Facility" means any building, structure, lot,
, , ,	or portion thereof, designed and used primarily for the
:	temporary storage of motor vehicles in designated
	parking spaces.
[(21)](22)	"Parking Space" means any Off-Street Area of Space
	below, above, or at ground level, open or enclosed,
٠	that is used for parking one motor vehicle at a time.
[(22)](23)	"Person" means individuals, corporations, associations,
	firms, partnerships, joint stock companies, public and
•	municipal corporations, political subdivisions, the
	State and any agencies thereof, and the federal
	government and any agencies thereof.
[(23)](24)	"Population" means that population estimate most
- · · · · ·	recently published by the Center for Population
	Research and Census, Portland State University, or any
	other population estimate approved by the Department.
[(24)](25)	"Regional Authority" means a regional air quality
	control authority established under the provisions of
	ORS [468.505] 468A.105.
[(25)](26)	"Regional Planning Agency" means any planning agency
	which has been recognized as a substate-clearinghouse
	for the purposes of conducting project review under the
	United States Office of Management and Budget Circular
	Number A-95, or other governmental agency having
	planning authority.

- "Reasonable Receptor and Exposure Sites" means locations where people might reasonably be expected to be exposed to air contaminants generated in whole or in part by the Indirect Source in question. Location of ambient air sampling sites and methods of sample collection shall conform to criteria on file with the Department of Environmental Quality.
- [(27)](28) "Sensitive Area" means locations which are actual or potential air quality non-attainment areas, as determined by the Department.
- [(28)](29) "Vehicle Trip" means a single movement by a motor
 vehicle which originates or terminates at or uses an
 Indirect Source.

[(29) "Indirect Source Operating Permit" means a written permit in letter form issued by the Department or Regional Authority having jurisdiction, bearing the signature of the Director or designee, which authorizes the permittee to operate an indirect source.]

Stat. Auth.: ORS Ch. 468[.065(2)] & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76; DEQ 17-1990, f. & cert. ef. 5-25-90; AQ 22, f. 10-30-92, ef. 11-1-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Indirect Sources Required to Have Indirect Source Construction Permits

340-20-115

- (1) The owner, operator, or developer of an Indirect Source identified in section (2) of this rule shall not commence construction of such a source after December 31, 1974, without an approved Indirect Source Construction Permit issued by the Department or Regional Authority having jurisdiction.
- (2) All Indirect Sources meeting the criteria of this section relative to type, location, size, and operation are required to apply for an Indirect Source Construction Permit:
 - (a) The following sources in or within five (5) miles of the municipal boundaries of a municipality with a population of 50,000 or more including, but not limited to, Portland, Salem, and Eugene:
 - (A) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking [()] or Associated Parking [)], capacity of 250 or more Parking Spaces, except within the municipal boundary of Portland where the minimum number of Parking Spaces associated with an Indirect Source requiring Department approval shall be 150;
 - (B) Any Highway Section being proposed for construction with an anticipated annual average daily traffic volume of 20,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual

Average Daily Traffic on that Highway Section will be 20,000 or more motor vehicles per day or will be increased by 10,000 or more vehicles per day within ten years after completion.

- following (b) (A) sources within Implementation Plan Medford Carbon Monoxide nonattainment area boundary defined "Beginning at the intersection of Crater Lake Highway (Highway 62) south on Biddle Road to the intersection of Fourth Street, west on Fourth Street to Riverside Avenue (Highway 99), south on Riverside Avenue to Tenth Street, west on Tenth Street to the intersection with Oakdale north on Oakdale Avenue intersection with Fourth Street, east on Fourth Street to Central Avenue, north on Central Avenue to Court Street, north on Court Street to intersection with Crater Lake Highway (Highway 62) and east on Crater Lake Highway to the point of beginning, with extensions along McAndrews Road east from Biddle Road to Crater Lake Avenue, and along Jackson Street east from Biddle Road to Crater Lake Avenue";
 - Any Parking Facility or other Indirect Source (B) with Associated Parking being constructed or modified to create new or additional parking {(}or Associated Parking{)}_ capacity of 250 of more parking spaces.
- (c) Except as otherwise provided in this rule, following sources within Clackamas, Lane, Marion, Multnomah, or Washington Counties and the municipal boundary of Medford: Any Parking Facility or other Source with Associated Parking constructed or modified to create new or additional parking [()or Associated Parking[)], capacity of 500 or more Parking Spaces;
- (d) The following sources within Clackamas, Jackson, Lane, Marion, Multnomah, or Washington Counties: Any Highway Section being proposed for construction with anticipated annual Average Daily Traffic volume of 20,000 or more motor vehicles per day within ten years after completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be 20,000 or more motor vehicles per day, or will be increased by 10,000 or more motor vehicles per day within ten years after completion;

- (e) Except as otherwise provided in this rule, the following sources in all areas of the state:
 - (A) Any Parking Facility or other Indirect Source with Associated Parking being constructed or modified to create new or additional parking {(}) capacity of 1,000 or more parking spaces;
 - (B) Highway Section being proposed construction with an anticipated annual Average Daily Traffic Volume of 50,000 or more motor vehicles per day within ten years completion, or being modified so that the annual Average Daily Traffic on that Highway Section will be 50,000 or more motor vehicles per day, or will be increased by 25,000 or more motor vehicles per day, within ten years completion.
- (f) Any Airport being proposed for construction with projected annual aircraft operations of 50,000 or more within ten years after completion, or being modified in any way so as to increase the projected number of annual Aircraft operations by 25,000 or more within 10 years after completion.
- (3) Where an Indirect Source is constructed or modified in increments which individually are not subject to review under this rule, and which are not part of a program of construction or modification in planned incremental phases approved by the Director, all such increments commenced after January 1, 1975, shall be added together for determining the applicability of this rule.
- (4) An Indirect Source Construction Permit may authorize more than one phase of construction where commencement of construction or modification of successive phases will begin over acceptable periods of time referred to in the permit; and thereafter construction or modification of each phase may be begun without the necessity of obtaining another permit.
- (5) Persons applying for an Indirect Source Permit shall at the time of application pay the following fees:
 - (a) Filing Fee of \$100 (required of all applicants);
 - (b) Basic Application Processing Fee of \$500[(required of all applicants)];
 - (c) Extended Analysis Processing Fee of \$2,000 [(]required of applicants with parking facilities of 1,000 or greater spaces or for those facilities locating in "sensitive areas" which are not part of an approved parking and circulation plan[)].

Stat. Auth.: ORS Ch. 468[.065(2)] & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76; DEQ 6-1984(Temp), f. & ef. 4-17-84; DEQ 19-1984, f. & ef. 10-16-84; DEQ 17-1990, f. & cert. ef. 5-25-90

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Establishment of an Approved Parking and Traffic Circulation Plan(s) by a City, County, or Regional Government or Regional Planning Agency

340-20-120

- (1)Upon determination by the Department or Regional (a) Authority that control of Parking Spaces and traffic circulation is necessary to ensure attainment and maintenance of State and National Ambient Air Quality (S/NAAQS), Standards the Department or Regional Authority shall notify the Commission of the geographic areas determined or projected to be in noncompliance. The basis for the Department's determination shall be findings and conclusions of an Air the Quality Maintenance Area (AQMA) Analysis, or similar air quality study. Upon submission of its findings to the Commission, the Department shall give notice to cities, counties, regional governmental unit, or Regional Agencies located in geographic determined or projected to be in noncompliance with S/NAAQS, that a public hearing shall be held on the Department's findings related to the need to control Parking Spaces and Traffic Circulation. After reviewing the public hearing testimony and the Department's findings, the Commission shall determine if it is in concurrence with the Department's findings. Upon the Commission's concurrence of the Department's findings, the Department or Regional Authority shall so notify the city, county, regional government unit, or Regional Planning Agency of the geographic areas determined or projected to be in noncompliance;
 - (b) Within one-hundred twenty (120) days of receipt of such notification, the appropriate city, county, regional, or other local government unit or planning agency shall proceed, in accordance with a specific plan and time schedule agreed to by the appropriate governmental unit or planning agency and the Department to develop and

implement a Parking and Traffic Circulation Plan. The Parking and Traffic Circulation Plan, where required, shall be developed in coordination with the local and regional comprehensive planning process pursuant to the requirements of ORS 197.005 et. seq. The required plan shall be submitted to the Department or Regional Authority for approval within the agreed time schedule but shall not be more than three (3) years after the appropriate city, county or regional government or Regional Planning Agency is notified of the necessity for a Parking and Traffic Circulation Plan for an area within its jurisdiction.

- (2) Within sixty (60) days of the notification that development and submittal of Parking and Traffic Circulation Plans are required under section (1) of this rule, each designated city, county or regional government or Regional Planning Agency shall notify the Department or Regional Authority in writing the agency or department and individual responsible for coordination and development of Parking and Traffic Circulation Plans.
- (3) The Department or Regional Authority having jurisdiction will include in its notification:
 - (a) The geographic area requiring the development of Parking and Traffic Circulation Plans;
 - (b) The time period over which the Plan shall attain and maintain S/NAAQS; and
 - (c) The air contaminants for which the plan is to be developed.
- (4) The Parking and Traffic Circulation Plan shall include, but not be limited to:
 - (a) Legally identifiable plan boundaries;
 - (b) Total Parking Space capacity allocated to the plan area, where applicable;
 - (c) Measures as necessary to provide for the attainment and maintenance of S/NAAQS for the air contaminants for which the Parking and Traffic Circulation Plan area was identified:
 - (d) Duly enforceable rules, regulations, and ordinances that implement measures that provide for attainment and maintenance of S/NAAQS for a period to be specified by the Department or Regional Authority;
 - (e) A description of the air quality levels expected as a result of the implementation of the Parking and Traffic Circulation Plan;
 - (f) Other applicable information which would allow evaluation of the plan such as, but not limited to,

- scheduling of construction, emission factors, and criteria, guidelines, and zoning ordinances applicable to the plan area;
- (g) A description of the administrative procedures to be used in implementing each control measure included in the Parking and Traffic Circulation Plan;
- (h) A description of the enforcement methods used to ensure compliance with measures adopted as part of the Parking and Traffic Circulation Plan;
- (i) Identification and responsibilities of each city, county, and regional government or Regional Planning Agency designated under sections (1) or (10) of this rule to implement the Parking and Traffic Circulation Plan.
- (5) The Department or Regional Authority having jurisdiction shall hold a public hearing on each Parking and Traffic Circulation Plan submitted and on each proposed revocation or substantial modification thereof, allowing at least thirty (30) days for written comments from public and other interested agencies.
- (6) Upon approval of a submitted Parking and Traffic Circulation Plan, the Plan shall be identified as the approved Parking and Traffic Circulation Plan, the appropriate governmental unit or planning agency shall be notified and the plan used for the purposes and implementation of this rule.
- (7) The appropriate city, county, or regional government or Regional Planning Agency shall annually review an approved Parking and Traffic Circulation Plan to determine if the plan continues to be adequate for the maintenance of air quality in the plan area and shall report its conclusions to the Department or Regional Authority having jurisdiction.
- (8) The Department or Regional Authority having jurisdiction shall initiate a review of an approved Parking and Traffic Circulation Plan if it is determined that the Parking and Traffic Circulation Plan is not adequately maintaining the air quality in the plan area.
- (9) A city, county, or regional government or Regional Planning Agency may submit a Parking and Traffic Circulation Plan to the Department or Regional Authority having jurisdiction for approval without being required to do so as stated in section (1) of this rule.
- (10) The City of Medford shall develop and implement a Parking and Traffic Circulation Plan. The Parking and Traffic Circulation Plan, where required, shall be developed in coordination with the local and regional comprehensive planning process pursuant to the requirements of ORS 197.005 et. seq. The

required plan shall be submitted to the Department for approval by August 25, 1984.

(11) Within thirty (30) days of the notification that development and submittal of a Parking and Traffic Circulation Plan is required under section (10) of this rule, the City of Medford shall notify the Department in writing the agency or department and individual responsible for coordination and development of the Parking and Traffic Circulation Plan. The provisions of sections (3) - (9) of this rule shall be applicable.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76; DEQ 6-1984(Temp), f. & ef. 4-17-84; DEQ 19-1984, f. & ef. 10-16-84

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Information and Requirements Applicable to Indirect Source(s)
Construction Permit Applications Where an Approved Parking and
Traffic Circulation Plan is on File
340-20-125

- (1) Application Information Requirements:
 - (a) Parking Facilities and Indirect Sources Other Than Highway Sections:
 - (A) A completed application form;
 - (B) A map showing the location of the site;
 - (C) A description of the proposed and prior use of the site;
 - (D) A site plan showing the location and quantity of Parking Spaces at the Indirect Source and Associated Parking area, points of motor vehicle ingress and egress to and from the site and Associated Parking;
 - (E) A ventilation plan for subsurface and enclosed parking;
 - (F) A written statement from the appropriate planning agency that the Indirect Source in question is consistent with an approved Parking and Traffic Circulation Plan or any adopted transportation plan for the region;

- (G) A reasonable estimate of the effect the project has on total parking approved for any specific grid area and Parking and Traffic Circulation Plan area.
- (b) Highway Section(s):
 - (A) Items (A) through (C) of subsection (1)(a);
 - (B) A written statement from the appropriate governmental unit or planning agency that the Indirect Source in question is consistent with an approved Parking and Traffic Circulation Plan and any adopted transportation plan for the region;
 - (C) A reasonable estimate of the effect the project has on total vehicle miles traveled within the Parking and Traffic Circulation Plan Area.
- (2) Within 15 days after the receipt of an application for a permit or additions thereto, the Department or Regional Authority having jurisdiction shall advise the owner or operator of the Indirect Source of any additional information required as a condition precedent to issuance of a permit.
- (3) An application shall not be considered complete until the required information is received by the Department or Regional Authority having jurisdiction.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Information and Requirements Applicable to Indirect Source(s) Construction Permit Application Where No Approved Parking and Traffic Circulation Plan is on File

- 340-20-129
- (1) For all Indirect Sources for which an Indirect Source Construction Permit is required, other than Highway Sections and Airports, a completed Short Form Application shall be submitted containing the following information:
 - (a) A map showing the location of the site;
 - (b) A description of the proposed and prior use of the site;

- (c) A site plan showing the location and quantity of Parking Spaces at the Indirect Source and Associated Parking area, point of motor vehicle ingress and egress to and from the site and Associated Parking;
- (d) A ventilation plan for subsurface and enclosed parking;
- (e) An estimate of the annual average and annual maximum daily vehicle trips detailed in the highest one and eight hour periods of the day, generated by the movement of mobile sources to and from the Parking Facility and/or Associated Parking Facility for the first and fifth years after completion of each planned incremental phase of the Indirect Source;
- (f) A description of the availability and type of mass transit presently serving or projected to serve the proposed Indirect Source. This description shall only include mass transit operating within 1/4 mile of the boundary of the Indirect Source;
- Within 15 days after the receipt (g) (A) application for an Indirect Source Construction Permit or any addition thereto, the Department {()or Regional Authority having jurisdiction{)} shall mail or deliver to the applicant a written demand for any additional information which the Department f()or Regional Authority having jurisdiction [)] requires as condition a precedent to making a final determination to issue or deny a permit;
 - (B) An application shall not be considered complete until all the required information is received by the Department {(} or Regional Authority having jurisdiction{})}. If no timely written demand is made for additional information, then the application shall be considered complete;
 - (C) Such additional information may be required when there is reasonable basis for concluding:
 - (i) That the Indirect Source may cause or contribute to a violation of the Clean Air Act Implementation Plan for Oregon; or
 - (ii) That the Indirect Source may cause or contribute to a delay in the attainment of or a violation of any applicable ambient air quality standard after December 31, 1982; or
 - (iii) That the information is necessary to determine whether the proposed Indirect

Source may cause or contribute to any such delay or violation. The Department shall base such conclusion upon any reliable information, including ambient air monitoring, traffic volume, traffic speed, and air quality projections based thereon, or on any other reliable information.

- (D) The additional information that may be required as a condition precedent to issuance of a permit may include any of that information required to be submitted in a Long Form Application by section (2) of this rule.
- (2) For Indirect Sources, other than Highway Sections and Airports, proposed to be constructed or modified to create new or additional parking capacity of 1000 or more parking spaces in or within five miles of the municipal boundaries of Portland, Salem, Eugene, or Medford, the following Long Form Application information shall be submitted:
 - (a) All the information required by the Short Form Application by subsection (1)(a) through (g) of this rule:
 - (b) An estimate of the Average Daily Traffic, peak hour and peak eight hour traffic volumes for all roads, streets, and arterials within 1/4 mile of the Indirect Source and for all freeways and expressways within 1/2 mile of the nearest boundary of the Indirect Source for the time periods as stated in subsection (1)(e) of this rule and as exist at the time of application;
 - (c) An estimate of the gross emissions of carbon monoxide, lead, reactive hydrocarbons, and oxides of nitrogen based on the analysis performed in subsections (1)(e) and (2)(b) of this rule;
 - (d) Measured and estimated carbon monoxide and lead concentrations at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction. Estimates shall be made for the first, fifth, and tenth years after the Indirect Source and Associated Parking are completed or fully operational. Such estimates shall be made for the average and peak operating conditions;
 - (e) Evidence of the compatibility of the Indirect Source with any adopted transportation plan for the area;
 - (f) An estimate of the additional residential, commercial, and industrial developments which may occur concurrent with or as the result of, the construction and use of

- the Indirect Source. This shall also include an air quality impact assessment of such development pursuant to subsection (2)(d) of this rule;
- (g) A description of the Indirect Source Emission Control Program if such a program is necessary in order to be in compliance with the requirements of OAR 340-20-130(5)(a), (b) and (c).
- (3) For Airports, the following information shall be submitted:
 - (a) Paragraphs (A) through (E) of OAR 340-20-125(1)(a);
 - (b) OAR 340-20-125(2) and (3) shall be applicable;
 - (c) A map showing the topography of the area surrounding and including the site;
 - (d) Evidence of the compatibility of the Airport with any adopted Transportation Plan for the area;
 - (e) An estimate of the effect of the operation of the Airport on the total vehicle miles traveled;
 - (f) Estimates of the effect of the operation and use of the Airport on traffic patterns, volumes, and flow in, on, or within 1/4 mile of the Airport;
 - (g) An estimate of the average and maximum number of Aircraft Operations per day by type of aircraft in the first, fifth, and tenth years after completion of the Airport;
 - (h) Expected passenger loadings in the first, fifth, and tenth years after completion;
 - (i) Measured or estimated carbon monoxide and lead concentrations at Reasonable Receptor and Exposure sites. Measurements shall be made prior to construction and estimates shall be made for the first, fifth, and tenth years after the Airport and associated Parking are completed or fully operational. Such estimates shall be made for average and peak operating conditions;
 - (j) Alternative designs of the Airport, i.e., size, location, parking capacity, etc., which would minimize the adverse environmental impact of the Airport;
 - (k) An estimate of the additional residential, commercial, and industrial development which may occur within 3 miles of the boundary of the new or modified Airport as the result of the construction and use of the Airport;
 - (1) An estimate of the area-wide air quality impact analysis for carbon monoxide, photo-chemical oxidants, nitrogen oxides, and lead particulate. This analysis would be based on the emissions projected to be emitted from mobile and stationary sources within the Airport and from mobile and stationary source growth within 3

miles of the boundary of the Airport. Projections should be made for the first, fifth, and tenth years after completion;

- (m) A description of the availability and type or mass transit presently serving or projected to serve the proposed Airport. This description shall only include mass transit operating within 1/4 mile of the boundary of the Airport.
- (4) For Highway Sections, the following information shall be submitted:
 - (a) Paragraph (A) through (C) of OAR 340-20-125(1)(a);
 - (b) OAR 340-20-125(2) shall be applicable;
 - (c) A map showing the topography of the Highway Section and points of ingress and egress;
 - (d) The existing average and maximum daily traffic on the Highway Section proposed to be modified;
 - (e) An estimate of the maximum traffic levels for one and eight hour periods in the year in which the maximum air quality impact is projected and the first and last years the Highway Section is projected not to be in compliance with the requirements of OAR 340-20-130(5)(a), (b), and (c);
 - (f) An estimate of vehicle speeds for average and maximum traffic volumes for the year in which the maximum air quality impact is projected and the first and last years Highway Section is projected not to be in compliance with the requirements of OAR 340-20-130(5)(a), (b), and (c);
 - 340-20-130(5)(a), (b), and (c);
 (g) A description of the general features of the Highway Section and associated right-of-way;
 - (h) An analysis of the impact of the Highway Section on the development of mass transit and other modes of transportation such as bicycling;
 - (i) Alternative designs of the Highway Section, i.e., size, location, etc. which would minimize adverse environmental effects of the Highway Section;
 - (j) The compatibility of the Highway Section with an adopted comprehensive transportation plan for the area;
 - (k) An estimate of the additional residential, commercial, and industrial development which may occur as the result of the construction and use of the Highway Section, including an air quality assessment of such development;

- (1) Estimates of the effect of the operation and use of the Indirect Source on major shifts in traffic patterns, volumes, and flow in, on, or within 1/4 mile of the Highway Section;
- (m) An analysis of the area-wide air quality impact for carbon monoxide, photochemical oxidants, nitrogen oxides, and lead particulates for the year in which maximum air quality impact is projected and the first and last years the Highway Section is projected not to be in compliance with the requirements of OAR 340-20-130(5)(a), (b), and (c). This analysis would be based on the change in total vehicle miles traveled in the area selected for analysis;
- (n) The total air quality impact (carbon monoxide and lead) of maximum and average traffic volumes. This analysis would be based on the estimates of an appropriate diffusion model at Reasonable Receptor and Exposure Sites. Measurements shall be made prior to construction and estimates shall be made for the year in which maximum air quality impact is projected and the first and last years the Highway Section is projected not to be in compliance with the requirements of OAR 340-20-130(5) (a), (b), and (c);
- (o) Where applicable and requested by the Department, a Department approved surveillance plan for motor vehicle related air contaminants.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76; DEQ 19-1978, f. & ef. 12-4-78

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Issuance or Denial of Indirect Source Construction Permits 340-20-130

- (1) Issuance of an Indirect Source Construction Permit shall not relieve the permittee from compliance with other applicable provisions of the Clean Air Act Implementation Plan for Oregon.
- (2) Within 20 days after receipt of a complete permit application, the Department or Regional Authority having jurisdiction shall:

- Issue a 20 day notice and notify appropriate newspapers (a) and any interested person(s) who has requested to receive such notices in each region in which the proposed Indirect Source is to be constructed of the written public opportunity for comment submitted the information by the applicant, Department's evaluation of the proposed project, the Department's proposed decision, and the Department's proposed construction permit where applicable;
- (b) Make publicly available in at least one location in each Department region in which the proposed Indirect Source would be constructed, the information submitted by the applicant, the Department's evaluation of the proposed project, the Department's proposed decision, and the Department's proposed construction permit where applicable.
- (3) Within 60 days of the receipt of a complete permit application, the Department or Regional Authority having jurisdiction shall act to either disapprove a permit application or approve it with possible conditions.
- (4) Conditions of an Indirect Source Construction Permit may include, but not be limited to:
 - (a) An Indirect Source Emission Control Program where it is necessary in order to be in compliance with the requirements of subsections (5)(a),(b), and (c) of this rule. The ISECP shall only contain control measures which have reasonably definable costs;
 - (b) Completion and submission of a Notice of Completion form prior to operation of the Indirect Source.
- (5) An Indirect Source Construction Permit may be denied if:
 - (a) The Indirect Source will cause or contribute to a violation of the [Clear]Clean Air Act Implementation Plan for Oregon;
 - (b) The Indirect Source will cause or contribute to a delay in the attainment of or cause or contribute to a violation of any State Ambient Air Quality Standard;
 - (c) The Indirect Source causes or contributes to any violation of any State Ambient Air Quality Standard by an other Indirect Source or system of Indirect Sources;
 - (d) The applicable requirements for an Indirect Source Construction Permit applications are not met.
- (6) Any owner or operator of an Indirect Source operating without a permit required by this rule, or operating in violation of any of the conditions of an issued permit shall be subject to civil penalties and injunctions.

- (7) Nothing in this rule shall preclude a Regional Authority authorized under OAR 340-20-105 from setting the permit conditions for areas within its jurisdiction at levels more stringent than those detailed in OAR 340-20-100 through 340-20-135.
- (8) If the Department shall deny, revoke, or modify an Indirect Source Construction Permit, it shall issue an order setting forth its reasons in essential detail.
- (9) An Indirect Source Construction Permit shall be applied for at least 90 days in advance of the anticipated start of construction.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Permit Duration 340-20-135

- (1) An Indirect Source Construction Permit issued by the Department or a Regional Authority having jurisdiction shall remain in effect until modified or revoked by the Department or such Regional Authority.
- (2) The Department or Regional Authority having jurisdiction may revoke the permit of any Indirect Source operating in violation of the construction, modification, or operation conditions set forth in this permit.
- (3) An approved permit may be conditioned to expire if construction or modification is not commenced within 18 months after receipt of the approved permit; and, in the case of a permit granted covering construction of modification in approved, planned incremental phases, a permit may be conditioned to expire as to any such phase as to which construction or modification is not commenced within 18 months of the time period stated in the initial permit for the commencing of construction of that phase. The Director may extend such time period upon a satisfactory showing by the permittee that an extension is justified.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76

Owners of Gasoline at Terminals, Distributors and Retail Outlets Required to Have Indirect Source Operating Permits

340-20-136 The owner of gasoline at any gasoline terminal, distributor or retail outlet (defined in OAR 340-22-450(29), (12), (26)) shall not supply gasoline to any oxygenated gasoline control area during the control period (defined in OAR 340-22-450(6) and (10)) without an approved Indirect Source Operating Permit issued by the Department or Regional Authority having jurisdiction.

- (1) An Indirect Source Operating Permit must be renewed yearly, prior to supplying any gasoline to an oxygenated gasoline control area during the control period.
- (2) Persons applying for an Indirect Source Operating Permit shall at the time of application pay the following fees:
 - (a) Gasoline Terminals \$5,700;
 - (b) Gasoline Distributors \$500;
 - (c) Gasoline Retailers \$100.

Stat Auth.: ORS Ch. 468A Hist: AQ 21, f. 10-30-92, ef. 11-1-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Air Contaminant Discharge Permits

Purpose

340-20-140 The purpose of the prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to ORS [468.310 to 468.330]468A.040 through 468A.060 and related statutes for stationary sources.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-86; Renumbered from 340-20-033.02

Definitions

340-20-145 As used in [these rules, unless otherwise required by context]OAR 340-20-140 through 340-20-185:

- (1) "Department" means Department of Environmental Quality.
- (2) "Commission" means Environmental Quality Commission.
- (3) "Person" means the United States Government and agencies thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.
- "Permit" or "Air Contaminant Discharge Permit" means a (4)written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify, or operate specified facilities, conduct specified discharge, activities, or emit, ordispose with contaminants in accordance specified practices, limitations, or prohibitions.
- (5) "Regional Authority" means Lane Regional Air Pollution Authority.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.04

Notice Policy

340-20-150

- (1) It shall be the policy of the Department and the Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least thirty (30) days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit. Public notice shall include the name and quantities of new or increased emissions for which permit limits are proposed, or new or increased emissions which exceed significant emission rates established by the Department.
- (2) In addition to the information required under OAR 340-11-007, public notices for Air Contaminant Discharge Permits shall contain:

- (a) If a major source permit, whether the proposed permitted emission would have a significant impact on a Class 1 airshed;
- (b) Whether each proposed permitted emission is a criteria pollutant and whether the area in which the source is located is designated as attainment or nonattainment for that pollutant; and
- (c) For each major source within an attainment area for which dispersion modeling has been performed an indication of what impact each proposed permitted emission would have on the Prevention of Significant Deterioration Program within that attainment area.

Stat. Auth.: ORS Ch. 183, 468 & 468 A
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.06; DEQ 13-1988, f. & cert. ef. 6-17-88; DEQ 34-1990, f. 8-20-90, cert. ef. 9-1-90

Permit Required 340-20-155

- (1) No person shall construct, install, establish, develop or operate any air contaminant source which is referred to in Table 1, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.
- (2) No person shall modify any source covered by a permit under [these rules]OAR 340-20-140 through 340-20-185 such that the emissions are significantly increased without first applying for and obtaining a modified permit.
- (3) No person shall modify any source covered by a permit under [these rules]OAR 340-20-140 through 340-20-185 such that:
 - (a) The process equipment is substantially changed or added to; or
 - (b) The emissions are significantly changed without first notifying the Department.
- (4) Any source may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the application

processing fee and/or annual compliance determination fee, provided by OAR 340-20-165, may be waived by the Department or Regional Authority.

- (5) The Department may designate any source as a "Minimal Source" based upon the following criteria:
 - (a) Quantity and quality of emissions;
 - (b) Type of operation;
 - (c) Compliance with Department regulations; and
 - (d) Minimal impact on the air quality of the surrounding region. If a source is designated as a minimal source, the annual compliance determination fee, provided by OAR 340-20-165, will be collected in conjunction with plant site compliance inspections which will occur no less frequently than every five (5) years.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.08; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 13-1981, f. 5-6-81, ef. 7-1-81; DEQ 11-1983, f. & ef. 5-31-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 12-1987, f. & ef. 6-15-87

Multiple-Source Permit

340-20-160 When a single site includes more than one air contaminant source, a single permit may be issued including all sources located at the site. For uniformity such applications shall separately identify by subsection each air contaminant source included from Table 1.

- (1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension, or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to the permit.
- (2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and the Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-003.10

Fees

340-20-165

- (1) All persons required to obtain a permit shall be subject to a three part fee consisting of a uniform non-refundable filing fee of \$75, an application processing fee, and an annual compliance determination fee which are determined by applying Table 1. The amount equal to the filing fee, application processing fee, and the annual compliance determination fee shall be submitted as a required part of any application for a new permit. The amount equal to the filing fee and the application processing fee shall be submitted with any application for modification of a permit. The amount equal to the filing fee, application processing fee, and the annual compliance determination fee shall be submitted with any application for a renewed permit.
- (2) The fee schedule contained in the listing of air contaminant sources in **Table 1** shall be applied to determine the permit fees, on a Standard Industrial Classification (SIC) plant site basis.
- (3) Modifications of existing, unexpired permits which are instituted by the Department or Regional Authority due to changing conditions or standards, receipts or additional information, or any other reason pursuant to applicable statutes and do not require refiling or review of an application or plans and specifications shall not require submission of the filing fee or the application processing fee.
- (4) Applications for multiple-source permits received pursuant to OAR 340-20-160 shall be subject to a single \$75 filing fee. The application processing fee and annual compliance determination fee for multiple-source permits shall be equal to the total amounts required by the individual sources involved, as listed in **Table 1**.

- (5) The annual compliance determination fee shall be paid at least 30 days prior to the start of each subsequent permit year. Failure to timely remit the annual compliance determination fee in accordance with the above shall be considered grounds for not issuing a permit or revoking an existing permit.
- (6) If a permit is issued for a period less than one (1) year, the applicable annual compliance determination fee shall be equal to the full annual fee. If a permit is issued for a period greater than 12 months, the applicable annual compliance determination fee shall be prorated by multiplying the annual compliance determination fee by the number of months covered by the permit and dividing by twelve (12).
- (7) In no case shall a permit be issued for more than ten (10) years.
- (8) Upon accepting an application for filing, the filing fee shall be non-refundable.
- (9) When an air contaminant source which is in compliance with the rules of a permit issuing agency relocates or proposes to relocate its operation to a site in the jurisdiction of another permit issuing agency having comparable control requirements, application may be made and approval may be given for an exemption of the application processing fee. The permit application and the request for such fee reduction shall be accompanied by:
 - (a) A copy of the permit issued for the previous location; and
 - (b) Certification that the permittee proposes to operate with the same equipment, at the same production rate, and under similar conditions at the new or proposed location. Certification by the agency previously having jurisdiction that the source was operated in compliance with all rules and regulations will be acceptable should the previous permit not indicate such compliance.
- (10) If a temporary or conditional permit is issued in accordance with adopted procedures, fees submitted with the application for an air contaminant discharge permit shall be retained and be applicable to the regular permit when it is granted or denied.
- (11) All fees shall be made payable to the permit issuing agency.
- (12) Pursuant to ORS [468.535]468A.135, a regional authority may adopt fees in different amounts than set forth in Table 1 provided such fees are adopted by rule and after hearing and in accordance with ORS 468.065(2).

- (13) Sources which are temporarily not conducting permitted activities, for reasons other than regular maintenance or seasonal limitations, may apply for use of a modified annual compliance determination fee in lieu of an annual compliance determination fee determined by applying **Table 1**. A request for use of the modified annual compliance determination fee must be submitted to the Department in writing along with the modified annual compliance determination fees on or before the due date of the annual compliance determination fee on or before the due date of the annual compliance determination fee. The modified annual compliance determination fee shall be \$250.
- (14) Sources which have received Department approval for payment of a modified annual compliance determination fee must obtain authorization from the Department prior to resuming permitted activities. Sources shall submit written notification to the Department at least thirty (30) days before startup specifying the earliest anticipated startup date, and accompanied by:
 - (a) Payment of the full annual compliance determination fee determined from Table 1 if greater than six (6) months would remain in the billing cycle for the source, or
 - (b) Payment of 50% of the annual compliance determination fee determined from Table 1 if six (6) months or less would remain in the billing cycle.

Stat. Auth.: ORS Ch. 468[.065(2)] & 468A
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.12; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 11-1983, f. & ef. 5-31-83; DEQ 6-1986, f. & ef. 3-26-86; DEQ 12-1987, f. & ef. 6-15-87; DEQ 17-1990, f. & cert. ef. 5-25-90; AQ 4, f. & ef. 12-2-91

Procedures For Obtaining Permits

340-20-170 Submission and processing of

applications for permits and issuance, denial, modification, and revocation, of permits shall be in accordance with duly adopted procedures of the permit issuing agency.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; Renumbered from 340-20-033.14

Other Requirements 340-20-175

- (1) Any person intending to obtain an Air Contaminant Discharge Permit to construct, install, or establish a new or modified source of air contaminant emissions as required in OAR 340-20-155 shall submit a completed application on forms provided by the Department or at least the following information:
 - (a) Name, address, and nature of business;
 - (b) A description of the production processes and a related flow chart;
 - (c) A plot plan showing location of all air contaminant sources and the nearest residential or commercial property;
 - (d) Type and quantity of fuels used;
 - (e) Amount, nature, and duration of emissions;
 - (f) Estimated efficiency of air pollution control equipment.
- (2) Any person complying with section (1) of this rule shall be exempted from complying with the notice of construction requirements of OAR 340-20-020 and [340-20-030]340-20-032.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.16; DEQ 20-1979, f. & ef. 6-29-79

Registration Exemption

340-20-180 Air contaminant sources constructed and operated under a permit issued pursuant to these regulations shall be exempted from registration as required by ORS [468.320]468A.050 and OAR 340-20-005, 340-20-010, and 340-20-015.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.18; DEQ 20-1979, f. & ef. 6-29-79

Permit Program For Regional Air Pollution Authority

340-20-185 Subject to the provisions of this rule, the Commission authorizes the Regional Authority to issue, modify, renew, suspend, and revoke air contaminant discharge permits for air contamination sources within its jurisdiction.

- (1) Each permit proposed to be issued or modified by the Regional Authority shall be submitted to the Department at least thirty (30) days prior to the proposed issuance date.
- (2) A copy of each permit issued, modified, or revoked by the Regional Authority shall be promptly submitted to the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.20

Applicability in Nonattainment Areas

340-20-190 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Definitions: Rules 340-20-190 to 340-20-192

340-20-191 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Requirements - Nonattainment Areas

340-20-192 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Applicability in Attainment Areas

340-20-193 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Definitions - Rules 340-20-193 to 340-20-195 340-20-194 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Requirements

340-20-195 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Emission Limitations on a Plant Site Basis 340-20-196 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Definitions - Rules 340-20-196 to 340-20-198 340-20-197 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Limitation by Permit

340-20-198 [DEQ 16-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Conflicts of Interest

Purpose

340-20-200 The purpose of OAR 340-20-200 to 340-20-215 is to comply with the requirements of Section 128 of the federal Clean Air Act as amended August, 1977 (Public Law 95-95) (herein-after called "Clean Air Act"), regarding public interest representation by a majority of the members of the Commission and by the Director and disclosure by them of potential conflicts of interest.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1978, f. & ef. 10-13-78

Definitions

340-20-205 As used in OAR 340-20-200 to 340-20-215, unless otherwise required by context:

- (1) "Disclose" means explain in detail in a signed written statement prepared at least annually and available for public inspection at the Office of the Director or the Oregon Ethics Commission.
- (2) "Commission" means the Oregon Environmental Quality Commission.
- (3) "Director" means the Director of the Oregon Department of Environmental Quality.
- (4) "Persons subject in Oregon to permits or enforcement orders under the Clean Air Act" includes any individual, corporation, partnership, or association who holds, is an applicant for, or is subject to any permit, or who is or may become subject to any enforcement order under the Clean Air Act, except that it does not include:
 - (a) An individual who is or may become subject to an enforcement order solely by reason of his or her ownership or operation of a motor vehicle; or
 - (b) Any department or agency of a state, local, or regional government.
- (5) "Potential conflict of interest" includes:
 - (a) Any significant portion of income from persons subject in Oregon to permits or enforcement orders under the Clean Air Act; and
 - (b) Any interest or relationship that would preclude the individual having the interest or relationship from being considered one who represents the public interest.
- (6) "Represent the public interest" means that, other than an insignificant portion of income, the individual has no special interest or relationship that would preclude objective and fair consideration and action by that individual in the best interest of the general public.
- (7) "Significant portion of income" means 10 percent or more of gross personal income for a calendar year, including retirement benefits, consultant fees, and stock dividends, except that it shall mean 50 percent or more of gross personal income for a calendar year if the recipient is over 60 years of age and is receiving such portion pursuant to retirement, pension, or similar arrangement. For purposes of this section, income derived from mutual-fund payments, or from other diversified investments as to which the recipient does not know the identity of the primary sources of income, shall be considered part of the recipient's gross personal

income but shall not be treated as income derived from persons subject to permits or enforcement orders under the Clean Air Act.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 15-1978, f. & ef. 10-13-78

Public Interest Representation

340-20-210 At least a majority of the members of the Commission and the Director shall represent the public interest and shall not derive any significant portion of their respective incomes directly from persons subject in Oregon to permits or enforcement orders under the Clean Air Act.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 15-1978, f. & ef. 10-13-78

Disclosure of Potential Conflicts of Interest

340-20-215 Each member of the Commission and the Director shall disclose any potential conflict of interest.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 15-1978, f. & ef. 10-13-78

New Source Review

Applicability

340-20-220

(1) No owner or operator shall begin construction of a major source or a major modification of an air contaminant source without having received an Air Contaminant Discharge Permit from the Department of Environmental Quality and having satisfied OAR [340-20-230]340-20-220 through [340-20-280]340-20-276 of these rules.

(2) Owners or operators of proposed non-major sources non-major modifications are not subject to these New Source Review rules. Such owners or operators are subject to other Department rules including Highest and Best Practicable Treatment and Control Required [(]_OAR 340-20-001[)], Notice Construction and Approval of Plans () OAR $340-20-032_{\{\}\}}$, 340-20-020[to]through Air Contaminant Permits[(]_OAR Discharge 340-20-140 fto]through $340-20-185_{\{\}\}}$ Emission for Hazardous Standards Contaminants [(], OAR 340-25-450 [to]through [340-25-480)]340-25-485, and Standards of Performance for New Stationary Sources $\frac{(1,0)}{(1,0)}$ 340-25-505 $\frac{(1,0)}{(1,0)}$ 340-25-545 $\frac{(1,0)}{(1,0)}$

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Definitions

340-20-225

As used in OAR 340-20-220 through 340-20-276:

- (1) "Actual emissions" means the mass rate of emissions of a pollutant from an emissions source:
 - (a) In general, actual emissions as of the baseline period shall equal the average rate at which the source actually emitted the pollutant during the baseline period and which is representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period;
 - (b) The Department may presume that existing source-specific permitted mass emissions for the source are equivalent to the actual emissions of the source if they are within 10% of the calculated actual emissions;
 - (c) For any newly permitted emission source which had not yet begun normal operation in the baseline period, actual emissions shall equal the potential to emit of the source.
- (2) "Baseline Concentration" means:
 - (a) [t]The ambient concentration level for fsulfer]sulfur
 dioxide and total suspended particulate matter which existed
 in an area during the calendar year 1978. If no ambient air
 quality data is available in an area, the baseline

concentration may be estimated using modeling based on actual emissions for 1978. The following emission increases or decreases will be included in the baseline concentration:

- (A) Actual emission increases or decreases occurring before January 1, 1978; and
- (B) Actual emission increases from any major source or major modification on which construction commenced before January 6, 1975.
- (b) [t] The ambient concentration level for nitrogen oxides which existed in an area during the calendar year 1988.
- (3) "Baseline Period" means either calendar years 1977 or 1978. The Department shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.
- (4)"Best Available Control Technology (BACT)" means an emission limitation (1) including, but not limited to, a visible emission standard{)}, based on the maximum degree of reduction of each air contaminant subject to regulation under the Clean Air Act which would be emitted from any proposed major source or major modification which, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air contaminant. In no event, shall the application of BACT result in emissions of any air contaminant which would exceed the emissions allowed by any applicable new source performance standard or any standard for hazardous air pollutants. If an emission ·limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required. Such standard shall, to the degree possible, set forth the emission reduction achievable and shall provide for compliance by prescribing appropriate permit conditions.
- (5) "Class I area" means any Federal, State or Indian reservation land which is classified or reclassified as Class I area. Class I areas are identified in OAR 340-31-120.
- (6) "Commence" means that the owner or operator has obtained all necessary preconstruction approvals required by the Clean Air Act and either has:
 - (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed in a reasonable time; or

- (b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time.
- (7) "Construction" means any physical change f() including, but not limited to, fabrication, erection, installation, demolition, or modification of an emissions unitf), or change in the method of operation of a source which would result in a change in actual emissions.
- (8) "Emission Limitation" and "Emission Standard" mean a requirement established by a State, local government, or the Administrator of the U.S. Environmental Protection Agency which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.
- (9) "Emission Reduction Credit Banking" means to presently reserve, subject to requirements of these provisions, emission reductions for use by the reserver or assignee for future compliance with air pollution reduction requirements.
- (10) "Emissions Unit" means any part of a stationary source {(},including, but not limited to, specific process equipment{}} which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.
- (11) "Federal Land Manager" means with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.
- (12) "Fugitive Emissions" means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.
- (13) "Growth Increment" means an allocation of some part of an airshed's capacity to accommodate future new major sources and major modifications of sources.
- (14) "Lowest Achievable Emission Rate (LAER)" means that rate of emissions which reflects: the most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event, shall the application of this term permit a

proposed new or modified source to emit any air contaminant in excess of the amount allowable under applicable new source performance standards or standards for hazardous air pollutants.

- "Major Modification" means any physical change or change of (15)operation of a source that would result in a net significant $increase \frac{{\{()_z}}{{\{()_z\}}} as$ defined in $\frac{{\{()_z\}}}{{\{()_z\}}} as$ emission rate (25)) this rule, for any pollutant subject to regulation under the Clean Air Act. This criteria also applies to any pollutants not previously emitted by the source. Calculations of net emission increases must take into account all accumulated increases and decreases in actual emissions occurring at the source since January 1, 1978, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations for pollutant, whichever time is more recent. If accumulation of emission increases results in a net significant emission rate increase, the modification causing such increases become subject to the New Source Review requirements including the retrofit of required controls.
- (16) "Major Source" means a stationary source which emits, or has the potential to emit, any pollutant regulated under the Clean Air Act at a Significant Emission Rate (1) as defined fin definition (25)) in this rule.
- (17) "Nonattainment Area" means a geographical area of the State which exceeds any state or federal primary or secondary ambient air quality standard as designated by the Environmental Quality Commission or the Environmental Protection Agency.
- (18) "Offset" means an equivalent or greater emission reduction which is required prior to allowing an emission increase from a new major source or major modification of a source.
- (19) "Particulate Matter Emissions" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods.
- (20) "PM₁₀ Emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers, emitted to the ambient air as measured by applicable reference methods.
- (21) "Plant Site Emission Limit" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source.
- "Potential to Emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control

equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.

- (23) "Resource Recovery Facility" means any facility at which municipal solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing municipal solid waste for reuse. Energy conversion facilities must utilize municipal solid waste to provide 50% or more of the heat input to be considered a resource recovery facility.
- (24) "Secondary Emissions" means emissions from new or existing sources which occur as a result of the construction and/or operation of a source or modification, but do not come from the source itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the source associated with the secondary emissions. Secondary emissions may include, but are not limited to:
 - (a) Emissions from ships and trains coming to or from a facility;
 - (b) Emissions from off-site support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a source or modification.
- (25) "Significant emission rate" means:
 - (a) Emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:

Table 1
Significant Emission Rates for Pollutants
Regulated Under the Clean Air Act

Signi	ficant		
<u>Poll</u> ı	<u>itant</u>	<u>Emission Rate</u>	
(A)	Carbon Monoxide	100 tons/year	
(B)	Nitrogen Oxides	40 tons/year	
(C)	Particulate Matter*	25 tons/year	
	(i) TSP	25 tons/year	
	(ii) PM ₁₀ Sulfur Dioxide	15 tons/year	
(D)		40 tons/year	
(E)	Volatile Organic		
	Compounds*	40 tons/year	
(F)	Lead	0.6 ton/year	

(H) Beryllium 0.0004 ton/year (I) Asbestos 0.007 ton/year (J) Vinyl Chloride 1 ton/year	
(J) Vinyl Chloride 1 ton/year	
· · · · · · · · · · · · · · · · · · ·	
(K) Fluorides 3 tons/year	
(L) Sulfuric Acid Mist 7 tons/year	
(M) Hydrogen Sulfide 10 tons/year	
(N) Total reduced sulfur	
(including hydrogen sulfide) 10 to	ons/yea:
(0) Reduced sulfur compounds	

(including hydrogen sulfide)

NOTE: *For the Medford-Ashland Air Quality Maintenance Area, and the Klamath Falls Urban Growth Area, the Significant Emission Rate for particulate matter is defined in Table 2.

10 tons/year

- (b) For pollutants not listed above, the Department shall determine the rate that constitutes a significant emission rate;
- (c) Any emissions increase less than these rates associated with a new source or modification which would construct within 10 kilometers of a Class I area, and would have an impact on such area equal to or greater than 1 ug/m³ (24 hour average) shall be deemed to be emitting at a significant emission rate (see **Table 2**).

Table 2 (OAR 340-20-225)

Significant Emission Rates for the Nonattainment
Portions of the Medford-Ashland Air Quality
Maintenance Area and the Klamath Falls Urban Growth Area

Air Contaminant Kilograms (tons) Kilogram (lbs) Kilogram (lbs) Particulate Matter $^{13}4,500$ (5.0) 23 (50.0) 4.6 (10.0) (TSP or PM ₁₀)	Air Contaminant Kilograms Particulate Matter 4,500 (TSP or PM ₁₀)	(tons) (5.0)			<u>Hour</u> <u>Kilogram</u> 4.6	(lbs) (10.0)
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<u>Emission Rate</u>

NOTE: *[*] For the Klamath Falls Urban Growth Area, the Significant Emission Rates for particulate matter apply to all new or modified sources for which permit applications have not been submitted prior to June 2, 1989; particulate emission increases of 5.0 or more tons per year must be fully offset, but the application of lowest achievable emission rate (LAER) is not required unless the emission increase is 15 or more tons per year. At the option of sources with

particulate emissions of 5.0 or more but, less than 15 tons per year, LAER control technology may be applied in lieu of offsets.

** Applies to the Medford-Ashland Air Quality Maintenance Area

Table 3 (OAR 340-20-225)

only.

Significant [Air Quality] Ambient Air Quality Impact Which is Equal to or Greater Than:

Pollutant Averaging Time

<u>Pollutant</u>	<u>Annual</u>	<u> 24-Hour</u>	8-Hour	3-Hour	<u>1-Hour</u>
so ₂	1.0 ug/m ³	5 ug/m ³		25 ug/m ³	
TSP or PM ₁₀	.2 ug/m ³	1.0 ug/m ³		•	
NO ₂	1.0 ug/m ³				
co			0.5 mg/m ³		2 mg/m ³

- "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than those set out in Table 3. For sources of volatile organic compounds (VOC), a major source or major modification will be deemed to have a significant impact if it is located within 30 kilometers of an ozone nonattainment area and is capable of impacting the nonattainment area.
- "Significant Impairment" occurs when visibility impairment in the judgment of the Department interferes with the management, protection, preservation, or enjoyment of the visual experience of visitors within a Class I area. The determination must be made on a case-by-case basis considering the recommendations of the Federal Land Manager; the geographic extent, intensity, duration, frequency, and time of visibility impairment. These factors will be considered with respect to visitor use of the Class I areas, and the frequency and occurrence of natural conditions that reduce visibility.
- (28) "Source" means any building, structure, facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control. This includes all the pollutant emitting activities which belong to the same industrial grouping, or Major Group

- (i.e., which have the same two digit code) as described in EPA's Standard Industrial Classification (SIC) Manual (U.S. Office of Management and Budget, 1987)
- (29) "Visibility Impairment" means any humanly perceptible change in visual range, contrast or coloration from that which would have existed under natural conditions. Natural conditions include fog, clouds, windblown dust, rain, sand, naturally ignited wildfires, and natural aerosols.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83;
DEQ 18-1984, f. & ef. 10-16-84; DEQ 8-1988, f. &cert. ef. 5-19-88
(and corrected 5-31-88); DEQ 14-1989, f. & cert. ef. 6-26-89; DEQ 27-1992, f. & cert. ef. 11-12-92

Procedural Requirements 340-20-230

- (1) Information Required. The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or make any determination required under these rules. Such information shall include, but not be limited to:
 - (a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;
 - (b) An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, [seasonal,] and yearly rates, showing the calculation procedure;
 - (c) A detailed schedule for construction of the source or modification;
 - (d) A detailed description of the system of continuous emission reduction which is planned for the source or modification, and any other information necessary to determine that best available control technology or lowest achievable emission rate technology, whichever is applicable, would be applied;

- (e) To the extent required by these rules, an analysis of the air quality and/or visibility impact of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and
- (f) To the extent required by these rules, an analysis of the air quality and/or visibility impacts, and the nature and extent of all commercial, residential, industrial, and other source emission growth which has occurred since January 1, 1978, in the area the source or modification would affect.
- (2) Other Obligations:
 - (a) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to these rules OAR 340-20-220 through 276 or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section OAR 340-20-220 who commences construction after the effective date of these regulations without applying for and receiving an Air Contaminant Discharge Permit, shall be subject to appropriate enforcement action;
 - (b) construct shall become invalid Approval to construction is not commenced within 18 months after receipt οf such approval, if construction discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period upon satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date;
 - (c) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state or federal law.
- (3) Public Participation:
 - (a) Within 30 days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted. The date of the receipt of a complete application shall be,

for the purpose of this section, the date on which the Department received all required information;

- (b) Notwithstanding the requirements of OAR 340-14-020, but as expeditiously as possible and at least within six months after receipt of a complete application, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner:
 - (A) Make preliminary determination construction should be approved, approved with conditions, or disapproved;
 - Make available for a 30-day period in at least (B) one location a copy of the permit application, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination;
 - Notify the public, by advertisement in a (C) newspaper of general circulation in the area in which the proposed source or modification would constructed. of the application, preliminary determination, the extent increment consumption that is expected from the source or modification, and the opportunity for a public hearing and for written public comment;
 - (D) Send a copy of the notice of opportunity for public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: The chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency, any State, Federal Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification, and the Environmental Protection Agency;
 - Upon determination that significant interest (E) exists, or upon written requests for a hearing from ten (10) persons or from an organization or organizations representing at least ten persons, provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology

- required, and other appropriate considerations. For energy facilities, the hearing may be consolidated with the hearing requirements for site certification contained in OAR Chapter 345, Division 15;
- (F) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 working days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same locations the Department made available preconstruction information relating to the proposed source or modification;
- (G) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section;
- (H) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source or modification.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 18-1984, f. & ef. 10-16-84; DEQ 13-1988, f. & cert. ef. 6-17-88

Review of New Sources and Modifications for Compliance With Regulations

340-20-235 The owner or operator of a proposed major source or major modification must demonstrate the ability of the proposed source or modification to comply with all applicable requirements of the Department of Environmental Quality, including New Source Performance Standards, OAR 340-25-505 through 340-25-530, and National Emission Standards for Hazardous Air Pollutants, OAR 340-

25-450 through 340-25-485, and shall obtain an Air Contaminant Discharge Permit pursuant to OAR 340-20-140 through 340-20-185.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Requirements for Sources in Nonattainment Areas

340-20-240 Proposed new major sources and major modifications which would emit a nonattainment pollutant within a designated nonattainment areas shall meet the requirements listed below:

- Lowest Achievable Emission Rate. The owner or operator of the (1) proposed major source or major modification must demonstrate that the source or modification will comply with the lowest achievable emission rate (LAER) for each nonattainment pollutant which is emitted at or above the significant emission rate $\{(0AR 340-20-225 definition (25))\}$. In the case of a major modification, the requirement for LAER shall apply only to each new or modified emission unit which increases emissions. For phased construction projects, determination of LAER shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.
- (2) Source Compliance. The owner or operator of the proposed major source or major modification must demonstrate that all major sources owned or operated by such person (or by an entity controlling, controlled by, or under common control with such person) in the state are in compliance or on a schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act.
- (3) Offsets. The owner or operator of the proposed major source or major modification must provide offsets [as specified by these rules] as specified in OAR 340-20-255 and 340-20-260.
- (4) Net Air Quality Benefit. For cases in which emission reductions or offsets are required, the applicant must demonstrate that a net air quality benefit will be achieved in the affected area as described in OAR 340-20-260 [(Requirements for Net Air Quality Benefit for Offsets)] and that the reductions are consistent with reasonable further progress toward attainment of the air quality standards. Applicants in an ozone nonattainment area must demonstrate that the proposed offsets will result in a 10% net reduction in emissions, as [described in] required by OAR 340-20-260(3)(c).

(5) Alternative Analysis:

- (a) The owner or operator of a proposed new major source or major modification shall conduct an alternative analysis for each nonattainment pollutant emitted at or above the significant emission rate [(OAR 340-20-225(25))], except that no analysis shall be required for Total Suspended Particulate (TSP);
- (b) This analysis must include an evaluation of alternative sites, sizes, production processes, and environmental control techniques for such proposed source or modification which demonstrates that benefits of the proposed source or modification significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.
- (6) Special Exemption for the Salem Ozone Nonattainment Area. Proposed new major sources and major modifications which emit volatile organic compounds and oxides of nitrogen at or above the significant emission rate {(OAR 340-20-225(25))} and are located in the Salem Ozone nonattainment area shall comply with the requirements of sections (1) and (2) of this rule but are exempt from all other sections of this rule.

Stat. Auth.: ORS Ch. 468
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83;
DEQ 27-1992, f. & ef. 11-12-92

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Growth Increments

340-20-241 Renumbered to 340-20-245(8)

[[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 5-1983, f. & ef. 4-18-83; DEQ 5-1986, f. & ef. 2-21-86; DEQ 27-1992, f. & cert. ef. 11-12-92

Requirements for Sources in Attainment or Unclassified Areas (Prevention of Significant Deterioration)

340-20-245 New Major Sources or Major Modifications locating in areas designated attainment or unclassifiable shall meet the following requirements:

- (1) Best Available Control Technology. The owner or operator of the proposed major source or major modification shall apply best available control technology (BACT) for each pollutant which is emitted at a significant emission rate (OAR 340-20-225 definition (22)). In the case of a major modification, the requirement for BACT shall apply only to each new or modified emission unit which increases emissions. For phased construction projects, the determination of BACT shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.
- (2) Air Quality Analysis:
 - (a) The owner or operator of the proposed major source or major modification shall demonstrate that the potential to emit any pollutant at a significant emission rate {(OAR 340-20-225 definition (22))}, in conjunction with all other applicable emissions increases and decreases, {()}including secondary emissions{()}, would not cause or contribute to air quality levels in excess of:
 - (A) Any state or national ambient air quality standard; or
 - (B) Any applicable increment established by the Prevention of Significant Deterioration requirements, f(10AR 340-31-110f); or
 - (C) An impact on a designated nonattainment area greater than the significant air quality impact levels (OAR 340-20-225 definition (23)). New sources or modifications of sources which would emit volatile organic compounds which may impact the Salem ozone nonattainment area are exempt from this requirement.
 - (b) Sources or modifications with the potential to emit at rates greater than the significant emission rate but less than 100 tons/year, and are greater than 50 kilometers from a nonattainment area are not required to assess their impact on the nonattainment area;
 - (c) If the owner or operator of a proposed major source or major modification wishes to provide emission offsets such that a net air quality benefit[as defined in], OAR 340-20-260, is provided, the Department may consider the requirements of section (2) of this rule to have been met.
- (3) Exemption for Sources Not Significantly Impacting or Contributing to Levels in Excess of Air Quality Standards or PSD Increment Levels:
 - (a) A proposed major source or major modification is exempt from OAR 340-20-220 [to]through [340-20-270]340-20-276

- if paragraphs (A) and (B) of this subsection are satisfied:
- (A) The proposed source or major modification does not cause or contribute a significant air quality impact to air quality levels in excess of any state or national ambient air quality standard; or to air quality levels in excess of any applicable increment established by the Prevention of Significant Deterioration requirements, {()OAR 340-31-110{)}; or on a designated nonattainment area;
- (B) The potential emissions of the source are less than 100 tons/year for sources in the following categories or less than 250 tons/year for sources not in the following source categories:
 - (i) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input;

 - (iii) Kraft pulp mills;
 - (iv) Portland cement plants;
 - (v) Primary Zinc Smelters;
 - (vi) Iron and Steel Mill Plants;
 - (vii) Primary aluminum ore reduction plants;
 - (vii) Primary copper smelters;
 - (ix) Municipal Incinerators capable of charging more than 250 tons of refuse per day;
 - (x) Hydrofluoric acid plants;
 - (xi) Sulfuric acid plants,
 - (xii) Nitric acid plants;
 - (xiii) Petroleum Refineries;
 - (xiv) Lime plants;
 - (xv) Phosphate rock processing plants;
 - (xvi) Coke oven batteries;
 - (xvii) Sulfur recovery plants;
 - (xviii) Carbon black plants, {()}furnace
 process());
 - (xix) Primary lead smelters;
 - (xx) Fuel conversion plants;
 - (xxi) Sintering plants;
 - (xxii) Secondary metal production plants;
 - (xxiii) Chemical process plants;

than 250 million BTU per hour heat input;

- (xxv) Petroleum storage and transfer units
 with a total storage capacity exceeding
 300,000 barrels;
- (xxvi) Taconite ore processing plants; (xxvii) Glass fiber processing plants; (xxviii) Charcoal production plants.
- (b) Major modifications are not exempted under this section unless the source including the modifications meets the requirements of paragraph (a)(A) and (B) of this section. Owners or operators of proposed sources which are exempted by this provision should refer to OAR 340-20-020 [te]through 340-20-032, Notice of Construction and Approval of Plans, and OAR 340-20-140 [te]through 340-20-185, Air Contaminant Discharge Permits, for possible applicable requirements;
- (c) A proposed major source or modification is exempted from the requirements for PM_{10} in OAR 340-22-220 to $\frac{1340-20-2701340-20-276}{1}$ if:
 - (i) The proposed source or modification received fin an
 Air Contaminant Discharge Permit prior to July 31, 1987, and meets all requirements of 40 CFR 52.21(i)(4)(ix); or
 - (ii) The proposed source or modification submitted a complete application for an Air Contaminant Discharge Permit prior to July 31, 1987, and meets all requirements of 40 CFR 52.21(i)(4)(x).
- (4)Air Quality Models. All estimates of ambient concentrations required under these rules shall be based on the applicable air quality models, data bases, and other requirement specified in the "Guidelines on Air Quality Models (Revised)" 450/2-78-027R, U.S. Environmental Protection Agency, September 1986, including Supplement A, July, 1987. Where an air quality impact model specified in the "Guideline on Air Quality Models (Revised)" (including Supplement A) inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment and must receive approval of the Department and the Environmental Protection Agency. Methods like those outlined in the "Interim Procedures for Evaluating Air Quality Models (Revised)" (U.S. Environmental Protection Agency, 1984) should be used to determine the comparability of models.

(5) Air Quality Monitoring:

- The owner or operator of a proposed major source (A) or major modification shall submit with the application, subject to approval οf Department, an analysis of ambient air quality in the area impacted by the proposed project. analysis shall be conducted for each pollutant potentially emitted at a significant emission rate by the proposed source modification. As necessary to establish ambient air quality, the analysis shall include continuous air quality monitoring data for any pollutant potentially emitted by the source or modification except for nonmethane hydrocarbons. Such data shall relate to, and shall have been gathered over the year preceding receipt of the complete application, unless the owner operator demonstrates that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of an ambient air quality standard or any applicable increment. Pursuant pollutant to requirements of these rules, the owner operator of the source shall submit for the approval of the Department, a preconstruction air quality monitoring plan.
 - (B) Air quality monitoring which is conducted pursuant to this requirement shall be conducted in accordance with 40 CFR 58 Appendix B, "Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring" and with other methods on file with the Department.
 - (C) The Department may exempt a proposed major source or major modification from monitoring for a specific pollutant if the owner or operator demonstrates that the air quality impact from the emissions increase would be less than the amounts listed below or that the concentrations of the pollutant in the area that the source or modification would impact are less than these amounts:
 - (i) Carbon monoxide 575 ug/m³, 8 hour average;

- (ii) Nitrogen dioxide - 14 ug/m³, annual average;
- (iii) Particulate Matter:
 - TSP 10 ug/ m^3 , 24 hour average; PM₁₀ -10 ug/ m^3 , 24 hour average; (I) (II)
- (iv) Sulfur dioxide - 13 ug/m³, average;
- (v) Ozone -Any net increase of 100 tons/year or more of volatile organic compounds from a source or modification subject to PSD is required to perform an ambient impact analysis, including the gathering of ambient air quality data;
- Lead 0.1 ug/m^3 , 24 hour average; (vi)
- Mercury 0.25 ug/m³, 24 hour average; (vii)
- Beryllium 0.0005 ug/m^3 , (viii) average;
- Fluorides 0.25 ug/m^3 , 24 hour average; (ix)
- Vinyl chloride 15 ug/m³, 24 hour (X) average;
- Total reduced sulfur 10 ug/m3, 1 hour (xi) average;
- Hydrogen sulfide 0.04 ug/m³, 1 hour (xii) average;
- Reduced sulfur compounds 10 ug/m^3 , 1 (xiii) hour average.
- (D) When monitoring is required by paragraphs (5)(a)(A)through (C) of this rule, preconstruction monitoring shall be required according to the following transition program:
 - Complete PSD applications submitted (i) before May 31, 1988, shall not be required to perform new PM₁₀ monitoring;
 - (ii) Complete PSD applications submitted after May 31, 1988, and before November 31, 1988 must use existing PM_{10} or other representative air quality data collect PM₁₀ monitoring data. The collected data may come nonreference sampling methods. At least four months of data must be collected which the Department judges to include the season(s) of highest PM₁₀ levels;
 - (iii) Complete PSD applications submitted after November 31, 1988, must use reference sampling methods. At least

four months of data must be collected which the Department judges to include the season(s) of highest PM₁₀ levels.

- (b) The owner or operator of a proposed major source or major modification shall, after construction has been completed, conduct such ambient air quality monitoring as the Department may require as a permit condition to establish the effect which emissions of a pollutant, {(})other than nonmethane hydrocarbons{})}, may have, or is having, on air quality in any area which such emissions would affect.
- (6) Additional Impact Analysis:
 - (a) The owner or operator of a proposed major source or major modification shall provide an analysis of the impairment to [,] soils and vegetation that would occur as a result of the source or modification, and general commercial, residential, industrial and other growth associated with the source or modification [,]. [t] The owner or operator may be exempted from providing an analysis of the impact on vegetation having no significant commercial or recreational value;
 - (b) The owner or operator shall provide an analysis of the air quality concentration projected for the area as a result of general commercial, residential, industrial and other growth associated with the major source or modification.
- (7) Sources Impacting Class I Areas:
 - (a) Where a proposed major source or major modification impacts or may impact a Class I area, the Department shall provide written notice to the Environmental Protection Agency and to the appropriate Federal Land Manager within 30 days of the receipt of such permit application, at least 30 days prior to Department Public Hearings and subsequently, of any preliminary and final actions taken with regard to such application;
 - (d) Federal Land Manager shall be provided opportunity in accordance with OAR 340-20-230(3) to present a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality related values, {(}including visibility{)}, of any federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from. such source modification would not cause or contribute concentrations which would exceed the maximum allowable

increment for a Class I area. If the Department concurs with such demonstration, the permit shall not be issued.

(8) Medford-Ashland Growth Margin. The owner or operator or a proposed new major source or major modification in the Medford-Ashland Maintenance Area which will emit volatile organic compounds must obtain a portion of the growth margin or offsets equal to the amount of any increase in its plant site emission limit. The growth margin shall be allocated on a first-come-first-served basis depending on the date of submittal of a complete permit applications. No single source shall receive an allocation of more than 50% of any remaining growth margin. The allocation of emission increases from the growth margins shall be calculated based on the ozone season (May 1 to September 30 of each year). The amount of each growth margin that is available is defined in the State Implementation Plan and is on file with the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83;
DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 8-1988, f. &cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 27-1992, f. & cert. ef. 11-12-92

Exemptions

340-20-250

- (1) Resource recovery facilities burning municipal refuse and sources subject to federally mandated fuel switches may be exempted by the Department from requirements OAR 340-20-240 sections (3) and (4) provided that:
 - (a) No growth increment is available for allocation to such source or modification; and
 - (b) The owner or operator of such source or modification demonstrates that every effort was made to obtain sufficient offsets and that every available offset was secured.

NOTE: Such an exemption may result in a need to revise the State Implementation Plan to require additional control of existing sources.

- Temporary emission sources, which would be in operation at a site for less than two years, such as pilot plants and portable facilities, and emissions resulting from the construction phase of a new source or modification must comply with OAR 340-20-240(1) and (2) or OAR 340-20-245(1), whichever is applicable, but are exempt from the remaining requirements of OAR 340-20-240 and OAR 340-20-245 provided that the source or modification would impact no Class I area or no area where an applicable increment in known to be violated.
- (3) Proposed increases in hours of operation or production rates which would cause emission increases above the levels allowed in an Air Contaminant Discharge Permit and would not involve a physical change in the source may be exempted from the requirement of OAR 340-20-245(1) [(Best Available Control Technology)] provided that the increases cause no exceedances of an increment or standard and that the net impact on a nonattainment area is less than the significant air quality impact levels. This exemption shall not be allowed for new sources or modifications that received permits to construct after January 1, 1978.
- (4) Also refer to OAR 340-20-245(3) for exemptions pertaining to sources smaller than the Federal Size-Cutoff Criteria.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Baseline for Determining Credit for Offsets 340-20-255

- (1) The baseline for determining credit for emission offsets shall be the Plant Site Emission Limit established pursuant to OAR 340-20-300 [to] through 340-20-320 or, in the absence of a Plant Site Emission Limit, the actual emission rate for the source providing the offsets.
- (2) Sources in violation of air quality emission limitations may not supply offsets from those emissions which are or were in excess of permitted emission rates.
- (3) Emission reductions which are required pursuant to any state or federal regulation shall not be used for offsets.

- (4) Approval of offsets shall not exempt the new major sources or major modifications from Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER), New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPS) where required.
- (5) Offsets, including offsets from mobile and area source categories, must be quantifiable and enforceable before the Air Contaminant Discharge Permit is issued and must be demonstrated to remain in effect throughout the life of the proposed source or modification.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 27-1992, f. & cert. ef. 11-12-92

Requirements for Net Air Quality Benefit

340-20-260 Demonstrations of net air quality benefit for offsets must include the following:

- (1) A demonstration must be provided showing that the proposed offsets will improve air quality in the same geographical area affected by the new source or modification. This demonstration may require that air quality modeling be conducted according to the procedures specified in the "Guideline on Air Quality Models (Revised)" (including Supplement A).
- (2) Offsets for volatile organic compounds or nitrogen oxides shall be within the same nonattainment area as the proposed source. Offsets for total suspended particulate, PM₁₀ sulfur dioxide, carbon monoxide, nitrogen dioxide, lead, and other pollutants shall be within the area of significant air quality impact.
- (3) New major sources or major modifications must meet the following offset requirements:
 - (a) within a designated nonattainment area, the offsets must provide reductions which are equivalent or greater than the proposed increases. The offsets must be appropriate in terms of short term, seasonal, and yearly time periods to mitigate the impacts of the proposed emissions;
 - (b) outside a designated nonattainment area, new major sources or major modifications which have a significant air quality impact [(OAR 340-20-225 definition (26))]

- on the nonattainment area, the emission offsets must be sufficient to reduce impacts to levels below the significant air quality impact level within the nonattainment area;
- (c) within an ozone nonattainment area, new major sources or major modifications which emit volatile organic compounds or nitrogen oxides shall provide emission reductions at a 1.1 to 1 ratio (i.e., demonstrate a 10% new reduction); and
- (d) within 30 kilometers of an ozone nonattainment area, new major sources or major modifications which emit volatile organic compounds or nitrogen oxides shall provide reductions which are equivalent or greater than the proposed emission increases unless the applicant demonstrates that the proposed emissions will not impact the nonattainment area.
- (4) The emission reductions must be of the same type of pollutant as the emissions from the new source or modification. Sources of PM_{10} must be offset with particulate in the same size range. In areas where atmospheric reactions contribute to pollutant levels, offsets may be provided from precursor pollutants if a net air quality benefit can be shown.
- (5) The emission reductions must be contemporaneous, that is, the reductions must take effect prior to the time of startup but not more than two years prior to the submittal of a complete permit application for the new source or modification. This time limitation may be extended through banking, as provided for in OAR 340-20-265, {{}Emission Reduction Credit Banking{}}. In the case of replacement facilities, the Department may allow simultaneous operation of the old and new facilities during the startup period of the new facility provided that net emissions are not increased during that time period.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 27-1992, f. & cert. ef. 11-12-92

Emission Reduction Credit Banking

340-20-265 The owner or operator of a source of air pollution who wishes to reduce emissions by implementing more stringent

controls than required by a permit or <code>fby</code> an applicable regulation may bank such emission reductions. Cities, counties or other local jurisdictions may participate in the emissions bank in the same manner as a private firm. Emission reduction credit banking shall be subject to the following conditions:

- (1) To be eligible for banking, emission reduction credits must be in terms of actual emission decreases resulting from permanent continuous control of existing sources. The baseline for determining emission reduction credits shall be the actual emissions of the source or the Plant Site Emission Limit established pursuant to OAR 340-20-300 [to]through 340-20-320.
- (2) Emission reductions may be banked for a specified period not to exceed ten years unless extended by the Commission, after which time such reductions will revert to the Department for use in attainment and maintenance of air quality standards.
 - (3) Emission reductions which are required pursuant to an adopted rule shall not be banked.
- (4)Permanent source shutdowns or curtailments other than those used within one year for contemporaneous offsets as provided in OAR 340-20-260(5) are not eligible for banking by the owner or operator but will be banked by the Department for use in attaining and maintaining standards. The two year limitation for contemporaneous offsets shall not applicable to those shutdowns or curtailments which are to be used as internal offsets within a plant as part of a specific plan. Such a plan for use of internal offsets shall be submitted to the Department and receive written approval within one year of the permanent shutdown or curtailment. A permanent source shutdown or curtailment shall be considered to have occurred when a permit is modified, revoked or expires without renewal pursuant to the criteria established in OAR 340-14-005 through 340-14-050.
- (5) The amount of banked emission reduction credits shall be discounted without compensation to the holder for a particular source category when new regulations requiring emission reductions are adopted by the Commission. The amount of discounting of banked emission reduction credits shall be calculated on the same basis as the reductions required for existing sources which are subject to the new regulation. Banked emission reduction credits shall be subject to the same rules, procedures, and limitations as permitted emissions.
- (6) Emission reductions must be in the amount of ten tons per year or more to be creditable for banking except as follows:(a) In the Medford-Ashland AQMA emission reductions must be

at least in the amount specified in Table 2 of OAR 340-20-225 (20) (25);

(b) In Lane County, the Lane Regional Air Pollution Authority may adopt lower levels.

- (7) Requests for emission reduction credit banking must be submitted to the Department and must contain the following documentation:
 - (a) A detailed description of the processes controlled;
 - (b) Emission calculations showing the types and amounts of actual emissions reduced;
 - (c) The date or dates of such reductions;
 - (d) Identification of the probable uses to which the banked reductions are to be applied;
 - (e) Procedure by which such emission reductions can be rendered permanent and enforceable.
- (8) Requests for emission reduction credit banking shall be submitted to the Department prior to or within the year following the actual emissions reduction. The Department shall approve or deny requests for emission reduction credit banking and, in the case of approvals, shall issue a letter to the owner or operator defining the terms of such banking. The Department shall take steps to insure the permanence and enforceability of the banked emission reductions by including appropriate conditions in Air Contaminant Discharge Permits and by appropriate revision of the State Implementation Plan.
- (9) The Department shall provide for the allocation of the banked emission reduction credits in accordance with the uses specified by the holder of the emission reduction credits. When emission reduction credits are transferred, the Department must be notified in writing. Any use of emission reduction credits must be compatible with local comprehensive plans, [S]statewide planning goals, and state laws and rules.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 27-1992, f. & cert. ef. 11-12-92

Fugitive and Secondary Emissions

340-20-270 Fugitive emissions shall be included in the calculation of emission rates of all air contaminants. Fugitive emissions are subject to the same control requirements and analyses required for emissions from identifiable stacks or vents. Secondary

emissions shall not be included in calculations of potential emissions which are made to determine if a proposed source or modification is major. Once a source or modification is identified as being major, secondary emissions must be added to the primary emissions and become subject to these rules.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Stack Heights

340-20-275 [DEQ 25-1981, f. & ef. 9-8-81; Repealed by DEQ 5-1983, f. & ef. 4-18-83]

Visibility Impact

340-20-276 New major sources or major modifications located in Attainment, Unclassified or Nonattainment Areas shall meet the following visibility impact requirements.

- (1) Visibility impact analysis:
 - (a) The owner or operator of a proposed major source or major modification shall demonstrate that the potential to emit any pollutant at a significant emission rate {(OAR-340-20-225, definition (22))} in conjunction with all other applicable emission increases or decreases, {() including secondary emissions {)}, permitted since January 1, 1984, shall not cause or contribute to significant impairment of visibility within any Class I area;
 - (b) Proposed sources which are exempted under OAR 340-20-245(3) {, excluding subsection (3)(a)(A) of this rule} are not required to complete a visibility impact assessment to demonstrate that the sources do not cause or contribute to significant visibility impairment within a Class I area. The visibility impact assessment for sources exempted under this section shall be completed by the Department;
 - (c) The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or demonstration required by these rules pursuant to OAR 340-20-230(1).
- (2) Air quality models. All estimates of visibility impacts required under this rule shall be based on the models on file

- with the Department. Equivalent models may be substituted if approved by the Department. The Department will perform visibility modeling of all sources with potential emissions less than 100 tons/year of any individual pollutant and locating closer than 30 Km to a Class I area, if requested.
- (3) Determination of significant impairment: The results of the modeling must be sent to the affected land managers and the Department. The land managers may, within 30 days following receipt of the source's visibility impact analysis, determine whether or not impairment of visibility in a Class I area would result. The Department will consider the comments of the Federal Land Manager in its consideration of whether significant impairment will result. Should the Department determine that impairment would result, a permit for the proposed source will not be issued.
- (4) Visibility monitoring:
 - The owner or operator of a proposed major source or major modification which emit more than 250 tons per year of TSP, SO₂ or NO₂ shall submit with the application, subject to approval of the Department, an analysis of visibility in or immediately adjacent to the Class I area impacted by the proposed project. As necessary to establish visibility conditions within the Class I area, the analysis shall include a collection continuous visibility monitoring data for all pollutants emitted by the source that could potentially impact Class I area visibility. Such data shall relate to and shall have been gathered over the year preceding receipt of the complete application, unless the owner or operator demonstrates that data gathered over a shorter portion of the year for another representative year 1,1 would be adequate to determine that the source of major modification would not cause or contribute to significant impairment. Where applicable, the owner or operator may demonstrate that existing visibility monitoring data may be suitable. Pursuant to the requirements of these rules, the owner or operator of the source shall submit, for the approval of the Department, a preconstruction visibility monitoring
 - (b) The owner or operator of a proposed major source or major modification shall, after construction has been completed, conduct such visibility monitoring as the Department may require as a permit condition to establish the effect which emissions of pollutant may have, or is having, on visibility conditions with the

Class I area being impacted.

- (5) Additional impact analysis: The owner or operator of a proposed major source or major modification subject to OAR 340-20-245(6)(a) shall provide an analysis of the impact to visibility that would occur as a result of the source or modification and general commercial, residential, industrial, and other growth associated with the source or major modification.
- (6) Notification of permit application:
 - (a) Where a proposed major source modification impacts or may impact visibility within a Class I area, the Department shall provide written notice to the Environmental Protection Agency and to the appropriate Federal Land Manager within 30 days of the receipt of such permit application. Such notification shall include a copy of all information relevant to the permit application, including analysis of anticipated impacts on Class I area visibility. Notification will also be sent at least 30 days prior to Department Public Hearings and subsequently of any preliminary and final actions taken with regard to such application;
 - (b) Where the Department receives advance notification of a permit application of a source that may affect Class I area visibility, the Department will notify all affected Federal Land Managers within 30 days of such advance notice;
 - (c) The Department will, during its review of source impacts on Class I area visibility pursuant to this rule, consider any analysis performed by the Federal Land Manager that is provided within 30 days of notification required by subsection (a) of this section. If the Department disagrees with the Federal Land Manager's demonstration, the Department will include a discussion of the disagreement in the Notice of Public Hearing;
 - (d) Federal Land Manager shall provided be opportunity in accordance with OAR 340-20-230(3) to present a demonstration that the emissions from the proposed source of modification would have an adverse impact on visibility of any Federal mandatory Class I lands, notwithstanding that the change in air quality resulting from emissions from such source fofjor modification would not cause or contribute concentrations which would exceed the maximum allowable increment for a Class I area. If the Department concurs with such demonstration, the permit shall not be

issued.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85

Plant Site Emission Limits

Policy

340-20-300 The Commission recognizes the need to establish a more definitive method for regulating increases and decreases in air emissions of air quality permit holders as contained in OAR 340-20-301 through 340-20-320. However, by the adoption of these rules, the Commission does not intend to: limit the use of existing production capacity of any air quality permittee; cause any undue hardship or expense to any permittee due to the utilization of existing unused productive capacity; or create inequity within any class of permittees subject to specific industrial standards which are based on emissions related to production. Plant Site Emission Limits (PSELs) can be established at levels higher than baseline provided a demonstrated need exists to emit at a higher level and PSD increments and air quality standards would not be violated and reasonable further progress in implementing control strategies would not be impeded.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Requirement for Plant Site Emission Limits 340-20-301

- (1) Plant <code>[s]s</code>ite <code>[e]s</code>mission <code>[l]s</code>mits (PSEL) shall be incorporated in all Air Contaminant Discharge Permits except minimal source permits and special letter permits as a means of managing airshed capacity. All sources subject to regular permit requirements shall be subject to PSELs for all federal and state regulated pollutants. PSELs will be incorporated in permits when permits are renewed, modified, or newly issued.
- (2) The emissions limits established by PSELs shall provide the

basis for:

- (a) Assuring reasonable further progress toward attaining compliance with ambient air standards;
- (b) Assuring that compliance with ambient air standards and Prevention of Significant Deterioration increments are being maintained;
- (c) Administering offset, banking and bubble programs;
- (d) Establishing the baseline for tracking consumption of Prevention of Significant Deterioration Increments.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Definitions

340-20-305

As used in OAR 340-20-300 through 340-20-320:

- (1) "Actual Emissions" means the mass rate of emissions of a pollutant from an emissions source:
 - (a) In general, actual emissions as of the baseline period shall equal the average rate at which the source actually emitted the pollutant during a baseline period and which is representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period;
 - (b) The Department may presume that existing source-specific permitted mass emissions for the source are equivalent to the actual emissions of the source if they are within 10% of the calculated actual emissions;
 - (c) For any newly permitted emissions source which had not yet begun normal operation in the baseline period, actual emissions shall equal the potential to emit of the source.
- (2) "Baseline Emission Rate" means the average actual emission rate during the baseline period. Baseline emission rate shall not include increases due to voluntary fuel switches or increased hours of operation that have occurred after the baseline period.
- (3) "Baseline Period" means either calendar years 1977 or 1978.

 The Department shall allow the use of a prior time period upon a determination that it is more representative of normal

source operation.

(4) "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.

equipment malfunction, or highly abnormal market conditions.

(5) "Plant Site Emission Limit (PSEL)" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Criteria for Establishing Plant Site Emission Limits 340-20-310

- (1) For existing sources, PSELs shall be based on the baseline emission rate for a particular pollutant at a source and shall be adjusted upward or downward pursuant to Department Rules:
 - (a) If an applicant requests that the Plant Site Emission Limit be established at a rate higher than the baseline emission rate, the applicant shall:

(A) Demonstrate that the requested increase is less than the significant emission rate increase defined in OAR 340-20-225 (22) (25); or

- Provide an assessment of the air quality impact (B) to procedures specified pursuant 340-20-240 to 340-20-245. A demonstration that no air quality standard or PSD increment will be violated in an attainment area or that a growth available increment offset is ornonattainment area shall be sufficient to allow increase in the [Plant Site Emission Limit]PSEL to an amount not greater than the plant's demonstrated need to emit as long as no physical modification of an emissions unit is involved.
- (b) Increases above baseline emission rates shall be subject to public notice and opportunity for public hearing pursuant to the Department's permit requirements.
- (2) PSELs shall be established on at least an annual emission basis and a short term period emission basis that is compatible with source operation and air quality standards.

- (3) Mass emission limits may be established separately within a particular source for process emissions, combustion emissions, and fugitive emissions.
- (4) Documentati on of PSEL calculations shall be available to the permittee.
- (5) For new sources, PSELs shall be based on application of applicable control equipment requirements and projected operating conditions.
- (6) PSELs shall not **be established which** allow emissions in excess of those allowed by any applicable federal or state regulation or by any specific permit condition unless specific provisions of OAR 340-20-315 are met.
- (7) PSELs may be changed pursuant to Department rules when:
 - (a) Errors are found or better data is available for calculating PSELs;
 - (b) More stringent control is required by a rule adopted by the Environmental Quality Commission;
 - (c) An application is made for a permit modification pursuant to <u>OAR 340-20-140 through 340-20-185, {the}</u> Air Contaminant Discharge Permits, {requirements} and <u>OAR 340-20-220 through 340-20-276, {the}</u> New Source Review, {requirements} and approval can be granted based on growth increments, offsets, or available Prevention of Significant Deterioration increments;
 - (d) The Department finds it necessary to initiate modifications of a permit pursuant to OAR 340-14-040.

 Modification of a Permit.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Alternative Emission Controls (Bubble)

340-20-315 Alternative emission controls may be approved for use within a plant site such that specific mass emission limit rules are exceeded provided that:

- (1) Such alternatives are not specifically prohibited by a permit condition.
- (2) Net emissions for each pollutant are not increased above the Plant Site Emission Limit.
- (3) The net air quality impact is not increased as demonstrated by procedures required by OAR 340-20-260 (Requirements for Net Air Quality Benefit).

- (4) No other pollutants including malodorous, toxic or hazardous pollutants are substituted.
- (5) Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) where required by a previously issued permit and New Source Performance Standards (NSPS), OAR 340-25-505 through 530, and National Emission Standards for Hazardous Air Pollutants (NESHAP), OAR 340-25-450 through 340-25-485, where required, are not relaxed.
- (6) Specific mass emission limits are established for each emission unit involved such that compliance with the PSEL can be readily determined.
- (7) Application is made for a permit modification and such modification is approved by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Temporary PSD Increment Allocation 340-20-320

- (1) PSELs may include a temporary or time-limited allocation against an otherwise unused PSD increment in order to accommodate voluntary fuel switching or other cost or energy saving proposals provided it is demonstrated to the Department that:
 - (a) No ambient air quality standard is exceeded;
 - (b) No applicable PSD increment is exceeded;
 - (c) No nuisance condition is created;
 - (d) The applicant's proposed and approved objective continues to be realized.
- (2) When such demonstration is being made for changes to the PSEL, it shall be presumed that ambient air quality monitoring shall not be required of the applicant for changes in hours of operation, changes in production levels, voluntary fuel switching or for cogeneration projects unless, in the opinion of the Department, extraordinary circumstances exist.
- (3) Such temporary allocation of a PSD increment must be set forth in a specific permit condition issued pursuant to the Department's Notice and Permit Issuance or Modification Procedures.
- (4) Such temporary allocations must be specifically time limited and may be recalled under specified notice conditions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 25-1981, f. & ef. 9-8-81

Stack Heights and Dispersion Techniques

Definitions

340-20-340 [DEQ 5-1983, f. & ef. 4-18-83; Repealed by DEQ 11-1986, f. & ef. 5-12-86]

Limitations

340-20-345 [DEQ 5-1983, f. & ef. 4-18-83; Repealed by DEQ 11-1986, f. & ef. 5-12-86]

Excess Emissions

Purpose and Applicability

340-20-350 Emissions of air contaminants in excess of applicable standards or permit conditions are considered unauthorized and subject to enforcement action, pursuant to OAR 340-20-360 through 340-20-380. [These rules]OAR 340-20-350 through 340-20-380 apply to any source which emits air contaminants in violation of any applicable air quality rule or permit condition resulting from the breakdown of air pollution control equipment or operating equipment, process upset, start up, shut down, or scheduled maintenance. The purpose of these rules is to:

- (1) Require that, where applicable, all excess emissions be reported by sources to the Department immediately;
- (2) Require sources to submit information and data regarding conditions which resulted or could result in excess emissions; and
- (3) Identify criteria to be used by the Department for determining whether enforcement action will be taken against an excess emission.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 42-1990, f. 12-13-90,

cert. ef. 1-2-91; Renumbered from 340-21-065

Definitions

340-20-355 As used in [this rule]OAR 340-20-350 through 340-20-380[, unless otherwise required by context]:

(1) "Event" means any period of excess emissions.

(2) "Excess emissions" means emissions which are in excess of an Air Contaminant Discharge Permit limit or any applicable air quality rule.

(3) "Immediately" means as soon as possible but in no case more than one hour after the beginning of the excess emission

period.

- (4) "Large Source" means any stationary source whose actual emissions or potential controlled emissions while operating full-time at the design capacity are equal to or exceed 100 tons per year of any regulated pollutant, or which is subject to a National Emissions Standard for Hazardous Air Pollutants. Where plant site emission limits (PSEL) have been incorporated into the Air Contaminant Discharge Permit, the PSEL shall be used to determine actual emissions.
- (5) "Permittee" means the owner or operator of the facility, in whose name the operation of the source is authorized by the Air Contaminant Discharge Permit.
- (6) "Process Upset" means a failure or malfunction of a production process or system to operate in a normal and usual manner.
- (7) "Small Source" means any stationary source with a regular Air Contaminant Discharge Permit (not a letter permit or a minimal source permit) which is not classified as a large source.
- (8) "Startup" and "shutdown" means that time during which an air contaminant source or emission-control equipment is brought into normal operation or normal operation is terminated, respectively.
- (9) "Unavoidable" means events which are not caused entirely or in part by poor or inadequate design, operation, maintenance, or any other preventable condition in either process or control equipment.
- (10) "Upset" or "Breakdown" mean any failure or malfunction of any pollution control equipment or operating equipment which may cause an excess emission.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A
Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91

Planned Startup and Shutdown 340-20-360

- (1) In cases where startup or shutdown of a production process or system may result in excess emissions, prior Department authorization shall be obtained of startup/ shutdown procedures that will be used to minimize excess emissions. Application for approval of procedures shall be submitted and received by the Department in writing at least seventy-two (72) hours prior to the event, and shall include the following:
 - (a) The reasons why the excess emissions during startup and shutdown could not be avoided;
 - (b) Identification of the specific production process or system causing the excess emissions;
 - (c) The nature of the air contaminants likely to be emitted, and an estimate of the amount and duration of the excess emissions;
 - (d) Identification of specific procedures to be followed which will minimize excess emissions at all times.
- (2) Approval of the startup/shutdown procedures by the Department shall be based upon determination that said procedures are consistent with good pollution control practices, and will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The permittee shall record all excess emissions in the upset log as required in OAR 340-20-375(3). Approval of the startup/shutdown procedures shall not absolve the permittee from enforcement action if the approved procedures are not followed, or if excess emissions which occur are determined by the Department to be avoidable, pursuant to OAR 340-20-380f(1)1.
- (3) No startups or shutdowns resulting in excess emissions associated with the approved procedures in section (2) of this rule shall occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced yellow or red woodstove curtailment period in areas designated by the Department as PM₁₀ Nonattainment Areas.
 (4) In cases where notification of a planned startup or shutdown
- (4) In cases where notification of a planned startup or shutdown is likely to cause excess emissions has not been provided to the Department 72 hours prior to the event, the permittee shall immediately notify the Department by telephone of the situation, and shall be subject to the requirements under

Upsets and Breakdowns in OAR 340-20-370.

INOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91

Scheduled Maintenance 340-20-365

(1)In cases where it is anticipated that shutdown, by-pass, or operation at reduced efficiency of air pollution control equipment for necessary scheduled maintenance may result in excess emissions, prior Department authorization shall be obtained of procedures that will be used to minimize excess emissions. Application for approval of procedures associated with scheduled maintenance shall be submitted and received by the Department in writing at least seventy-two (72) hours prior to the event, and shall include the following:

The reasons explaining the need for maintenance, (a) including why it would be impractical to shut down the source operation during the period, and why the by-pass or reduced efficiency could not be avoided through better scheduling for maintenance or through better

operation and maintenance practices;

Identification of the specific production or emission (b) control equipment or system to be maintained;

The nature of the air contaminants likely to be emitted (C) during the maintenance period, and the estimated amount and duration of the excess emissions, including measures[,] such as the use of overtime labor and contract services and equipment, that will be taken to minimize the length of the maintenance period;

Identification of specific procedures to be followed (d) which will minimize excess emissions at all times.

Approval of the above procedures by the Department shall be (2) based upon determination that said procedures are consistent with good pollution control practices, and will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The permittee shall record all excess emissions in the upset log as required in OAR 340-20-375(3). Approval of the above procedures shall not absolve the permittee from enforcement action if the approved procedures are not followed, or if excess emissions occur which are determined by the Department

- to be avoidable, pursuant to OAR $340-20-380 \frac{(1)}{(1)}$.
- (3) No scheduled maintenance associated with the approved procedures in section (2) of this rule, which is likely to result in excess emissions, shall occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced yellow or red woodstove curtailment period in areas designated by the Department as PM₁₀ Nonattainment Areas.
- (4) In cases where notification of necessary scheduled maintenance likely to cause excess emissions has not been provided to the Department 72 hours prior to the event, the permittee shall immediately notify the Department by telephone of the situation, and shall be subject to the requirements under Upset and Breakdowns in OAR 340-20-370.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A
Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91

Upsets and Breakdowns 340-20-370

- (1) For large sources, as defined by OAR 340-20-355(4), all excess emissions due to upset or breakdown must be reported to the Department immediately. Based on the severity of the event, the Department will either require submittal of a written report pursuant to OAR 340-20-375(1) and (2), or a recording of the event in the upset log as required in OAR 340-20-375(3).
- (2) Small sources, as defined by OAR 340-20-355(7), need not report excess emissions due to upset or breakdown immediately unless required to do so by permit condition or written notice by the Department, or unless the excess emission is of a nature that could endanger public health. Based on the severity of the event, the Department will either require submittal of a written report pursuant to OAR 340-20-375(1) and (2), or a recording of the event in the upset log as required in OAR 340-20-375(3).
- (3) During any period of excess emissions due to upset or breakdown, the Department may require that a source immediately proceed to reduce or cease operation of the equipment or facility until such time as the condition causing the excess emissions has been corrected or brought under control. Such action by the Department would be taken

upon consideration of the following factors:

- (a) Potential risk to the public or environment;
- (b) Whether shutdown could result in physical damage to the equipment or facility, or cause injury to employees;
- (c) Whether any Air Pollution Alert, Warning, Emergency, or yellow or red woodstove curtailment period exists; or
- (d) If continued excess emissions were determined by the Department to be avoidable.
- (4) In the event of any on-going period of excess emissions due to upset or breakdown, the source shall cease operation of the equipment or facility no later than 48 hours after the beginning of the excess emission period, if the condition causing the emissions is not corrected within that time. The source need not cease operation if it can obtain Department's approval of procedures that will be used to minimize excess emissions until such time as the condition causing the excess emissions is corrected or brought under control. Approval of these procedures shall be based on the following information supplied to the Department:
 - (a) The reasons why the condition(s) causing the excess emissions cannot be corrected or brought under control. Such reasons shall include but not be limited to equipment availability and difficulty of repair or installation;
 - (b) Information as required in OAR 340-20-360(1)(b), (c), and (d).
- (5) Approval of the above procedures by the Department shall be based upon determination that said procedures are consistent with good pollution control practices, and will minimize emissions during such period to the extent practicable, and that no adverse health impact on the public will occur. The permittee shall record all excess emissions in the upset log as required in OAR 340-20-375(3). At any time during the period of excess emissions the Department may require the source to cease operation, in accordance with section (3) of this rule. In addition, approval of these procedures shall not absolve the permittee from enforcement action if the approved procedures are not followed, or if excess emissions occur that are determined by the Department to be avoidable, pursuant to OAR 340-20-380.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A

Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91

Reporting Requirements 340-20-375

- (1) For any period of excess emissions, the Department may require the source to submit a written excess emission report within fifteen (15) days of the date of the event, which includes the following:
 - (a) The date and time each event was reported to the Department;
 - (b) Information as described in OAR 340-20-380(1) through
 (5);
 - (c) The final resolution of the cause of the excess emissions.
- (2) Based on the severity of event, the Department may waive the 15 day reporting requirement, and specify either a shorter or longer time period for report submittal. The Department may also waive the submittal of the written report, if in the judgement of the Department, the period or magnitude of excess emissions was minor. In such cases the source shall record the event in the upset log pursuant to section (3) of this rule.
- (3) Large and small sources shall keep an upset log of all planned and unplanned excess emissions. The upset log shall include all pertinent information as required in section (1) of this rule.
- (4) At each annual reporting period specified in a permit, or sooner if required by the Department, the permittee shall submit a copy of the log entries for the reporting period. Upset logs shall be kept by the permittee for two (2) calendar years.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A
Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91

Enforcement Action Criteria

340-20-380 In determining if a period of excess emissions is avoidable, and whether enforcement action is warranted, the Department shall consider the following information submitted by the source.

(1) Whether notification occurred immediately pursuant to OAR 340-20-370(1) and (2).

- (2) Whether the event occurred during startup, shutdown, maintenance, or as a result of a breakdown or malfunction.
- (3) Whether the Department was furnished with complete details of the event, i.e., the equipment involved, the duration or best estimate of the time until return to normal operation, the magnitude of emissions and the increase over normal rates or concentrations as determined by continuous monitoring or a best estimate (supported by operating data and calculations).
- (4) Whether the amount and duration of the excess emission were limited to the maximum extent practicable during the period of excess emissions.
- (5) Whether the appropriate remedial action was taken.
- (6) Whether the event was due to negligent or intentional operation by the source. For the Department to find that an incident of excess emissions is not due to negligent or intentional operation by the source, the permittee must demonstrate, upon Department request, that all of the following conditions were met:
 - (a) The process or handling equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - (b) Repairs or corrections were made in an expeditious manner when the operator(s) knew or should have known that emission limits were being or were likely to be exceeded. Expeditious manner may include such activities as use of overtime labor or contract labor and equipment that would reduce the amount and duration of excess emissions;
 - (c) The event was not one in a recurring pattern of incidents which indicate inadequate design, operation, or maintenance.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.280] & 468A
Hist.: DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91

Parking Offsets in the Portland Central Business District

Purpose

340-20-400 [These rules]OAR 340-20-400 through 340-20-430 allow the City of Portland, through application of transportation

emission offsets, to meet new parking growth needs in the Central Business District without increasing carbon monoxide emissions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.380] & 468A

Hist.: DEQ 43-1990, f. & cert. ef. 12-19-90

Scope

340-20-405 Subject to the provisions of [these rules]OAR 340-20-400 through 340-20-430, the City of Portland may utilize motor vehicle emission offsets for the purpose of increasing off-street parking spaces by up to 1,370 spaces above the 43,914 parking space limit contained in the Portland carbon monoxide control strategy (Section 4.2 of the State Implementation Plan, OAR 340-20-047). If further increases are needed, the City of Portland shall make a request to the Department of Environmental Quality for an appropriate rule change and State Implementation Plan revision at least six months prior to the needed increase.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.380] & 468A

Hist.: DEQ 43-1990, f. & cert. ef. 12-19-90

Definitions

340-20-410

As used in OAR 340-20-400 through 340-20-430:

- (1) "Category I" means a parking offset measure that would reduce vehicle emissions on a per vehicle trip basis.
- (2) "Category II" means a parking offset measure that would reduce the number of vehicle trips.
- (3) "Core Area" means Parking Sectors C, E, F, and G in the central business district of downtown Portland as identified in the 1985 Updated Downtown Parking and Circulation Policy adopted by the Portland City Council on February 26, 1986.
- (4) "Department" means the Oregon Department of Environmental Quality.
- (5) "Downtown Parking Inventory" means the total number of parking spaces authorized for use in the central business district of downtown Portland in the Portland carbon monoxide control strategy (Section 4.2 of the State Implementation

Plan). The Downtown Parking Inventory is made up of existing spaces, spaces allocated to new development but not yet built, and reserve spaces available to be allocated.

- (6) "Downtown Parking Management Plan" means the plan prepared by the Portland Office of Transportation in July 1990 and subsequently adopted by the Portland City Council on July 18, 1990. The Downtown Parking Management Plan provides direction for the management of parking resources in downtown Portland.
- (7) "Long-Term Parking Space" means any parking space where the parking duration is allowed to exceed 4 hours.
- (8) "Motor Vehicle" means self-propelled vehicles powered by internal combustion engines including, but not limited to, automobiles, trucks and motorcycles.
- (9) "Non-core Area" means Parking Sectors A, B, D, H, J, K, and L in the central business district of downtown Portland as identified in the 1985 Updated Downtown Parking and Circulation Policy adopted by the Portland City Council on February 26, 1986.
- (10) "Offsets Study" means the Air Quality Offsets for Parking study prepared for the City of Portland by Cambridge Systematics, Inc. dated January 25, 1988.
- (11) "Parking Emission Offset" means any emission reduction measure applied to motor vehicles which provides an equivalent or greater emission reduction prior to allowing an emission increase from motor vehicles using new off-street parking. Such emission reduction measures shall include but not be limited to the following measures from the Offsets Study:
 - (a) Fringe Parking (Category II);
 - (b) Alternative Work Schedules (Category I);
 - (c) Subsidy of Ridesharing (Category II);
 - (d) Increase Long-Term Parking Space Rates (Category II);
 - (e) Increase All Parking Rates (Category II);
 - (f) Restrict Off-Street Parking Before 10 a.m. (Category I);
 - (g) Reserve Parking for Carpools (Category II);
 - (h) Park and Ride Remote Lots (Category II);
 - (i) Alternative Fuels (Category I);
 - (j) Enhanced Vehicle Inspection and Maintenance (Category
 I);
 - (k) Increased Transit Capacity (Category II);
 - (1) Traffic Flow Improvement (Category I);
 - (m) Bicycle Access (Category II).
- (12) "Short-Term Parking Space" means any parking space having a parking duration of up to 4 hours.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.380] & 468A Hist.: DEQ 43-1990, f. & cert. ef. 12-19-90

Requirements for Parking Offsets 340-20-420

- (1) The baseline year for determining parking offset emission credits is 1987 with the following carbon monoxide emission and parking space equivalences identified in the Offsets Study:
 - (a) 122.5 grams per day for a core area off-street parking space; and
 - (b) 107.8 grams per day for a non-core area off-street parking space.
- (2) In order to insure a net air quality benefit, the following ratios shall be used to calculate the number of additional parking spaces allowed:
 - (a) Category I parking offsets at a 1.2 ratio; and
 - (b) Category II parking offsets at a 1.2 for greater (up to 2.0f) ratio based on the type of parking offset and the relative locations (core versus non-core sectors) of the parking offsets and the new parking spaces.
- (3) The City of Portland shall submit applications for parking emission offsets to the Department of Environmental Quality for approval. The application shall include at least the following elements:
 - (a) Proposed number and sector type (core or non-core) of additional parking spaces;
 - (b) Proposed offsets quantified according to calculation procedures in the Offsets Study and sections (1) and (2) of this rule;
 - (c) Documentation of permanence and enforceability of proposed offsets; and
 - (d) Monitoring plan to provide at least an annual assessment of whether the offset is maintaining its projected effectiveness.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.380] & 468A

Hist.: DEQ 43-1990, f. & cert. ef. 12-19-90

Overall Monitoring and Contingency Plan 340-20-430

- (1) The City of Portland shall monitor the overall effectiveness of the Downtown Parking Management Plan. The City of Portland monitoring program shall include at least the following elements:
 - (a) A semi-annual report on the Downtown Parking Inventory;
 - (b) An every-third-year update of significant changes in parking utilization rates and parking lot types;
 - (c) Continuous monitoring of traffic volumes [()] and speed approximations[)] at 19 or more key locations in downtown beginning in January 1991;
 - (d) Annual to quarterly floating car speed runs on critical streets as requested by the Department;
 - (e) Annual evaluation of effectiveness of specific offset measures approved under these rules.
- (2) Before any offsets are approved by the Department, the City of Portland shall guarantee the permanence of offset measures by providing the Department with a contingency plan adopted by resolution. In the event the offset monitoring required by OAR 340-20-420(3)(d) indicates an offset measure is not providing the projected effectiveness and the City of Portland is unable to correct the deficiency within six months of notification by the Department, then the City of Portland shall commit through resolution to:
 - (a) Reduce the number of spaces in the reserve portion of the Downtown Parking Inventory by an equivalent number of spaces; or
 - (b) Reduce the hours of operation of City-provided off-street parking by delaying opening until 10 a.m. of an equivalent number of spaces as determined by calculation procedures in the Offsets Study; or
 - (c) Remove equivalent existing parking spaces.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.380] & 468A

Hist.: DEQ 43-1990, f. & cert. ef. 12-19-90

Emission Statements for VOC and NOx Sources in Ozone Nonattainment Areas

Purpose and Applicability

340-20-450

(1) The purpose of these rules is to obtain data on actual emissions of volatile organic compounds (VOC) and nitrogen oxides (NOx) from sources in ozone nonattainment areas, in accordance with Federal Clean Air Act requirements, for the purpose of monitoring progress toward attainment of the ozone national ambient air quality standard.

(2) This rule shall apply to sources of VOC and NOx in ozone nonattainment areas, with a Plant Site Emission Limit (PSEL) greater than 25 tons per year for either pollutant, and to any source whose actual emissions exceeds 25 tons per year.

(3) For purposes of establishing consistent emission reporting requirements, VOC and NOx sources already subject to the Department's Interim Emission Fee Rules (OAR 340-20-500 to 340-20-660) and electing to pay fees based on actual emissions shall report emission data to the Department, utilizing procedures identified in those rules to calculate actual VOC and NOx emissions, to the extent applicable. Other sources shall use current and applicable emission factors and actual production data to estimate and report actual emissions.

Stat. Auth.: ORS Ch. 468A

Hist: AQ 23, f. & ef. 11-12-92

Definitions

340-20-460 As used in OAR 340-20-450 through 340-20-490, unless otherwise required by context:

- (1) "Actual emissions" means all emissions including but not limited to routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities.
- (2) "Certifying individual" means the responsible corporate official who certifies the accuracy of the emission statement.
- (3) "Emission Factor" means an estimate of the rate at which a pollutant is released into the atmosphere, as the result of some activity, divided by the rate of that activity (e.g., production or process rate). Sources shall use an EPA or DEQ approved emission factor.

- (4) "Nitrogen Oxides (NOx)" means all oxides of nitrogen except nitrous oxide.
- (5) "Nonattainment area" means a geographical area of the State which exceeds any federal ambient air quality standard, and is designated as nonattainment by the Environmental Protection Agency.
- (6) "Ozone Season" means the contiguous 3 month period of the year during which ozone exceedances typically occur (i.e., June, July, and August).
- (7) "Plant Site Emission Limit (PSEL)" means the total mass emissions per unit of time of an individual air pollutant specified in a permit for a stationary source.
- (8) "Source" means any building, structure, facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere, and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.
- (9) "Source category" means all the pollutant emitting activities which belong to the same industrial grouping (i.e., which have the same two-digit code) as described in EPA's Standard Industrial Classification (SIC) Manual.
- "Volatile organic compounds (VOC)" means any organic compound (10)carbon; excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates, and ammonium carbonate; which participates in atmospheric photochemical reactions to form ozone; that is, any precursor organic compound which would be emitted during use, application, curing, or drying of a surface coating, solvent, or other Excluded from this category are those compounds material. which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity, which includes: methane; ethane; methylene chloride; 1,1,1-trichloroethane (methyl chloroform); 1,1,1-trichoro-2,2,2-trifluoroethane (CFC-113); trichlorofluoromethane CFC-11); dichlorodifluoromethane (CFC-12); chorodifluoromethane (CFC-(FC-23);22); trifluoromethane 1,2-dichloro 1,1,2,2tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2chloro-1,1,1,2-tetrafluoroethane (HCFC-124);pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-152a); and perfluorocarbon compounds which fall into these classes - (1) cyclic, branched, or linear, completely fluorinated alkanes, (2)

cyclic, branched, or linear, completely fluorinated ethers with no unsaturations, (3) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and (4) sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Stat. Auth.: ORS Ch. 468A Hist.: AQ 23, f. & ef. 11-12-92

Requirements

340-20-470

- (1) Sources of VOC and NOx subject to this rule shall annually submit data on the actual average emissions during the ozone season to the Department. Emission Statements submitted by the source to the Department shall contain the following information:
 - (a) Certification that the information contained in the statement is accurate to the best knowledge of the certifying individual.
 - (b) Source identification information: full name, physical location, mailing address of the facility, and Air Contaminant Discharge Permit number.
 - (c) Emissions information:
 - (A) Estimated actual VOC and/or NOx emissions for those emissions over 25 tons per year, on an average weekday basis during the preceding year's ozone season, by source category; and
 - (B) Calendar year for the ozone season; and
 - (C) Each emission factor used and reference source for the emission factor, if applicable, or indicate other estimation method or procedure used to calculate emissions (e.g., material balance, source test, or continuous monitoring).
- (2) Sources subject to these rules shall keep records at the plant site of the information used to calculate actual emissions pursuant to these rules. These records shall contain all applicable operating data, process rate data, and control equipment efficiency information and other information used to calculate or estimate actual emissions, and shall be available for the Department's review, or submitted upon request. Such records shall be kept by the source for three (3) calendar years after submittal of the emission statement.

Stat. Auth.: ORS 468A

Hist.: AQ 23, f. & ef. 11-12-92

Submission of Emission Statement

340-20-480 The owner or operator of any facility meeting the applicability requirements stated in OAR 340-20-450 must submit annual Emission Statements to the Department beginning in 1993. The Emission Statement for the preceding calendar year is due to the Department no later than either February 28 or the due date for the annual permit report specified in the source's Air Contaminant Discharge Permit.

Stat. Auth.: ORS 468A

Hist.: AQ 23, f. & ef. 11-12-92

Major Source Interim Emission Fees

[PURPOSE, SCOPE AND APPLICABILITY] Purpose, Scope And Applicability

340-20-500

(1) The purpose of these rules OAR 340-20-500 through 340-20-660 is to provide permittees, major sources, and the Department of Environmental Quality with the criteria and procedures to determine interim emissions and fees based on calculated (1991 only), actual and permitted air emissions only for calendar years 1991 and 1992.

NOTE: These interim fees will be used to provide resources to cover the costs of the Department of Environmental Quality to develop an approvable federal operating permit program in accordance with the Federal Clean Air Act and ORS 468A.

- (2) [The rules]OAR 340-20-500 through 340-20-660 apply to major sources as defined in OAR 340-20-520 (144)]. The permittee may elect to pay interim emission fees on either calculated emissions (1991 only), actual emissions or permitted emissions for each assessable emission.
- (3) The interim emission fees are in addition to fees required by OAR 340-20-155 and 340-20-165.

NOTE: Assessment of fees for calendar years 1993 and beyond is subject to Environmental Protection Agency approval of the Title V program developed by the Department pursuant to Oregon Laws 1991 Chapter 752, ORS 468A, enacted by the 1991 Oregon Legislature in response to the federal Clean Air Act Amendments of 1990.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

{POLICY}

Policy

340-20-510 Considering that [these rules] OAR 340-20-500 through 340-20-660 are retroactive and that methods were not in place for determining actual emissions for fee purposes, the Environmental Quality Commission recognizes that special criteria are necessary to quantify emissions for 1991. More specific methods for data collection are consistent with the new requirements under the Clean Air Act Amendments of 1990 and appropriate for calendar year 1992 emissions.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

{DEFINITIONS}

Definitions

340-20-520 As used in OAR 340-20-500 through 340-20-660, unless otherwise required by context:

- (1) "Actual Emission" means all emissions including but not limited to routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunctions, and other activities.
- "Assessable Emission" means a unit of emissions for which the major source will be assessed a fee. It includes an emission of a pollutant as defined in OAR 340-20-530 from one emission point and from an area within a major source. For routine process emissions, emissions of each pollutant in OAR 340-20-530 from each emission point included in an air contaminant discharge permit shall be an assessable emission.
- (3) "Constant Process Rate" means the average variation in process rate for the calendar year is not greater than plus or minus ten percent of the average process rate.
- (4) "Continuous Monitoring Systems" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect calculated emissions and actual emissions or concentrations on a continuing basis in accordance with the Department's Continuous Monitoring Manual, and includes continuous emission monitoring systems and continuous parameter monitoring systems.
- (5) "Calculated Emissions" means procedures used to estimate emissions for the 1991 calendar year.
- (6) "Department" means Department of Environmental Quality.

- (7) "Emission" means a release into the atmosphere of any regulated pollutant.
- (8) "Emission Estimate Adjustment Factor (EEAF)" means an adjustment applied to an emission factor to account for the relative inaccuracy of the emission factor.
- (9) "Emission Factor" means an average value which relates the quantity of a pollutant released to the atmosphere with the activity associated with the release of that pollutant.
- (10) "Emission Reporting Form" means a paper or electronic form developed by the Department that shall be completed by the permittee to report calculated emissions, actual emissions or permitted emissions for interim emission fee assessment purposes.
- (11) "Fugitive Emissions" means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.
- (12) "Interim Emission Fee" means \$13 per ton for each assessable emission subject to emission fees under OAR 340-20-530 for calculated, actual or permitted emissions released during calendar years 1991 and 1992.
- (13) "Late Payment" means an interim emission fee which is postmarked after the due date.
- (14) "Major Source" or "Source" means a permitted stationary source or group of stationary sources located within a contiguous area and under common control or any stationary facility or source of air pollutants which directly emits, or is permitted to emit:
 - (a) One hundred tons per year or more of any regulated pollutant, or
 - (b) Fifty tons per year or more of a volatile organic compound and is located in a serious ozone nonattainment area.
- (15) "Material Balance" means a procedure for determining emissions based on the difference in the amount of material added to a process and the amount consumed and/or recovered from a process.
- (16) "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured by a Department approved method in accordance with the Department's Source Sampling Manual.
- (17) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department, pursuant to OAR 340-20-140 through 340-20-175 and includes the application review report.

- (18) "Permitted Emissions" means each assessable emission portion of the Plant Site Emission Limit.
- (19) "Person" means the United States Government and agencies thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity.
- (20) "Plant Site Emission Limit (PSEL)" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a major source. The PSEL may consist of more than one assessable emission.
- (21) "PM₁₀ Emissions" means emissions of finely divided solid or liquid material, other than uncombined water, with an aerodynamic diameter less than or equal to a nominal 10 micrometers, emitted to the ambient air as measured by applicable reference methods in accordance with the Department's Source Sampling Manual.
- (22) "Regulated Pollutant" means PM_{10} , Sulfur Dioxide (SO_2) , Oxides of Nitrogen (NO_χ) , Lead (Pb), Volatile Organic Compounds (VOC), and Carbon Monoxide (CO); and any other pollutant subject to a New Source Performance Standard (NSPS) such as Total Reduced Sulfur (TRS) from kraft pulp mills and Fluoride (F) from aluminum mills.
- (23) "Source Category" means a group of major sources determined by the Department to be using similar raw materials and having equivalent process controls and pollution control equipment.
- (24) "Source Test" means the average of at least three test runs during operating conditions representative of the period for which emissions are to be determined, conducted in accordance with the Department's Source Sampling Manual or other Department approved methods.
- (25) "Substantial Underpayment" means the lesser of ten percent (10%) of the total interim emission fee for the major source or five hundred dollars.
- (26) "Total Reduced Sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, and any other organic sulfides present expressed as hydrogen sulfide (H₂S).
- (27) "Verified Emission Factor" means an emission factor approved by the Department and developed for a specific major source or source category and approved for application to that major source by the Department.
- (28) "Volatile Organic Compound or "VOC" means any organic compound which participates in atmospheric photochemical reactions to form ozone; that is, any precursor organic

compound which would be emitted during use, application, curing or drying of a surface coating, solvent, or other material. Excluded from this category are those compounds which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity which includes methane, ethane, methylene chloride, 1,1,1-trichloroethane (methyl chloroform), trichlorofluoromethane (CFC-11), dichlorofluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115).

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[POLLUTANTS SUBJECT TO INTERIM EMISSION FRES] Pollutants Subject to Interim Emission Fees 340-20-530

- (1) The Department shall assess interim emission fees on assessable emissions up to and including 4,000 tons per year of each of the following pollutants from each major source:
 - (a) PM₁₀ or TSP as specified in section (2) of this rule,
 - (b) SO₂,
 - (c) NO_x ,
 - (d) Voc,
 - (e) Lead,
 - (f) Fluoride,
 - (g) TRS, and
 - (h) Any other pollutant subject to New Source Performance Standards.
- (2) If the interim emission fee on PM_{10} emissions is based on the Plant Site Emission Limit for a source that does not have a Plant Site Emission Limit for PM_{10} , the Department shall assess the interim emission fee on the Plant Site Emission Limit for total suspended particulates.
- (3) The permittee shall determine each actual assessable emission separately.
- (4) The permittee shall pay interim emission fees on all assessable emissions from each emission source included in the permit or application review report.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[EXCLUSIONS] Exclusions

340-20-540

- (1) The Department shall not assess interim emission fees on:
 - (a) Pollutants regulated solely as hazardous air pollutants as defined in Section 112 of the federal Clean Air Act, and
 - (b) Newly permitted major sources that have not begun initial operation.
 - (c) A former permittee who has permanently ceased operation, as indicated by cancellation of the air contaminant discharge permit prior to the time of interim emission fee assessment by the Department.
- (2) The Department shall not assess interim emission fees on carbon monoxide. However, sources that emit or are permitted to emit 100 tons or more per year of carbon monoxide are subject to the interim emission fees on all other regulated pollutants regardless of the amount of emissions of those regulated pollutants.
- (3) The Department shall not assess interim emission fees if there are no emissions from an assessable emission for the entire calendar year.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

{REFERENCES}

References

340-20-550 Reference documents used in OAR 340-20-500 through 340-20-660 include the Department of Environmental Quality Source Sampling Manual and the Department of Environmental Quality Continuous Monitoring Manual.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[ELECTION FOR EACH ASSESSABLE EMISSION FOR 1991 AND 1992] Election For Each Assessable Emission For 1991 And 1992 340-20-560

(1) The permittee shall make an election to pay interim emission fees on either calculated emissions (1991 only), actual emissions or permitted emissions for each year for each

assessable emission and notify the Department in accordance with OAR 340-20-580.

- (2) For calendar year 1991 the permittee shall elect to pay interim emission fees on either:
 - (a) Calculated emissions, OAR 340-20-590,
 - (b) Permitted emissions, OAR 340-20-570 and 340-20-580, or
 - (c) Actual emissions, OAR 340-20-570, 340-20-580 and 340-20-600.
- (3) For calendar year 1992 the permittee shall elect to pay interim emission fees on either:
 - (a) Actual emissions, OAR 340-20-570, 340-20-580, and 340-20-600, or
 - (b) Permitted emissions, OAR 340-20-570 and 340-20-580.
- (4) If a permittee fails to notify the Department of the election for an assessable emission, the Department shall assess interim emission fees for the assessable emission based on permitted emissions.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[EMISSION REPORTING] Emission Reporting 340-20-570

- (1) For the purpose of assessing interim emission fees the permittee shall submit the following information on an Emission Reporting Form(s) developed by the Department for each assessable emission in tons per year, reported as follows:
 - (a) PM_{10} as PM_{10} ,
 - (b) Sulfur Dioxide as SO,,
 - (c) Oxides of Nitrogen (NO₂) as Nitrogen Dioxide (NO₂),
 - (d) Total Reduced Sulfur (TRS) as H₂S in accordance with OAR 340-25-150(15),
 - (e) Volatile Organic Compounds (VOC) as:
 - (A) VOC for material balance emission reporting, or
 - (B) Propane (C₃H₈), unless otherwise specified by permit, or Coregon Administrative Rules OAR Chapter 340, or a method approved by the Department, for emissions verified by source testing.
 - (f) Fluoride as F.
 - (g) Lead as Pb.
- (2) The permittee electing to pay interim emission fees on actual and calculated emissions shall report emissions as follows:

- (a) Round up to the nearest whole ton for emission values 0.5 and greater, and
- (b) Round down to the nearest whole ton for emission values less than 0.5.
- (3) The permittee electing to pay interim emission fees on either actual or calculated emissions shall:
 - (a) Submit complete information on the Emission Reporting Forms including all assessable emissions, emission points and sources, and
 - (b) Submit documentation necessary to support emission calculations.
- (4) The permittee electing to pay on calculated (1991 only) or actual emissions for an assessable emission shall report total emissions including those emissions in excess of 4,000 tons for each assessable emission.
- (5) The permittee electing to pay on permitted emissions for an assessable emission shall submit a statement to the Department that they shall pay on the Plant Site Emission Limit in effect for the calendar year in which they are paying, in accordance with OAR 340-20-570 and 340-20-580.
- (6) If more than one permit is in effect for a calendar year for a major source, the permittee electing to pay on permitted emissions shall pay on the Plant Site Emission Limit(s) in effect for each day of that calendar year.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[EMISSION REPORTING AND INTERIM FEE PROCEDURES] Emission Reporting And Interim Fee Procedures 340-20-580

- (1) The permittee shall submit the original Emission Reporting Form(s), including the permittees election for each assessable emission, to the Department by the later of either February 28 or the due date for the annual permit report for the previous calendar year.
- (2) The permittee may request that information, other than emission information, submitted pursuant to OAR 340-20-500 through 340-20-660 be treated as confidential by the Department in accordance with Oregon Revised Statutes ORS 192.410 through 192.505.
- (3) The permittee shall allow the Department representatives access to the plant site and pertinent records at all reasonable times for the purposes of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission discharge records and

- otherwise conducting all necessary functions related to the interim emission fees. The permittee shall maintain all records on site for two years from the date specified in Section (6) of this rule.
- (4) The Department may accept information submitted or request additional information from the permittee. The permittee shall submit additional calculated or actual emission information requested by the Department within thirty (30) days of receiving a request from the Department. The Department may approve a request from a permittee for an extension of time of up to thirty days to submit additional information under extenuating circumstances.
- (5) If the Department determines the actual or calculated emission information submitted for any assessable emission does not meet the criteria in OAR 340-20-500 through 340-20-660, the Department shall assess the interim emission fee on the permitted emission for that assessable emission.
- (6) The permittee shall submit interim emission fees payable to the Department by the later of:
 - (a) July 1 for interim emission fees from the previous calendar year, or
 - (b) Thirty (30) days after the Department mails the interim emission fee invoice.
- (7) Department acceptance of interim emission fees shall not indicate approval of data collection methods, calculation methods, or information reported on Emission Reporting Forms. If the Department determines initial interim emission fee assessments were inaccurate or inconsistent with OAR 340-20-500 through 340-20-660, the Department may assess or refund interim emission fees up to two years after interim emission fees are received by the Department.
- fees are received by the Department.

 (8) The Department shall not revise a Plant Site Emission Limit solely due to an interim emission fee payment.
- (9) Permittees operating major sources pursuant to OAR 340-22-100 through OAR 340-22-220 may submit the emission reporting information in the annual permit report format provided that:
 - (a) The permittee receives Department approval prior to the annual permit report due date and prior to February 28 of the year the fee is due,
 - (b) The report is received by the Department by the due date specified in the permit, and
 - (c) All information required by OAR 340-20-500 through 340-20-660 is provided, including an indication of whether the permittee is electing to pay on permitted, calculated, or actual emissions for each assessable emission.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

{CALCULATED EMISSIONS FOR 1991} Calculated Emissions For 1991

340-20-590 To calculate actual emissions for 1991, the permittee shall use one of the following methods:

(1) OAR 340-20-650(9), and:

- (a) The emission factor(s) and other criteria used by the Department and documented in the permit or application review report to establish Plant Site Emission Limits to calculate assessable emission(s), or
- (b) Emission Factors developed from at least one Department approved source test conducted since 1985.
- (2) Material balance data.
- (3) Emission data from a continuous monitoring system if:
 - (a) The system was installed and maintained and is capable of continuously monitoring pollutant emissions,
 - (b) Emissions data were recorded at a minimum of once per hour, and
 - (c) Data completeness was at least ninety percent (90%) of the scheduled operating time based on hourly data, otherwise OAR 340-20-610(2) shall be used to determine emissions.
- (4) Alternative emission factors approved by the Department as more representative of actual source configuration and operation in 1991, provided that the alternative factors are at least as accurate as methods used for compliance demonstration.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[ACTUAL EMISSIONS FOR 1992] Actual Emissions For 1992

340-20-600 A permittee electing to pay on actual emissions for calendar year 1992 emissions shall obtain emission data and determine emissions using one of the following methods:

- (1) Continuous monitoring systems used in accordance with OAR 340-20-610,
- (2) Verified emission factors developed for that particular source in accordance with OAR 340-20-650 for:,
 - (a) Each assessable emission, or
 - (b) A combination of assessable emissions if there are multiple sources venting to the atmosphere through one common emission point (eg. stack). The permittee shall

have a verified emission factor plan approved by the Department prior to conducting the source testing in accordance with OAR 340-20-650,

(3) Material balances determined in accordance with OAR 340-20-620, OAR 340-20-630, or OAR 340-20-640, or

(4) Verified emission factors for source categories developed in accordance with OAR 340-20-650(11).

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[DETERMINING EMISSIONS FROM CONTINUOUS MONITORING SYSTEMS FOR 1992] Determining Emissions From Continuous Monitoring Systems For 1992 340-20-610

(1) If the permittee elects to report emission data using monitoring systems, the permittee shall use a monitor installed and operated in accordance with the Department's Continuous Monitoring Manual for data collected from April 1, 1992 through December 31, 1992. For data collected from January 1, 1992 through March 31, 1992, the permittee shall use data collected in accordance with permit conditions, applicable [Department] rules in OAR Chapter 340, or the Department's Continuous Monitoring Manual.

(2) If the permittee has continuous monitoring data that comprises less than ninety percent (90%) of the plant operating time, the actual emissions during the period when the continuous monitoring system was not operating shall be determined from 90 percentile continuous monitoring data.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[DETERMINING EMISSIONS USING MATERIAL BALANCE FOR 1992] Determining Emissions Using Material Balance For 1992

340-20-620 The permittee may elect to use material balance to determine actual emissions:

(1) If the amount of material added to a process less the amount consumed and/or recovered from a process can be documented in accordance with Department approved permit procedures and in accordance with OAR 340-20-500 through 340-20-660.

(2) The permittee shall only apply material balance calculations to VOC or sulfur dioxide emissions in accordance with OAR 340-20-630 and OAR 340-20-640 respectively.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[DETERMINING VOLATILE ORGANIC COMPOUND EMISSIONS USING MATERIAL BALANCE FOR 1992]

<u>Determining Volatile Organic Compound Emissions Using Material</u>
<u>Balance For 1992</u>

340-20-630 The permittee may determine the amount of VOC emissions for an assessable emission by using material balance.

(1) The permittee using material balance to calculate VOC emissions shall determine the amount of VOC added to the process, the amount of VOC consumed in the process and/or the amount of VOC recovered in the process by testing in accordance with 40 Code of Federal Regulations (CFR) Part 60 EPA Method 18, 24, 25, a material balance method, or an equivalent plant specific method specified in the Air Contaminant Discharge Permit using the following equation:

$$VOC_{tot} = VOC_{add} - VOC_{cons}$$

Where:

VOC_{tot} = Total VOC emissions, tons

VOC_{add} = VOC added to the process, tons

VOC consumed and/or recovered from the process, tons

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[DETERMINING SULFUR DIOXIDE EMISSIONS USING MATERIAL BALANCE FOR 1992]

<u>Determining Sulfur Dioxide Emissions Using Material Balance For</u>
1992

340-20-640

- Sulfur dioxide emissions for major sources may be determined (1)by measuring the sulfur content of fuels and assuming that all of the sulfur in the fuel is oxidized to sulfur dioxide.
- (2) The permittee shall use ASTM methods to measure the sulfur
- content in fuel for each quantity of fuel burned. The permittee shall determine sulfur dioxide emissions for (3) each quantity of fuel burned, determining quantity by a method that is reliable for that source, by performing the following calculation:

$$SO_2 = %S/100 \times F \times 2$$

Where:

so ₂	=	Sulfur dioxide emissions for each quantity of fuel, tons
%S	=	Percent sulfur in the fuel being burned, $% (w/w)$.
F	=	Amount of fuel burned, based on a quantity measurement, tons
2	=	Pounds of sulfur dioxide per pound of sulfur

For coal-fired steam generating units the following equation (4)shall be used by permittees to account for sulfur retention:

$$SO_{2adi} = SO_2 \times 0.97$$

Where:

- SO_{2adj} Sulfur dioxide adjusted for sulfur retention (40 CFR Part 60, Appendix A, Method Section 5.2)
- Sulfur dioxide emissions so, each quantity burned (OAR 340-20-640(3))
- (5) Total sulfur dioxide emissions for the year shall be the sum total of each quantity burned calculated in accordance with OAR 340-20-640(3) divided by 2000 pounds per ton.

(6) The permittee shall keep records of the fuel received and consumed and the quantity and sulfur content for two years from the date specified in OAR 340-20-580(6).

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[VERIFIED EMISSION FACTORS USING SOURCE TESTING] Verified Emission Factors Using Source Testing 340-20-650

- (1) To verify emission factors used to determine assessable emissions the permittee shall:
 - (a) Utilize source testing data collected in accordance with appropriate procedures or Department guidance in effect at the time the data was collected, for source test data collected from 1985 through 1991, or
 - (b) Perform source testing in accordance with the Department's Source Sampling Manual or other methods approved by the Department for source tests conducted in 1992. Source tests shall be conducted in accordance with testing procedures on file at the Department and the pretest plan submitted at least fifteen (15) days in advance and approved by the Department. All test data and results shall be submitted for review to the Department within thirty (30) days after testing.

NOTE: It is recommended that the permittee notify the Department and obtain pre-approval of the Emission Factor source testing program prior to or as part of the submittal of the first source test notification.

- (2) The permittee shall conduct or have conducted at least three compliance source tests each consisting of at least three individual test runs for a total of at least nine test runs.
- (3) The permittee shall monitor and record or have monitored and recorded applicable process and control device operating data.
- (4) The permittee shall perform or have performed a source test either:
 - (a) In each of three quarters of the year with no two successive source tests performed any closer than thirty (30) days apart, or

- (b) At equal intervals over the operating period if the permittee demonstrates and the Department approves that:
 - (A) The process operates or has operated for part of the year, or
 - (B) The process is or was not subject to seasonal variations.
- (5) The permittee shall conduct or have conducted the source tests to test the entire range of operating levels. At least one test shall be conducted at minimum operating conditions, one test at normal or average operating levels, and one test at anticipated maximum operating levels. If the process rate is constant, all tests shall be conducted at that rate. The permittee shall submit documentation to the Department demonstrating a constant process rate.
- (6) The permittee shall determine or have determined an emission factor for each source test by dividing each test run emissions, in pounds per hour, by the applicable process rate during the source test run. At least nine emission factors shall be plotted against the respective process rates and a regression analysis performed to determine the best fit equation and the correlation coefficient (R²). If the correlation coefficient is less than 0.50, which would indicate that there is a relatively weak relationship between emissions and process rates, the arithmetic average and standard deviation of at least nine emission factors shall be determined.
- (7) The permittee shall determine the Emissions Estimate Adjustment Factor (EEAF) as follows:
 - (a) If the correlation coefficient (R^2) of the regression analysis is greater than 0.50, the EEAF shall be 1+(1- R^2).
 - (b) If the correlation coefficient (R²) is less than 0.50, the EEAF shall be:

$$EEAF = 1 + SD/EF_{avg}$$

Where:

SD = Standard Deviation

EF_{avg} = Average of the Emission Factors

(8) The permittee shall determine actual emissions for interim emission fee purposes using one of the following methods:

(a) If the regression analysis correlation coefficient is less than 0.50, the actual emissions shall be the average emission factor determined from at least nine test runs multiplied by the EEAF multiplied by the total production for the entire year, or

 $AE = EF_{avg} \times EEAF \times P$

Where:

AE = Actual Emissions

 EF_{avq} = Average of the Emission Factors

EEAF = Estimated Emissions Adjustment

Factor

P = Total production for the year

(b) If the regression analysis correlation coefficient is greater than 0.50 the following calculations shall be performed:

(A) Determine the average emission factor (EF) for each production rate category (maximum = EF and minimum = EF)

normal = EF_{norm} , and minimum = EF_{min}).

(B) Determine the total annual production and operating hours, production time (PT_{tot}), for the

calendar year.

- (C) Determine the total hours operating within the maximum production rate category (PT_{max}). The maximum production rate category is any operation rate greater than the average of at least three maximum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by two (2).
- (D) Determine the total hours while operating within the normal production rate category (PTnorm). The normal production rate category is defined as any operating rate less than the average of at least three maximum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by two (2) and any operating rate greater than the average of at least three minimum operating rates during the source

testing plus the average of at least three normal operating rates during the source testing divided by two (2).

(E) Determine the total hours while operating within the minimum production rate category (PT_{min}). The minimum production rate category is defined as any operating rate less than the average of at least three minimum operating rates during the source testing plus the average of at least three normal operating rates during the source testing divided by two (2).

Actual emissions equals EEAF \times [PT_{max}/PT_{tot}) \times EF_{max} (F)

- + (PT_{norm}/PT_{tot})xEF_{norm} + (PT_{min}/PT_{tot})xEF_{min}].

 The permittee shall determine emissions during startup and (9) shutdown, and for emissions greater than normal, during conditions that are not accounted for in the procedure(s) otherwise used to document actual emissions.
 - All emissions during startup and shutdown, emissions greater than normal shall be assumed equivalent to operation without an air pollution control device, unless accurately demonstrated by the permittee and approved by the Department in accordance with OAR 340-20-650(9)(b), (9)(c), (9)(d), and (9)(e). The emission factor plus the EEAF shall be adjusted by the air pollution control device collection efficiency as follows:

Actual emission factor = $(EF \times EEAF)/(1 - PCDE)$

Where:

Emission Factor EF

EEAF Emission Estimate Adjustment

Factor

Pollution PCDE Control Device Collection Efficiency

Unless otherwise approved by the Department, the pollution control device collection efficiencies used in this calculation shall be:

Particulate Matter:

ESP or baghouse	0.90
High energy wet scrubber	0.80
Low energy wet scrubber	0.70
Cyclonic separator	0.50

Acid gases:

Wet or dry scrubber 0.90

Volatile Organic Compounds:

Incinerator	0.98
Carbon absorber	0.95

- (b) During process startups a Department approved source test shall be performed to determine an average startup factor. The average of at least three tests runs plus the standard deviation shall be used to determine actual emissions during startups.
- (c) During process shutdowns a Department approved source test shall be performed to determine an emission factor for shutdowns. The average of at least three test runs plus the standard deviation shall be used to determine actual emissions during shutdowns.
- (d) During routine maintenance activity the permittee shall:
 - (A) Perform routine maintenance activity during source testing for verified emission factors, or
 - (B) Determine emissions in accordance with Section (10) of this rule.
- (e) The emission factor need not be adjusted if the permittee demonstrates to the Department that the pollutant emissions do not increase during startup and shutdown, and for conditions that are not accounted for the in procedure(s) otherwise used to document actual emissions (eg. NO, emissions during an ESP failure).
- (10) A verified emission factor developed pursuant to OAR 340-20-500 through 340-20-660 and approved by the Department can not be used if a process change occurs that would affect the accuracy of the verified emission factor.
- (11) The permittee may elect to use verified emission factors for source categories if the Department determines the following criteria are met:

- (a) The verified emission factor for a source category shall be based on verified emission factors from at least three individual sources within the source category,
- (b) Verified emission factors from sources within a source category shall be developed in accordance with OAR 340-20-650.
- (c) The verified emission factors from the sources shall not differ from the mean by more than twenty percent, and
- (d) The source category verified emission factor shall be the mean of the source verified emission factors plus the average of the source emission estimate adjustment factors.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 14, f. & ef. 1-23-92

[LATE AND UNDERPAYMENT INTERIM EMISSION FEES] Late And Underpayment Interim Emission Fees 340-20-660

- (1) Notwithstanding any enforcement action, the permittee shall be subject to a late payment fee of:
 - (a) Two hundred dollars (\$200) for payments postmarked more than seven (7) or less than thirty (30) days late, and
 - (b) Four hundred dollars (\$400) for payments postmarked on or over thirty (30) days late.
- (2) Notwithstanding any enforcement action, the Department may assess an additional fee of the greater of four hundred (\$400) or twenty percent (20%) of the amount underpaid for substantial underpayment.

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 20 - DEPARTMENT OF ENVIRONMENTAL QUALITY

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

- A. Late Payment
- D. Modeling Review
- a) 8-30 days \$200 b) > 30 days \$400
- a) Screening methodology \$ 500 b) Refined methodology \$1,000
- E. Alternative Emission Control

Review - \$1,500

- B. BACT/LAER Determination \$12,500 each
- C. Ambient Monitoring Network Review \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air	Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
1.	Seed cleaning located in special control areas, commercial operations only (not elsewhere included)	0723	75	400	610
2.	Reserved				
3.	Flour and other grain mili products in special control areas a) 10,000 or more tons/yr b) Less than 10,000 tons/yr	2041	75 75	1300 1000	1200 515
4.	Cereal preparations in special control areas	2043	75	1300	865
5.	Blended and prepared flour in special control areas a) 10,000 or more tons/yr b) Less than 10,000 tons/yr	2045	75 75	1300 1000	865 500
6.	Prepared feeds for animals and fowl in special control areas a) 10,000 or more tons/yr b) Less than 10,000 tons/yr	2048	75 75	1300 800	1200 945
7.	Beet sugar manufacturing	2063	75	1700	5955
8.	Rendering plants a) 10,000 or more tons/yr input b) Less than 10,000 tons/yr input	2077	75 75	1600 1200	1920 1040
9.	Coffee roasting, 30 tons/yr or more roasted product	2095	75	800	785
10.	Sawmills and/or planing mills a) 25,000 or more bd.ft./ shift finished product b) Reserved	2421, 2426	75	800	1200
11.	Reserved				
12.	Reserved			,	

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

A. Late Payment
a) 8-30 days \$200

D. Modeling Review

- a) Screening methodology \$ 500
- E. Alternative Emission Control Review - \$1,500

b) > 30 days \$400

b) Refined methodology

\$1,000

- B. BACT/LAER Determination \$12,500 each
- C. Ambient Monitoring Network Review \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

Air	Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application ,	Annual Compliance Determination Fee
	Millwork (including structural wood members), 25,000 or more bd.ft./shift input Plywood manufacturing and/or veneer drying a) 25,000 or more sq.ft./hr, 3/8" basis finished product b) 10,000 or more but less than 25,000 sq.ft./hr, 3/8" basis finished product c) Less than 10,000 sq.ft./hr,	· 2431, 2439 2435, 2436	75 75 75	600 2500 1800	945 2420 1635
15.	3/8" basis finished product Reserved		75	600	865
16.	Wood preserving (excluding waterborne)	2491	75	1000	960
17.	Particleboard manufacturing (including strandboard, flakeboard and waferboard) a) 10,000 or more sq.ft./hr, 3/4" basis finished product b) Less than 10,000 sq.ft./hr, 3/4" basis finished product	2493	75 75	2500 1200	2850 1360
18.	Hardboard manufacturing (including fiberboard) a) 10,000 or more sq.ft./hr, 1/8" basis finished product b) Less than 10,000 sq.ft./hr, 1/8" basis finished product	2493	75 75	2500 1200	2340 1200
19.	Battery separator mfg.	2499	75	1000	2080

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

A. Late Payment a) 8-30 days \$200 D. Modeling Review

- a) Screening methodology \$ 500 b) Refined methodology \$1,000

E. Alternative Emission Control

Review - \$1,500

B. BACT/LAER Determination - \$12,500 each

b) > 30 days \$400

C. Ambient Monitoring Network Review - \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

Air	Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
20.	Furniture and fixtures a) 25,000 or more bd.ft./ shift input b) Reserved	2511	75	600	945
21.	Pulp mills, paper mills, and paperboard mills a) Kraft, sulfite, & neutral sulfite only b) Other - 100 tons or more of emissions	2611, 2621, 2631	75 75	5000 5000	10355 10355
22.	Building paper and building- board mills	2621, 2493	75	800	785
23.	Alkalies and chlorine mfg. a. High cost b. Low cost	2812	75 75	2450 1400	2750 2065
24.	Calcium carbide manufacturing a. High cost b. Low cost	2819	75 75	2625 1500	2750 2065
25.	Nitric acid manufacturing a. High cost b. Low cost	2819	75 75	1750 1000	1385 1040
	Ammonia manufacturing a. High cost b. Low cost	2819	75 75	1750 1000	1600 1200
27.	Industrial inorganic and organic chemicals manufacturing (not elsewhere included) a. High cost b. Low cost	2819, 2869	75 75	2275 1300	1960 1475

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

- A. Late Payment
- D. Modeling Review

E. Alternative Emission Control

- a) 8-30 days \$200 b) > 30 days \$400
- a) Screening methodology \$ 500 b) Refined methodology \$1,000

Review - \$1,500

- B. BACT/LAER Determination \$12,500 each
- C. Ambient Monitoring Network Review \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

Air	Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
28.	Synthetic resin manufacturing a. High cost b. Low cost	2821	75 75	1750 1000	1600 1200
29.	Charcoal manufacturing	2861	75	1400	2500
30.	Pesticide manufacturing	2879	75	2500	10355
31.	Petroleum refining a) Refining, general b) Asphalt production by distillation	2911	75 75	5000 1000	10355 1200
32.	Reserved				
33.	Asphalt blowing plants	2952	75	1000	1555
34.	Asphaltic concrete paving plants a) Stationary b) Portable	2951	75 75	500 500	590 7 50
35.	Asphalt felts or coating	2952	75	500	900
36.	Redefining of lubricating oils and greases, and reprocessing of oils and solvents for fuel	2992	75	900	1120
37.	Glass container manufacturing	3221	75	1000	1475
38.	Cement manufacturing	3241	75	3200	7585
39.	Concrete manufacturing, including redimix and CTB	3271, 3272, 3273	75	200	320
40.	Lime manufacturing	3274	75	1500	785
41.	Gypsum products	3275	75	800	. 865

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

- A. Late Payment
- D. Modeling Review
- a) 8-30 days \$200 b) > 30 days \$400
- a) Screening methodology \$ 500 b) Refined methodology \$1,000
- E. Alternative Emission Control
 - Review \$1,500

- B. BACT/LAER Determination \$12,500 eachC. Ambient Monitoring Network Review \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

Air	Contaminant Source	Standard Industria Classification Num (Reference Only)		Application Processing Fee	Annual Compliance Determination Fee
					•
42.	Rock crusher a) Stationary b) Portable	1442, 1446, 329	75 75 75	450 450	590 750
43.	Steel works, rolling and finishing mills, electrometallurgical products	3312, 3313	75	2500	2065
44.	Incinerators a) 250 or more tons/day capacity or any off-site infectiou	4953 s			
	waste incinerator b) 50 or more but less than	-	75	12000	5170
	250 tons/day capacity c) 2 or more but less than		75	3000	1570
	50 tons/day capacity d) Crematoriums and pathological waste incinerators, less than		75	500	610
	2 tons/day capacity e) PCB and/or hazardous		75	500	610
	waste incinerator		75	12000	5170
45.	Malleable iron foundries, Steel investment foundries, Steel Foundries (not else- where classified) a) 3,500 or more tons/yr production	3321, 3322, 332 3325	75	2500	1810
	b) Less than 3,500 tons/yr production		75	600	945
46.	Primary aluminum production	3334	75	5000	10355
47.	Primary smelting of zirconium or hafnium	3339	75	5000	10355

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

A. Late Payment a) 8-30 days \$200

b) > 30 days \$400

D. Modeling Review

a) Screening methodology \$ 500b) Refined methodology \$1,000

Chandend Induction

E. Alternative Emission Control

Review - \$1,500

B. BACT/LAER Determination - \$12,500 each

C. Ambient Monitoring Network Review - \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

Air	Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
				ž.	
48.	Primary smelting and refining of ferrous and nonferrous metals (not elsewhere classified) a) 2,000 or more tons/yr production b) Less than 2,000 tons/yr production	3331, 3339	75 75	2500 500	4480 1730
49. 	Secondary smelting and refining of nonferrous metals, 100 or more tons/yr metal charged	3341	75	1200	1200
50.	Nonferrous metals foundries, 100 or more tons/yr metal charged	3363, 3364, 3365, 3366, 3369	75	600	1040
51.	Reserved				
52.	Galvanizing and pipe coating (excluding all other activities)	3479	75	500	785
53.	Battery manufacturing	3691	75	600	1040
54.	Grain elevators, intermediate storage only, located in special control areas (not elsewhere classified) a) 20,000 or more tons/yr grain	4221			
	processed b) Less than 20,000 tons/yr grain		75	900	1635
	processed	•	75	500	785
55.	Electric power generation a) Wood or Coal Fired, 25 MW or more	4911*	75	20000	10355
	b) Reservedc) Oil or Natural Gas Fired,- 25 MW or more		75	1800	2500

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

	a) 8-30 days \$200 a)	ing Review Screening methodology Refined methodology		ernative Emission Con iew - \$1,500	trol
	B. BACT/LAER Determination - \$12,5 C. Ambient Monitoring Network Revi		(nar	n-technical permit mod me change, ownership ilar) - \$50	
NOTE	Persons who operate boilers shall applicable category.	include fees as indic	ated in Items 58, 59	9, or 60 in addition	to fee for other
Air	Contaminant Source	Standard Industrial Classification Numbe (Reference Only)	r Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
56.	Fuel burning equipment for Gas production and/or distribution, 10 million or more Btu/hr heat input a) Natural gas transmission b) Natural gas production and/or mfg.	4922, 4925	75 75	1900 1900	1200 1200
57.	Grain elevators, terminal elevators primarily engaged in buying and/or marketing grain, in special control areas 5153 a) 20,000 or more tons/yr grain processed b) Less than 20,000 tons/yr grain processed		75 75	2500 700	2065 785
58.	Fuel Burning equipment within the boundaries of the Portland and Medford- Ashland Air Quality Maintenance Areas, Salem Area Transportation Study Boundary, and Grants Pess Klamath Falls, and LaGrande Urban fuel burning Growth Areas		ill be based on the ent at the site)	total aggregate heat	input of all
	 a) Residual or distillate oil fired, 250 million or more Btu/hr heat in b) Residual or distillate oil fired, 10 or more but less than 250 million Btu/hr heat input. c) Reserved 	put	75 75	1600 1000	1570 865
59.	Fuel Burning equipment within the boundaries of the Portland and Medford-Ashland Air Quality Maintenance Areas, Salem Area Transportation Study Boundary, and Grants Pass Klamath Falls, and LaGrange Urban fuel burning Growth Areas,		ill be based on the ent at the site)	total aggregate heat	input of all

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

a) High cost

	a) 8-30 days \$200 a)	ing Review Screening methodology Refined methodology		native Emission Con 1 - \$1,500	trol
	B. BACT/LAER Determination - \$12,5 C. Ambient Monitoring Network Rev		(name	echnical permit mod change, ownership dr) - \$50	dification transfer, and
NOTE	 Persons who operate boilers shall applicable category. 	include fees as indicate	ed in Items 58, 59,	or 60 in addition	to fee for other
Air (Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
	a) Wood or coal fired, 35 million or more Btu/hr heat input		75	1600	1570
	b) Wood or coal fired, less than 35 million Btu/hr heat input		75	400	865
 60.	Fuel Burning equipment outside the boundaries of the Portland and Medford- Ashland Air Quality Maintenance Areas, Salem Area Transportation Study Boundary, and Grants Pass Klamath Falls, and LaGrange Urban fuel burning Growth Areas		l be based on the to t at the site)	otal aggregate heat	input of all
	All oil fired 30 million or more Btu/hr heat input, and all wood and coal fired 10 million or more Btu/hr heat input		75	1000	. 865
61.	Sources installed in or after 1971 not listed herein which would emit 10 or more tons/yr of any air contaminants including but not limited to particulates, SO _x , or Volatile Organic Compounds (VOC), if the source were to operate uncontrolled. a) High cost b) Medium cost c) Low cost	any	75 75 75	9000 2500 600	6400 1120 480
62.	Sources installed in or after 1971 not listed herein which would emit significant malodorous emissions, as determined by Departmental review of sources which a re known to have similar air contaminant emissions.	any	75	9000 .	6400

75

9000

6400

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

- A. Late Payment a) 8-30 days \$200
- D. Modeling Review
- b) > 30 days \$400
- a) Screening methodology \$ 500
- b) Refined methodology \$1,000
- E. Alternative Emission Control

Review - \$1,500

- B. BACT/LAER Determination \$12,500 eachC. Ambient Monitoring Network Review \$90

F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

Air	Contaminant Source	Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
	b) Medium cost c) Low cost		75 75	2500 600	1120 480
63.	sources not listed herein for which an air quality problem is identified by the Department				
	a) High cost b) Medium cost c) Low cost	any	75 75 75	9000 2500 600	6400 1120 480
64.	Bulk Gasoline Plants regulated by OAR 340-22-120	. 5171	75	400	515
65.	Bulk Gasoline Terminals****	5171	75	4000	1730
66.	Liquid Storage Tanks, 39,000 gallons or more capacity, regulated by OAR 340-22-160 (not elsewhere included)	5169, 5171	75	200/tank	355/tank
67.	can or drum Coating a) 50,000 or more units/mo. b) Less than 50,000 units/mo.	3411, 3412	75 75	6000 400	3105 6 9 0
68.	Paper or other substrate Coating *****,	3861	75	6000	3105
69.	Coating Flat Wood regulated by OAR 340-22-200****	2435	75	2000	1040
70.	Surface Coating, Manufacturing **** a) 100 or more tons VOC/yr b) 10 or more but less than 100 tons VOC/yr	any	75 75	2000 600	1380 690
	c) less than 10 tons VOC/yr (at sources! request)		75	200	290

TABLE 1 AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE (340-20-155)

NOTE: Fees in A-F are in addition to any other applicable fees

A. Late Payment a) 8-30 days \$200 D. Modeling Review

a) Screening methodology \$ 500 b) Refined methodology \$1,000 E. Alternative Emission Control

Review - \$1,500

b) > 30 days \$400

B. BACT/LAER Determination - \$12,500 each C. Ambient Monitoring Network Review - \$90 F. Non-technical permit modification (name change, ownership transfer, and similar) - \$50

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source		Standard Industrial Classification Number (Reference Only)	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee
71.	Flexographic or Rotogravure printing, 60 or more tons VOC/yr per plant	2754, 2759	75	2250	2000
72.	Reserved				
73.	Sources subject to NESHAPS rules (except demolition and renovation)	any	75	400	500
74.	Sources requiring toxic air pollutant review (not elsewhere classified)	any	75	1000	960
75.	Soil Remediation Plants a) Stationary b) Portable	1799	75 75	1000 1000	945 1200

 $_{\star\star}$ Excluding hydro-electric and nuclear generating projects.

Including co-generation facilities of less than 25 megawatts.

^{****} Legal descriptions and maps of these areas are on file in the Department.

Permit for sources in categories 64 through 71 are required only if the source is located in the Portland AQMA, Medford-Ashland AQMA or Salem SATS.

EMISSION STANDARDS AND REGULATIONS

DIVISION 21

GENERAL EMISSION STANDARDS FOR PARTICULATE MATTER

[ED. NOTE: Administrative Order DEQ 16 repealed previous rules OAR 340-21-005 through 340-21-031 (consisting of AP 1, filed 1-14-57; and SA 16, filed 2-13-62).]

Definitions

340-21-005 As used in OAR 340-21-005 through 340-21-060:

- (1) "Coastal Areas" means Clatsop, Tillamook, Lincoln, Coos, and Curry Counties and those portions of Douglas and Lane County west of Range 8 West, Willamette Meridian.
- "Fuel burning equipment" means equipment, other than internal combustion engines, the principal purpose of which is to produce heat or power by indirect heat transfer.
- "Municipal Waste Incinerator" means a device used to reduce the volume of general household wastes by combustion which is capable of processing more than 200 lb/hr of such wastes but which is too small to be classed as a major source as defined by the Department's New Source Review rule, OAR 340-20-220 to 340-20-275.
- "New source" means any air contaminant source installed, constructed, or modified after June 1, 1970.
- (5) "Opacity" means the degree to which an emission reduces
 transmission of light and obscures the view of an object in
 the background as measured in accordance with the
 Department's Source Sampling Manual.
- ([5]6) "Particulate matter" means any matter, except uncombined water, which exists as a liquid or solid at standard conditions.
- ([6]7) "Refuse" means unwanted matter.
- ([7]8) "Refuse burning equipment" means a device designed to reduce the volume of solid, liquid, or gaseous refuse by combustion.
- ([8]9) "Ringlemann Smoke Chart" means the Ringlemann Smoke Chart with instructions for use as published in May, 1967, by the U.S. Department of Interior, Bureau of Mines.
- ([9]10) "Standard conditions" means a temperature of [60]68° Fahrenheit and a pressure of 14.7 pounds per square inch absolute.

"Standard cubic foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from fuel or refuse burning, "standard cubic foot" also implies adjustment of gas volume to that which would result at a concentration of 12% carbon dioxide or 50% excess air.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84

Special Control Areas

340-21-010 OAR 340-21-005 through 340-21-060 are applicable to [T]the following areas of the state [are]established as special control areas[, and are deemed applicable to these regulations and to emission standards for industrial purposes]:

- The counties within the Willamette Valley, [defined as all areas within counties of the state under the jurisdiction of a regional air pollution control authority as of June 1, 1970,]including Benton, Clackamas, Columbia, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill counties. [:]

 - (b) The Mid-Willamette Valley Air Pollution Authority, which includes the counties of Benton, Linn, Marion, Polk, and Yamhill;
 - (c) Lane Regional Air Pollution Authority, which includes
 Lane County.]
- (2) Umpqua Basin, defined as the area bounded by the following line: Beginning at the SW corner of Section 2, T19S, R9W, on the Douglas-Lane County lines and extending due south to the SW corner of Section 14, T32S, R9W, on the Douglas-Curry County lines; thence easterly on the Douglas-Curry and Douglas-Josephine County lines to the intersection of the Douglas, Josephine, and Jackson County

lines; thence easterly on the Douglas-Jackson County line to the intersection of the Umpqua National Forest boundary on the NW corner of Section 32, T32S, R3W; thence northerly on the Umpqua National Forest boundary to the NE corner of Section 36, T25S, R2W; thence west to the NW corner of Section 36, T25S, R4W; thence north to the Douglas-Lane County line; thence westerly on the Douglas-Lane County line to the starting point.

(3) Rogue Basin, defined as the area bounded by the following line: Beginning at the NE corner of T32S, R2E, W.M.; thence south along range line 2E to the SE corner of T39S; thence west along township line 39S to the NE corner of T40S, R7W; thence south to the SE corner of T40S, R7W; thence west to the SE corner of T40S, R9W; thence north on range line 9W to the NE corner of T39S, R9W; thence east to the NE corner of T39S, R8W; thence north on range line 8W to the SE corner of Section 1, T33S, R8W on the Josephine-Douglas County line; thence east on the Josephine-Douglas and Jackson-Douglas County lines to the NE corner of T32S, R1W; thence east along township line 32S to the NE corner of T32S, R2E to the point of beginning.

(4) Within incorporated cities having a population of four thousand (4000) or more, and within three (3) miles of the

corporate limits of any such city.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70

Visible Air Contaminant Limitations 340-21-015

- (1) Existing sources outside special control areas. No person shall cause, suffer, allow, or permit the emission of any air contaminant into the atmosphere from any existing air contaminant source located outside a special control area for a period or periods aggregating more than three minutes in any one hour which is:
 - (a) As dark or darker in shade as that designated as No. 2 on the Ringlemann Chart; or
 - (b) Equal to or greater than 40% opacity.
- (2) New sources in all areas and existing sources within special control areas: No person shall cause, suffer, allow, or permit the emission of any air contaminant into the atmosphere from any new air contaminant source, or from

any existing source within a special control area, for a
period or periods aggregating more than three minutes
in any one hour which is:

- (a) As dark or darker in shade as that designated as No. 1 on the Ringlemann Chart; or
- (b) Equal to or greater than 20% opacity.
- (3) Exceptions to sections (1) and (2) of this rule:
 - (a) Where the presence of uncombined water is the only reason for failure of any emission to meet the requirements of sections (1) and (2) of this rule, such sections shall not apply;
 - (b) Existing fuel burning equipment utilizing wood wastes and located within special control areas shall comply with the emission limitations of section (1) of this rule in lieu of section (2) of this rule.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70

Fuel Burning Equipment Limitations 340-21-020

- (1) No person shall cause, suffer, allow, or permit the emission of particulate matter [,] from any fuel burning equipment in excess of:
 - (a) 0.2 grains per standard cubic foot for existing sources;
- (b) 0.1 grains per standard cubic foot for new sources.
 (2) For sources burning salt laden wood waste on July 1, 1981, where salt in the fuel is the only reason for failure to comply with the above limits and when the salt in the fuel results from storage or transportation of logs in salt water, the resulting salt portion of the emissions shall be exempted from subsection (1)(a) or (b) of this rule and OAR 340-21-015. In no case shall sources burning salt laden woodwaste exceed 0.6 grains per standard cubic foot. Sources which utilize this exemption, to demonstrate compliance otherwise with subsection (1)(a) or (b) of this rule, shall:
 - (a) Not exceed a darkness of Ringleman 2 from the boiler stacks for more than three minutes in any one hour;
 - (b) Submit the results of a particulate emissions source test of the boiler stacks bi-annually.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 12-1979, f. & ef. 6-8-79; DEQ 6-1981, f. & ef. 2-17-81; DEQ 18-1982, f. & ef. 9-1-82

Refuse Burning Equipment Limitations 340-21-025

No person shall cause, suffer, allow, or permit the emission of particulate matter from any refuse burning equipment in excess of:

- (1) For equipment designed to burn 200 pounds of refuse per hour or less, 0.3 grains per standard cubic foot; or
- (2) For equipment designed to burn more 200 pounds of refuse per hour:
 - (a) 0.2 grains per standard cubic foot for existing sources [,]; or
 - (b) 0.1 grains per standard cubic foot for new sources, except that small to medium size municipal waste incinerators located in coastal areas as defined in OAR 340-21-005(1) shall be subject to OAR 340-21-027 and larger municipal incinerators shall be subject to provisions of OAR 340-20-220 [to 340-20-275]through 340-20-276.

[NOTE: Sources subject to this rule may also be subject to OAR 340-25-850 through 340-25-905.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16, f. 6-12-70, ef. 7-11-70; DEQ 1-1984, f. & ef. 1-16-84

Municipal Waste Incinerator in Coastal Areas 340-21-027

(1) No person shall cause, suffer, allow, or permit the operation of any municipal waste incinerator in coastal areas which violates the following emission limits and requirements:

- (a) Particulate Emissions:
 - (A) For municipal waste incinerators capable of processing not more than 50 tons/day of wastes, 0.2 grains per standard cubic foot of exhaust gases:
 - (B) For municipal waste incinerators capable of processing greater than 50 tons/day of wastes, 0.08 grains per standard cubic foot of exhaust gases.
- (b) Minimum Exhaust Gas Temperatures:
 - (A) Prior to the initial charge of wastes and for the first 30 minutes of incineration of the initial charge, 1600°F for one second;
 - (B) For the period beginning 30 minutes after the initial charge of wastes to the time of the final charge, 1800°F for one second or 1700°F for two seconds or a temperature and corresponding residence time linearly interpolated between the aforementioned two points;
 - (C) For a two hour period after the final charge of waste, 1600°F for one second.
- (c) Visible Emissions and Particle Fallout Limitations of OAR 340-21-015 and 340-31-045, respectively.
- Each operator of a municipal waste incinerator in a coastal (2) area shall monitor the exhaust gas temperatures of each of its incinerators with a continuous recording pyrometer. The pyrometer shall be located at a point within the incinerator exhaust system which has been judged by the Department through plan review to represent a place that can demonstrate compliance or non-compliance with minimum exhaust gas temperature requirements in subsection (1)(b) of this rule. The operator shall retain [its]pyrometer records for one year unless at the expiration of the year an enforcement matter is pending against the operator, in which case the operator shall retain the records until the enforcement matter is finally terminated by an Order. The operator shall make fits pyrometer records available to the Department of Environmental Quality upon request.
- (3) In cases of multiple incinerators at one site, the 0.2 grain per standard cubic foot particulate emission standard in subsection (1)(a)(A) of this rule for individual municipal waste incinerators up to 50 tons/day capacity, shall apply only up to a combined capacity of 150 tons/day.

(4) Municipal waste incinerators in coastal areas, installed between 1970 and 1982, of 13 tons/day capacity and less, are exempt from subsection (1)(a) and (b) of this rule, but shall emit particulate at a concentration less than 0.30 gr/scf.

[NOTE: Sources subject to this rule may also be subject to OAR 340-25-850 through OAR 340-25-905.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 1-1984, f. & ef. 1-16-84

Particulate Emission Limitations for Sources Other Than Fuel Burning and Refuse Burning Equipment

340-21-030 No person shall cause, suffer, allow, or permit the emission of particulate matter, from any air contaminant source other than fuel burning equipment or refuse burning equipment, in excess of:

- (1) 0.2 grains per standard cubic foot for existing sources; or
- (2) 0.1 grains per standard cubic foot for new sources.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Particulate Emissions From Process Equipment

Applicability

340-21-035[This rule] OAR 340-21-035 through 340-21-045 shall apply to all industrial processes other than those for which specific emission standards have been adopted. Also excluded are fuel burning and refuse burning equipment in which combustion gases do not mix directly with process materials.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Emission Standard

340-21-040 No person shall cause, suffer, allow, or permit the emission of particulate matter in any one hour from any process in excess of the amount shown in Table 1, for the process weight rate allocated to such process.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Determination of Process Weight 340-21-045

- (1) Process weight per hour is the total weight of all materials introduced into any specific process, which process may cause any discharge of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight by a typical period of time.
- (2) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this rule, the interpretation that results in the minimum value for allowable emission shall apply.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Fugitive Emissions

Definitions

340-21-050 As used in this rule, unless otherwise required by context OAR 340-21-050 through 340-21-060:

- (1) "Fugitive emissions" means dust, fumes, gases, mist, odorous matter, vapors or any combination thereof not easily given to measurement, collection, and treatment by conventional pollution control methods.
- (2) "Nuisance conditions" means unusual or annoying amounts of fugitive emissions traceable directly to one or more specific sources. In determining whether a nuisance condition exists, consideration shall be given to all of the circumstances, including density of population, duration of the activity in question, and other applicable factors.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Applicability

340-21-055 This rule OAR 340-21-050 through 340-21-060 shall [be applicable]apply:

- (1) Within Special Control Areas, as [defined] established in OAR 340-21-010.
- (2) When ordered by the Department, in other areas when the need for application of the rules [-regulation], and the practicability of control measures, have been clearly demonstrated.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Requirements

340-21-060

(1) When fugitive emissions escape from a building or equipment in such a manner and amount as to create nuisance conditions or to violate any regulation, the Department may, in addition to other means of obtaining compliance, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that air contaminants are controlled or removed before discharge to the open air.

- (2) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to the following:
 - (a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - (b) Application of asphalt, oil, water, or other suitable chemicals on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts;
 - (c) Full or partial enclosure of materials stockpiles in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;
 - (d) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
 - (e) Adequate containment during sandblasting or other similar operations;
 - (f) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;
 - (g) The prompt removal from paved streets of earth or other material which does or may become airborne.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Upset Conditions

Introduction

340-21-065 [Renumbered to 340-20-350]

Scheduled Maintenance

340-21-070 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91]

Malfunction of Equipment

340-21-075 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 42-1990, f. 12-13-90, cert. ef. 1-2-91]

Woodstove Certification

Definitions

340-21-100 [Renumbered to 340-34-005; AQ 7, f. & ef. 11/13/91]

Requirements for Sale of New Woodstoves in Oregon

340-21-105 [Renumbered to 340-34-010; AQ 7, f. & ef. 11/13/91]

Exemptions

340-21-110 [Renumbered to 340-34-015; AQ 7, f. & ef. 11/13/91]

Emissions Performance Standards and Certification

340-21-115 [Renumbered to 340-34-050; AQ 7, f. & ef. 11/13/91]

Efficiency Testing Criteria and Procedures

340-21-120 [Renumbered to 340-34-055; AQ 7, f. & ef. 11/13/91]

General Certification Procedures

340-21-125 [Renumbered to 340-34-060; AQ 7, f. & ef. 11/13/91]

Changes in Woodstove Design

340-21-130 [Renumbered to 340-34-065; AQ 7, f. & ef. 11/13/91]

Labelling Requirements

340-21-135 [Renumbered to 340-34-070; AQ 7, f. & ef. 11/13/91]

Permanent Label

340-21-140 [DEQ 11-1984, f. & ef. 6-26-84; Repealed by DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90]

Contents of Permanent Label

340-21-145 [DEQ 11-1984, f. & ef. 6-26-84; Repealed by DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90]

Removable Label

340-21-150 [Renumbered to 340-34-075; AQ 7, f. & ef. 11/13/91]

Label Approval

340-21-155 [Renumbered to 340-34-080; AQ 7, f. & ef. 11/13/91]

Laboratory Accreditation Requirements

340-21-160 [Renumbered to 340-34-085; AQ 7, f. & ef. 11/13/91]

Accreditation Criteria

340-21-165 [Renumbered to 340-34-090; AQ 7, f. & ef. 11/13/91]

Application for Laboratory Efficiency Accreditation

340-21-170 [Renumbered to 340-34-095; AQ 7, f. & ef. 11/13/91]

On-Site Laboratory Inspection and Stove Testing Proficiency Demonstration

340-21-175 [Renumbered to 340-34-100; AQ 7, f. & ef. 11/13/91]

Accreditation Application Deficiency, Notification and Resolution 340-21-180 [Renumbered to 340-34-105; AQ 7, f. & ef. 11/13/91]

Final Department Administrative Review and Certificate of Accreditation

340-21-185 [Renumbered to 340-34-110; AQ 7, f. & ef. 11/13/91]

Civil Penalties, Revocation, and Appeals

340-21-190 [Renumbered to 340-34-115; AQ 7, f. & ef. 11/13/91]

Industrial Contingency Requirements for PM₁₀ Nonattainment Areas

Purpose

340-21-200 OAR 340-21-200 through 340-21-245 establish contingency control requirements for existing industrial sources as required under section 172(c) of the Clean Air Act. These requirements become effective in a PM_{10} nonattainment area if the area fails to attain the national ambient air quality standard for PM_{10} by the applicable attainment date in the Clean Air Act.

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Relation to Other Rules

340-21-205 OAR 340-21-200 through 340-21-245 shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent conflict, the most stringent rule shall apply.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Applicability

340-21-210

- (1) OAR 340-21-200 through 340-21-245 shall apply in a PM_{10} nonattainment area upon publication by EPA of notice in the Federal Register that the area has failed to attain the national ambient air quality standard for PM_{10} by the attainment date required in the Clean Air Act.
- (2) (a) OAR 340-21-200 through 340-21-245 shall apply to a major source located outside of a PM_{10} nonattainment area upon a determination by the Department based upon a study conducted under subsection (b) of this section that the source has a significant impact on a PM_{10} nonattainment area affected under section (1) of this rule.
 - (b) Upon request of the Department, the owner or operator of any source with the potential to have a significant impact on a PM₁₀ nonattainment area shall conduct, prior to the attainment date required in the Clean Air Act and in accordance with a study protocol approved by the Department, a receptor and dispersion modeling study of the impact of emissions from the source on the PM₁₀ nonattainment area.

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Definitions

340-21-215 As used in OAR 340-21-200 through 340-21-245 {, unless otherwise required by context}:

- (1) "Air Conveying System" means an air moving device, such as a fan or blower, associated ductwork, and a cyclone or other collection device, the purpose of which is to move material from one point to another by entrainment in a moving air stream.
- (2) "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.
- (3) "Collection Efficiency" means the overall performance of the air cleaning device in terms of ratio of weight of material collected to total weight of input to the collector.
- "Contingency Requirements" means the requirements of OAR 340-21-200 through 340-21-245.
- (5) "Design Criteria" means the numerical as well as narrative description of the basis of design including, but not necessarily limited to, design flow rates, temperatures, humidities, descriptions of the types and chemical species of contaminants, uncontrolled and expected controlled mass emission rates and concentrations, scopes of any vendor-supplied and owner-supplied equipment and utilities, and a description of any operational controls.
- (6) "EPA" means the United States Environmental Protection Agency.
- (7) "Fugitive Emissions" means dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof not easily given to measurement, collection and treatment by conventional pollution control methods.
- (8) "General Arrangement", [in the context of the compliance schedule requirements in this division,] means drawings or reproductions which show, as a minimum, the size and location of the control equipment on a source plot plan, the location of equipment served by the emission-control system, the location and elevation above grade of the ultimate point of contaminant emission to the atmosphere, and the diameter of the emission vent.

- (9) "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.
- (10) "Large Sawmill" means a sawmill and/or planing mill which produces 25,000 or more board feet/shift of finished product.
- "Major Source" [is defined in OAR 340-20-225] means a stationary source which emits, or has the potential to emit, any pollutant regulated under the Clean Air Act at a Significant Emission Rate (OAR 340-20-225(25)).
- (13) "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background as measured in accordance with the Department's Source Sampling Manual.
- (1[3]4) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.
- $(1{4}<u>5</u>)$ "Particulate Matter" means all solid or material, other than uncombined water, emitted to the ambient air as measured in accordance with the Department Source Sampling Manual. Particulate matter emission determinations shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run shall have a minimum sampling time of one hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers shall be tested with DEQ Method 5; wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.
- (1[5]6) "Plywood" means a flat panel built generally of an odd number of thin sheets of veneers of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it.
- "Press/Cooling Vents" means any openings, generally located immediately above the board press or board cooling area, through which particulate and gaseous emissions from panelboard manufacturing (including, but not limited to, particleboard and hardboard) are exhausted, either by natural draft or by powered fan, from the building housing the process.

- "Significant Impact" means an annual average impact of 1.0 μ g/m³ or 24-hour average impact of 5.0 μ g/m³ of PM₁₀ from a source at the point of maximum concentration within a PM₁₀ nonattainment area as computed by a receptor and dispersion model approved by the Department.
- (1[8]9) "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Compliance Schedule for Existing Sources 340-21-220

- (1) Except as provided in sections (2) and (3) of this rule, compliance with applicable contingency requirements for a source that is located in an area prior to the date the contingency requirements first apply under OAR 340-21-210 shall be demonstrated as expeditiously as possible, but in no case later than the following schedule:
 - (a) No later than three months after the date the contingency requirements first apply under OAR 340-21-210, the owner or operator shall submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval; and if the Department disapproves the Design Criteria, the owner or operator shall revise the Design Criteria to meet the Department's objections and submit the revised Design Criteria to the Department no later than one month after receiving the Department's disapproval;
 - (b) No later than three months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department a General Arrangement and copies of purchase orders for any emission-control devices;
 - (c) No later than eight months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department vendor

drawings as approved for construction of any emissioncontrol devices and specifications of any other major equipment in the emission control system in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;

(d) No later than nine months after receiving the Department's approval of the Design Criteria, the owner or operator shall begin construction of any emissioncontrol devices;

(e) No later than sixteen months after receiving the Department's approval of Design Criteria, the owner or operator shall complete construction in accordance with the Design Criteria;

(f) No later than thirty months from the date the contingency requirements first apply under OAR 340-21-210 the owner or operator shall demonstrate compliance with the applicable contingency requirements.

(2) Section (1) of this rule shall not apply if the owner or operator has demonstrated within six months after the date the contingency requirements first apply under OAR 340-21-210 that the source is capable of being operated and is operated continuous compliance with applicable contingency requirements and the Department has agreed with the demonstration in writing. The Department may grant an extension of up to twelve months after the date the contingency requirements first apply under OAR 340-21-210 for a source to demonstrate compliance under this section. The applicable contingency requirements shall be incorporated in the Air Contaminant Discharge Permit issued to the source.

(3) The Department may adjust the schedule specified in paragraphs (a) through (e) of section (1) of this rule if necessary to ensure timely compliance with paragraph (f) of section (1) of this rule.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Wood-Waste Boilers

340-21-225 No person shall cause or permit the emission into the atmosphere from any wood-waste boiler that is located on a plant site where the total heat input capacity from all wood-waste boilers is greater than 35 million BTU/hr:

- (1) Any air contaminant for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 10% opacity, unless the permittee demonstrates by source test that the source can comply with the emission limit in section (2) of this rule at higher opacity but in no case shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.
- (2) Particulate matter in excess of 0.05 grains per standard cubic foot, corrected to 12% CO₂.

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Wood Particle Dryers at Particleboard Plants 340-21-230

- (1) No person shall cause or permit the total emission of particulate matter from all wood particle dryers at a particleboard plant site to exceed 0.40 pounds per 1,000 square feet of board produced by the plant on a 3/4" basis of finished product equivalent.
- (2) No person shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed 10% opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Hardboard Manufacturing Plants

340-21-235 No person shall cause or permit the total emissions of particulate matter from all sources within a hardboard plant, other than press/cooling vents, in excess of 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Air Conveying Systems 340-21-240

(1) No person shall cause or permit the emission of particulate matter in excess of 0.1 grains per standard cubic foot from any air conveying system emitting less than or equal to 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990.

(2) All air conveying systems emitting greater than 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990 shall be equipped with a control system with a collection efficiency of at least 98.5 percent or equivalent control as approved by the Department.

(3) No person shall cause or permit the emission of any air contaminant which is equal to or greater than 5% opacity from any air conveying system subject to section (2) of this rule.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

Fugitive Emissions

340-21-245 The owner or operator of a large sawmill, any plywood mill or veneer manufacturing plant, particleboard plant, hardboard plant, or charcoal manufacturing plant that is located in an area subject to contingency requirements under OAR 340-21-210 shall comply with OAR 340-30-043.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth: ORS Ch. 468 & 468A Hist.: AQ 6, f.& ef. 11-13-91

TABLE 2 (340-21-115)

CUMULATIVE PROBABILITY FOR A GIVEN HEAT OUTPUT DEMAND BASED ON OREGON CLIMATE (POPULATION WEIGHTED*)

Heat Output (Btu/hr)	Cumulative Probability (P)	Heat Output (Btu/hr)	Cumulative Probability (P)
0	0.02640	24,600	0.97873
600	0.03071	25,200	0.98256
1,200	0.03503	25,800	0.98540
1,800	0.04130	26,400	0.98713
2,400 3,000	0.04888	27,000 27,600	0.98972 0.99096
3,600	0.05863	28,200	0.99237
4,200	0.06879 0.08122	28,800	0.99316
4,200	0.08122	29,400	0.99408
5,400	0.11586	30,000	0.99472
6,000	0.13522	30, 600	0.99506
6,600	0.15803	31,200	0.99526
7,200	0.18394	31,800	0.99563
7,800	0.21615	32,400	3.99589
8,400	0.24867	33,000	0.99679
9,000	0.28798	33,600	0.99711
9,600	0.32621	34,200	0.99745
10,200	0.37040	34,800	0.99774
10,800	0.41575	35,400	0.99787
11,400	0.46226	36,000	0.99817
12,000	0.50831	36,600	0.99837
12,600	0.55778	37,200	0.99851
13,200	0.60326	37,800	0.99858
13,800	0.64770	38,400	0.99882
14,400	0.68572	39,000	0.99899
15,000	0.72483	39,600	0.99915
15,600	0.75743	40,200	0.99933
16,200	0.78883	40,800	0.99945
16,800	0.81816	41,400	0.99958
17,400	0.84386	42,000	0.99968
18,000	0.86822	42,600	0.99974
18,600	0.88951	43,200	0.99986
19,200	0.90667	43,800	0.99992
19,800	0.92228	44,400	0.99995
20,400	0.93620	45,000	0.99996
21,000	0.94720	45,600	0.99999
21,600	0.95545	46,200	1.00000

22,200	0.96158	46,800	1.00000
22,800	0.96699	47,400	1.00000
23,400	0.97151	48,000	1.00000
24,000	0.97515	48.000	1.00000

*Based on ambient temperature data during October through April, 1967-73 with population weighting from eight Oregon locations (Portland, Medford, Pendleton, Astoria, Burns, North Bend, Redmond, and Salem).

EXHIBIT 1 (340-21-115)

Calculating Weighted Average Particulate Emission

$$E = K_{1}E_{1} + K_{2}K_{2} + K_{3}E_{3} \dots + K_{n}E_{n}$$

$$K_{1} + K_{2} + K_{3} \dots + K_{n}$$

where: E is the weighted average particulate emission rate in grams per hour; E_1 , E_2 , $E_3 \cdots E_n$ are the particulate emission rates in grams per hour from test runs 1 through n in order of increasing heat output; and K_1 , H_2 , K_3 . . . K_n are the weighting factors for test runs 1 through n. The weighting factors (K_i) are calculated as follows:

$$K_i = P_{i+1} - P_{i-1}$$

where P_i is the cumulative probability from Table 2 for the heat output measured during each test run, P_o = 0, and P_{n+1} = 1.

DIVISION 22

GENERAL GASEOUS EMISSIONS

Sulfur Content of Fuels

Definitions

340-22-005 As used in these regulations, unless otherwise required by context OAR 340-22-005 through 340-22-025:

- (1) "ASTM" means the American Society for Testing and Materials.
- (2) "Distillate Fuel Oil" means any oil meeting the specifications of ASTM Grade 1 or Grade 2 fuel oils.
- (3) "Residual Fuel Oil" means any oil meeting the specifications of ASTM Grade 4, Grade 5, or Grade 6 fuel oils.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Residual Fuel Oils 340-22-010

- [(1) After July 1, 1972, no person shall sell, distribute, use,
 or make available for use, any residual fuel oil containing
 more than 2.5 percent sulfur by weight.]
- (2) After July 1, 1974, n]No person shall sell, distribute, use, or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u> Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 87, f. 3-25-75, ef. 4-25-75; DEQ 141, f. & ef. 8-25-77

Distillate Fuel Oils

340-22-015 [After July 1, 1972, n]No person shall sell, distribute, use, or make available for use, any distillate fuel oil containing more than the following percentages of sulfur:

- (1) ASTM Grade 1 fuel oil 0.3 percent by weight.
- (2) ASTM Grade 2 fuel oil 0.5 percent by weight.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Coal

340-22-020

- (1) [After July 1, 1972] Except as provided in section (2), no person shall sell, distribute, use, or make available for use, any coal containing greater than 1.0 percent sulfur by weight.
- (2) Except as provided for in sections (4) and (5) of this rule, no person shall sell, distribute, use or make available for use; after July 1, 1983, any coal or coal containing fuel with greater than 0.3% sulfur and 5% volatile matter as defined in ASTM Method D3175 for direct space heating within the Portland, Salem, Eugene-Springfield, and Medford-Ashland Air Quality Maintenance Areas. For coals subjected to a devolatilization process, compliance with the sulfur limit may be demonstrated on the sulfur content of coal prior to the devolatilization process.
- (3) Distributors of coal or coal containing fuel destined for direct residential space heating use shall keep records for a five year period which shall be available for DEQ inspection and which:
 - (a) Specify quantities of coal or coal containing fuels sold:
 - (b) Contain name and address of customers who are sold coal or coal containing fuels;
 - (c) Specify the sulfur and volatile content of coal or the coal containing fuel sold to residences in the Portland, Salem, Eugene-Springfield, and Medford-Ashland Air Quality Maintenance Areas.
- (4) Users of coal for direct residential space heating in 1980 who apply in writing by July 1, 1983 and receive written approval from the Department shall be exempted from the requirement of section (2) of this rule provided they certify that they used more than one-half (1/2) ton of coal in 1980.
- (5) Distributors may sell coal not meeting specification in section (2) of this rule to those users who have applied for and received the exemption provided for in section (4) of this rule.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch.[459] 468 & 468A
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 3-1982, f. & ef. 1-29-82

Exemptions

340-22-025 Exempted from the requirements of OAR 340-22-010, 340-22-015, and 340-22-020 are:

- (1) Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives, and diesel motor vehicles.
- (2) With prior approval of the Department of Environmental Quality, fuels used in such a manner or control provided such that sulfur dioxide emissions can be demonstrated to be equal to or less than those resulting from the combustion of fuels complying with the limitations of OAR 340-22-010, 340-22-015, and 340-22-020.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

General Emission Standards for Sulfur Dioxide

Definitions

340-22-050 As used in this regulation, unless otherwise required by context OAR 340-22-050 through 340-22-055:

- (1) "Fuel burning equipment" means equipment, other than internal combustion engines, the principal purpose of which is to produce heat or power by indirect heat transfer.
- (2) "New source" means any air contaminant source installed, constructed, or modified after January 1, 1972.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Fuel Burning Equipment

340-22-055 The following emission standards are applicable to new sources only:

- (1) For fuel burning equipment having more than 150 million BTU per hour heat input, but not more than 250 million BTU per hour heat input, no person shall cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:
 - (a) 1.4 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned;
 - (b) 1.6 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.
- (2) For fuel burning equipment having more than 250 million BTU per hour heat input, no person shall cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:
 - (a) 0.8 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned;
 - (b) 1.2 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

General Emission Standards for Volatile Organic Compounds

Introduction

340-22-100

(1) {These rules}OAR 340-22-100 through 340-22-300 regulate sources of VOC which contribute to the formation of photochemical oxidant, mainly ozone.

- (2) Since ozone standards are not violated in Oregon from October through April (because of insufficient solar energy), natural gas-fired afterburners may be permitted, on a case-by-case basis, to lay idle during the winter months.
- (3) Sources regulated by these rules OAR 340-22-100 through 340-22-300 are:
 - (a) New sources] new and all existing sources in the Portland and Medford AQMA's and in the Salem SATS for listed in subsections ([b]a) through ([m]n) of this section (; including:
 - ({b|a) Gasoline stations, underground tank filling;
 - (felb) Bulk gasoline plants and delivery vessels;
 - (fd]c) Bulk gasoline terminal loading;
 - (fe]d) Cutback asphalt;
 - ({f]e) Petroleum refineries, petroleum refinery leaks;

 - ({fh]g) Coating including paper coating and miscellaneous painting;
 - (h) Aerospace component coating
 - (i) Degreasers;
 - (j) Asphaltic and coal tar pitch in roofing;
 - (k) Flat wood coating;
 - (1) Rotogravure and Flexographic printing;
 - (m) Perchloroethylene dry cleaning [.];
 - (n) Automotive gasoline.
- (4) Sources not covered by the source categories listed in section (3) of this rule which emit or have the potential to emit over 100 tons of VOC per year are subject to OAR 340-22-104(5).

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Definitions

340-22-102 As used in these regulations, unless otherwise required by context OAR 340-22-100 through 340-22-300:

(1) "Aerospace component" means the fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile or space vehicle.

- (2) "Air dried coating" means coatings which are dried by the use of air at ambient temperature.
- (3) "Applicator" means a device used in a coating line to apply coating.
- (4) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by railroad car or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.
- (5) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.
- (6) "Can Coating" means any coating applied by spray, roller, or other means to the inside and/or outside surfaces of metal cans, drums, pails, or lids.
- (7) "Carbon Bed Breakthrough" means the initial indication of depleted adsorption capacity characterized by a sudden measurable increase in VOC concentration exiting a carbon adsorption bed or column.
- (8) "Certified Underground Storage Device" means vapor recovery equipment for underground storage tanks as certified by the State of California Air Resources Board Executive Orders, copies of which are on file with the Department, or which has been certified by other air pollution control agencies and approved by the Department.
- (9) "Class II hardboard paneling finish" means finishers which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.
- (10) "Clear coat" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color.
- (11) "Coating" means a material applied to a surface which forms a continuous film and is used for protective and/or decorative purposes.
- (12) "Coating Line" means one or more apparatus or operations which include a coating applicator, flash-off area, and oven or drying station wherein a surface coating is applied, dried, and/or cured.
- (13) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

- (14) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen, and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.
- (15) "Custody transfer" means the transfer of produced petroleum and/or condensate after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
- (16) "Cutback asphalt" means a mixture of a base asphalt with a solvent such as gasoline, naphtha, or kerosene. Cutback asphalts are rapid, medium, or slow curing (known as RC, MC, SC), as defined in ASTM D2399.
- (17) "Day" means a 24-hour period beginning at midnight.
- (18) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks.
- (19) "Dry cleaning facility" means any facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes but is not limited to any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.
- (20) "Emission Unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation.
- (21) "External floating roof" means a cover over an open top storage tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (22) "Extreme performance coatings" means coatings designed for extreme environmental conditions such as exposure to any one of the following: continuous ambient weather conditions, temperature consistently above 95 °C., detergents, abrasive and scouring agents, solvents, corrosive atmosphere, or similar environmental conditions.
- (23) "Extreme performance interior topcoat" means a topcoat used in interior spaces of aircraft areas requiring a fluid, stain or nicotine barrier.
- (24) "Fabric coating" means any coating applied on textile fabric. Fabric coating includes the application of coatings by impregnation.

- (25) "Flexographic Printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.
- (26) "Freeboard ratio" means the freeboard height divided by the width (not length) of the degreaser's air/solvent area.
- (27) "Forced air dried coating" means a coating which is dried by the use of warm air at temperatures up to 90 °C. (194 °F.).
- (28) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 27.6 kPa (4.0 psi) or greater which is used to fuel internal combustion engines.
- (29) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.
- (30) "Gas service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the gaseous phase.
- (31) "Hardboard" is a panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press.
- (32) "Hardwood plywood" is plywood whose surface layer is a veneer of hardwood.
- (33) "High Performance Architectural Coating" means coatings applied to aluminum panels and moldings being coated away from the place of installation.
- (34) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floating upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (35) "Large appliance" means any residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products.
- "Leaking component" means any petroleum refinery source which has a volatile organic compound concentration exceeding 10,000 parts per million (ppm) when tested in the manner described in method 31 and 33 on file with the Department. These sources include, but are not limited to, pumping seals, compressor seals, seal oil degassing vents, pipeline valves, flanges and other connections, pressure relief devices, process drains, and open-ended pipes. Excluded from these sources are valves which are not externally regulated.

- (37) "Liquid-mounted" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.
- (38) "Liquid service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the liquid phase.
- (39) "Low solvent coating" means a coating which contains a lower amount of volatile organic compound than conventional organic solvent borne coatings. Low solvent coatings include waterborne, higher solids, electrodeposition and powder coatings.
- (40) "Major modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase for any pollutant subject to regulation under the Clean Air Act. [Refer to OAR 340-20-225(14).]
- (41) "Major source" means a stationary source which emits or has the potential to emit any pollutant regulated under the Clean Air Act at a significant emission rate. [Refer to OAR 340-20-225(15).]
- (42) "Maskant for chemical processing" means a coating applied directly to an aerospace component to protect surface areas when chemical milling, anodizing, aging, bonding, plating, etching and/or performing other chemical operations on the surface of the component.
- (43) "Miscellaneous metal parts and products" means any metal part or metal product, even if attached to or combined with a nonmetal part or product, except cans, coils, metal furniture, large appliances, magnet wires, automobiles, ships, and airplane bodies.
- (44) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.
- (45) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (46) "Oven-dried" means a coating or ink which is dried, baked, cured, or polymerized at temperatures over 90 °C. (194 °F.).
- (47) "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into pack-aging products and labels for articles to be sold.
- (48) "Paper coating" means any coating applied on paper, plastic film, or metallic foil to make certain products, including (but not limited to) adhesive tapes and labels, book covers,

- post cards, office copier paper, drafting paper, or pressure sensitive tapes. Paper coating includes the application of coatings by impregnation and/or saturation.
- (49) "Person" means the federal government, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.
- (50) "Petroleum refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum, crude oil, or through redistillation, cracking, or reforming of unfinished petroleum derivatives. "Petroleum refinery" does not mean a re-refinery of used motor oils or other waste chemicals. "Petroleum refinery" does not include asphalt blowing or separation of products shipped together.
- (51) "Plant site basis" means all of the sources on the premises (contiguous land) covered in one Air Contaminant Discharge Permit unless another definition is specified in a Permit.
- (52) "Potential emissions before add-on controls" means the quantity of volatile organic material emissions that theoretically could be emitted by a stationary source, based on the design capacity or maximum production capacity of the source and 8760 hours per year before the application of capture systems or control devices.
- (53) "Pretreatment wash primer" means a coating which contains a minimum of 0.5% acid by weight for surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- (54) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.
- (55) "Printing" means the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage.
- (56) "Prime coat" means the first of two or more films of coating applied in an operation.
- (57) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

- (58) "Reasonably Available Control Technology" or "RACT" means the lowest emission limitation that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.
- (59) "Roll printing" means the application of words, designs and pictures to a substrate by means of hard rubber or steel rolls.
- (60) "Sealant" means a coating applied for the purpose of filing voids and providing a barrier against penetration of water, fuel or other fluids or vapors.
- (61) "Specialty Printing" means all gravure and flexographic operations which print a design or image, excluding publication gravure and packaging printing. Specialty Printing includes printing on paper plates and cups, patterned gift wrap, wallpaper, and floor coverings.
- (62) "Splash filling" means the filling of a delivery vessel or stationary storage tanks through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.
- (63) "Source" means any building, structure facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.
- (64) "Source category" means all sources of the same type or classification.
- (65) "Submerged fill" means any fill pipe or hose, the discharge opening of which is entirely submerged when the liquid is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe, the discharge of which is entirely submerged when the liquid level is 18 inches, or is twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.
- (66) "Thin particleboard" means a manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.
- (67) "Thirty-day rolling average" means any value arithmetically averaged over any consecutive thirty days.
- (68) "Tileboard" means panelling that has a colored waterproof surface coating.
- (69) "Topcoat" means a coating applied over a primer or intermediate coating for purposes such as appearance, identification or protection.

- (70) "True Vapor Pressure" means the equilibrium pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks", February, 1980.
- (71) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.
- (72) "Vapor-mounted" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the primary seal, the tank shell, the liquid surface, and the floating roof.
- (73) "Volatile Organic Compound", or "VOC", means any organic compound which participates in atmospheric photochemical reactions to form ozone; that is, any precursor organic compound which would be emitted during use, application, curing or drying of a surface coating, solvent, or other material. Excluded from this category are those compounds which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity which includes methane, ethane, methylene chloride, 1,1,1-trichloroethane (methyl chloroform), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-13), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115).

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Limitations and Requirements

General Requirements for New and Existing Sources 340-22-104

- (1) Notwithstanding the emission limitations in [-these rules]

 OAR 340-22-100 through 340-22-300, all new major sources or major modifications at existing sources, located within the areas cited in section (2) of this rule, shall comply with OAR 340-20-220 through 340-20-276 (New Source Review).
- (2) All new and existing sources inside the following areas shall comply with the General Emission Standards for Volatile Organic Compounds:
 - (a) Portland-Vancouver Air Quality Maintenance Area;
 - (b) Medford-Ashland Air Quality Maintenance Area;
 - (c) Salem Area Transportation Study (SATS) Area.
- (3) VOC sources located outside the areas cited in section (2) of this rule are exempt from the General Emission standards for Volatile Organic Compounds.
- (4) All new and existing sources inside the designated nonattainment areas identified in section (2) of this rule shall apply Reasonably Available Control Technology (RACT) subject to the categorical RACT requirements set forth interest to the categorical requirements set forth interest to the categorical race through 340-22-300, or as described in sections (5) and (6) of this rule. Compliance with the conditions set forth in OAR 340-22-[106]100 through 340-22-300 shall be presumed to satisfy the RACT requirement.
- (5) Sources for which no categorical RACT requirements exist and which have potential emissions before add-on equipment of over 100 tons per year (TPY) of VOC from aggregated, non-regulated emission units, shall have RACT requirements developed on a case-by-case basis by the Department. A source may request RACT not be applied by demonstrating to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity. Once a source becomes subject to RACT requirements underf these rules OAR 340-22-100 through 340-22-300, it shall continue to be subject to RACT, unless emissions fall below 100 tons and the source requests that RACT be removed, by demonstrating to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity.
- (6) Within 3 months of written notification by the Department of the applicability of this rule, or, for good cause shown, up to an additional 3 months as approved by the Department, the source shall submit to the Department a complete analysis of RACT for each category of emission unit at the source, taking into account technical and economic feasibility of available control technology, and the emission reductions each technology would provide. This analysis does not need to include any emission units

subject to a specific RACT requirement under these rules OAR 340-22-100 through 340-22-300. These RACT requirements approved by the Department shall be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source specific SIP revision. The source shall have one year from the date of notification by the Department of EPA approval to comply with the applicable RACT requirements.

(7) Failure by a source to submit a RACT analysis required by section (6) of this rule shall not relieve the source of complying with a RACT determination established by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Exemptions

340-22-106 Natural gas-fired afterburners installed for the purpose of complying with these rules OAR 340-22-100 through 340-22-300 shall be operated during the months of May, June, July, August, and September. During other months, the afterburners may be turned off with prior written Departmental approval, provided that the operation of such devices is not required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants, or for complying with visual air contaminant limitations.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

Compliance Determination 340-22-107

(1) Certification and test procedures are listed in each specific section and on file required by OAR 340-22-100 through 340-22-300 shall be conducted in accordance with the

Department's Source Sampling Manual. Applicants are encouraged to submit designs approved by other air pollution control agencies where VOC control equipment has been developed. Construction approvals and proof of compliance will, in most cases, be based on Departmental evaluation of the source and controls.

- (2) Approval by the Department of alternative methods for demonstrating compliance where specified and allowed infathese rules OAR 340-22-100 through 340-22-300, including approval of equivalent testing methods for determining compliance, shall be subject to review and approval by EPA.
- (3) Sources subject to the requirements in OAR 340-22-170 and 340-22-175 of these rules which cannot meet these requirements upon the effective date of these rules, shall be exempted from the enforcement provisions in OAR 340-12-041 for 60 days from the effective date of these rules through July 16, 1991. These sources may be placed on compliance schedules through issuance of permit addendums, pursuant to OAR 340-20-032.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A
Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; Renumbered from 340-22-106(3) & (4); DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Applicability of Alternative Control Systems
340-22-108 [DEQ 23-1980, f. & ef. 9-26-80;
Repealed by DEQ 5-1983,
f. & ef. 4-18-83]

Gasoline Dispensing Facilities 340-22-110

(1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk

Gasoline Terminal or nonexempted Bulk Gasoline Plant into any gasoline dispensing facility of less than 40,000 gallon capacity unless:

- (a) The tank is filled by submerged fill;
- (b) A vapor balance system is used which consists of a Certified Underground Storage Tank Device capable of collecting the vapor from volatile organic liquids and gases so as to prevent their emission to the outdoor atmosphere. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place;
- (c) The vapors are processed by a system demonstrated to the satisfaction of the Department to be of equal effectiveness; or
- (d) All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order. No gasoline delivery shall take place unless the vapor return hose is connected by the delivery truck operator, if required by subsection (b) of this section.
- (2) Exemptions and Limitations:
 - In the Portland-Vancouver AQMA, no person shall deliver gasoline to a gasoline dispensing facility unless the gasoline vapor is handled as required in subsection (1)(b) and (c) of this rule. Gasoline dispensing facilities with a monthly throughput of 10,000 gallons or less of gasoline (thirty-day rolling average) are exempt from these requirements;
 - (b) In the Medford-Ashland AQMA, all existing storage tanks at gasoline dispensing facilities with a rated capacity of 1,000 gallons or less shall be exempt from the submerged fill requirement in subsection (1)(a) of this rule;
 - (c) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent shall be exempt from [these rules] OAR 340-22-100 through 340-22-300;
 - (d) Stationary gasoline storage containers of less than 2,085 liters (550 gallons) used for agricultural purposes shall be exempt from [these rules] OAR 340-22-100 through 340-22-300;
 - (e) Stationary gasoline storage tanks with offset fill lines, welded-in drop tubes, or fill pipes of less than 3" diameter, if installed before January 1, 1979, shall be exempt from [these rules] OAR 340-22-100 through 340-22-300.

(3) Compliance with subsection (1)(b) of this rule shall be determined by verifications of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 16-1983, f. & ef. 10-19-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Bulk Gasoline Plants and Delivery Vessel(s) 340-22-120

- (1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:
 - (a) Each stationary storage tank and each delivery vessel uses submerged fill when transferring gasoline; and
 - (b) The displaced vapors from filling each tank and each delivery vessel are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by the Department. All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.
- (2) Exemptions and Limitations:
 - (a) Bulk gasoline plants located within the Portland-Vancouver AQMA which transfer less than 4,000 gallons of gasoline per day (1) and thirty-day rolling average(1) shall be exempt from the vapor balance requirement in OAR 340-22-110(1)(b);

- (b) Bulk gasoline plants which deliver gasoline to dispensing facilities in the Portland-Vancouver AQMA with a monthly throughput of less than 10,000 gallons (thirty-day rolling average) of gasoline are exempt from the vapor balance requirement in OAR 340-22-110(1)(b), providing the gasoline delivery trucks are used exclusively for the delivery of gasoline to dispensing facilities also exempt from this requirement;
- (c) Bulk gasoline plants located in the Medford-Ashland AQMA, or in the Salem SATS, are exempt from the requirements in OAR 340-22-110(1)(b);
- (d) Each stationary gasoline storage tank may release vapor to the atmosphere through a pressure relief valve set to release at the highest possible pressure {(}in accordance with State or local fire codes, or the National Fire Prevention Association guidelines{()} and no less than 3.4 kPa (0.50 psi) or some other setting approved in writing by the Department;
- (e) Gasoline shall be handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation. If more than five gallons are spilled, the operator shall report the spillage in accordance with OAR 340-20-350 to 340-20-380.
- (3) Compliance with subsection (1)(a) of this rule shall be determined by visual inspection to ensure minimal spillage of gasoline and proper installation of bottom loading couples.
- (4) Compliance with subsection (1)(b) of this rule shall be determined by verification of use of equipment approved by the Department and/or by testing and monitoring in accordance with applicable portions of OAR 340-22-137 and/or Method 31 and/or 32 on file with the Department.
- (5) The owner or operator of a gasoline delivery vessel shall maintain the vessel to be vapor tight at all times, in accordance with OAR 340-22-137(1), if such vessel is part of a vapor balance system required by { these rules} OAR 340-22-100 through 340-22-300.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Bulk Gasoline Terminals 340-22-130

(1) No terminal owner or operator, shall allow volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with a daily throughputs of greater than 76,000 liters (20,000 gallons) per day of gasoline (determined by a thirty-day rolling average):

The owner or operator of a gasoline loading terminal shall only allow the transfer of gasoline between the facility and a truck tank or a truck trailer when a current leak test certification for the delivery vessel is on file with the terminal or a valid inspection sticker f(]as required by OAR 340-22-137(1)(c)f()] is displayed on the delivery vessel;

(b) The owner or operator of a truck tank or a truck trailer shall not make any connection to the terminal's gasoline loading rack unless the gasoline delivery vessel has been tested in accordance with OAR 340-22-137(1);

(c) The truck driver or other operator who fills a delivery truck tank and/or trailer tank shall not take on a load of gasoline unless the vapor return hose is properly connected;

(d) All equipment associated with the vapor recovery system shall be maintained to be vapor tight and in good working order.

(2) Compliance with section (1) of this rule shall be determined by testing in accordance with Method 33 on file with the Department. The method for determining compliance with section (1) of this rule are delineated in 40 CFR Part 60, Subpart XX, §60.503.

(3) Bulk Gasoline terminals shall comply with the following within the limits of section (1) of this rule:

- (a) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system;
- (b) The loading device must not leak when in use. The loading device shall be designed and operated to allow no more than 10 cubic centimeters drainage per disconnect on the basis of 5 consecutive disconnects;
- (c) All loading liquid lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected;
- (d) All vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected or which contain vapor-tight unidirectional valves;
- (e) Gasoline is handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. If more than 5 gallons are spilled, the operator shall report the spillage in accordance with OAR 340-20-350 to 340-20-380;
- (f) The vapor collection system is operated in a manner to prevent the pressure therein from exceeding the tank truck or trailer pressure relief settings.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

340-22-133 [Renumbered to 340-33-130(2)]

340-22-136 [Renumbered to 340-22-130(3)]

Testing Vapor Transfer and Collection Systems 340-22-137

- (1) No person shall allow a vapor-laden delivery vessel subject to OAR 340-22-120(5) to be filled or emptied unless the delivery vessel:
 - (a) Is tested annually according to the test method 32 on file with the Department, or CFR Part 60, EPA Method 21 or 27, or California Air Resources Board Method 2-5;
 - (b) Sustains a pressure change of no more than 750 pascals (3 inches of H_2O) in 5 minutes when pressurized to a gauge pressure of 4,500 pascals (18 inches of H_2O) or evacuated to a gauge pressure of 1,500 pascals (6 inches of H_2O) during the testing required in subsection (1)(a) of this rule; and
 - (c) Displays a sticker near the Department of Transportation test date markings required by 49 CFR 177.824h, which:
 - (A) Shows the year and month that the gasoline tank truck last passed the test required in subsections (1)(a) and (b) of this rule;
 - (B) Shows the identification of the sticker; and
 - (C) Expires not more than one year from the date of the leak-test test, or if tested in California, on the expiration date so specified.
 - (d) Has its vapor return hose connected by the truck operator so that gasoline vapor is not expelled to the atmosphere.
- (2) The owner or operator of a vapor collection system subject to this regulation shall design and operate the vapor collection system and the gasoline loading equipment in a manner that prevents:
 - (a) Gauge pressure from exceeding 4,500 pascals (18 inches of H₂O) and vacuum from exceeding 1,500 pascals (6 inches of H₂O) in the gasoline tank truck being loaded;
 - (b) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source when measured by the Method 31 and 33 on file with the Department, or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals; and
 - (c) Visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals.

- (3) The Department may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system, by the methods on file with the Department, to confirm continuing compliance with sections (1) or (2) of this rule.
- (4) Recordkeeping and Reporting:
 - (a) The owner or operator of a source of volatile organic compounds subject to this [-regulation] rule shall maintain records of all certification testing and repairs. The records must identify the gasoline tank truck, vapor collection system, or vapor control system; the date of the test or repair; and if applicable, the type of repair and the date of retest. The records must be maintained in a legible, readily available condition for at least two years after the date of testing or repair was completed;
 - (b) Copies of all records and reports under subsection (4)(a) of this rule shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A

Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Cutback and Emulsified Asphalt 340-22-140

- (1) Use of any cutback asphalts for paving roads and parking areas is prohibited during the months of April, May, June, July, August, September, and October, except as provided for in section (2) of this rule.
- (2) Slow curing (SC) and medium curing (MC) cutback asphalts are allowed during all months for the following uses and applications:

- (a) Solely as a penetrating prime coat for aggregate bases prior to paving;
- (b) For the manufacture of medium-curing patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance; or
- (c) For all uses when the National Weather Service forecast of the high temperature during the 24-hour period following application is below 10° C. (50° F.).
- (3) Rapid curing (RC) grades of cutback asphalt are always prohibited.
- (4) (a) Use of emulsified asphalts is unrestricted if solvent content is kept at or less than the limits listed below. If these limits are exceeded, then the asphalt shall be classified as medium curing (MC) cutback asphalts, and shall be limited to only the uses permitted by section (2) of this rule. (Grades of Emulsion Per AASHTO Designation M 208-72 Maximum Solvent Content by Weight):
 - (A) CRS-1 3%
 - (B) CRS-2 3%
 - (C) CSS-1 3%
 - (D) CSS-1h 3%
 - (E) CMS-2 8%
 - (F) CMS-2h 8%
 - (G) CMS-2S 12%
 - (b) Solvent content is determined by ASTM distillation test D-244.

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Petroleum Refineries

340-22-150[These regulations] This rule shall apply to all petroleum refineries:

- (1) Vacuum-Producing Systems:
 - (a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system;
 - (b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.

(2) Wastewater Separators:

- (a) Wastewater separators' forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed totally enclosing the compartmented liquid contents, or a floating pontoon or double deck-type cover equipped with closure seals between the cover edge and compartment wall;
- (b) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.
- (3) Process Unit Turnaround:
 - (a) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system;
 - (b) The pressure in a process unit following depressurization for turnaround shall be less than 5 psig before venting to the ambient air.
- (4) Maintenance and Operation of Emission Control Equipment: Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner commensurate with the level of maintenance and housekeeping of the overall plant.
- (5) Recordkeeping: The owner or operator shall maintain a record of process unit turnarounds including an approximation of the quantity of VOC emitted to the atmosphere. Records shall be maintained for two years.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91

Petroleum Refinery Leaks 340-22-153

- (1) All persons operating petroleum refineries shall comply with the following rules this section concerning leaks:
 - (a) The owner or operator of a petroleum refinery complex, upon detection of a leaking component, which has a volatile organic compound concentration exceeding 10,000 ppm when tested in the manner described below shall:

- (A) Include the leaking component on a written list of scheduled repairs; and
- (B) Repair and retest the component within 15 days.
 (b) Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when a sample is being taken during maintenance operations;
- (c) Pipeline valves and pressure relief valves in gaseous volatile organic compound service shall be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and the Department.
- (2) Testing Procedures: Testing and calibration procedures to determine compliance with this [regulation] rule shall be done in accordance with EPA Method 21.
- (3) Monitoring, Recordkeeping, Reporting:
 - (a) The owner or operator of a petroleum refinery shall maintain, as a minimum, records of all testing conducted under this rule; plus records of all monitoring conducted under subsections (b) and (c) of this section;
 - (b) The owner or operator of a petroleum refinery subject to this [regulation] rule shall:
 - (A) Monitor yearly by the methods referenced in section (2) of this rule all:
 - (i) Pump seals;
 - (ii) Pipeline valves in liquid service; and
 - (iii) Process drains.
 - (B) Monitor quarterly by the methods referenced in section (2) of this rule all:
 - (i) Compressor seals;
 - (ii) Pipeline valves in gaseous service; and
 - (iii) Pressure relief valves in gaseous service.
 - (C) Monitor weekly by visual methods all pump seals;
 - (D) Monitor immediately any pump seal from which liquids are observed dripping;
 - (E) Monitor any relief valve within 24 hours after it has vented to the atmosphere; and
 - (F) Monitor immediately after repair of any component that was found leaking.
 - (c) Pressure relief devices which are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves, or valves

- that are not externally regulated are exempt from the monitoring requirements in subsection (b) of this section;
- (d) The owner or operator of a petroleum refinery, upon the detection of a leaking component, shall affix a weatherproof and readily visible tag bearing an identification number and the date the leak is located to the leaking component. This tag shall remain in place until the leaking component is repaired;
- (e) The owner or operator of a petroleum refinery, upon the completion of each yearly and/or quarterly monitoring procedure, shall:
 - (A) Submit a report to the Department on the 15th day of January, April, July, and September, listing the leaking components that were located but not repaired within the required time limit in subsection (1)(a) of this rule;
 - (B) Submit a signed statement attesting to the fact that, with the exception of those leaking components listed in paragraph (A) of this subsection, all monitoring and repairs were performed as stipulated.
- (f) The owner or operator of a petroleum refinery shall maintain a leaking component monitoring log which shall contain, at a minimum, the following data:
 - (A) The name of the process unit where the component is located;
 - (B) The type of component (e.g., valve, seal);
 - (C) The tag number of the component;
 - (D) The date on which a leaking component is discovered;
 - (E) The date on which a leaking component is repaired;
 - (F) The date and instrument reading of the recheck procedure after a leaking component is repaired;
 - (G) A record of the calibration of the monitoring instrument:
 - (H) Those leaks that cannot be repaired until turnaround, (exceptions to the 15 day requirement of paragraph (1)(a)(B) of this rule); and
 - (I) The total number of components checked and the total number of components found leaking.
- (g) Copies of all records and reports required by this section shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;

- (h) Copies of all records and reports required by this section shall immediately be made available to the Department upon verbal or written request at any reasonable time;
- (i) The Department may, upon written notice, modify the monitoring, recordkeeping and reporting requirements.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Liquid Storage 340-22-160

- (1) Owners or operators which have tanks storing methanol or other volatile organic compound liquids with a true vapor pressure, as stored, greater than 10.5 kPa (kilo Pascals) (1.52 psia), at actual monthly average storage temperatures, and having a capacity greater than 150,000 liters (approximately 39,000 gallons) shall comply with one of the following:
 - (a) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids, 40 CFR 60 Subpart K, and Ka, as amended by Federal Register, April 4, 1980, pages 23379 through 23381;
 - (b) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal standards referred to in subsection (a) of this section or its equivalent.
- (2) All seals used in subsections (1) (b) and (c) of this rule are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.
- (3) All openings, except stub drains and those related to safety (such as slotted gage wells), are to be sealed with suitable closures. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; except for slotted gage wells which must have floating seals with one half inch edge gaps or less.
- (4) Secondary Seals:

- (a) Applicability: Subsection (c) of this section applies to all VOC liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (39,000 gallons) except as indicated in paragraph (H) of subsection (c) of this section;
- (b) Exemptions: Subsection (c) of this section does not apply to petroleum liquid storage vessels which:
 - (A) Are used to store waxy, heavy pour crude oil;
 - (B) Have capacities less than 1,600,000 liters (420,000 gallons) and are used to store produced crude oil and condensate prior to lease custody transfer;
 - (C) Contain a VOC liquid with a true vapor pressure of less than 10.5 kPa (1.5 psia) where the vapor pressure is measured at the storage temperature;
 - (D) Contain a VOC liquid with a true vapor pressure less than 27.6 kPa (4.0 psia):
 - (i) Are of welded construction; and
 - (ii) Presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by the Department; or
 - (E) Are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoemounted secondary seal).
- (c) No owner of a VOC liquid storage vessel subject to this rule shall store VOC liquid in that vessel unless:
 - (A) The vessel has been fitted with:
 - (i) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or
 - (ii) A closure or other device which controls VOC emissions with an effectiveness equal to or greater than a seal required under subparagraph (A)(i) of this subsection as approved in writing by the Department.
 - (B) All seal closure devices meet the following requirements:
 - (i) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;

- (ii) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and
- (iii) For vapor mounted seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall are determined by the method in subsection (d) of this section and shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per foot of tank diameter).
- (C) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
 - (i) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
 - (ii) Equipped with projections into the tank which remain below the liquid surface at all times.
- (D) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
- (E) Rim vents are set to open only when the roof is being floated off the leg supports or at the manufacturer's recommended setting;
- (F) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent of the area of the opening; and
- (G) The owner or operator of a VOC liquid storage vessel with an external floating roof subject to subsection (c) of this section shall:
 - (i) Perform routine inspections semi-annually in order to ensure compliance with paragraphs (A) through (F) of this subsection and shall include inspections inspection of the secondary seal gap;
 - (ii) Measure the secondary seal gap annually in accordance with subsection (d) of this section when the floating roof is equipped with a vapor-mounted primary seal; and
 - (iii) Maintain records of the types of VOC liquids stored, the maximum true vapor

pressure of the liquid as stored, and the results of the inspections performed in subparagraphs (G)(i) and (ii) of this subsection.

- (H) The owner or operator of a VOC liquid storage vessel having a capacity equal to or less than 150,000 liters (39,000 gallons) with an external floating roof not subject to this regulation, but containing a VOC liquid with a true vapor pressure greater than 7.00 kPa (1.0 psi), shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all VOC liquids with a true vapor pressure greater than 7.0 kPa;
- (I) The owner or operator of a VOC liquid storage vessel subject to this [regulation] rule, shall submit to the Department, as a minimum, annual reports summarizing the inspections;
- (J) Copies of all records and reports under paragraphs (G) (H), and (I) of this subsection shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;
- (K) Copies of all records and reports under this section shall immediately be made available to the Department, upon verbal or written request, at any reasonable time;
- (L) The Department may, upon written notice, require more frequent reports or modify the monitoring and recordkeeping requirements, when necessary to accomplish the purposes of this rule.
- (d) Secondary Seal Compliance Determination:
 - (A) The owner or operator of any volatile organic compound source required to comply with section (4) of this rule shall demonstrate compliance by the methods of this section or an alternative method approved by the Department;
 - (B) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by the Department;
 - (C) Compliance with subparagraph (4)(c)(B)(iii) of this rule shall be determined by:

- (i) Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 inch) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall; and
- (ii) Summing the area of the individual gaps.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Surface Coating in Manufacturing 340-22-170

- (1) No person shall operate a coating line which emits into the atmosphere volatile organic compounds in excess of the limits in section (5) of this rule, expressed as pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to section (3) of this rule or emissions are controlled to an equivalent level pursuant to section (7) of this rule.
- (2) Exemptions:
 - (a) This rule does not apply to airplanes painted out of doors in open air; automobile and truck refinishing; customized top coating of automobiles and trucks, if production is less than 35 vehicles per day; marine vessels and vessel parts painted out in the open air; flat wood coating; wood furniture and wood cabinets; wooden doors, mouldings, and window frames; machine staining of exterior wood siding; high temperature coatings (for service above 500° F.); lumber marking coatings; potable water tank inside coatings; high performance inorganic zinc coatings, air dried, applied to fabricated steel; and markings by stencil for railroad cars;

- (b) This rule does not apply to:
 - (A) Sources (, regulated by this rule,) whose potential emissions from activities identified in section (5) of this rule before add on controls of volatile organic compounds are less than 10 tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual); or
 - (B) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance (such as research facilities, pilot plant operations, and laboratories) unless:
 - (i) The operation of the source is an integral part of the production process; or
 - (ii) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.
- (3) Exceptions:
 - (a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (5) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);
 - (b) Included in this documentation must be a complete analysis of technical and economic factors which:
 - (A) Prevent the source from using both compliance coatings and pollution control equipment; and
 - (B) Justify the alternative emission limit sought by the source.
 - (c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source specific SIP revision.
- (4) Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and forced air drier(s), and oven(s) used in the surface coating of the metal parts and products in subsections (5)(a) through (j) of this rule.
- (5) Process and Limitation: These emission limitations shall be based on a daily average except subsection (5)(e) of this rule shall be based on a monthly average. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied:

Can Coating:

(a)

	(a) can coating:
	(A) Sheet basecoat (exterior and interior) and
	over-varnish; two-piece can exterior (basecoat
	and over-varnish) 2.8 lb/gal.
	(B) Two- and three-piece can interior and exterior
	body spray, two-piece can exterior end (spray or
	roll coat) 4.2 lb/gal.
	(C) Three-piece can side-seam spray . 5.5 lb/gal.
	(D) End sealing compound 3.7 lb/gal.
	(E) End Sealing Compound for fatty foods
	(b) Fabric Coating
	(b) Fabric Coating 2.9 lb/gal.
	(c) Vinyl Coating 3.8 lb/gal.
	(d) Paper Coating 2.9 lb/gal.
	(d) Paper Coating 2.9 lb/gal.(e) Existing Coating of Paper and Film in the
	Medford-Ashland AQMA 55 lb.
	*55 lb VOC per 1000 sq. yds. of material per pass.
	(f) Auto and Light Duty Truck Coating:
	(B) Topcoat 2.8 lb/gal.
	(C) Repair 4.8 lb/gal.
	(g) Metal Furniture Coating 3.0 lb/gal.
	(h) Magnet Wire Coating 1.7 lb/gal.
	(i) Large Appliance Coating 2.8 lb/gal.
	(A) Clear Coatings 4.3 lb/gal.
	(B) Force Air Dried or Air Dried 3.5 lb/gal.
	(C) Extreme Performance Coatings 3.5 lb/gal.
	(D) Other Coatings (i.e., Powder, oven
	dried) 3.0 lb/gal.
	(E) High Performance Architectural
	Coatings
(6)	Compliance Determination: Compliance with this rule shall be
	determined by testing in accordance with 40 CFR Part 60 EPA
	Method 18, 24, 25, a material balance method, or an
	equivalent plant specific method approved by and on file with
	the Department. The limit in section (1) of this rule of VOC
-	in the coating is based upon an assumed solvent density, and
	other assumptions unique to a coating line; where conditions
	differ, such as a different solvent density, a plant specific
	limit developed pursuant to the applicable Control Technology
	Guideline document may be submitted to the Department for
	approval.
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(7)	Reduction Method: The emission limits of sections (3) and (5)
	of this rule shall be achieved by:
	(a) The application of low solvent content coating
•	technology;

- (b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or
- An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specific SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.
- (8) Recordkeeping Requirements:
 - (a) A current list of coatings shall be maintained which provides all the coating data necessary to evaluate compliance, including the following information, where applicable:
 - (A) Coating catalyst and reducer used;
 - (B) Mix ratio of components used;
 - (C) VOC content of coating as applied; and
 - (D) Oven temperature.
 - (b) Where applicable, a monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;
 - (c) Such records shall be retained and available for inspection by the Department for a period of two years.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

340-22-173 [Renumbered to 340-22-170(5)]

Aerospace Component Coating Operations 340-22-175

(1) No owner or operator of an aero-space component coating facility shall emit into the atmosphere volatile organic compounds in excess of the following limits, expressed as

pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to section (4) of this rule or emissions to the atmosphere are controlled to an equivalent level pursuant to section (10) of this rule:

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(a)	Primer	2.9	lb/gal.	
(b)	Interior Topcoat	2.8	lb/gal.	
(c)	Electric or Radiation Effect Coating .	6.7	lb/gal.	
(d)	Extreme Performance Interior Topcoat .	5.0	lb/gal.	
(e)	Fire Insulation Coating	5.0	lb/gal.	
(f)	Fuel Tank Coating	6.0	lb/gal.	
(g)	High Temperature Coating*	6.0	lb/gal.	
(h)	Sealant	5.0	lb/gal.	
(i)	Self-Priming Topcoat	3.5	lb/gal.	
(j)	Topcoat	5.0	lb/gal.	
(k)	Pretreatment Wash Primer	6.5	lb/gal.	
(1)	Sealant Bonding Primer	6.0	lb/gal.	
(m)	Temporary Protective Coating	2.1	lb/gal.	
• •	'(For conditions between 350° F 500° F.	.)		

- (2) After January 1, 1992, the emission limits for coatings in subsections (1)(d), (j), and (k) of this rule, shall not exceed 3.5 lb/gal.
- (3) Exemptions: This rule does not apply to the following:
 - (a) The exterior of fully assembled airplanes painted out of doors, high temperature coatings (for conditions over 500° F.), adhesive bonding primer, flight test coatings, and space vehicle coatings;
 - (b) Sources[, regulated by this rule,] whose potential emissions from activities identified in sction (1) of this rule before add on controls of volatile organic compounds are less than 10 tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual);
 - (c) The use of separate coating formulations in volumes of less than 20 gallons per calendar year. No source shall use more than a combined total of 250 gallons per calendar year of exempt coatings. Records of coating usage shall be maintained as per section (8) of this rule; or
 - (d) Sources used exclusively for chemical or physical analysis or determination of product quality and coating performance (such as research facilities and laboratories) unless:
 - (A) The operation of the source is an integral part of the production process; or
 - (B) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(4) Exceptions:

- (a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (1) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);
- (b) Included in this documentation must be a complete analysis of technical and economic factors which:
 - (A) Prevent the source from using both compliance coatings and pollution control equipment; and
 - (B) Justify the alternative emission limit sought by the source.
- (c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source-specific SIP revision.
- (5) Applicability: This rule[s] applies to each coating line, which includes the application area(s), flashoff area(s), air and force air drier(s), and oven(s) used in the surface coating of aerospace components in subsection (1)(a) through (m) of this rule. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied.

(6) Solvent Evaporation Minimization:

- (a) Closed containers shall be used for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup;
- (b) Fresh or spent solvent shall be stored in closed containers;
- (c) Organic compounds shall not be used for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation;
- (d) Containers of coating, catalyst, thinner, or solvent shall not be left open to the atmosphere when not in use.
- (7) Stripper Limitations: No stripper shall be used which contains more than 400 grams/liter (3.3 lbs/gal) of VOC or which has a true vapor pressure of 1.3 kPa (0.19 psia) at actual usage temperature.
- (8) Maskant for Chemical Processing Limitation: No maskant shall be applied for chemical processing unless the VOC emissions from coating operations are reduced by 85 percent, or the coating contains less than 600 grams/liter (5.0 lbs/gal) of VOC of coating excluding water, as applied.

- Compliance determination: Compliance with this rule shall be (9) determined by testing in accordance with 40 CFR Part 60 Appendix A Method 24 for determining the VOC content of the coating materials. Emissions from the coating processes and/or VOC emissions control efficiencies shall be determined by testing in accordance with 40 CFR Part 60 Appendix A Method 18, 25, California Method ST-7, a material balance method, or an equivalent plant specific method approved by EPA and the Department and on file with the Department. The limit in section (1) of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit may be submitted to the Department and EPA for approval.
- (10) Reduction Method: The emission limits of section (1) of this rule shall be achieved by:
 - (a) The application of a low solvent content coating technology;
 - (b) A vapor collection and disposal system; or
 - (c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specified SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.
- (11) Recordkeeping Requirements:
 - (a) A current list of coatings shall be maintained which provides all of the coating data necessary to evaluate compliance, including the following information, where applicable:
 - (A) A daily record indicating the mix ratio of components used; and
 - (B) The VOC content of the coating as applied.
 - (b) A monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;
 - (c) A monthly record shall be maintained indicating the amount of stripper used;
 - (d) Such records shall be retained and available for inspection by the Department for a period of two years.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 8-1991, f. & cert. ef. 5-16-91

Degreasers

340-22-180 Cold cleaners, open top vapor degreasers, and conveyorized degreasers are exempt from the following this rule [s] if they use fluids which are not photochemically reactive. These fluids are: $C_2C1_3F_3$ trichlorotrifluoroethane, also known as Freon 113 or Freon TF; CH_2C1_2 methylene chloride; 1, 1, $1-C_2H_3C1_3$, methyl chloroform, also known as 1-1-1 trichloroethane or chlorothene VG. Cold Cleaners:

- (1) The owner or operator of dip tank cold cleaners shall comply with the following equipment specifications in this section after April 1, 1980:
 - (a) Be equipped with a cover that is readily opened and closed. This is required of all cold cleaners, whether a dip tank or not;
 - (b) Be equipped with a drainrack, suspension basket, or suspension hoist that returns the drained solvent to the solvent bath;
 - (c) Have a freeboard ratio of at least 0.5;
 - (d) Have a visible fill line.
- (2) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices in this section:
 - (a) The solvent level shall not be above the fill line;
 - (b) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner;
 - (c) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation;
 - (d) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped;

- (e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste {{}} weight{}} can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's solid and Hazardous Waste Rules, OAR Chapter 340, Division {-}100.
- (3) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.
- (4) If the solvent has a volatility greater than 2.0 kPa (0.3 psi) measured at 38 °C. (100 °F.), or if the solvent is agitated or heated, then the cover must be designed so that it can be easily operated with one hand or foot.
- (5) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38 °C. (100 °F.), then the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (6) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38 °C. (100 °F.), or if the solvent is heated above 50 °C. (120 °F.), then one of the following solvent vapor control systems must be used:
 - (a) The freeboard ratio must be equal to or greater than 0.70; or
 - (b) Water must be kept over the solvent, which must be insoluble in and heavier than water; or
 - (c) Other systems of equivalent control, such as a refrigerated chiller.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Open Top Vapor Degreasers 340-22-183

(1) The owner or operator of all open top vapor degreasers shall comply with the following equipment specifications:

- (a) Be equipped with a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. The cover shall move horizontally or slowly so as not to agitate and spill the solvent vapor. The degreaser shall be equipped with at least the following three safety switches:
 - (A) Condenser flow switch and thermostat (- ()to shut(shut(shut(shut(shut(shut(shut(shut(shut(shut(shut<a href
 - (B) Spray safety switch {- (}to shut{s} off spray pump or conveyor if the vapor level drops excessively, (e.g., greater than 10 cm (4 inches));
 - (C) Vapor level control thermostat [- (]to shut[s] off sump heat when vapor level rises too high[)].
- (b) {Have the following:}
 - (A) A closed design such that the cover opens only when the part enters or exits the degreaser {(}and when the degreaser starts up, forming a vapor layer, the cover may be opened to release the displaced air{}, and either;
 - (B) A freeboard ratio equal to or greater than 0.75; or
 - (C) A freeboard, refrigerated or cold water, chiller.
- (c) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:
 - (A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope;
 - (B) The cover of the degreaser should be closed at all times except when processing workloads;
 - (C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet/ minute);
 - (D) Rack parts so as to facilitate solvent drainage from the parts;
 - (E) Workloads should not occupy more than one-half of the vapor-air interface area;
 - (F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet/ minute);
 - (G) Degrease the workload in the vapor zone until condensation ceases;

- (H) Spraying operations should be done within the vapor layer;
- (I) Hold parts in the degreaser until visually dry;
- (J) When equipped with a lip exhaust, the fan should be turned off when the cover is closed;
- (K) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser;
- (L) Water shall not be visible in the solvent stream from the water separator.
- (2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (4) Still and sump bottoms shall be kept in closed containers.
- (5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR Chapter 340, Division [-]100.
- (6) Exhaust ventilation shall not exceed 20 m³/minute per m² (65 cfm per foot²) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans shall not be used near the degreaser opening.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Conveyorized Degreasers 340-22-186

(1) The owner or operator of conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements:

- (a) Exhaust ventilation should not exceed 20 cubic meters per minute of square meter (65 cfm per foot²) of degreaser opening, unless necessary to meet OSHA requirements. Workplace fans should not be used near the degreaser opening;
- (b) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:
 - (A) Rack parts for best drainage;
 - (B) Maintain vertical speed of conveyored parts to less than 3.35 meters per minute (11 feet/minute);
 - (C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (4) Still and sump bottoms shall be kept in closed containers.
- (5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR Chapter 340, Division [-]100.
- (6) All conveyorized cold cleaners and conveyorized vapor degreasers with air/vapor interfaces of 2.0 m² or greater shall have one of the following major control devices installed and operating:
 - (a) Carbon adsorption system, exhausting less than 25 ppm of solvent averaged over a complete adsorption cycle, {{}}based on exhaust ventilation of 15 m³/minutes per m² of air/vapor area, when down-time covers are open{}); or
 - (b) Refrigerated chiller with control effectiveness equal to or better than subsection (a) of this section; or
 - (c) A system with control effectiveness equal to or better than subsection (a) of this section.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Asphaltic and Coal Tar Pitch Used for Roofing Coating 340-22-190

- (1) No person shall operate or use equipment for melting, heating or holding asphalt or coal tar pitch for the on-site construction, installation, or repair of roofs unless the gas-entrained effluents from such equipment are contained by close fitting covers.
- (2) A person operating equipment subject to this rule shall maintain the temperature of the asphaltic or coal tar pitch below 285 °C. (550 °F.), or 17 °C. (30 °F.) below the flash point whichever is the lower temperature, as indicated by a continuous reading thermometer.
- (3) The provisions of this rule shall not apply to equipment having a capacity of 100 liters (26 gallons) or less; or to equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91

Flat Wood Coating 340-22-200

- (1) This rule applies to all flat wood manufacturing and surface finishing facilities, that manufacture the following products:
 - (a) Printed interior panels made of hardwood plywood and thin particle board;
 - (b) Natural finish hardwood plywood panels; or
 - (c) Hardboard paneling with Class II finishes.

DIVISION 22

GENERAL GASEOUS EMISSIONS

Sulfur Content of Fuels

Definitions

340-22-005 As used in these regulations, unless otherwise required by context OAR 340-22-005 through 340-22-025:

- (1) "ASTM" means the American Society for Testing and Materials.
- (2) "Distillate Fuel Oil" means any oil meeting the specifications of ASTM Grade 1 or Grade 2 fuel oils.
- (3) "Residual Fuel Oil" means any oil meeting the specifications of ASTM Grade 4, Grade 5, or Grade 6 fuel oils.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Residual Fuel Oils 340-22-010

- f(1) After July 1, 1972, no person shall sell, distribute, use,
 or make available for use, any residual fuel oil containing
 more than 2.5 percent sulfur by weight.]
- [(2) After July 1, 1974, n]No person shall sell, distribute,
 use, or make available for use, any residual fuel oil
 containing more than 1.75 percent sulfur by weight.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 87, f. 3-25-75, ef. 4-25-75; DEQ 141, f. & ef. 8-25-77

Distillate Fuel Oils

340-22-015 [After July 1, 1972, n]No person shall sell, distribute, use, or make available for use, any distillate fuel oil containing more than the following percentages of sulfur:

- (1) ASTM Grade 1 fuel oil 0.3 percent by weight.
- (2) ASTM Grade 2 fuel oil 0.5 percent by weight.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Coal

340-22-020

- (1) [After July 1, 1972] Except as provided in section (2), no person shall sell, distribute, use, or make available for use, any coal containing greater than 1.0 percent sulfur by weight.
- (2) Except as provided for in sections (4) and (5) of this rule, no person shall sell, distribute, use or make available for use; after July 1, 1983, any coal or coal containing fuel with greater than 0.3% sulfur and 5% volatile matter as defined in ASTM Method D3175 for direct space heating within the Portland, Salem, Eugene-Springfield, and Medford-Ashland Air Quality Maintenance Areas. For coals subjected to a devolatilization process, compliance with the sulfur limit may be demonstrated on the sulfur content of coal prior to the devolatilization process.
- (3) Distributors of coal or coal containing fuel destined for direct residential space heating use shall keep records for a five year period which shall be available for DEQ inspection and which:
 - (a) Specify quantities of coal or coal containing fuels sold;
 - (b) Contain name and address of customers who are sold coal or coal containing fuels;
 - (c) Specify the sulfur and volatile content of coal or the coal containing fuel sold to residences in the Portland, Salem, Eugene-Springfield, and Medford-Ashland Air Quality Maintenance Areas.
- (4) Users of coal for direct residential space heating in 1980 who apply in writing by July 1, 1983 and receive written approval from the Department shall be exempted from the requirement of section (2) of this rule provided they certify that they used more than one-half (1/2) ton of coal in 1980.
- (5) Distributors may sell coal not meeting specification in section (2) of this rule to those users who have applied for and received the exemption provided for in section (4) of this rule.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [-459] 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 3-1982, f. & ef. 1-29-82

Exemptions

340-22-025 Exempted from the requirements of OAR 340-22-010, 340-22-015, and 340-22-020 are:

- (1) Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives, and diesel motor vehicles.
- (2) With prior approval of the Department of Environmental Quality, fuels used in such a manner or control provided such that sulfur dioxide emissions can be demonstrated to be equal to or less than those resulting from the combustion of fuels complying with the limitations of OAR 340-22-010, 340-22-015, and 340-22-020.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

General Emission Standards for Sulfur Dioxide

Definitions

340-22-050 As used in this regulation, unless otherwise required by context OAR 340-22-050 through 340-22-055:

- (1) "Fuel burning equipment" means equipment, other than internal combustion engines, the principal purpose of which is to produce heat or power by indirect heat transfer.
- (2) "New source" means any air contaminant source installed, constructed, or modified after January 1, 1972.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Fuel Burning Equipment

340-22-055 The following emission standards are applicable to new sources only:

- (1) For fuel burning equipment having more than 150 million BTU per hour heat input, but not more than 250 million BTU per hour heat input, no person shall cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:
 - (a) 1.4 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned;

(b) 1.6 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.

- (2) For fuel burning equipment having more than 250 million BTU per hour heat input, no person shall cause, suffer, allow, or permit the emission into the atmosphere of sulfur dioxide in excess of:
 - (a) 0.8 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned;
 - (b) 1.2 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

General Emission Standards for Volatile Organic Compounds

Introduction

340-22-100

(1) [These rules]OAR 340-22-100 through 340-22-300 regulate sources of VOC which contribute to the formation of photochemical oxidant, mainly ozone.

- (2) Since ozone standards are not violated in Oregon from October through April (because of insufficient solar energy), natural gas-fired afterburners may be permitted, on a case-by-case basis, to lay idle during the winter months.
- (3) Sources regulated by these rules OAR 340-22-100 through 340-22-300 are:
 - (a) New sources new and all existing sources in the Portland and Medford AQMA's and in the Salem SATS for listed in subsections ([b]a) through ([m]n) of this section (; including:

(((Gasoline stations, underground tank filling;

(fc]b) Bulk gasoline plants and delivery vessels;

(fd]c) Bulk gasoline terminal loading;

((fe]d) Cutback asphalt;

((ff]e) Petroleum refineries, petroleum refinery leaks;

([g]f) VOC liquid storage, secondary seals;

({h}g) Coating including paper coating and miscellaneous painting;

- (h) Aerospace component coating
- (i) Degreasers;
- (j) Asphaltic and coal tar pitch in roofing;
- (k) Flat wood coating;
- (1) Rotogravure and Flexographic printing;
- (m) Perchloroethylene dry cleaning [.];
- (n) Automotive gasoline.
- (4) Sources not covered by the source categories listed in section (3) of this rule which emit or have the potential to emit over 100 tons of VOC per year are subject to OAR 340-22-104(5).

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Definitions

340-22-102 As used in these regulations, unless otherwise required by context OAR 340-22-100 through 340-22-300:

(1) "Aerospace component" means the fabricated part, assembly of parts, or completed unit of any aircraft, helicopter, missile or space vehicle.

- (2) "Air dried coating" means coatings which are dried by the use of air at ambient temperature.
- (3) "Applicator" means a device used in a coating line to apply coating.
- (4) "Bulk gasoline plant" means a gasoline storage and distribution facility which receives gasoline from bulk terminals by railroad car or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations.
- (5) "Bulk gasoline terminal" means a gasoline storage facility which receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck.
- (6) "Can Coating" means any coating applied by spray, roller, or other means to the inside and/or outside surfaces of metal cans, drums, pails, or lids.
- (7) "Carbon Bed Breakthrough" means the initial indication of depleted adsorption capacity characterized by a sudden measurable increase in VOC concentration exiting a carbon adsorption bed or column.
- (8) "Certified Underground Storage Device" means vapor recovery equipment for underground storage tanks as certified by the State of California Air Resources Board Executive Orders, copies of which are on file with the Department, or which has been certified by other air pollution control agencies and approved by the Department.
- (9) "Class II hardboard paneling finish" means finishers which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.
- (10) "Clear coat" means a coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color.
- (11) "Coating" means a material applied to a surface which forms a continuous film and is used for protective and/or decorative purposes.
- (12) "Coating Line" means one or more apparatus or operations which include a coating applicator, flash-off area, and oven or drying station wherein a surface coating is applied, dried, and/or cured.
- (13) "Condensate" means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature and/or pressure and remains liquid at standard conditions.

- (14) "Crude oil" means a naturally occurring mixture which consists of hydrocarbons and/or sulfur, nitrogen, and/or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.
- (15) "Custody transfer" means the transfer of produced petroleum and/or condensate after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
- (16) "Cutback asphalt" means a mixture of a base asphalt with a solvent such as gasoline, naphtha, or kerosene. Cutback asphalts are rapid, medium, or slow curing (known as RC, MC, SC), as defined in ASTM D2399.
- (17) "Day" means a 24-hour period beginning at midnight.
- (18) "Delivery vessel" means any tank truck or trailer used for the transport of gasoline from sources of supply to stationary storage tanks.
- (19) "Dry cleaning facility" means any facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes but is not limited to any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.
- (20) "Emission Unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation.
- (21) "External floating roof" means a cover over an open top storage tank consisting of a double deck or pontoon single deck which rests upon and is supported by the volatile organic liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (22) "Extreme performance coatings" means coatings designed for extreme environmental conditions such as exposure to any one of the following: continuous ambient weather conditions, temperature consistently above 95 °C., detergents, abrasive and scouring agents, solvents, corrosive atmosphere, or similar environmental conditions.
- (23) "Extreme performance interior topcoat" means a topcoat used in interior spaces of aircraft areas requiring a fluid, stain or nicotine barrier.
- (24) "Fabric coating" means any coating applied on textile fabric. Fabric coating includes the application of coatings by impregnation.

- (25) "Flexographic Printing" means the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.
- (26) "Freeboard ratio" means the freeboard height divided by the width (not length) of the degreaser's air/solvent area.
- (27) "Forced air dried coating" means a coating which is dried by the use of warm air at temperatures up to 90 °C. (194 °F.).
- (28) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 27.6 kPa (4.0 psi) or greater which is used to fuel internal combustion engines.
- (29) "Gasoline dispensing facility" means any site where gasoline is dispensed to motor vehicle, boat, or airplane gasoline tanks from stationary storage tanks.
- (30) "Gas service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the gaseous phase.
- (31) "Hardboard" is a panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press.
- (32) "Hardwood plywood" is plywood whose surface layer is a veneer of hardwood.
- (33) "High Performance Architectural Coating" means coatings applied to aluminum panels and moldings being coated away from the place of installation.
- (34) "Internal floating roof" means a cover or roof in a fixed roof tank which rests upon or is floating upon the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank shell.
- (35) "Large appliance" means any residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dish washers, trash compactors, air conditioners, and other similar products.
- "Leaking component" means any petroleum refinery source which has a volatile organic compound concentration exceeding 10,000 parts per million (ppm) when tested in the manner described in method 31 and 33 on file with the Department. These sources include, but are not limited to, pumping seals, compressor seals, seal oil degassing vents, pipeline valves, flanges and other connections, pressure relief devices, process drains, and open-ended pipes. Excluded from these sources are valves which are not externally regulated.

- (37) "Liquid-mounted" means a primary seal mounted so the bottom of the seal covers the liquid surface between the tank shell and the floating roof.
- (38) "Liquid service" means equipment which processes, transfers or contains a volatile organic compound or mixture of volatile organic compounds in the liquid phase.
- (39) "Low solvent coating" means a coating which contains a lower amount of volatile organic compound than conventional organic solvent borne coatings. Low solvent coatings include waterborne, higher solids, electrodeposition and powder coatings.
- (40) "Major modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase for any pollutant subject to regulation under the Clean Air Act. [Refer to OAR 340-20-225(14).]
- (41) "Major source" means a stationary source which emits or has the potential to emit any pollutant regulated under the Clean Air Act at a significant emission rate. [Refer to OAR 340-20-225(15).]
- (42) "Maskant for chemical processing" means a coating applied directly to an aerospace component to protect surface areas when chemical milling, anodizing, aging, bonding, plating, etching and/or performing other chemical operations on the surface of the component.
- (43) "Miscellaneous metal parts and products" means any metal part or metal product, even if attached to or combined with a nonmetal part or product, except cans, coils, metal furniture, large appliances, magnet wires, automobiles, ships, and airplane bodies.
- (44) "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.
- (45) "Operator" means any person who leases, operates, controls, or supervises a facility at which gasoline is dispensed.
- (46) "Oven-dried" means a coating or ink which is dried, baked, cured, or polymerized at temperatures over 90 °C. (194 °F.).
- (47) "Packaging rotogravure printing" means rotogravure printing upon paper, paper board, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into pack-aging products and labels for articles to be sold.
- (48) "Paper coating" means any coating applied on paper, plastic film, or metallic foil to make certain products, including (but not limited to)adhesive tapes and labels, book covers,

- post cards, office copier paper, drafting paper, or pressure sensitive tapes. Paper coating includes the application of coatings by impregnation and/or saturation.
- (49) "Person" means the federal government, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatsoever.
- (50) "Petroleum refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum, crude oil, or through redistillation, cracking, or reforming of unfinished petroleum derivatives. "Petroleum refinery" does not mean a re-refinery of used motor oils or other waste chemicals. "Petroleum refinery" does not include asphalt blowing or separation of products shipped together.
- (51) "Plant site basis" means all of the sources on the premises (contiguous land) covered in one Air Contaminant Discharge Permit unless another definition is specified in a Permit.
- (52) "Potential emissions before add-on controls" means the quantity of volatile organic material emissions that theoretically could be emitted by a stationary source, based on the design capacity or maximum production capacity of the source and 8760 hours per year before the application of capture systems or control devices.
- (53) "Pretreatment wash primer" means a coating which contains a minimum of 0.5% acid by weight for surface etching and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- (54) "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.
- (55) "Printing" means the formation of words, designs and pictures, usually by a series of application rolls each with only partial coverage.
- (56) "Prime coat" means the first of two or more films of coating applied in an operation.
- (57) "Publication rotogravure printing" means rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

- (58) "Reasonably Available Control Technology" or "RACT" means the lowest emission limitation that a particular source or source category is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.
- (59) "Roll printing" means the application of words, designs and pictures to a substrate by means of hard rubber or steel rolls.
- (60) "Sealant" means a coating applied for the purpose of filing voids and providing a barrier against penetration of water, fuel or other fluids or vapors.
- (61) "Specialty Printing" means all gravure and flexographic operations which print a design or image, excluding publication gravure and packaging printing. Specialty Printing includes printing on paper plates and cups, patterned gift wrap, wallpaper, and floor coverings.
- (62) "Splash filling" means the filling of a delivery vessel or stationary storage tanks through a pipe or hose whose discharge opening is above the surface level of the liquid in the tank being filled.
- (63) "Source" means any building, structure facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.
- (64) "Source category" means all sources of the same type or classification.
- (65) "Submerged fill" means any fill pipe or hose, the discharge opening of which is entirely submerged when the liquid is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe, the discharge of which is entirely submerged when the liquid level is 18 inches, or is twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.
- (66) "Thin particleboard" means a manufactured board 1/4 inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.
- (67) "Thirty-day rolling average" means any value arithmetically averaged over any consecutive thirty days.
- (68) "Tileboard" means panelling that has a colored waterproof surface coating.
- (69) "Topcoat" means a coating applied over a primer or intermediate coating for purposes such as appearance, identification or protection.

- (70) "True Vapor Pressure" means the equilibrium pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks", February, 1980.
- (71) "Vapor balance system" means a combination of pipes or hoses which create a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.
- (72) "Vapor-mounted" means a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the primary seal, the tank shell, the liquid surface, and the floating roof.
- "Volatile Organic Compound", or "VOC", means any organic (73)compound which participates in atmospheric photochemical reactions to form ozone; that is, any precursor organic compound which would be emitted during use, application, curing or drying of a surface coating, solvent, or other material. Excluded from this category are those compounds which the U.S. Environmental Protection Agency classifies as being of negligible photochemical reactivity which includes methane, ethane, methylene chloride, 1,1,1-trichloroethane (methyl chloroform), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115).

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Limitations and Requirements

General Requirements for New and Existing Sources 340-22-104

- (1) Notwithstanding the emission limitations in [these rules]
 OAR 340-22-100 through 340-22-300, all new major sources or
 major modifications at existing sources, located within the
 areas cited in section (2) of this rule, shall comply with
 OAR 340-20-220 through 340-20-276 (New Source Review).
- (2) All new and existing sources inside the following areas shall comply with the General Emission Standards for Volatile Organic Compounds:
 - (a) Portland-Vancouver Air Quality Maintenance Area;
 - (b) Medford-Ashland Air Quality Maintenance Area;
 - (c) Salem Area Transportation Study (SATS) Area.
- (3) VOC sources located outside the areas cited in section (2) of this rule are exempt from the General Emission standards for Volatile Organic Compounds.
- (4) All new and existing sources inside the designated nonattainment areas identified in section (2) of this rule shall apply Reasonably Available Control Technology (RACT) subject to the categorical RACT requirements set forth interest these rules OAR 340-22-100 through 340-22-300, or as described in sections (5) and (6) of this rule. Compliance with the conditions set forth in OAR 340-22-{106}100 through 340-22-300 shall be presumed to satisfy the RACT requirement.
- Sources for which no categorical RACT requirements exist (5) and which have potential emissions before add-on equipment of over 100 tons per year (TPY) of VOC from aggregated, non-regulated emission units, shall have RACT requirements developed on a case-by-case basis by the Department. A source may request RACT not be applied by demonstrating to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity. Once a source becomes subject to RACT requirements underf these rules OAR 340-22-100 through 340-22-300, it shall continue to be subject to RACT, unless emissions fall below 100 tons and the source requests that RACT be removed, by demonstrating to the Department that potential emissions are below 100 tons due to a permanent reduction in production or capacity.
- (6) Within 3 months of written notification by the Department of the applicability of this rule, or, for good cause shown, up to an additional 3 months as approved by the Department, the source shall submit to the Department a complete analysis of RACT for each category of emission unit at the source, taking into account technical and economic feasibility of available control technology, and the emission reductions each technology would provide. This analysis does not need to include any emission units

subject to a specific RACT requirement under [these rules] OAR 340-22-100 through 340-22-300. These RACT requirements approved by the Department shall be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source specific SIP revision. The source shall have one year from the date of notification by the Department of EPA approval to comply with the applicable RACT requirements.

(7) Failure by a source to submit a RACT analysis required by section (6) of this rule shall not relieve the source of complying with a RACT determination established by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Exemptions

340-22-106 Natural gas-fired afterburners installed for the purpose of complying with these rules OAR 340-22-100 through 340-22-300 shall be operated during the months of May, June, July, August, and September. During other months, the afterburners may be turned off with prior written Departmental approval, provided that the operation of such devices is not required for purposes of occupational health or safety, or for the control of toxic substances, malodors, or other regulated pollutants, or for complying with visual air contaminant limitations.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86

Compliance Determination

340-22-107

(1) Certification and test procedures [- are listed in each specific section and on file] required by OAR 340-22-100 through 340-22-300 shall be conducted in accordance with the

- Department's Source Sampling Manual. Applicants are encouraged to submit designs approved by other air pollution control agencies where VOC control equipment has been developed. Construction approvals and proof of compliance will, in most cases, be based on Departmental evaluation of the source and controls.
- (2) Approval by the Department of alternative methods for demonstrating compliance where specified and allowed interested these rules OAR 340-22-100 through 340-22-300, including approval of equivalent testing methods for determining compliance, shall be subject to review and approval by EPA.
- (3) Sources subject to the requirements in OAR 340-22-170 and 340-22-175 of these rules which cannot meet these requirements upon the effective date of these rules, shall be exempted from the enforcement provisions in OAR 340-12-041 for 60 days from the effective date of these rules through July 16, 1991. These sources may be placed on compliance schedules through issuance of permit addendums, pursuant to OAR 340-20-032.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; Renumbered from 340-22-106(3) & (4); DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Applicability of Alternative Control Systems
340-22-108 [DEQ 23-1980, f. & ef. 9-26-80;
Repealed by DEQ 5-1983,
f. & ef. 4-18-83]

Gasoline Dispensing Facilities 340-22-110

(1) No person may transfer or cause or allow the transfer of gasoline from any delivery vessel which was filled at a Bulk

Gasoline Terminal or nonexempted Bulk Gasoline Plant into any gasoline dispensing facility of less than 40,000 gallon capacity unless:

(a) The tank is filled by submerged fill;

- (b) A vapor balance system is used which consists of a Certified Underground Storage Tank Device capable of collecting the vapor from volatile organic liquids and gases so as to prevent their emission to the outdoor atmosphere. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place;
- (c) The vapors are processed by a system demonstrated to the satisfaction of the Department to be of equal effectiveness; or
- (d) All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order. No gasoline delivery shall take place unless the vapor return hose is connected by the delivery truck operator, if required by subsection (b) of this section.

(2) Exemptions and Limitations:

- (a) In the Portland-Vancouver AQMA, no person shall deliver gasoline to a gasoline dispensing facility unless the gasoline vapor is handled as required in subsection (1)(b) and (c) of this rule. Gasoline dispensing facilities with a monthly throughput of 10,000 gallons or less of gasoline (thirty-day rolling average) are exempt from these requirements;
- (b) In the Medford-Ashland AQMA, all existing storage tanks at gasoline dispensing facilities with a rated capacity of 1,000 gallons or less shall be exempt from the submerged fill requirement in subsection (1)(a) of this rule;
- (c) Transfers made to storage tanks of gasoline dispensing facilities equipped with floating roofs or their equivalent shall be exempt from these rules OAR 340-22-100 through 340-22-300;
- (d) Stationary gasoline storage containers of less than 2,085 liters (550 gallons) used for agricultural purposes shall be exempt from [these rules] OAR 340-22-100 through 340-22-300;
- (e) Stationary gasoline storage tanks with offset fill lines, welded-in drop tubes, or fill pipes of less than 3" diameter, if installed before January 1, 1979, shall be exempt from { these rules} OAR 340-22-100 through 340-22-300.

(3) Compliance with subsection (1)(b) of this rule shall be determined by verifications of use of equipment identical to equipment most recently approved and listed for such use by the Department or by testing in accordance with Method 30 on file with the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A
Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 16-1983, f. & ef. 10-19-83; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Bulk Gasoline Plants and Delivery Vessel(s) 340-22-120

- (1) No person shall transfer or allow the transfer of gasoline to or from a bulk gasoline plant unless:
 - (a) Each stationary storage tank and each delivery vessel uses submerged fill when transferring gasoline; and
 - (b) The displaced vapors from filling each tank and each delivery vessel are prevented from being released to the atmosphere through use of a vapor tight vapor balance system, or equivalent system as approved in writing by the Department. All equipment associated with the vapor balance system shall be maintained to be vapor tight and in good working order.
- (2) Exemptions and Limitations:
 - (a) Bulk gasoline plants located within the Portland-Vancouver AQMA which transfer less than 4,000 gallons of gasoline per day (10n a) thirty-day rolling average(10n) shall be exempt from the vapor balance requirement in OAR 340-22-110(1)(b);

- (b) gasoline plants which deliver gasoline dispensing facilities in the Portland-Vancouver AQMA with a monthly throughput of less than 10,000 gallons (thirty-day rolling average) of gasoline are exempt from the vapor balance requirement in 340-22-110(1)(b), providing the gasoline delivery trucks are used exclusively for the delivery of gasoline to dispensing facilities also exempt from this requirement;
- (c) Bulk gasoline plants located in the Medford-Ashland AQMA, or in the Salem SATS, are exempt from the requirements in OAR 340-22-110(1)(b);
- (d) Each stationary gasoline storage tank may release vapor to the atmosphere through a pressure relief valve set to release at the highest possible pressure {(}in accordance with State or local fire codes, or the National Fire Prevention Association guidelines{(})} and no less than 3.4 kPa (0.50 psi) or some other setting approved in writing by the Department;
- (e) Gasoline shall be handled in a manner to prevent spillage, discharging into sewers, storage in open containers, or handled in any other manner that would result in evaporation. If more than five gallons are spilled, the operator shall report the spillage in accordance with OAR 340-20-350 to 340-20-380.
- (3) Compliance with subsection (1)(a) of this rule shall be determined by visual inspection to ensure minimal spillage of gasoline and proper installation of bottom loading couples.
- (4) Compliance with subsection (1)(b) of this rule shall be determined by verification of use of equipment approved by the Department and/or by testing and monitoring in accordance with applicable portions of OAR 340-22-137 and/or Method 31 and/or 32 on file with the Department.
- (5) The owner or operator of a gasoline delivery vessel shall maintain the vessel to be vapor tight at all times, in accordance with OAR 340-22-137(1), if such vessel is part of a vapor balance system required by [these rules] OAR 340-22-100 through 340-22-300.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Bulk Gasoline Terminals 340-22-130

- (1) No terminal owner or operator, shall allow volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with a daily throughputs of greater than 76,000 liters (20,000 gallons) per day of gasoline (determined by a thirty-day rolling average):
 - (a) The owner or operator of a gasoline loading terminal shall only allow the transfer of gasoline between the facility and a truck tank or a truck trailer when a current leak test certification for the delivery vessel is on file with the terminal or a valid inspection sticker {(]as required by OAR 340-22-137(1)(c){)} is displayed on the delivery vessel;
 - (b) The owner or operator of a truck tank or a truck trailer shall not make any connection to the terminal's gasoline loading rack unless the gasoline delivery vessel has been tested in accordance with OAR 340-22-137(1);
 - (c) The truck driver or other operator who fills a delivery truck tank and/or trailer tank shall not take on a load of gasoline unless the vapor return hose is properly connected;
 - (d) All equipment associated with the vapor recovery system shall be maintained to be vapor tight and in good working order.
- (2) Compliance with section (1) of this rule shall be determined by testing in accordance with Method 33 on file with the Department. The method for determining compliance with section (1) of this rule are delineated in 40 CFR Part 60, Subpart XX, §60.503.
- (3) Bulk Gasoline terminals shall comply with the following within the limits of section (1) of this rule:

- (a) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system;
- (b) The loading device must not leak when in use. The loading device shall be designed and operated to allow no more than 10 cubic centimeters drainage per disconnect on the basis of 5 consecutive disconnects;
- (c) All loading liquid lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected;
- (d) All vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected or which contain vapor-tight unidirectional valves;
- (e) Gasoline is handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. If more than 5 gallons are spilled, the operator shall report the spillage in accordance with OAR 340-20-350 to 340-20-380;
- (f) The vapor collection system is operated in a manner to prevent the pressure therein from exceeding the tank truck or trailer pressure relief settings.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

340-22-133 [Renumbered to 340-33-130(2)]

340-22-136 [Renumbered to 340-22-130(3)]

Testing Vapor Transfer and Collection Systems 340-22-137

- (1) No person shall allow a vapor-laden delivery vessel subject to OAR 340-22-120(5) to be filled or emptied unless the delivery vessel:
 - (a) Is tested annually according to the test method 32 on file with the Department, or CFR Part 60, EPA Method 21 or 27, or California Air Resources Board Method 2-5;
 - (b) Sustains a pressure change of no more than 750 pascals (3 inches of H_2O) in 5 minutes when pressurized to a gauge pressure of 4,500 pascals (18 inches of H_2O) or evacuated to a gauge pressure of 1,500 pascals (6 inches of H_2O) during the testing required in subsection (1)(a) of this rule; and
 - (c) Displays a sticker near the Department of Transportation test date markings required by 49 CFR 177.824h, which:
 - (A) Shows the year and month that the gasoline tank truck last passed the test required in subsections (1)(a) and (b) of this rule;
 - (B) Shows the identification of the sticker; and
 - (C) Expires not more than one year from the date of the leak-test test, or if tested in California, on the expiration date so specified.
 - (d) Has its vapor return hose connected by the truck operator so that gasoline vapor is not expelled to the atmosphere.
- (2) The owner or operator of a vapor collection system subject to this regulation shall design and operate the vapor collection system and the gasoline loading equipment in a manner that prevents:
 - (a) Gauge pressure from exceeding 4,500 pascals (18 inches of H_2O) and vacuum from exceeding 1,500 pascals (6 inches of H_2O) in the gasoline tank truck being loaded;
 - (b) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source when measured by the Method 31 and 33 on file with the Department, or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals; and
 - (c) Visible liquid leaks during loading or unloading operations at gasoline dispensing facilities, bulk plants and bulk terminals.

- (3) The Department may, at any time, monitor a gasoline tank truck, vapor collection system, or vapor control system, by the methods on file with the Department, to confirm continuing compliance with sections (1) or (2) of this rule.
 (4) Recordkeeping and Reporting:
 - (a) The owner or operator of a source of volatile organic compounds subject to this [regulation] rule shall maintain records of all certification testing and repairs. The records must identify the gasoline tank truck, vapor collection system, or vapor control system; the date of the test or repair; and if applicable, the type of repair and the date of retest. The records must be maintained in a legible, readily available condition for at least two years after the date of testing or repair was completed;
 - (b) Copies of all records and reports under subsection (4)(a) of this rule shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Cutback and Emulsified Asphalt 340-22-140

- (1) Use of any cutback asphalts for paving roads and parking areas is prohibited during the months of April, May, June, July, August, September, and October, except as provided for in section (2) of this rule.
- (2) Slow curing (SC) and medium curing (MC) cutback asphalts are allowed during all months for the following uses and applications:

- (a) Solely as a penetrating prime coat for aggregate bases prior to paving;
- (b) For the manufacture of medium-curing patching mixes to provide long-period storage stockpiles used exclusively for pavement maintenance; or
- (c) For all uses when the National Weather Service forecast of the high temperature during the 24-hour period following application is below 10° C. (50° F.).
- (3) Rapid curing (RC) grades of cutback asphalt are always prohibited.
- (4) (a) Use of emulsified asphalts is unrestricted if solvent content is kept at or less than the limits listed below. If these limits are exceeded, then the asphalt shall be classified as medium curing (MC) cutback asphalts, and shall be limited to only the uses permitted by section (2) of this rule. (Grades of Emulsion Per AASHTO Designation M 208-72 Maximum Solvent Content by Weight):
 - (A) CRS-1 3%
 - (B) CRS-2 3%
 - (C) CSS-1 3%
 - (D) CSS-1h 3%
 - (E) CMS-2 8%
 - (F) CMS-2h 8%
 - (G) CMS-2S 12%
 - (b) Solvent content is determined by ASTM distillation test D-244.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Petroleum Refineries

340-22-150{ These regulations} This rule shall apply to all petroleum refineries:

- (1) Vacuum-Producing Systems:
 - (a) Noncondensable VOC from vacuum producing systems shall be piped to an appropriate firebox, incinerator or to a closed refinery system;
 - (b) Hot wells associated with contact condensers shall be tightly covered and the collected VOC introduced into a closed refinery system.

(2) Wastewater Separators:

- (a) Wastewater separators' forebays shall incorporate a floating pontoon or fixed solid cover with all openings sealed totally enclosing the compartmented liquid contents, or a floating pontoon or double deck-type cover equipped with closure seals between the cover edge and compartment wall;
- (b) Accesses for gauging and sampling shall be designed to minimize VOC emissions during actual use. All access points shall be closed with suitable covers when not in use.
- (3) Process Unit Turnaround:
 - (a) The VOC contained in a process unit to be depressurized for turnaround shall be introduced to a closed refinery system, combusted by a flare, or vented to a disposal system;
 - (b) The pressure in a process unit following depressurization for turnaround shall be less than 5 psig before venting to the ambient air.
- (4) Maintenance and Operation of Emission Control Equipment: Equipment for the reduction, collection or disposal of VOC shall be maintained and operated in a manner commensurate with the level of maintenance and housekeeping of the overall plant.
- (5) Recordkeeping: The owner or operator shall maintain a record of process unit turnarounds including an approximation of the quantity of VOC emitted to the atmosphere. Records shall be maintained for two years.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91

Petroleum Refinery Leaks 340-22-153

- (1) All persons operating petroleum refineries shall comply with the following rules this section concerning leaks:
 - (a) The owner or operator of a petroleum refinery complex, upon detection of a leaking component, which has a volatile organic compound concentration exceeding 10,000 ppm when tested in the manner described below shall:

- (A) Include the leaking component on a written list of scheduled repairs; and
- (B) Repair and retest the component within 15 days.
 (b) Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when a sample is being taken during maintenance operations;
- (c) Pipeline valves and pressure relief valves in gaseous volatile organic compound service shall be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and the Department.
- (2) Testing Procedures: Testing and calibration procedures to determine compliance with this [regulation] rule shall be done in accordance with EPA Method 21.
- (3) Monitoring, Recordkeeping, Reporting:
 - (a) The owner or operator of a petroleum refinery shall maintain, as a minimum, records of all testing conducted under this rule; plus records of all monitoring conducted under subsections (b) and (c) of this section;
 - (b) The owner or operator of a petroleum refinery subject to this [regulation] rule shall:
 - (A) Monitor yearly by the methods referenced in section (2) of this rule all:
 - (i) Pump seals;
 - (ii) Pipeline valves in liquid service; and
 - (iii) Process drains.
 - (B) Monitor quarterly by the methods referenced in section (2) of this rule all:
 - (i) Compressor seals;
 - (ii) Pipeline valves in gaseous service; and
 - (iii) Pressure relief valves in gaseous service.
 - (C) Monitor weekly by visual methods all pump seals;
 - (D) Monitor immediately any pump seal from which liquids are observed dripping;
 - (E) Monitor any relief valve within 24 hours after it has vented to the atmosphere; and
 - (F) Monitor immediately after repair of any component that was found leaking.
 - (c) Pressure relief devices which are connected to an operating flare header, vapor recovery device, inaccessible valves, storage tank valves, or valves

- that are not externally regulated are exempt from the monitoring requirements in subsection (b) of this section;
- (d) The owner or operator of a petroleum refinery, upon the detection of a leaking component, shall affix a weatherproof and readily visible tag bearing an identification number and the date the leak is located to the leaking component. This tag shall remain in place until the leaking component is repaired;

(e) The owner or operator of a petroleum refinery, upon the completion of each yearly and/or quarterly monitoring procedure, shall:

- (A) Submit a report to the Department on the 15th day of January, April, July, and September, listing the leaking components that were located but not repaired within the required time limit in subsection (1)(a) of this rule;
- (B) Submit a signed statement attesting to the fact that, with the exception of those leaking components listed in paragraph (A) of this subsection, all monitoring and repairs were performed as stipulated.
- (f) The owner or operator of a petroleum refinery shall maintain a leaking component monitoring log which shall contain, at a minimum, the following data:
 - (A) The name of the process unit where the component is located;
 - (B) The type of component (e.g., valve, seal);
 - (C) The tag number of the component;
 - (D) The date on which a leaking component is discovered:
 - (E) The date on which a leaking component is repaired;
 - (F) The date and instrument reading of the recheck procedure after a leaking component is repaired;
 - (G) A record of the calibration of the monitoring instrument;
 - (H) Those leaks that cannot be repaired until turnaround, (exceptions to the 15 day requirement of paragraph (1)(a)(B) of this rule); and
 - (I) The total number of components checked and the total number of components found leaking.
- (g) Copies of all records and reports required by this section shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;

- (h) Copies of all records and reports required by this section shall immediately be made available to the Department upon verbal or written request at any reasonable time;
- (i) The Department may, upon written notice, modify the monitoring, recordkeeping and reporting requirements.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Liquid Storage 340-22-160

following:

- (1) Owners or operators which have tanks storing methanol or other volatile organic compound liquids with a true vapor pressure, as stored, greater than 10.5 kPa (kilo Pascals) (1.52 psia), at actual monthly average storage temperatures, and having a capacity greater than 150,000 liters (approximately 39,000 gallons) shall comply with one of the
 - (a) Meet the equipment specifications and maintenance requirements of the federal standards of performance for new stationary sources - Storage Vessels for Petroleum Liquids, 40 CFR 60 Subpart K, and Ka, as amended by Federal Register, April 4, 1980, pages 23379 through 23381;
 - (b) Be retrofitted with a floating roof or internal floating cover using at least a nonmetallic resilient seal as the primary seal meeting the equipment specifications in the federal standards referred to in subsection (a) of this section or its equivalent.
- (2) All seals used in subsections (1)(b) and (c) of this rule are to be maintained in good operating condition and the seal fabric shall contain no visible holes, tears or other openings.
- (3) All openings, except stub drains and those related to safety (such as slotted gage wells), are to be sealed with suitable closures. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; except for slotted gage wells which must have floating seals with one half inch edge gaps or less.
- (4) Secondary Seals:

- (a) Applicability: Subsection (c) of this section applies to all VOC liquid storage vessels equipped with external floating roofs, having capacities greater than 150,000 liters (39,000 gallons) except as indicated in paragraph (H) of subsection (c) of this section;
- (b) Exemptions: Subsection (c) of this section does not apply to petroleum liquid storage vessels which:
 - (A) Are used to store waxy, heavy pour crude oil;
 (B) Have capacities less than 1 600 000 liter
 - (B) Have capacities less than 1,600,000 liters (420,000 gallons) and are used to store produced crude oil and condensate prior to lease custody transfer;
 - (C) Contain a VOC liquid with a true vapor pressure of less than 10.5 kPa (1.5 psia) where the vapor pressure is measured at the storage temperature;
 - (D) Contain a VOC liquid with a true vapor pressure less than 27.6 kPa (4.0 psia):
 - (i) Are of welded construction; and
 - (ii) Presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by the Department; or
 - (E) Are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoemounted secondary seal).
- (c) No owner of a VOC liquid storage vessel subject to this rule shall store VOC liquid in that vessel unless:
 - (A) The vessel has been fitted with:
 - (i) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or
 - (ii) A closure or other device which controls VOC emissions with an effectiveness equal to or greater than a seal required under subparagraph (A)(i) of this subsection as approved in writing by the Department.
 - (B) All seal closure devices meet the following requirements:
 - (i) There are no visible holes, tears, or other openings in the seal(s) or seal fabric;

- (ii) The seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and
- (iii) For vapor mounted seals, the accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal and the tank wall are determined by the method in subsection (d) of this section and shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per foot of tank diameter).
- (C) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are:
 - (i) Equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
 - (ii) Equipped with projections into the tank which remain below the liquid surface at all times.
- (D) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
- (E) Rim vents are set to open only when the roof is being floated off the leg supports or at the manufacturer's recommended setting;
- (F) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90 percent of the area of the opening; and
- (G) The owner or operator of a VOC liquid storage vessel with an external floating roof subject to subsection (c) of this section shall:
 - (i) Perform routine inspections semi-annually in order to ensure compliance with paragraphs (A) through (F) of this subsection and the inspections shall include a visual inspection of the secondary seal gap;
 - (ii) Measure the secondary seal gap annually in accordance with subsection (d) of this section when the floating roof is equipped with a vapor-mounted primary seal; and
 - (iii) Maintain records of the types of VOC liquids stored, the maximum true vapor

pressure of the liquid as stored, and the results of the inspections performed in subparagraphs (G)(i) and (ii) of this subsection.

- (H) The owner or operator of a VOC liquid storage vessel having a capacity equal to or less than 150,000 liters (39,000 gallons) with an external floating roof not subject to this regulation, but containing a VOC liquid with a true vapor pressure greater than 7.00 kPa (1.0 psi), shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all VOC liquids with a true vapor pressure greater than 7.0 kPa;
- (I) The owner or operator of a VOC liquid storage vessel subject to this [regulation] rule, shall submit to the Department, as a minimum, annual reports summarizing the inspections;
- (J) Copies of all records and reports under paragraphs (G) (H), and (I) of this subsection shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report submitted;
- (K) Copies of all records and reports under this section shall immediately be made available to the Department, upon verbal or written request, at any reasonable time;
- (L) The Department may, upon written notice, require more frequent reports or modify the monitoring and recordkeeping requirements, when necessary to accomplish the purposes of this rule.
- (d) Secondary Seal Compliance Determination:
 - (A) The owner or operator of any volatile organic compound source required to comply with section (4) of this rule shall demonstrate compliance by the methods of this section or an alternative method approved by the Department;
 - (B) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by the Department;
 - (C) Compliance with subparagraph (4)(c)(B)(iii) of this rule shall be determined by:

- (i) Physically measuring the length and width of all gaps around the entire circumference of the secondary seal in each place where a 0.32 cm (1/8 inch) uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall; and
- (ii) Summing the area of the individual gaps.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Surface Coating in Manufacturing 340-22-170

- (1) No person shall operate a coating line which emits into the atmosphere volatile organic compounds in excess of the limits in section (5) of this rule, expressed as pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to section (3) of this rule or emissions are controlled to an equivalent level pursuant to section (7) of this rule.
- (2) Exemptions:
 - This rule does not apply to airplanes painted out of doors in open air; automobile and truck refinishing; customized top coating of automobiles and trucks, if production is less than 35 vehicles per day; marine vessels and vessel parts painted out in the open air; flat wood coating; wood furniture and wood cabinets; wooden doors, mouldings, and window frames; machine staining of exterior wood siding; high temperature coatings (for service above 500° F.); lumber marking coatings; potable water tank inside coatings; high performance inorganic zinc coatings, air dried, applied to fabricated steel; and markings by stencil for railroad cars;

(b) This rule does not apply to:

- (A) Sources[, regulated by this rule,] whose potential emissions from activities identified in section (5) of this rule before add on controls of volatile organic compounds are less than 10 tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual); or
- (B) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance (such as research facilities, pilot plant operations, and laboratories) unless:
 - (i) The operation of the source is an integral part of the production process; or
 - (ii) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(3) Exceptions:

- (a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (5) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);
- (b) Included in this documentation must be a complete analysis of technical and economic factors which:
 - (A) Prevent the source from using both compliance coatings and pollution control equipment; and
 - (B) Justify the alternative emission limit sought by the source.
- (c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source specific SIP revision.
- (4) Applicability: This rule applies to each coating line, which includes the application area(s), flashoff area(s), air and forced air drier(s), and oven(s) used in the surface coating of the metal parts and products in subsections (5)(a) through (j) of this rule.
- (5) Process and Limitation: These emission limitations shall be based on a daily average except subsection (5)(e) of this rule shall be based on a monthly average. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied:

	(2)	Con Conting.
	(a)	Can Coating: (A) Sheet basecoat (exterior and interior) and
		(A) Sheet basecoat (exterior and interior) and over-varnish; two-piece can exterior (basecoat
		and over-varnish) 2.8 lb/gal.
		(B) Two- and three-piece can interior and exterior
		body spray, two-piece can exterior end (spray or
		roll coat) 4.2 lb/gal. (C) Three-piece can side-seam spray . 5.5 lb/gal.
		(D) End sealing compound 3.7 lb/gal.
		(E) End Sealing Compound for fatty foods
		(h) the beating compound for facey foods
	(b)	Fabric Coating
	(c)	Vinyl Coating 3.8 lb/gal.
	(d)	Paper Coating 2.9 lh/gal.
	(e)	Paper Coating 2.9 lb/gal. Existing Coating of Paper and Film in the
	(-)	Medford-Ashland AQMA
		*55 lb VOC per 1000 sq. yds. of material per pass.
	(f)	Auto and Light Duty Truck Coating:
	(-/	
		(A) Prime 1.9 lb/gal. (B) Topcoat 2.8 lb/gal.
		(C) Repair 4.8 lb/gal.
	(g)	Metal Furniture Coating 3.0 lb/gal.
	(h)	Magnet Wire Coating 1.7 lb/gal.
	(i)	Large Appliance Coating 2.8 lb/gal.
	(ċ)	Miscellaneous Products and Metal Parts:
		(A) Clear Coatings 4.3 lb/gal. (B) Force Air Dried or Air Dried 3.5 lb/gal.
		(B) Force Air Dried or Air Dried 3.5 lb/gal.
	÷	(C) Extreme Performance Coatings 3.5 lb/gal.
		(D) Other Coatings (i.e., Powder, oven
		dried) 3.0 lb/gal.
		(E) High Performance Architectural
		Coatings 3.5 lb/gal.
(6)		iance Determination: Compliance with this rule shall be
		mined by testing in accordance with 40 CFR Part 60 EPA
	Metho	
	equiva	alent plant specific method approved by and on file with
		epartment. The limit in section (1) of this rule of VOC
		e coating is based upon an assumed solvent density, and
		assumptions unique to a coating line; where conditions
		r, such as a different solvent density, a plant specific
		developed pursuant to the applicable Control Technology
		line document may be submitted to the Department for
(7)	appro	tion Method: The emission limits of sections (3) and (5)
(7)		is rule shall be achieved by:
	(a)	The application of low solvent content coating
	(4)	technology;
		acomorogi,

- (b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or
- (c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specific SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.

(8) Recordkeeping Requirements:

- (a) A current list of coatings shall be maintained which provides all the coating data necessary to evaluate compliance, including the following information, where applicable:
 - (A) Coating catalyst and reducer used;

(B) Mix ratio of components used;

(C) VOC content of coating as applied; and

(D) Oven temperature.

- (b) Where applicable, a monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;
- (c) Such records shall be retained and available for inspection by the Department for a period of two years.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

340-22-173 [Renumbered to 340-22-170(5)]

Aerospace Component Coating Operations 340-22-175

(1) No owner or operator of an aero-space component coating facility shall emit into the atmosphere volatile organic compounds in excess of the following limits, expressed as pounds VOC per gallon of coating applied, excluding water, unless an alternative emission limit is approved by the Department pursuant to section (4) of this rule or emissions to the atmosphere are controlled to an equivalent level pursuant to section (10) of this rule:

F	(_0,	
(a)	Primer	2.9 lb/gal.
(b)	Interior Topcoat	2.8 lb/gal.
(c)	Electric or Radiation Effect Coating .	6.7 lb/gal.
(d)	Extreme Performance Interior Topcoat .	5.0 lb/gal.
(e)	Fire Insulation Coating	5.0 lb/gal.
(f)	Fuel Tank Coating	6.0 lb/gal.
(g)	High Temperature Coating*	6.0 lb/gal.
(h)	Sealant	5.0 lb/gal.
(i)	Self-Priming Topcoat	3.5 lb/gal.
(ċ)	Topcoat	5.0 lb/gal.
(k)	Pretreatment Wash Primer	6.5 lb/gal.
(1)	Sealant Bonding Primer	6.0 lb/gal.
(m)	Temporary Protective Coating	2.1 lb/gal.
• •	*(For conditions between 350° F 500° F.	

- (2) After January 1, 1992, the emission limits for coatings in subsections (1)(d), (j), and (k) of this rule, shall not exceed 3.5 lb/gal.
- (3) Exemptions: This rule does not apply to the following:
 - (a) The exterior of fully assembled airplanes painted out of doors, high temperature coatings (for conditions over 500° F.), adhesive bonding primer, flight test coatings, and space vehicle coatings;
 - (b) Sources[, regulated by this rule,] whose potential emissions from activities identified in sction (1) of this rule before add on controls of volatile organic compounds are less than 10 tons per year (or 3 lb. VOC/hr or 15 lb. VOC/day actual);
 - (c) The use of separate coating formulations in volumes of less than 20 gallons per calendar year. No source shall use more than a combined total of 250 gallons per calendar year of exempt coatings. Records of coating usage shall be maintained as per section (8) of this rule; or
 - (d) Sources used exclusively for chemical or physical analysis or determination of product quality and coating performance (such as research facilities and laboratories) unless:
 - (A) The operation of the source is an integral part of the production process; or
 - (B) The emissions from the source exceed 363 kilograms (800 pounds) in any calendar month.

(4) Exceptions:

- (a) On a case-by-case basis, the Department may approve exceptions to the emission limits specified in section (1) of this rule, upon documentation by the source that an alternative emission limit would satisfy the federal criteria for reasonably available control technology (RACT);
- (b) Included in this documentation must be a complete analysis of technical and economic factors which:
 - (A) Prevent the source from using both compliance coatings and pollution control equipment; and
 - (B) Justify the alternative emission limit sought by the source.
- (c) The alternative emission limit approved by the Department shall be incorporated into the source's Air Contaminant Discharge Permit and shall not become effective until approved by EPA as a source-specific SIP revision.
- (5) Applicability: This rule[s] applies to each coating line, which includes the application area(s), flashoff area(s), air and force air drier(s), and oven(s) used in the surface coating of aerospace components in subsection (1)(a) through (m) of this rule. If more than one emission limitation in this rule applies to a specific coating, then the most stringent emission limitation shall be applied.
- (6) Solvent Evaporation Minimization:
 - (a) Closed containers shall be used for the storage or disposal of cloth or paper used for solvent surface preparation and cleanup;
 - (b) Fresh or spent solvent shall be stored in closed containers;
 - (c) Organic compounds shall not be used for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation;
 - (d) Containers of coating, catalyst, thinner, or solvent shall not be left open to the atmosphere when not in
- (7) Stripper Limitations: No stripper shall be used which contains more than 400 grams/liter (3.3 lbs/gal) of VOC or which has a true vapor pressure of 1.3 kPa (0.19 psia) at actual usage temperature.
- (8) Maskant for Chemical Processing Limitation: No maskant shall be applied for chemical processing unless the VOC emissions from coating operations are reduced by 85 percent, or the coating contains less than 600 grams/liter (5.0 lbs/gal) of VOC of coating excluding water, as applied.

- (9) Compliance determination: Compliance with this rule shall be determined by testing in accordance with 40 CFR Part 60 Appendix A Method 24 for determining the VOC content of the coating materials. Emissions from the coating processes and/or VOC emissions control efficiencies shall be determined by testing in accordance with 40 CFR Part 60 Appendix A Method 18, 25, California Method ST-7, a material balance method, or an equivalent plant specific method approved by EPA and the Department and on file with the Department. The limit in section (1) of this rule of VOC in the coating is based upon an assumed solvent density, and other assumptions unique to a coating line; where conditions differ, such as a different solvent density, a plant specific limit may be submitted to the Department and EPA for approval.
- (10) Reduction Method: The emission limits of section (1) of this rule shall be achieved by:
 - (a) The application of a low solvent content coating technology;
 - (b) A vapor collection and disposal system; or
 - (c) An equivalent means of VOC removal. The equivalent means must be approved by the Department and will be incorporated in the source's Air Contaminant Discharge Permit, and shall not become effective until approved by EPA as a source-specified SIP revision. Other alternative emission controls approved by the Department and allowed by EPA may be used to provide an equivalent means of VOC removal.
- (11) Recordkeeping Requirements:
 - (a) A current list of coatings shall be maintained which provides all of the coating data necessary to evaluate compliance, including the following information, where applicable:
 - (A) A daily record indicating the mix ratio of components used; and
 - (B) The VOC content of the coating as applied.
 - (b) A monthly record shall be maintained indicating the type and amount of solvent used for cleanup and surface preparation;
 - (c) A monthly record shall be maintained indicating the amount of stripper used;
 - (d) Such records shall be retained and available for inspection by the Department for a period of two years.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 8-1991, f. & cert. ef. 5-16-91

Degreasers

340-22-180 Cold cleaners, open top vapor degreasers, and conveyorized degreasers are exempt from the following this rule for they use fluids which are not photochemically reactive. These fluids are: $C_2Cl_3F_3$ trichlorotrifluoroethane, also known as Freon 113 or Freon TF; CH_2Cl_2 methylene chloride; 1, 1, $1-C_2H_3Cl_3$, methyl chloroform, also known as 1-1-1 trichloroethane or chlorothene VG. Cold Cleaners:

- (1) The owner or operator of dip tank cold cleaners shall comply with the following equipment specifications in this section after April 1, 1980:
 - (a) Be equipped with a cover that is readily opened and closed. This is required of all cold cleaners, whether a dip tank or not;
 - (b) Be equipped with a drainrack, suspension basket, or suspension hoist that returns the drained solvent to the solvent bath;
 - (c) Have a freeboard ratio of at least 0.5;
 - (d) Have a visible fill line.
- (2) An owner or operator of a cold cleaner shall be responsible for following the required operating parameters and work practices. The owner shall post and maintain in the work area of each cold cleaner a pictograph or instructions clearly explaining the following work practices in this section:
 - (a) The solvent level shall not be above the fill line;
 - (b) The spraying of parts to be cleaned shall be performed only within the confines of the cold cleaner;
 - (c) The cover of the cold cleaner shall be closed when not in use or when parts are being soaked or cleaned by solvent agitation;
 - (d) Solvent-cleaned parts shall be rotated to drain cavities or blind holes and then set to drain until dripping has stopped;

- (e) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste {{}} weight{}} can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's solid and Hazardous Waste Rules, OAR Chapter 340, Division {-}}100.
- (3) The owner or operator shall maintain cold cleaners in good working condition and free of solvent leaks.
- (4) If the solvent has a volatility greater than 2.0 kPa (0.3 psi) measured at 38 °C. (100 °F.), or if the solvent is agitated or heated, then the cover must be designed so that it can be easily operated with one hand or foot.
- (5) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38 °C. (100 °F.), then the drainage facility must be internal, so that parts are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (6) If the solvent has a volatility greater than 4.3 kPa (0.6 psi) measured at 38 °C. (100 °F.), or if the solvent is heated above 50 °C. (120 °F.), then one of the following solvent vapor control systems must be used:
 - (a) The freeboard ratio must be equal to or greater than 0.70; or
 - (b) Water must be kept over the solvent, which must be insoluble in and heavier than water; or
 - (c) Other systems of equivalent control, such as a refrigerated chiller.

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Open Top Vapor Degreasers 340-22-183

(1) The owner or operator of all open top vapor degreasers shall comply with the following equipment specifications:

- (a) Be equipped with a cover that may be readily opened and closed. When a degreaser is equipped with a lip exhaust, the cover shall be located below the lip exhaust. The cover shall move horizontally or slowly so as not to agitate and spill the solvent vapor. The degreaser shall be equipped with at least the following three safety switches:
 - (A) Condenser flow switch and thermostat [- (]to shut[s] off sump heat if coolant is either not circulating or too warm[]];
 - (B) Spray safety switch [--(]to shut[s] off spray pump or conveyor if the vapor level drops excessively, (e.g., greater than 10 cm (4 inches));
 - (C) Vapor level control thermostat {- (}to shut{s} off sump heat when vapor level rises too high{)}.
- (b) {Have-the following: }
 - (A) A closed design such that the cover opens only when the part enters or exits the degreaser {(}and when the degreaser starts up, forming a vapor layer, the cover may be opened to release the displaced air{}), and either;
 - (B) A freeboard ratio equal to or greater than 0.75; or
 - (C) A freeboard, refrigerated or cold water, chiller.
- (c) Post a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:
 - (A) Do not degrease porous or absorbent materials such as cloth, leather, wood or rope;
 - (B) The cover of the degreaser should be closed at all times except when processing workloads;
 - (C) When the cover is open the lip of the degreaser should not be exposed to steady drafts greater than 15.3 meters per minute (50 feet/ minute);
 - (D) Rack parts so as to facilitate solvent drainage from the parts;
 - (E) Workloads should not occupy more than one-half of the vapor-air interface area;
 - (F) When using a powered hoist, the vertical speed of parts in and out of the vapor zone should be less than 3.35 meters per minute (11 feet/ minute);
 - (G) Degrease the workload in the vapor zone until condensation ceases;

- (H) Spraying operations should be done within the vapor layer;
- (I) Hold parts in the degreaser until visually dry;
- (J) When equipped with a lip exhaust, the fan should be turned off when the cover is closed;
- (K) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser;
- (L) Water shall not be visible in the solvent stream from the water separator.
- (2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (4) Still and sump bottoms shall be kept in closed containers.
- (5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR Chapter 340, Division [-]100.
- (6) Exhaust ventilation shall not exceed 20 m³/minute per m² (65 cfm per foot²) of degreaser open area, unless necessary to meet OSHA requirements. Ventilation fans shall not be used near the degreaser opening.

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Conveyorized Degreasers 340-22-186

(1) The owner or operator of conveyorized cold cleaners and conveyorized vapor degreasers shall comply with the following operating requirements:

- (a) Exhaust ventilation should not exceed 20 cubic meters per minute of square meter (65 cfm per foot²) of degreaser opening, unless necessary to meet OSHA requirements. Workplace fans should not be used near the degreaser opening;
- (b) Post in the immediate work area a permanent and conspicuous pictograph or instructions clearly explaining the following work practices:
 - (A) Rack parts for best drainage;
 - (B) Maintain vertical speed of conveyored parts to less than 3.35 meters per minute (11 feet/minute);
 - (C) The condenser water shall be turned on before the sump heater when starting up a cold vapor degreaser. The sump heater shall be turned off and the solvent vapor layer allowed to collapse before closing the condenser water when shutting down a hot vapor degreaser.
- (2) A routine inspection and maintenance program shall be implemented for the purpose of preventing and correcting solvent losses, as for example, from dripping drain taps, cracked gaskets, and malfunctioning equipment. Leaks must be repaired immediately.
- (3) Sump drainage and transfer of hot or warm solvent shall be carried out using threaded or other leakproof couplings.
- (4) Still and sump bottoms shall be kept in closed containers.
- (5) Waste solvent shall be stored in covered containers and returned to the supplier or a disposal firm handling solvents for final disposal, such that no greater than 20 percent of the waste (by weight) can evaporate into the atmosphere. Handling of the waste must also be done in accordance with the Department's Solid and Hazardous Waste Rules, OAR Chapter 340, Division [-]100.
- (6) All conveyorized cold cleaners and conveyorized vapor degreasers with air/vapor interfaces of 2.0 m² or greater shall have one of the following major control devices installed and operating:
 - (a) Carbon adsorption system, exhausting less than 25 ppm of solvent averaged over a complete adsorption cycle, {{}}based on exhaust ventilation of 15 m³/minutes per m² of air/vapor area, when down-time covers are open{{}}; or
 - (b) Refrigerated chiller with control effectiveness equal to or better than subsection (a) of this section; or
 - (c) A system with control effectiveness equal to or better than subsection (a) of this section.

Stat. Auth.: ORS Ch. [-468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Asphaltic and Coal Tar Pitch Used for Roofing Coating 340-22-190

- (1) No person shall operate or use equipment for melting, heating or holding asphalt or coal tar pitch for the on-site construction, installation, or repair of roofs unless the gas-entrained effluents from such equipment are contained by close fitting covers.
- (2) A person operating equipment subject to this rule shall maintain the temperature of the asphaltic or coal tar pitch below 285 °C. (550 °F.), or 17 °C. (30 °F.) below the flash point whichever is the lower temperature, as indicated by a continuous reading thermometer.
- (3) The provisions of this rule shall not apply to equipment having a capacity of 100 liters (26 gallons) or less; or to equipment having a capacity of 600 liters (159 gallons) or less provided it is equipped with a tightly fitted lid or cover.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91

Flat Wood Coating

340-22-200

- (1) This rule applies to all flat wood manufacturing and surface finishing facilities, that manufacture the following products:
 - (a) Printed interior panels made of hardwood plywood and thin particle board;
 - (b) Natural finish hardwood plywood panels; or
 - (c) Hardboard paneling with Class II finishes.

- (2) This rule does not apply to the manufacture of exterior siding, tileboard, particle board used as a furniture component, or paper or plastic laminates on wood or wood-derived substrates.
- (3) No owner or operator of a flat wood manufacturing facility subject to this [regulation] rule shall emit volatile organic compounds from a coating application system in excess of:
 - (a) 2.9 kg per 100 square meters of coated finished product (6.0 lb/1,000 square feet) from printed interior panels, regardless of the number of coats applied;
 - (b) 5.8 kg per 100 square meters of coated finished product (12.0 lb/1,000 square feet) from natural finish hardwood plywood panels, regardless of the number of coats applied; and
 - (c) 4.8 kg per 100 square meters of coated finished product (10.0 lb/1,000 square feet) from Class II finishes on hardboard panels, regardless of the number of coats applied.
- (4) The emission limits in section (3) of this rule shall be achieved by:
 - (a) The application of low solvent content coating technology; or
 - (b) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds entering the incinerator (VOC measured as total combustible carbon) to carbon dioxide and water; or
 - (c) An equivalent means of VOC removal. The equivalent means must be approved in writing by the Department. The time period used to determine equivalency shall not exceed twenty-four hours.
- (5) A capture system must be used in conjunction with the emission control systems in subsection (4)(b) and (c) of this rule. The design and operation of a capture system must be consistent with good engineering practice and shall be required to provide for an overall emission reduction sufficient to meet the emission limitations in section (3) of this rule.
- (6) Compliance Demonstration:
 - (a) The owner or operator of a volatile organic compound source required to comply with this rule shall demonstrate compliance by the methods of subsection (c) of this section, or an alternative method approved by the Department;

- (b) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test;
- (c) Test procedures in 40 CFR Part 60 EPA Method 18, 24, or 25 shall be used to determine compliance with section (3) of this rule;
- (d) The Department may accept, instead of the coating analysis required by paragraph (c)(A) of this section, a certification by the coating manufacturer of the composition of the coating, if supported by actual batch formulation records. In the event of any inconsistency between a Method 18, 24, or 25 test and a facility's formulation data, the Method 18, 24, or 25 test will govern;
- (e) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:
 - (A) Exhaust gas temperature of all incinerators;
 - (B) Temperature rise across a catalytic incinerator bed; and
 - (C) Breakthrough of VOC on a carbon absorption unit.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 8-1991, f. & cert. ef. 5-16-91

Rotogravure and Flexographic Printing 340-22-210

(1) No owner or operator of a packaging rotogravure, publication rotogravure, flexographic or specialty printing facility, with the potential to emit before add on controls greater than 90 mg/year (100 ton/year), employing ink containing solvent may operate, cause, allow or permit the operation of the press unless:

- (a) The volatile fraction of ink, as it is applied to the substrate contains 25.0 percent by volume or less or organic solvent and 75 percent by volume or more of water; or
- (b) The ink as it is applied to the substrate, less water, contains 60.0 percent by volume or more nonvolatile material; or
- (c) The owner or operator installs and operates:
 - (A) A carbon absorption system which reduces the volatile organic emissions from the capture system by at least 90.0 percent by weight;
 - (B) An incineration system which oxidizes at least 90.0 percent of the nonmethane volatile organic compounds (VOC measured as total combustible carbon) to carbon dioxide and water; or
 - (C) An alternative volatile organic compound emissions reduction system demonstrated to have at least a 90.0 percent reduction efficiency, measured across the control system, and has been approved by the Department.
- (2) A capture system must be used in conjunction with the emission control systems in subsection (1)(c) of this rule. The design and operation of a capture system must be consistent with good engineering practice, and shall be required to provide for an overall reduction in volatile organic compound emissions of at least:
 - (a) 75.0 percent where a publication roto-gravure process is employed;
 - (b) 65.0 percent where a packaging rotogravure process is employed; or
 - (c) 60.0 percent where a flexographic printing process is employed.
- (3) Compliance Demonstration:
 - (a) Upon request of the Department, the owner or operator of a volatile organic compound source shall demonstrate compliance by the methods of this section or an alternative method approved by the Department. All tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing;
 - (b) A person proposing to conduct a volatile organic compound emissions test shall notify the Department of the intent to test not less than 30 days before the proposed initiation of the tests so the Department may observe the test. The notification shall contain the information required by, and be in a format approved by, the Department;

- (c) Test procedures to determine compliance with this rule must be approved by the Department and consistent with:
 - (A) EPA test Method 18, 24, or 25, 40 CFR Part 60; or California Method ST-7;
 - (B) The Department may accept, instead ink-solvent analysis, a certification by the ink manufacturer of the composition of the ink supported solvent, if by actual formulation records. In the event of any inconsistency between an EPA Method test and a facility's formulation data, the EPA Method test will govern.
- (d) If add-on control equipment is used, continuous monitors of the following parameters shall be installed, periodically calibrated, and operated at all times that the associated control equipment is operating:
 - (A) Exhaust gas temperature of all incinerators;
 - (B) Breakthrough of VOC on a carbon adsorption unit; and
 - (C) Temperature rise across a catalytic incinerator bed.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Perchloroethylene Dry Cleaning 340-22-220

- (1) The owner or operator of a perchloroethylene dry cleaning facility shall:
 - (a) Vent the entire dryer exhaust through a properly functioning carbon adsorption system or equally effective control device;
 - (b) Emit no more than 100 ppmv of volatile organic compounds from the dryer control device before dilution;
 - (c) Immediately repair all components found to be leaking liquid volatile organic compounds;

- (d) Cook or treat all diatomaceous earth filters so that the residue contains 25 kg or less of volatile organic compounds per 100 kg of wet waste material;
- (e) Reduce the volatile organic compounds from all solvent stills to 60 kg or less per 100 kg of wet waste material;
- (f) Drain all filtration cartridges, in the filter housing, for at least 24 hours before discarding the cartridges;
- (g) When possible, dry all drained cartridges without emitting volatile organic compounds to the atmosphere;
- (h) Any other filtration or distillation system can be used if equivalency is demonstrated. Any system reducing waste losses below 1 kg solvent per 100 kg clothes cleaned will be considered equivalent. For dry-to-dry configuration units, the following shall apply in lieu of subsection (1)(a) and (b) of this rule:
 - (A) The dryer/condenser system must be closed to the atmosphere at all times except when articles are being loaded or unloaded through the door of the machine;
 - (B) The dryer/condenser system must not vent to the atmosphere until the air-vapor stream temperature on the outlet side of the refrigerated condenser is equal to or less than 45 °F.
- (2) Exemptions: The requirements of subsections (1)(a) and (b) of this rule are not applicable to:
 - (a) Coin-operated facilities;
 - (b) Facilities where an absorber or other necessary control equipment cannot be accommodated because of inadequate space; or
 - (c) Facilities with insufficient steam capacity to desorb adsorbers.
- (3) Compliance Demonstration: Compliance to this rule shall be demonstrated as follows:
 - (a) Compliance with subsections (1)(a), (f), and (g) of this rule shall be determined by means of a visual inspection;
 - (b) Compliance with subsections (1)(c) of this rule shall be determined by means of a visual inspection of the following components:
 - (A) Hose connections, unions, couplings and valves;
 - (B) Machine door gaskets and seatings;
 - (C) Filter head gasket and seating;
 - (D) Pumps;
 - (E) Base tanks and storage containers;
 - (F) Water separators;

- (G) Filter sludge recovery;
- (H) Distillation unit;
- (I) Diverter valves;
- (J) Saturated lint from lint basket; and
- (K) Cartridge filters.
- (c) Compliance with subsection (1) (b) of this rule shall be determined by:
 - (A) A test consistent with EPA Guideline Series document, "Measurement of Volatile Organic Compounds", EPA-450/2-78-041 and in accordance with EPA Method 23 "Determination of Halogenated Organics from Stationary Sources" (proposed 43 FR 39766, June 11, 1980); or
 - (B) The proper installation, operation, and maintenance of equipment which has been demonstrated to be adequate to meet the emission limits of 100 ppmv.
- (d) Compliance with subsections (1)(d) and (e) of this rule shall be determined by means of the procedure in the "Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation", ANSI/ASTM D322.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468.020, 468.280 & 468.295] 468 & 468A Hist.: DEQ 23-1980, f. & ef. 9-26-80; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91

Standard for Automotive Gasoline

Rèid Vapor Pressure for Gasoline 340-22-300

- (1) (a) No person shall sell or supply as a fuel for motor vehicles, during the period of May 15 through September 15 of each year, a gasoline having a Reid Vapor Pressure greater than ten and a half pounds per square inch (10.5 psi);
 - (b) This section shall apply to gasoline delivered to retail outlets more than 14 days immediately preceding the period established;

- (c) Gasoline and ethyl alcohol blends of at least 10% by volume (gasohol) are given a one pound per square inch allowance, so as not to exceed an RVP of 11.5 psi.
- (2) (a) As used in this [regulation] rule, "gasoline" means any blend of petroleum distillate sold as a motor fuel having a Reid Vapor Pressure of more than four pounds as defined by the most current method of ASTM Method D323, and meeting the other general specifications defined by the most current method of ASTM D439 or D4814;
 - (b) ASTM refers to the standards test methods and procedures published by the American Society for Testing and Materials.
- (3) The Reid Vapor Pressure specified in section (1) of this rule shall be measured according to the procedures established in the most current method of ASTM D323.
- (4) The geographic coverage of this <u>fregulation</u> rule shall be consistent with boundary specified in ASTM D439, specifically all of Oregon, west of 122 degrees Longitude.
- (5) Test results from samples submitted to the Department by refiners or distributors of gasoline shall be sampled and tested pursuant to methods established by the most current method of ASTM D323. Analysis of all fuel from pipeline, tanker, or other sources outside of the state shall be summarized and forwarded to the Department on a monthly basis. Such reports will be supplied on a form supplied by the Department.
- (6) The Department reserves the right to audit records and to sample gasoline for the purposes of compliance. Samples of petroleum shall be sampled pursuant and tested by methods established by the most current method of ASTM D323 or by methods established under the California Air Resources rule, Title 13 §2251 or Part 80 of Title 40 of the Code of Federal Regulations Fuel and Fuel Additives.
- (7) Pursuant to ORS 468.130, civil penalties of not more than \$10,000 per day may be assessed for violation of section (1) of this rule at wholesale fuel facilities, including terminals, fleet facilities, cardlocks, and not more than \$2500 per day at retail.
- [(8) The effective date of this section is June 15, 1989.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 11-1989, f. 6-12-89, cert. ef. 6-15-89

Gasoline Vapors from Gasoline Transfer and Dispensing Operations

Purpose

340-22-400

(1) Gasoline vapors contribute to the formation of ozone. [These rules] OAR 340-22-400 through 340-22-403 require the control of gasoline vapors from gasoline transfer and dispensing operations.

(2) [These rules]OAR 340-22-400 through 340-22-403 apply to gasoline dispensing sites located within Clackamas, Multnomah and Washington Counties.

Stat. Auth.: ORS Ch. 468[.295] & 468A

Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91)

Definitions

340-22-401 As used in these rules, unless otherwise required by context OAR 340-22-400 through 340-22-403:

- (1) "Equivalent control" means the use of alternate operational and/or equipment controls for the reduction of gasoline vapor emissions, that have been approved by the Department, such that the aggregate emissions of gasoline vapor from the facility do not exceed those from the application of defined reasonably available control technology.
- (2) "Gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds per square inch (28 kilopascals) or higher, used as a motor fuel.
- "Gasoline dispensing site" means any site where gasoline is dispensed into vehicle fuel tanks or into portable containers used to fuel any motor from any stationary storage container(s) larger than 550 gallons.
 "Annual throughput" means the amount of gasoline transferred
- (4) "Annual throughput" means the amount of gasoline transferred into or dispensed from a gasoline dispensing site during 12 consecutive months.
- (5) "Stage I vapor collection system" means a system where gasoline vapors are forced from a tank into a vapor-tight holding system or vapor control system through direct displacement by the gasoline being loaded.

- (6) "Stage II vapor collection system" means a system where at least 90 percent, by weight, of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling are transferred to a vapor-tight holding system or vapor control system.
- (7) "Substantially modified" means a modification of an existing gasoline-dispensing site which involves the addition of one or more new stationary gasoline storage tanks or the repair, replacement or reconditioning of an existing tank.
- (8) "Vapor control systems" means a system that prevents emissions to the outdoor atmosphere from exceeding 4.7 grains per gallon (80 grams per 1,000 liters) of petroleum liquid loaded.

Stat. Auth.: ORS Ch. 468[.295] & 468A
Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91)

General Provisions 340-22-402

- (1) No person shall transfer or allow the transfer of gasoline into storage tanks, at gasoline-dispensing sites located in Clackamas, Multnomah or Washington Counties, whose annual throughput exceeds 120,000 gallons, unless the storage tank is equipped with:
 - (a) A stage I vapor collection system consisting of a vapor-tight return line from the storage tank, or its vent, to the gasoline transport vehicle;
 - (b) A properly installed on-site vapor control system connected to a vapor collection system; or
 - (c) An equivalent control system.
- (2) A stage I vapor collection system and submerged filling are not required for storage tanks with a capacity less than 550 gallons. A stage II vapor collection system is not required at gasoline-dispensing sites that are not subject to the stage I requirements of this section.
- (3) No owner and/or operator of a gasoline-dispensing site shall transfer or allow the transfer of gasoline into a motor vehicle fuel tank at gasoline-dispensing sites located in Clackamas, Multnomah or Washington Counties whose annual throughput exceeds 600,000 gallons, unless the gasoline-dispensing site is equipped with a stage II vapor collection system which must be approved by the Department before it is installed.

NOTES:

-1- Underground piping requirements are described in OAR 340-150-001 through 340-150-003 and 40 CFR 280.20(d). Systems installed according to American Petroleum Institute

Publication 1615, "Installation of Underground Petroleum Storage System" or Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems" or American National Standards Institute Standard B31.4 "Liquid Petroleum Transportation Piping System" are considered approved systems.

-2- Above-ground stage II equipment requirements are based on systems recently approved in other states with established stage II program. See the Oregon Department of Environmental Quality, Air Quality Division, for the list of approved equipment. Any other proposed equivalent systems must be submitted to the Department of Environmental Quality, Air Quality Division, for approval before installation.

- (4) Owners and/or operators of gasoline storage tanks, gasoline transport vehicles and gasoline-dispensing sites subject to stage I or stage II vapor collection requirements must:
 - (a) Install all necessary stage I and stage II vapor collection and control systems, and make any modifications necessary to comply with the requirements;
 - (b) Provide adequate training and written instructions to the operator of the affected gasoline-dispensing site and the gasoline transport vehicle;
 - (c) Replace, repair or modify any worn or ineffective component or design element to ensure the vapor-tight integrity and efficiency of the stage I and stage II vapor collection systems; and
 - (d) Connect and ensure proper operation of the stage I and stage II vapor collection systems whenever gasoline is being loaded, unloaded or dispensed.
- (5) Approval of a stage I or stage II vapor collection system by the Department does not relieve the owner and/or operator of the responsibility to comply with other applicable codes and regulations pertaining to fire prevention, weights and measures and safety matters.
- (6) Regarding installation and testing of piping for stage I and stage II vapor collection systems:
 - (a) Piping shall be installed in accordance with standards in OAR 340 Division 150;
 - (b) Piping shall be installed by a licensed installation service provider pursuant to OAR 340 Division 160; and
 - (c) Piping shall be tested prior to being placed into operation by an installation or tank tightness testing service provider licensed pursuant to OAR 340 Division 160.

NOTE: Test methods are based on methods used in other states with established stage II programs. See the Oregon Department of Environmental Quality, Air Quality Division, for copies of the approved test methods.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.295] & 468A
Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91)

Compliance Schedules 340-22-403

- (1) Owners of gasoline-dispensing sites subject to the stage I vapor collection requirements of this rule within the Portland Air Quality Maintenance Area are required to be in compliance with all stage I requirements by April 1, 1981.
- (2) Owners of gasoline-dispensing sites subject to the stage I vapor collection requirements of this rule outside the Portland Air Quality Maintenance Area but within Clackamas, Multnomah or Washington Counties must be in compliance with stage I vapor collection requirements by December 31, 1993, or at the time the gasoline-dispensing site is required to install a stage II vapor collection system, whichever is sooner.
- (3) Owners of gasoline-dispensing sites subject to the stage II vapor collection requirements of this rule must be in compliance with stage II vapor collection requirements:
 - (a) For gasoline-dispensing sites whose annual throughput exceeds 1,800,000 gallons, by no later than April 30, 1992;
 - (b) For gasoline-dispensing sites whose annual throughput exceeds 1,080,000 gallons, by no later than April 30, 1993;
 - (c) For gasoline-dispensing sites whose annual throughput exceeds 600,000 gallons, by no later than April 30, 1994; or
 - (d) At the time the gasoline-dispensing site is substantially modified after the effective date of this rule May 7, 1991; whichever is sooner.

Stat. Auth.: ORS Ch. 468[.295] & 468A Hist.: DEQ 7-1991, f. & cert. ef. 5-7-91 (and corrected 6-7-91)

Control of Ozone Depleting Chemicals

Purpose and Applicability

340-22-405 The purpose of these rules OAR 340-22-405 through 340-22-415 is to reduce the use of stratospheric ozone depleting chemicals, to recycle those chemicals already in use, and to encourage the use of less dangerous chemicals. The Environmental Quality Commission having determined that equipment for the recovery and recycling of chlorofluorocarbons from automobile air conditioners is affordable and available, intends that these rules OAR 340-22-405 through 340-22-415 apply to persons handling automobile air conditioners.

Stat. Auth.: ORS Ch. 468[.600 - 468.621] & 468A Hist.: DEQ 31-1990, f. & cert. ef. 8-15-90

Definitions

340-22-410 As used in these rules, unless otherwise required by context OAR 340-22-405 through 340-22-415:

- (1) "Automobile" means any self-propelled motor vehicle used for transporting persons or commodities on public roads.
- (2) "Chlorofluorocarbons (CFC)" includes:
 - (a) CFC-11 (trichlorofluoromethane);
 - (b) CFC-12 (dichlorodifluoromethane);
 - (c) CFC-113 (trichlorotrifluoroethane);
 - (d) CFC-114 (dichlorotetrafluoroethane); and
 - (e) CFC-115 ((mono) chloropentafluoroethane).
- (3) "Commission" means the Environmental Quality Commission.
- (4) "Department" means the Department of Environmental Quality.
- (5) "Director" means the Director of the Department of Environmental Quality.
- (6) "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

Stat. Auth.: ORS Ch. 468[.600 - 468.62] & 468A Hist.: DEQ 31-1990, f. & cert. ef. 8-15-90

Requirement for Recycling Automobile Air Conditioning Coolant 340-22-415

(1) Except as provided in section (2) of this rule no person shall engage in the business of installing, servicing, repairing, disposing of, or otherwise treating automobile air conditioners {after August 10, 1991 } without recovering and recycling CFC.

- (2) Any automobile repair shop that has:
 - (a) Fewer than four employees; or
 - (b) Fewer than three covered bays shall comply with the provisions of section (1) of this rule after August 10, 1992.
- (3) Only recovery and recycling equipment that is certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent, shall be used.

(4) All recovery and recycling equipment shall be operated and maintained at full efficiency and effectiveness according to the manufacturer's directions and guidelines contained in SAE standard J1989.

Stat. Auth.: ORS Ch. 468[.600 - 468.62] & 468A Hist.: DEQ 31-1990, f. & cert. ef. 8-15-90

Motor Vehicle Fuel Specifications for Oxygenated Gasoline

Policy

340-22-440 The Environmental Quality Commission finds and determines that control area responsible parties, distributors and retail outlets are "Indirect Sources" as defined in OAR 340-20-110 (14).

Stat. Auth.: ORS Ch. 468A Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Definitions

- 340-22-450 As used in OAR 340-22-460 through OAR 340-22-640:
- (1) "Attest engagement" means a review of nonfinancial records by
- (2) "Averaging period" means the period of time over which all gasoline sold or dispensed for use in a control area by any control area responsible party must comply with the average oxygen content standard.
- (3) "Blend" means regular, unleaded, supreme or other trade names for gasoline products containing differing levels of octane.
- (4) "Blender control area responsible party (Blender CAR)" means a person who owns oxygenated gasoline which is sold or dispensed from a control area oxygenate blending facility.

- (5) "Carrier" means any person who transports, stores, or causes the transportation or storage of gasoline at any point in the gasoline distribution network, without taking title to or otherwise having ownership of the gasoline and without altering the quality or quantity of the gasoline.
- (6) "Control area" means a geographic area listed in OAR 340-22-470 in which only gasoline that meets the requirements of OAR 340-22-460 through OAR 340-22-640 may be sold or dispensed.
- (7) "Control area oxygenate blending facility" means any facility or truck at which oxygenate is added to gasoline that is intended for use in any control area, and at which the quality and quantity of gasoline is not otherwise altered, except through the addition of deposit-control additives.
- (8) "Control area responsible party (CAR)" means a person who owns gasoline and/or oxygenates that is sold or dispensed from a control area terminal.
- (9) "Control area terminal" means a terminal storage facility that is capable of receiving gasoline in bulk by pipeline or marine vessel, or at which gasoline is altered either in quantity or quality, excluding the addition of deposit control additives. Gasoline that is intended for use in any control area is sold or dispensed into trucks at these control area terminals.
- (10) "Control period" means the period during which oxygenated gasoline must be sold or dispensed within the control area.
- (11) "Department" means the Department of Environmental Quality.
- (12) "Distributor" means a person who transports or stores or causes the transportation or storage of gasoline at any point between a gasoline refinery or importer's facility and any retail outlet or wholesale purchaser-consumer's facility.
- (13) "EPA" means the United States Environmental Protection Agency.
- (14) "EPA substantially similar ruling" means a fuel or fuel additive for general use in light-duty vehicles manufactured after the model year 1974, that is substantially similar to a fuel or fuel additive used to certify a model year 1975 or newer vehicle or engine under 42 U.S.C. 7525 (Clean Air Act, section 206), as amended through November 15, 1990 and any amendments or modifications thereto, and as specified in EPA's Interpretative Ruling at 56 Federal Register 5352-5356, revised through February 11, 1991, and that the EPA has ruled meets the following criteria:
 - (a) The fuel contains carbon, hydrogen, and any or all of the elements of oxygen, nitrogen, or sulfur exclusively, with the exception of trace levels of impurities which produce gaseous combustion products, in the form of some combination of

- (A) hydrocarbons;
- (B) aliphatic ethers;
- (C) aliphatic alcohols other than methanol;
- (D) up to 0.3 percent methanol by volume;
- (E) up to 2.75 percent methanol by volume with an equal amount of butanol, or high molecular weight alcohol; or
- (F) a fuel additive at a concentration of no more than 0.25 percent by weight which contributes no more than 15 ppm sulfur by weight to the fuel.
- (b) The fuel contains no more than 2.0 percent oxygen by weight, except that fuels containing aliphatic ethers and/or alcohols (except methanol) must contain no more than 2.7 percent oxygen by weight.
- (c) The fuel possesses, at the time of manufacture, the physical and chemical characteristics of an unleaded gasoline as specified by ASTM Standard D4814-88 for at least one of the Seasonal and Geographical Volatility Classes specified in the standard; and
- (d) the fuel contains only
 - (A) carbon;
 - (B) hydrogen; and
 - (C) any or all of the following elements: oxygen, nitrogen and sulfur.
- (15) "EPA waiver" means any current motor fuel waivers granted by the U. S. Environmental Protection Agency under authority of 42 U.S.C. 745(f)(4)(Clean Air Act, section 211), as amended through November 15, 1990 and any amendments or modifications thereto.
- (16) "Gasoline" means any fuel sold for use in motor vehicles and motor vehicle engines and commonly or commercially known or sold as gasoline.
- (17) "Nonoxygenated gasoline" means any gasoline which does not meet the definition of oxygenated gasoline.
- (18) "Oxygen content of gasoline blends" means the percentage of oxygen by weight contained in a gasoline blend, based upon its percentage oxygenate by volume, excluding denaturants and other non-oxygen-containing components. All measurements must be adjusted to 60 degrees Fahrenheit.
- (19) "Oxygenate" means any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. Lawful use of any combination of these substances requires that they be "Substantially Similar" under section 211(f)(1) of the Clean Air Act (CAA), or be permitted under a waiver granted by the Administrator of the Environmental Protection Agency under the authority of section 211(f)(4) of the CAA.

- (20) "Oxygenate blender" means a person who owns, leases, operates, controls, or supervises a control area oxygenate blending facility.
- (21) "Oxygenated gasoline" means any gasoline which when supplied on a per gallon basis contains at least 2.7 percent oxygen by weight or which when supplied using the averaging method contains at least 2.0 percent oxygen by weight, and has been included in the oxygenated gasoline program accounting by a control area responsible party and which is intended to be sold or dispensed for use in any control area during a control period.
- (22) "Refiner" means a person who owns, leases, operates, controls, or supervises a refinery that produces gasoline for use in a control area.
- (23) "Refinery" means a plant at which gasoline is produced.
- (24) "Reseller" means a person who purchases gasoline and resells or transfers it to a retailer or wholesale purchaser-consumer.
- (25) "Retail outlet" means any establishment at which gasoline is sold or offered for sale to the ultimate consumer for use in motor vehicles.
- (26) "Retailer" means any person who owns, leases, operates, controls, or supervises a retail outlet.
- (27) "Substantially similar" means EPA substantially similar ruling.
- (28) "Terminal" means a facility capable of receiving gasoline by pipeline or marine vessel at which gasoline is sold, or dispensed into trucks for transportation to retail outlets or wholesale purchaser-consumer facilities.
- (29) "Wholesale purchaser-consumer" means any organization that is an ultimate consumer of gasoline and which purchases or obtains gasoline from a supplier for use in motor vehicles and receives delivery of that product into a storage tank of at least 550 gallon capacity substantially under the control of that organization.

Stat. Auth.: ORS Ch. 468A Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Purpose and General Requirements 34-22-460

(1) Pursuant to ORS 468A.420, OAR 340-22-450 through OAR 340-22-640 apply to a person who refines, distributes, blends, supplies, sells, offers for sale, or otherwise markets gasoline motor fuel.

- (2) Except as provided in OAR 340-22-640, the requirements of OAR 340-22-460 through OAR 340-22-640 apply only from November 1 to February 29, and only within a control area listed in OAR 340-22-470.
- (3) The labeling requirements of OAR 340-22-640 apply only within a control area during the control period.

NOTE: This applies only to the Department rules and a dispenser is still responsible for complying with the disclosure requirements of ORS 646.915.

- (4) To reduce carbon monoxide air pollution from motor vehicles in a control area, OAR 340-22-460 through OAR 340-22-640 requires
 - (a) the use in gasoline powered motor vehicles of an oxygenated gasoline with an oxygen content that meets the requirements of OAR 340-22-480 and OAR 340-22-510;
 - (b) that a dispenser where an oxygenated gasoline is dispensed be labeled as required by OAR 340-22-640;
 - (c) that oxygenated gasoline be blended as required by OAR 340-22-520; and
 - (d) a person who refines, distributes, blends, supplies, or sells an oxygenated gasoline to meet the recordkeeping and reporting requirements of OAR 340-22-460 through OAR 340-22-640.
- (5) Nothing in OAR 340-22-460 through OAR 340-22-640 precludes a person from using, refining, distributing, blending, supplying, selling, or otherwise marketing fuel that meets the requirements of OAR 340-22-460 through OAR 340-22-640
 - (a) between March 1 and October 31 in a control area; or
 - (b) at any time in any other location statewide.
- (6) Nothing in OAR 340-22-460 through OAR 340-22-640 precludes a person from using, refining, distributing, blending, supplying, selling, or otherwise marketing nonoxygenated fuel between November 1 and February 29 outside of control areas.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Control Areas

340-22-470 The following are considered control areas:

- (a) Clackamas, Multnomah, Washington and Yamhill counties;
- (b) Jackson county;

- (c) As used in this subsection, the Grants Pass control area means the area of the state beginning at the northeast corner of section 35, T35S, R5W; thence south to the southeast corner of section 11, T37S, R5W; thence west to the southwest corner of section 9, T37S, R6W; thence north to the northwest corner of section 33, T35S, R6W; thence east to the point of beginning.
- (d) As used in this subsection, the Klamath Falls control area means the area of the state beginning at the northeast corner of section 8, T38S, R10E; thence south to the southeast corner of section 5, T40S, R10E; thence west to the southwest corner of section 3, T40S, R8E; thence north to the northwest corner of section 10, T38S, R8E; thence east to the point of beginning.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Average Oxygen Content Standard 340-22-480

- (1) All gasoline sold or dispensed for use during the control period described in OAR 340-22-460(2), for use in each control area described in OAR 340-22-470, by each CAR or blender CAR, must be blended for each averaging period to contain an average oxygen content of not less than 2.7 percent by weight. Oxygen content calculations must be performed as required in OAR 340-22-490.
- (2) The averaging period for all gasoline sold or dispensed in a control area is the four-month control period established in OAR 340-22-460(b).

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Sampling, Testing and Oxygen Content 340-22-490

- (1) To determine compliance with the requirements of OAR 340-22-460 through OAR 340-22-640, the oxygen content of gasoline must be determined by
 - (a) sampling, using the sampling methods specified in 40 C.F.R. 80, Appendix D, as amended through July 1, 1991, the provisions of which are incorporated by reference in this rule, to obtain representative sample of the gasoline to be tested;

- (b) testing, using the test method specified in ASTM 4815-89 or other test methods determined by the Department and EPA as being equivalent, to determine the mass concentration of each oxygenate in the gasoline sampled; and
- (c) oxygen content calculations that are made as follows: calculate the oxygen content of the gasoline sampled by multiplying the volume concentration of each oxygenate in the gasoline sampled by the oxygen molecular weight contribution of the oxygenate set forth in section (2) of this rule, with volume measurements adjusted to 60 degrees Fahrenheit.
- (2) The oxygen molecular weight contributions of an oxygenate approved for use under OAR 340-22-460 through OAR 340-22-640 are set out in Table A of this rule.

TABLE A COMPARISON OF SPECIFIC GRAVITIES AND OXYGEN MASS FRACTIONS OF PURE OXYGENATES

Specific Gravity	
60/60 F	Mass Fraction
0 7063	0.4993
• • •	0.3473
	0.2662
0.7899	0.2662
0.8137	0.2158
0.8058	0.2158
0.8114	0.2158
nol 0.7922	0.2158
yl	,
0.7460	0.1815
1	•
0.7452	0.1566
1	
0.7752	0.1566
	60/60 F 0.7963 0.7939 0.8080 0.7899 0.8137 0.8058 0.8114 0.7922 yl 0.7460 1 0.7452

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Alternative Compliance Options 340-22-500

(1) Each CAR or blender CAR must comply with the standard set out in OAR 340-22-480 by means of the method established in section (2) or (3) of this rule.

(2) Compliance calculation on average basis:

- (a) To determine compliance with the standard in OAR 340-22-480, the CAR or blender CAR shall, for each averaging period and for each control area:
 - (A) calculate the total volume of gasoline sold or dispensed for use in the control area which is the sum of:
 - (i) the volume of each separate batch or truck load of oxygenated gasoline that is sold or dispensed;
 - (ii) minus the volume of each separate batch or truck load of oxygenated gasoline that is sold or dispensed in a different control area;
 - (iii) minus the volume of each separate batch or truck load of oxygenated gasoline that is sold or dispensed in any noncontrol area;
 - ((B) calculate the required total oxygen credit units. Multiply the total volume in gallons of oxygenated gasoline sold or dispensed into the control area so determined by Section (2)(a)(A) above) by 2.7 percent;
 - the actual (C) calculate total oxygen generated. The actual total oxygen credit units generated is the sum of the volume of each batch or truck load of oxygenated gasoline that was sold or dispensed in the control area (as determined by Section (2)(a)(A) above) multiplied by the actual oxygen content by weight associated with each batch or truck load.
 - (D) calculate the adjusted actual total oxygen credit units. The adjusted actual total oxygen content credit units is the sum of the actual total oxygen credit units generated (as determined in Section (2)(a)(C) above;
 - (i) plus the total oxygen credit units purchased or acquired through trade; and
 - (ii) minus the total oxygen credit units sold or given away through trade.
 - (E) compare the adjusted actual total oxygen credit units with the required total oxygen credit units. If the adjusted actual total content oxygen credit units is greater than or equal to the required total oxygen credit units, then the standard in OAR 340-22-480 is met. If the adjusted actual total oxygen credit units is

less than the required total oxygen credit units the purchase of oxygen credit units is required in order to achieve compliance.

- (F) in transferring oxygen credit units, the transferor shall provide the transferee with the volume and oxygen content by weight of the gasoline associated with the credits.
- (b) To determine the oxygen credit units associated with each batch or truck load of oxygenated gasoline sold or dispensed into the control area, use the running weighted oxygen content (RWOC) of the tank from which the batch or truck load was received at the time the batch or truck load was received. In the case of batches or truck loads of gasoline to which oxygenate is added outside of the terminal storage tank from which it was received, use the weighted average of the RWOC and the oxygen content added as a result of the volume of the additional oxygenate added.
- (c) Running weighted oxygen content (RWOC). The RWOC accounts for the volume and oxygen content of all gasoline which enters or leaves the terminal storage tank, and all oxygenates which are added to the tank. The RWOC must be calculated each time gasoline enters or leaves the tank or whenever oxygenates are added to the tank. The RWOC is calculated weighing the following:
 - (A) the volume and oxygen content of the gasoline in the storage tank at the beginning of the averaging period;
 - (B) the volume and oxygen content by weight of gasoline entering the storage tank;
 - (C) the volume and oxygen content by weight of gasoline leaving the storage tank; and
 - (D) the volume, type and oxygen content by weight of the oxygenate added to the storage tank.
- (d) Credit transfers. Credit transfer may be used in the compliance calculations in OAR 340-22-500(2)(a), provided that:
 - (A) the credits are generated in the same control area in which they are used; no credits may be transferred between control areas;
 - (B) the credits are generated in the same averaging period as they are used;
 - (C) the ownership of credits is transferred only between properly registered CARs or blender CARs;

- (D) the credit transfer agreement is made no later than 30 days after the final day of the averaging period in which the credits are generated; and
- (E) the credits are properly created.
- (e) Improperly created credits:
 - (A) No party may transfer any credits to the extent that such a transfer would result in the transferor having a negative credit balance at the conclusion of the averaging period for which the credits were transferred. Any credits transferred in violation of this subsection are improperly created credits.
 - (B) In the case of credits which were improperly created, the following paragraphs apply:
 - (i) improperly created credits may not be used, regardless of a credit transferee's good faith belief that it was receiving valid credits;
 - (ii) the transfer of credits in violation of paragraph (A) of this subsection constitutes a violation of the requirements of OAR 340-22-480; and
 - (iii) where any credits are transferred in violation of paragraph (A) of this subsection, the transferor's properly-created credits will be applied first to any credit transfers before the transferor may apply any credits to achieve its own compliance.
 - (iv) Where any credits are transferred in violation of paragraph (A) of this subsection, the transferor shall be held legally and financially liable for any penalties or damages incurred by the transferee as a result of the invalid transaction.
- (3) Compliance calculation on a per-gallon basis:
 - (a) Each gallon of gasoline sold or dispensed by a CAR or blender CAR for use within each control area during the averaging period defined in OAR 340-22-480 shall have an oxygen content of at least 2.7 percent by weight.
 - (b) In addition, the CAR or blender CAR is prohibited from selling or purchasing oxygen credits based on gasoline for which compliance is calculated under this alternative per-gallon method.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Minimum Oxygen Content

340-22-510

- (1) Any gasoline sold or dispensed by a CAR or a blender CAR for use within a control area during the control period, must contain not less than 2.0 percent oxygen by weight, unless it is sold or dispensed to another registered CAR or blender CAR. This requirement begins at least five working days before the control period and applies until the end of that period.
- (2) The requirements of this rule apply to all persons downstream of the CAR. Any gasoline offered for sale, sold or dispensed to an ultimate consumer within a control area must contain not less than 2.0 percent oxygen by weight. This requirement applies during the entire control period.
- (3) A refiner or importer shall determine the oxygen content of each gallon of gasoline produced by use of an applicable method described in OAR 340-22-500. This determination must include the percent oxygenate by weight, the type of oxygenate and percent by volume.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Oxygenated Gasoline Blending 340-22-520

- (1) In addition to the other applicable requirements of OAR 340-22-460 through OAR 340-22-640, no person may refine, distribute, blend, supply, sell, offer for sale or otherwise market any unleaded oxygenated gasoline for use in a motor
 - vehicle unless that product (a) has received a waiver from the U.S. Environmental Protection Agency (EPA) under 42 U.S.C. 7545(f)(4), as amended through November 15, 1990 and any amendments or modifications thereto; or
 - (b) meets EPA's "substantially similar" ruling for a fuel or fuel additive used to certify a model year 1975 or newer vehicle or engine under 42 U.S.C. 7525 (Clean Air Act), as amended through November 15, 1990 and any amendments or modifications thereto.
- (2) Only an oxygenate that is found to be acceptable under EPA's "substantially similar" ruling may be used in gasoline containing lead to meet the oxygenate requirements of OAR 340-22-460 through OAR 340-22-640.

(3) The requirements of this rule do not affect the blending into leaded gasoline of a compound that does not require an EPA waiver or an EPA "substantially similar" ruling.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Registration

340-22-530

- (1) At least 30 days before the control period in which a person meets the definition of CAR or blender CAR, that person shall petition for registration as a CAR or blender CAR. A person may petition for registration as a CAR or blender CAR after the beginning of the control period but should also do so at least 30 days before conducting activities as a CAR or blender CAR. A petition for registration must be on forms approved by, and available from the Department, and must include
 - (a) the name and business address of the control area responsible party;
 - (b) the address and physical location of each of the control area terminals from which the control area responsible party operates;
 - (c) the address and physical location of each control area oxygenate blender facility which is owned, leased, operated, controlled or supervised by a blender CAR; and
 - (d) the address and physical location where documents required to be retained by this rule will be kept by the control area responsible party.
- (2) Within 30 days after any occasion when the registration information previously supplied by a control area responsible party becomes incomplete or inaccurate, the CAR or blender CAR shall submit updated registration information to the Department.
- (3) The Department will issue each CAR or blender CAR a unique identification number within 30 days after submission of a registration application to the Department. No person may participate in the averaging program under OAR 340-22-480 as a CAR or blender CAR until the Department has issued notice that registration as a CAR or blender CAR has occurred, and a unique CAR identification number. Registration is valid for the time period specified by the Department.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

CAR, Distributor and Retail Outlet Operating Permits

340-22-540 Each CAR, distributor and retail outlet supplying gasoline to a control area during a control period shall apply for and receive a permit as specified by OAR 340-20-136.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Recordkeeping

340-22-550

(1) All persons in the gasoline distribution network shall maintain records containing the applicable compliance information described in this rule. The records must be kept by the regulated persons for at least two years.

(2) Refiners and importers shall, for each separate quantity of gasoline produced or imported for use in a control area during the control period, maintain records containing

(a) results of any tests needed to determine the types of oxygenates and percentage by volume;

(A) oxygenate type

- (B) oxygenate content by volume;
- (C) oxygen content by weight;
- (D) total volume; and
- (E) name and address of the party to whom each separate quantity of gasoline was sold or transferred.
- (3) A person who owns, leases, operates or controls a gasoline terminal that serves a control area shall maintain records containing
 - (a) the name and address of the owner of each batch of gasoline handled during the control period;
 - (b) the volume of each batch or truck load of gasoline going into or out of the terminal;
 - (c) the RWOC of all batches or truck loads of gasoline leaving the terminal;
 - (d) the type of oxygenate, purity and percentage by volume if available;
 - (e) the oxygen content by weight of all batches or truck loads received at the terminal;
 - (f) information of each tank truck sale or batch of gasoline, as to whether it was designated for use within a control area or not;
 - (g) the name and address of the person to whom the gasoline was sold or transferred and the date of the sale or transfer; and
 - (h) results of the tests for oxygenates, if performed, of each sale or transfer and who performed the tests.

- (4) CARs and blender CARs must maintain records containing the information listed in section (3) of this rule, plus the following information:
 - (a) CAR or blender CAR identification number:
 - (b) records supporting and demonstrating compliance with the averaging standard listed in OAR 340-22-480;
 - for any credits bought, sold, traded (A) transferred, the date of each transaction, the name, address and CAR or blender CAR number of the CAR or blender CAR involved in each transaction, and the amount of credit units (oxygen content and volume of gasoline) transferred; credit units transferred must be accompanied by a demonstration of how those credits were calculated, including adequate documentation that both parties have agreed to all credit transactions;
 - (B) the name and address of the auditor, and the results of the attest engagement conducted under OAR 340-22-630;
 - (C) the name and address of the person from whom each shipment of gasoline was received, and the date when it was received;
 - (D) data on each shipment of gasoline received, including
 - (i) the volume of each shipment;
 - (ii) the type of oxygenate, purity and percentage by volume; and
 - (iii) oxygen content by weight;
 - (E) the volume of each receipt of bulk oxygenates;
 - (F) the name and address of the persons from whom bulk oxygenates was received;
 - (G) the date and destination of each sale of gasoline, whether it was intended for use within a control area or not;
 - (H) data on each shipment of gasoline sold or dispensed including
 - (i) the volume of each shipment;
 - (ii) the type of oxygenate, purity and percentage by volume; and
 - (iii) oxygen content by weight;
 - (I) documentation of the results of all required tests done regarding the oxygen content of the gasoline; and

- (J) the names, addresses and CAR or blender CAR identification numbers of the persons to whom any gasoline was sold or dispensed, and the dates of each transaction.
- (5) Retailers and wholesale purchaser-consumers within a control area shall maintain the following records:
 - (a) the names, addresses and CAR or blender CAR identification number of each person from whom a shipment of gasoline was purchased or received, and the date when each shipment was received; and
 - (b) data on each shipment bought, sold or transported including
 - (A) the volume of each shipment;
 - (B) the type of oxygenate, purity and percentage by volume;
 - (C) oxygen content by weight; and

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Reporting

340-22-560

- (1) Each CAR or blender CAR shall submit a report for each control period defined in OAR 340-22-480, reflecting the compliance information detailed in OAR 340-22-500. Reports are due to the Department on the 30th day of the month following the close of the control period for which the information is required. Reports must be filed on forms provided by the Department.
- (2) Each time that physical custody or title of gasoline destined for a control area is transferred, except when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility, the transferor shall provide to the transferee, in addition to, or as part of, normal bills of lading or invoices, a transfer document containing information on the shipment. The transfer document must accompany every shipment of gasoline to a control area after it has been dispensed by a terminal, or the information must be included in the normal paperwork that accompanies each shipment of gasoline. The information must legibly and conspicuously contain the following information:
 - (a) the date of the transfer;
 - (b) the name, address and CAR or blender CAR identification number, if applicable of the transferor;
 - (c) the name, address and CAR or blender CAR identification number, if applicable, of the transferee;

- (d) the volume of gasoline being transferred;
- (e) the proper identification of the gasoline as nonoxygenated or oxygenated;
- (f) the location of the gasoline at the time of the transfer;
- (g) the type of oxygenate and purity;
- (h) the percentage by volume, to the nearest 0.1 percent, of oxygenate in the fuel; and
- (i) for gasoline in the gasoline distribution network between the refinery or import facility and the covered area terminal, the oxygen content by weight and the oxygenate volume of the gasoline.

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Prohibited Activities 340-22-570

- (1) During the control period, no refiner, importer, oxygenate blender, carrier, distributor or reseller may manufacturer, sell, offer for sale, dispense, supply, offer for supply, store, transport or cause the transportation of
 - (a) gasoline that contains less than 2.0 percent oxygen by weight, for use during the control period, in a control area; or
 - (b) gasoline represented as oxygenated which has an oxygen content that is improperly stated in the documents that accompany the gasoline.
- (2) No retailer or wholesale purchaser-consumer may dispense, offer for sale, sell, or store, for use during the control period, gasoline that contains less than 2.0 percent oxygen by weight in a control area.
- (3) No person may operate as, or claim to be a CAR or blender CAR unless that person is registered by the Department under OAR 340-22-530. No CAR or blender CAR may offer for sale, store, sell or dispense gasoline to any person who is not registered as a CAR for use in a control area, unless
 - (a) the average oxygen content of the gasoline during the averaging period meets the standard set in OAR 340-22-480; and
 - (b) the gasoline contains at least 2.0 percent oxygen by weight on a per-gallon basis.
- (4) For a terminal that sells or dispenses gasoline intended for use in a control area during the control period, the terminal owner or operator may not accept gasoline into the terminal unless

- (a) transfer documentation accompanies it containing information required by OAR 340-22-560(2); and
- (b) the terminal owner or operator conducts a quality assurance program to verify the accuracy of the information referred to in subsection (a) of this section.
- (5) No person may sell, store or dispense nonoxygenated gasoline in any control area during the control period unless
 - (a) the nonoxygenated gasoline is segregated from oxygenated gasoline;
 - (b) clearly marked documents accompany the nonoxygenated gasoline marking it as "nonoxygenated gasoline, not for sale to an ultimate consumer in a control area;" and the nonoxygenated gasoline is in fact not sold or
 - (c) the nonoxygenated gasoline is in fact not sold or dispensed to ultimate consumers during the control period, in the control area.
- (6) No person subject to the requirements of OAR 340-22-460 through OAR 340-22-640 may fail to comply with the requirements of OAR 340-22-460 through OAR 340-22-640.
- (7) No person may sell, store, dispense, or transfer oxygenated gasoline, except for use by the ultimate consumer at a retailoutlet or wholesale purchaser-consumer facility, without transfer documents that accurately contain the information required by OAR 340-22-560(2).

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Inspection and Sampling

340-22-580 With consent of the owner or operator, the Department will, at any reasonable time, enter the premises of any person subject to the requirements of OAR 340-22-460 through OAR 340-22-640 to determine compliance. The Department will inspect all relevant records and equipment, and will, in its discretion, purchase gasoline samples for testing by the Department.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Liability For Violation Of A Prohibited Activity 340-22-590

- (1) Subject to OAR 340-22-600, if gasoline contained in a storage tank at a facility owned, leased, operated, controlled or supervised by a retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, importer or oxygenate blender is found to be in violation of OAR 340-22-570(1)(a) or (2), the following persons will be considered in violation:
 - (a) the retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, importer or oxygenate blender who owns, leases, operates, controls or supervises the facility where the violation is found; and
 - (b) each oxygenate blender, distributor, reseller and carrier who, downstream of the control area terminal, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported or caused the transportation of gasoline that is in the storage tank containing gasoline found to be in violation.
- (2) Subject to OAR 340-22-600, if gasoline contained in a storage tank at a facility owned, leased, operated, controlled or supervised by a retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, importer or oxygenate blender is found to be in violation of OAR 340-22-570(1)(b) or (2), the following persons will be considered in violation:
 - (a) the retailer, wholesale purchaser-consumer, distributor, reseller, carrier, refiner, importer or oxygenate blender who owns, leases, operates, controls or supervises the facility where the violation is found; and
 - (b) each refiner, importer, oxygenate blender, distributor, reseller and carrier who manufactured, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported or caused the transportation of gasoline that is in the storage tank containing gasoline found to be in violation.

Stat. Auth.: ORS Ch. 468A

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Defenses For Prohibited Activities 340-22-600

(1) A refiner, importer, oxygenate blender, distributor, reseller or carrier is considered to be in violation of OAR 340-22-570(1) unless that person demonstrates that

- (a) the violation was not caused by the regulated person or that person's employee or agent;
- (b) the person possesses documents that should accompany the gasoline, and that contain the information required by OAR 340-22-560;
- (c) the person conducts a quality assurance sampling and testing program as described in OAR 340-22-620; and
- (2) A refiner, importer, oxygenate blender, distributor, reseller or carrier is considered to be in violation of OAR 340-22-570(5) unless that person demonstrates that
 - (a) the product is clearly labeled as "blendstock/export/storage" and the evidence supports this classifications;
 - (b) the accompanying documents clearly state that the product does not comply with the oxygenated gasoline requirements;
 - (c) some aspect of the product's quality supports the party's claim that the product was intended to be further blended before being sold, supplied, etc. as a finished product;
 - (d) the seller, supplier or transporter of the product has obtained a written certification or notice on shipping documents from the buyer/recipient of the product that the buyer/recipient understands that the product is not intended for sale or distribution as finished gasoline in a control area or until
 - (A) it is blended to meet the oxygenated gasoline requirements of OAR 340-22-460 through OAR 340-22-640 or
 - (B) the buyer/recipient receives equivalent certification from a subsequent buyer or obtains a written certification that the gasoline will not be sold or dispensed for use within a control area; and
 - (e) the party has no knowledge or reason to believe that the product will not be further blended to comply with the standards of OAR 340-22-480 before being sold, supplied or transported as finished product, or that it would be sold or dispensed without further blending within a control area.
- (3) A retailer or wholesale purchaser-consumer is considered to be in violation of OAR 340-22-570(2) unless that person demonstrates that
 - (a) the violation was not caused by the regulated person or that person's employee or agent;

- (b) the person possesses documents that should accompany the gasoline, and that contain the information required by OAR 340-22-560.
- (4) For purposes of this rule, the term "was caused" means that the person must demonstrate by a preponderance of the evidence through reasonably specific showings, by direct or circumstantial evidence, that the violation was caused or must have been caused by another person.

Stat. Auth.: ORS Ch. 468A Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Inability to Produce Conforming Gasoline Due to Extraordinary Circumstances

340-22-610

- (1) The Department will allow a person to distribute fuel which does not meet the oxygenated gasoline requirements of OAR 340-22-460 through OAR 340-22-640 in appropriate extreme and unusual circumstances which are clearly outside the control of the blender CAR and which could not have been avoided by the exercise of prudence, diligence and due care if:
 - (a) it is in the public interest to do so because distribution of the nonconforming fuel is necessary to meet projected shortfalls which cannot otherwise be compensated for;
 - (b) the blender CAR exercised prudent planning and was not able to avoid the violation and has taken all reasonable steps to minimize the extent of the nonconformity;
 - (c) the blender CAR can show how the requirements for oxygenated gasoline will be expeditiously achieved; and
 - (d) the blender CAR agrees to make up the air quality detriment associated with the nonconforming gasoline, where practicable.

Stat. Auth.: ORS Ch. 468A Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Quality Assurance Program

340-22-620 To demonstrate an acceptable quality assurance program under this rule, a person shall conduct periodic sampling and testing to determine if the oxygenated gasoline has oxygen content that is consistent with the product transfer documentation.

Stat. Auth.: ORS Ch. 468A Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Attest Engagements Guidelines When Prohibited Activities Alleged 340-22-630

- (1) The Department will not require a CAR or blender CAR to submit attest engagement reports except as an optional defense for any alleged violations of OAR 340-22-460 through OAR 340-22-640.
- (2) The attest engagement shall consist of performing the agreed-upon procedures set forth in the guidelines in accordance with the Association of Independent Certified Public Accountants' (AICPA's) statements on standards for Attestation Engagements and using statistical sample design parameters provided by EPA.
- (3) In performing the attest engagement, the CPA shall determine the sample size for each population according to parameters set out in Table A of this rule.

TABLE A

Number in Population (N)	Sample Size
66 or larger	59
41 - 65	41
26 - 40	31
0 - 25	N or 24, whichever is
	smaller

- (4) The number of populations from which samples should be drawn will vary depending on the circumstances. Sample items should be selected in such a way that the sample can be expected to be representative of the population.
- (5) If the CPA agrees to use some other form of sample selection and some other method to determine the sample size, that agreement should be summarized in the CPA's report.
- (6) The attest engagement shall be conducted by an independent Certified Public Accountant (CPA).
- (7) The CPA is required to comply with the general code of conduct and ethics as prescribed by the State of Oregon and by the AICPA.
- (8) The attest engagement shall include the following agreed-upon procedures, as appropriate, for the CAR's standardized reporting form(s):
 - (a) Read the report completed by management and filed with the Department.
 - (b) Obtain from the CAR an inventory reconciliation summarizing receipts and deliveries of all gasoline, gasoline blendstocks, and oxygenates for CARs serving a control area.
 - (A) Test mathematical accuracy of inventory reconciliation.

- (B) Agree beginning and ending inventory amounts to company's perpetual inventory records.
- (C) Agree deliveries into the control area to Department report, if applicable.
- (c) Obtain listing of all gasoline, gasoline blendstocks, and oxygenate receipts during the period.
 - (A) Test mathematical accuracy of listing.
 - (B) Agree amounts to inventory reconciliation.
 - (C) Select a representative sample of individual receipts of gasoline, gasoline blendstocks, and oxygenates and trace details back to source documents.
- (d) Obtain listing of all gasoline, gasoline blendstocks, and oxygenates sold or dispensed during the period.
 - (A) Test mathematical accuracy of listing.
 - (B) Agree amounts to inventory reconciliation report.
 - (C) Select a representative sample of individual batches sold or dispensed both into and outside the control area.
 - (i) Agree volumes for the sample items to original bill of lading or other source documents.
 - (ii) For sales or deliveries into the control area, determine that oxygenate content is at least two percent by examining bills of lading.
- (e) Using the volume of oxygenated gasoline sold or dispensed into the control area from the inventory reconciliation report, recalculate the number of oxygen content units required by multiplying by 2.7% and agree to Department report.
- (f) Recalculate the actual total oxygen credit units generated by adding the oxygen content of each batch or truck load of oxygenated gasoline that was sold or dispensed in the control area as determined in subsection (e) above multiplied by the actual oxygen content by weight associated with each batch or truck load.
- (g) Recalculate the adjusted actual total oxygen credit units as follows:
 - (A) The actual total oxygen credit units generated from subsection (f);
 - (B) plus the total oxygen credit units purchased or acquired through trade; and
 - (C) minus the total oxygen credit units sold or given away through trade.

- (h) The following steps apply to the testing of the actual total oxygen content from subsection (f) and are applicable based on method of blending:
 - (A) For CARs using rack- and splash-blending, recompute oxygen content by weight for a representative sample of deliveries based on detailed meter readings of gasoline, blendstocks and oxygenate receipts.
 - (B) For CARs using in-tank blending of gasoline, blendstocks and oxygenates, obtain register of running weighted oxygen content by tank and:

(i) Using the individual sample items from subsections (c) and (d) above, test calculation of running totals.

- (ii) Where laboratory analysis is used with the CARs weighted average calculation, select individual analysis reports of oxygenated gasoline receipts and deliveries during the period on a representative sample basis.
 - (I) Review laboratory results for consistency with CAR's calculations noting oxygen volume and specific gravity.
 - (II) Recalculate oxygen by weight.
 - (III) Agree information on lab reports to underlying delivery and receiving documentation.
- (i) Obtain register of oxygen credit unit purchases and sales and select separate representative samples of individual purchased credits and individual sales credits.
 - (A) Agree selected credit unit transactions to the underlying contract and/or other supporting documentation noting specific volumes and oxygen content of the gasoline associated with the credits.
 - (B) Agree to the underlying contract and/or supporting documentation that the credits are generated in the same control areas as they are used. For example, no credits may be transferred between control areas.
 - (C) Agree to the underlying contract and/or supporting documentation that the credits are generated in the same averaging period as they are used.

- (D) Agree to the underlying contract and/or supporting documentation that the ownership of credits is transferred only between CARs.
- (E) Agree to the underlying contract and/or supporting documentation that the credit transfer agreement was made no later than 30 days after the final day of the averaging period in which the credits are generated.
- (j) Prepare a report to client in accordance with the report provisions of Statements on Standards for Attestation Engagements indicating results of performing the above procedures.
- (9) The attestation report must be in compliance with the AICPA's Statement on Standards for Attestation Engagements.

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

Dispenser Labeling 340-22-640

- (1) A person who sells or markets oxygenated gasoline at retail, or who otherwise provides oxygenated gasoline for consumption by an ultimate consumer, shall place two labels on a dispenser used to dispense the gasoline to identify the oxygenate in the fuel, using the following criteria:
 - (a) The first label must include the following statement:
 "The gasoline dispensed from this pump is oxygenated and will reduce carbon monoxide pollution from motor vehicles."
 - (b) The second label must contain the type of oxygenate(s) and the exact (plus or minus 0.5%) or maximum use concentration by volume. Only those oxygenates and concentrations listed below and any gasoline designated by EPA as substantially similar are allowed.

NOTE: This applies only to the Department rules and a dispenser is still responsible for complying with the disclosure requirements of ORS 646.915.

- (A) Blends of up to 10% by volume anhydrous ethanol (200 proof) (commonly referred to as the "gasohol" waiver).
- (B) Blends of methanol and gasoline grade tertiary butyl alcohol (GTBA) such that the total oxygen content does not exceed 3.5% by weight and the ratio of methanol to GTBA is less than or equal to one. It is also specified that this blended fuel must meet ASTM volatility specifications (commonly referred to as the "ARCO" waiver).

- (C) Blends of up to 5.0% by volume methanol with a minimum of 2.5% by volume cosolvent alcohols having a carbon number of 4 or less (i.e. ethanol, propanol, butanol and/or GTBA). The total oxygen must not exceed 3.7% by weight, and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity and inhibitor specifications (commonly referred to as the "DuPont" waiver).
- (D) Blends up to 5.0% by volume methanol with a minimum of 2.5% by volume cosolvent alcohols having a carbon number of 8 or less. The total oxygen must not exceed 3.7% by weight and the blend must meet ASTM volatility specifications as well as phase separation and alcohol purity and inhibitor specifications (commonly referred to as the "Octamix" waiver).
- (E) Blends up to 15.0% by volume methyl tertiary butyl ether (MTBE) which must meet the ASTM D4614 specifications. Blenders must take precautions that the blends are not used as base gasolines for other oxygenated blends (commonly referred to as the "Sun" waiver).
- (F) Blends of aliphatic alcohols other than methanol and aliphatic ethers, provided the oxygen content does not exceed 2.7% by weight.
- (G) Blends of methanol up to 0.3 percent by volume exclusive of other oxygenates.
- (H) Blends up to 2.75% by volume methanol with an equal volume of butanol or alcohols of a higher molecular weight.
- (c) Lettering on the label must be legible and in block style of at least 20 point bold type.
- (d) The lettering on the label shall be in a color contrasting to the intended background.
- (e) The label must be placed on each side of the dispenser from which the gasoline can be dispensed and shall be on the upper one half of the dispenser, in a position that will be clear and conspicuous to the consumer.

Hist.: AQ 21, f. 10-30-92, ef. 11-1-92

DIVISION 23

RULES FOR OPEN BURNING

[ED. NOTE Administrative Order DEQ 37 repealed previous rules 340-23-005 through 340-23-021 (consisting of AP 4, filed 3-12-59; and applicable portions of SA 16, filed 2-13-62).]

Definitions

340-23-005 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 123, f. & ef. 10-20-76]

Prohibited Practices

340-23-010 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 123, f. & ef. 10-20-76]

Regulation of Authorized Open Burning 340-23-015 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 123,

f. & ef. 10-21-76]

Forced-Air Pit Incineration

340-23-020 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 123, f. & ef. 10-20-76]

How to Use These Open Burning Rules 340-23-022

{These rules} This Division classif {y}ies all open burning (1) into one of seven classes: Agricultural; Commercial; Construction; Demolition (which includes land clearing); Domestic (which includes burning commonly called "backyard burning" and burning of yard debris); Industrial; or Slash. Except for field burning within the Willamette Valley which is regulated by OAR Chapter 340, Division 26 and slash burning which is controlled by the forest practices smoke management plan administered by the Oregon Department of Forestry, { these rules} this Division prescribes requirements for and prohibitions of open burning for every location in the state. Generally, if a class of open burning is not specifically prohibited in a given location, then it is authorized subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. In addition, some practices specifically mentioned in OAR 340-23-035 are

(2)

exempted from rules this Division. Organization of rules:

- (a) OAR 340-23-025 is the Policy statement of the Environmental Quality Commission setting forth the goals of [-these rules] this Division.
- (b) OAR 340-23-030 contains definitions of terms which have specialized meanings within the context off these rules this Division.
- (c) OAR 340-23-035 lists specific types of open burning and practices which are not governed by this Division.
- (d) OAR 340-23-040 lists general requirements which are usually applicable to any open burning governed by these rules this Division.
- (e) OAR 340-23-042 lists general prohibitions which apply to most open burning.
- (f) OAR 340-23-043 establishes the open burning schedule based on air quality and meteorological conditions as required by ORS 468 [.450] A.570.
- (g) OAR 340-23-045 indexes each county of the state to a specific rule giving specific restrictions for each class of open burning applicable in the county.
- (h) OAR 340-23-055 through 340-23-090 are rules which give specific restrictions to open burning for each class of open burning in the counties named in each rule.
- (i) OAR 340-23-100 provides for a letter permit authorization for open burning under certain circumstances in which open burning otherwise would be prohibited.
- (j) OAR 340-23-105 establishes criteria for use of forced-air pit incineration.
- (k) OAR 340-23-110 requires fire permit issuing agencies to keep records and reports.
- (1) OAR 340-23-115 contains the legal description of Open Burning Control areas and maps which generally depict these areas.
- (3) Use of these rules this Division will be made easier by using the following procedure:
 - (a) Read OAR 340-23-040 and OAR 340-23-042 to understand general requirements and prohibitions which apply to all burning which is governed by these rules this Division.
 - (b) In OAR 340-23-030 read the definitions of Agricultural, Commercial, Construction, Demolition, Domestic and Industrial open burning plus the definitions of land clearing and yard debris to

determine the type of burning of concern. Also read OAR 340-23-035 to determine if the type of burning is exempted from these rules this Division.

- (c) Locate the rule (OAR 340-23-055 through OAR 340-23-090) which governs the county in which burning is to take place. OAR 340-23-045 is an index to the county rules.
- (d) Read the sections of the county rules which apply to the type of burning to be accomplished.
- (e) If not prohibited by these rules this Division, obtain a fire permit from the fire district, county court or county commissioners before conducting any burning.
- (f) If the type of burning proposed is prohibited by these rules this Division, refer to OAR 340-23-100 (Letter Permits) or OAR 340-23-105 (Forced Air Pit Incinerators) for a possible alternative.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468, 468A & 477 Hist.: DEQ 27-1981, f. & ef. 9-8-81

Policy

340-23-025 In order to restore and maintain the quality of the air resources of the state in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the state, it is the policy of the Environmental Quality Commission:

- (1) To eliminate open burning disposal practices where alternative disposal methods are feasible and practicable;
- (2) To encourage the development of alternative disposal methods;
- (3) To emphasize resource recovery;
- (4) To regulate specified types of open burning;
- (5) To encourage utilization of the highest and best practicable burning methods to minimize emissions where other disposal practices are not feasible; and
- (6) To require specific programs and timetables for compliance with these rules this Division.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 477] 468A Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 27-1981, f. & ef. 9-8-81

Definitions

340-23-030 As used in these rules unless otherwise required by context this Division:

- ({15}1)

 "Agricultural burning for d{D}isease{ and} or pest control" means open burning of agricultural waste infected or infested with a disease or pest for which no other practicable control exists. Pests or diseases for which no practicable control alternative exists shall include only those pests and diseases identified by the County Extension Service or Oregon Department of Agriculture.
- ({1}2)

 "Agricultural Operation" means an activity on land currently used or intended to be used primarily for the purpose of obtaining a profit in money by raising, harvesting and selling crops or by the raising and sale of livestock or poultry, or the produce thereof, which activity is necessary to serve that purpose; it does not include the construction and use of dwellings customarily provided in conjunction with the agricultural operation.
- ([2]3) "Agricultural open burning" means the open burning of any agricultural waste except as provided in OAR 340-23-035(5).
- "Agricultural waste" means any waste material actually generated or used by an agricultural operation [but], excluding those materials described in OAR 340-23-042(2).
- ([4]<u>5</u>) "Auxiliary Combustion Equipment" includes, but is not limited to, fans or air curtain incinerators.
- ([5]6) "Combustion Promoting Materials" include, but are not limited to, propane, diesel oil, or jellied diesel.
- ([6]7) "Commercial open burning" means the open burning of any commercial waste.
- ([7]8) "Commercial Waste" means:
 - (a) Any material except:
 - (A) Agricultural waste,
 - (B) Construction waste,
 - (C) Demolition waste,
 - (D) Domestic waste,
 - (E) Industrial waste, and
 - (F) Slash.
 - (b) Examples of commercial waste are <u>waste</u> material from offices, wholesale or retail yards and outlets, warehouses, restaurants, mobile home parks, and

•	dwellings containing more than four family living						
	units such as apartments, condominiums, hotels,						
	motels or dormitories.						
([8] 9)	"Commission" means the Environmental Quality						
	Commission.						
([9] 10)							
(4)	any construction waste.						
(1 [0] 1)							
	actually resulting from or produced by a building or						
	construction project. Examples of construction waste						
	are wood, lumber, paper, crating and packing						
	materials used during construction, materials left						
	after completion of construction and materials						
(15110)	collected during cleanup of a construction site.						
(1 [1] 2)	"Demolition open burning" means the open burning of demolition waste.						
/1 []]] \							
(1 [2] 3)	resulting from or produced by the complete or partial						
	destruction or tearing down of any man-made structure						
	or the clearing of any site for land improvement or						
	cleanup excluding yard debris (domestic waste) and						
	agricultural waste.						
(1 [3] 4)							
(-[-]-/	Quality.						
(1 [4] 5)	·····································						
(-E-1 =)	delegated employee representative pursuant to ORS						
	468.045(3).						
(16) "	Domestic open burning" means the open burning of any						
	omestic waste.						
(17) "	Domestic Waste" means household waste material, which						
i	ncludes paper, cardboard, clothing, yard debris, or other						
	aterial, actually generated in or around a dwelling of						
four (4) or fewer family living units, or on the real							
property appurtenant to the dwelling. Such waste material:							
	actually generated in or around a dwelling of more than						
	four (4) family living units are commercial wastes. Once						
	omestic waste is removed from the property of origin it						
	ecomes commercial waste.						
	Fire Hazard" means the presence or accumulation of						
C	combustible material of such nature and in sufficient						

welfare, or to adjacent lands.

(19) "Forced-Air Pit Incineration" means any method or device by which burning is accomplished in a subsurface pit or above ground enclosure using:

imminent and substantial danger to life, property, public

quantity that its continued existence constitutes an

- (a) Combustion air supplied under positive draft by an air curtain; and
- (b) Combustion air controlled in such a manner as to optimize combustion efficiency and minimize the emission of air contaminants.
- (20) "Industrial open burning" means the open burning of any industrial waste.
- (21) "Industrial Waste" means any <u>waste</u> material, including process waste, produced as the direct result of any manufacturing or industrial process.
- "Land Clearing" means the removal of trees, brush, logs, stumps, debris or man made structures for the purpose of site clean-up or site preparation. All waste material generated by land clearing is demolition waste except those materials which are included in the definitions of agricultural wastes, yard debris (domestic waste), and slash.
- (23) "Letter Permit" means an Air Contaminant Discharge Permit issued pursuant to OAR 340-23-100.
- (24) "Local jurisdiction" means:
 - (a) The local fire permit issuing authority, or
 - (b) Local governmental entity with authority to regulate by law or ordinance.
- (25) "Open Burning" [-includes burning in] means:
 - (a) <u>Burning in ofO</u>pen outdoor fires;
 - (b) <u>Burning in b[B]</u>urn barrels;
 - (c) <u>Burning in i{I}</u>ncinerators which do not meet the emission limitations specified for refuse burning equipment in OAR 340-21-025; and
 - (d) Any other <u>outdoor</u> burning which occurs in such a manner that combustion air is not effectively controlled and combustion products are not effectively vented through a stack or chimney.
- (26) "Open Burning Control Area" means an area established to control specific open burning practices or to maintain specific open burning standards which may be more stringent than those established for other areas of the state. Open burning control areas in the state are described in OAR 340-23-115. The open burning control areas in the state are:
 - (a) All areas in or within three (3) miles of the corporate city limits of cities having a population of four thousand (4,000) or more, as further described in OAR 340-23-115(1) and generally shown in Figure 2 thereof.

- (b) The Coos Bay open burning control area, as described in OAR 340-23-115(2) and generally shown in Figure 3 thereof.
- (c) The Rogue Basin open burning control area, as described in OAR 340-23-115(3) and generally shown in Figure 4 thereof.
- (d) The Umpqua Basin open burning control area, as described in OAR 340-23-115(4) and generally shown in Figure 5 thereof.
- (e) The Willamette Valley open burning control area as described in OAR 340-23-115(5) and generally shown in Figure 2 thereof.
- (27) "Person" means any individual, corporation, association, firm, partnership, joint stock company, public or municipal corporation, political subdivision, the state or any agency thereof, or the federal government or any agency thereof.
- (28) "Population" means the annual population estimate of incorporated cities within the State of Oregon issued by the Center for Population Research and Census, Portland State University, Portland, Oregon.
- (29) "Slash" means forest debris or woody vegetation to be burned under the Oregon Smoke Management Plan administered by the Oregon Department of Forestry pursuant to ORS 477.515. The burning of such slash slash is must be related to the management of forest land and does not include the burning of any other material created by land clearing used for growing and harvesting timber.
- (30) "Ventilation index" means a number calculated by the Department relating to the ability of the atmosphere to disperse pollutants. The ventilation index is the product of the measured or estimated meteorological mixing depth in hundreds of feet and the measured or estimated average wind speed in knots through the mixed layer [in knots].
- (31) "Waste" includes any useless or discarded materials. Each waste is categorized in [these rules] this Division as one and only one of the following types:
 - (a) Agricultural;
 - (b) Commercial;
 - (c) Construction;
 - (d) Demolition;
 - (e) Domestic;
 - (f) Industrial; or
 - (g) Slash.
- (32) "Yard debris" means wood, needle or leaf materials from trees, shrubs or plants from the real property appurtenant to a dwelling of not more than four (4) family living units so long as such debris remains on the property of

origin. Once yard debris is removed from the property of origin it becomes commercial waste. Yard debris is included in the definition of domestic waste.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 468A & 477 Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 1, f. & ef. 11-13-91

Exemptions, Statewide

340-23-035 [The rules in t]This Division $\{23\}$ shall not apply to:

- (1) Fires set for traditional recreational purposes and traditional ceremonial occasions for which a fire is appropriate provided that no materials which may emit dense smoke or noxious odors as prohibited in [-rule] OAR 340-23-042(2) are burned.
- (2) The operation of any barbecue equipment.
- (3) Fires set or permitted by any public agency when such fire is set or permitted in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, or a hazard to public health or safety or instruction of employees in the methods of fire fighting, which in the opinion of the agency is necessary.
- (4) Agricultural open burning conducted east of the crest of the Cascade Mountains including all of Hood River and Klamath Counties.
- (5) Open field burning, propane flaming, and stack and pile burning in the Willamette Valley between the crests of the Cascade and Coast Ranges pursuant to OAR Chapter 340, Division 26, Rules for Field Burning.
- (6) Open burning on forest land permitted under the forest practices Smoke Management Plan filed with the Secretary of State pursuant to ORS 477.515.
- (7) Fires set pursuant to permit for the purpose of instruction of employes of private industrial concerns in methods of fire fighting, or for civil defense instruction.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 23 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Stat. Auth.: ORS Ch. 468, 468A & 477

Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 1, f. & ef. 11-13-91; AQ 18, f. & ef. ###

General Requirements Statewide

340-23-040 This rule applies to all open burning within the purview of these rules this Division whether authorized, permitted or prohibited by the rules in this Division 23], [(]unless expressly limited therein[)], or by any other rule, regulation, permit, ordinance, order or decree of the Commission or other agency having jurisdiction:

- (1) All <u>f0]open burning shall</u> be constantly attended by a responsible person or an expressly authorized agent until extinguished.
- (2) Each person who is in ownership, control or custody of the real property on which open burning occurs, including any tenant thereof, or who is in ownership, control or custody of the material which is burned, shall be considered a responsible person for the open burning. Any person who causes or allows open burning to be initiated or maintained shall also be considered a responsible person.
- (3) It shall be the duty of each responsible person to promptly extinguish any burning which is in violation of any rule of the Commission or of any permit issued by the Department unless the Department has given written approval to such responsible person to use auxiliary combustion equipment or combustion promoting materials to minimize smoke production and the responsible person complies with the requirements in the written approval. However, nothing in this section shall be construed to authorize any violation of OAR 340-23-042(1) or (2).
- (4) To promote efficient burning and prevent excessive emissions of smoke, each responsible person shall, except where inappropriate to agricultural open burning:
 - (a) Assure that all combustible material is dried to the extent practicable. This action shall include covering the combustible material when practicable to protect the material from deposition of moisture in any form, including precipitation or dew. However, nothing in this section shall be construed to authorize any violation of OAR 340-23-042(1) or (2).
 - (b) Loosely stack or windrow the combustible material in such a manner as to eliminate dirt, rocks and other noncombustible material and promote an adequate air supply to the burning pile, and provide the necessary tools and equipment for the purpose.

- (c) Periodically restack or feed the burning pile and insure that combustion is essentially completed and smoldering fires are prevented and provide the necessary tools and equipment for the purpose.
- (5) Not withstanding OAR 340-23-035(4), each person sanitizing perennial or annual grass seed crops by open burning, in counties outside the Willamette Valley, shall pay the Department \$4.00 for each acre burned.
 - (a) The Department may contract with counties, rural fire protection districts, or other responsible individuals for the collection of the fees.
 - (b) All fees collected under this section shall be deposited in the State Treasury to the credit of the Department of Agriculturefall Service Fund.
- (6) Open burning in compliance with the rules in this Division 23 does not exempt any person from any civil or criminal liability for consequences or damages resulting from such burning, nor does it exempt any person from complying with any other applicable law, ordinance, regulation, rule, permit, order, or decree of this or any other governmental entity having jurisdiction.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79; DEQ 27-1981, f. & ef. 9-8-81; AQ 18, f. & ef. 3-11-92

General Prohibitions Statewide

340-23-042 This rule applies to all open burning within the purview of these rules this Division whether authorized, permitted or prohibited by the rules in this Division 23], (Junless expressly limited therein) or by any other rule, regulation, permit, ordinance, order or decree of the Commission or other agency having jurisdiction:

- (1) No person shall cause or allow to be initiated or maintained any open burning which interferes unreasonably with enjoyment of life or property or which creates any of the following:
 - (a) A private nuisance, except as created by agricultural open burning;
 - (b) A public nuisance, except as created by agricultural open burning; or
 - (c) A hazard to public safety.

- (2) No person shall cause or allow to be initiated or maintained any open burning of any wet garbage, plastic, wire insulation, automobile part, asphalt, petroleum product, petroleum treated material, rubber product, animal remains, or animal or vegetable matter resulting from the handling, preparation, cooking, or service of food or of any other material which normally emits dense smoke or noxious odors.
- (3) No person shall cause or allow to be initiated or maintained any open burning of any material in any part of the state on any day or at any time if the Department has notified the State Fire Marshal that such open burning is prohibited because of meteorological or air quality conditions pursuant to OAR 340-23-043.
- (4) No fire permit issuing agency shall issue any fire permit which purports to authorize any open burning of any material at any location on any day or at any time if the Department has notified the State Fire Marshal that such open burning is prohibited because of meteorological or air quality conditions. However, the failure of any fire permit issuing agency to comply shall not excuse any person from complying with this section.
- (5) No person shall cause or allow to be initiated or maintained any open burning authorized by the rules in this Division 23 during hours other than specified by the Department.
- (6) No person shall cause or allow to be initiated or maintained any open burning at any solid waste disposal site unless authorized by a Solid Waste Permit issued pursuant to OAR 340-61-005 through 340-61-085.

Open Burning Schedule

340-23-043 Pursuant to ORS 468[.450]A.570, 476.380, 477.520 and 478.960 the following open burning schedule shall be administered by the Department:

- (1) Mandatory Prohibition Based on Adverse Air Quality Conditions:
 - (a) The Department shall notify the State Fire Marshal that all open burning shall be prohibited in all or a

specified part of the state for the times and locations which the Department has declared:

- (A) A particulate or sulfur dioxide alert pursuant to OAR 340-27-010(2);
- (B) A particulate or sulfur dioxide warning pursuant to OAR 340-27-010(3); or
- (C) An emergency for any air contaminant pursuant to OAR 340-27-010(4).
- (b) All open burning shall be prohibited until the Department notifies the State Fire Marshal that the episode and prohibition have been declared to have terminated.
- (2) Discretionary Prohibition or Limitation Based on Meteorological Conditions:
 - (a) The Department may notify the State Fire Marshal that all or specified types of open burning shall be prohibited or limited in all or any specified parts of the state based on any one or more of the following criteria affecting that part of the state:
 - (A) An Air Stagnation Advisory issued by the National Weather Service;
 - (B) The daily maximum ventilation index calculated by the Department for the Willamette Valley Open Burning Control Area or Umpqua Basin Open Burning Control Area is less than 200;
 - (C) The daily maximum ventilation index calculated by the Department for the Rogue Basin or Umpqua Basin open burning control area is less than:
 - (i) 200 for burning of orchard prunings during February 1992 and February 1993 on days with a green woodburning advisory;
 - (ii) 200 for agricultural burning for disease or pest control on days with a green woodburning advisory;
 - (iii) 400 for all other open burning;
 - (D) The daily maximum ventilation index calculated by the Department for any area outside the Willamette Valley, Rogue Basin and Umpqua Basin open burning control areas is less than 150; { or }
 - (E) For regulation of burning of yard debris in urban areas, consideration of the amount of precipitation, expected during the day; or
 - (F) Any other relevant factor.
 - (b) All open burning so prohibited or limited shall be prohibited or limited until the Department notifies

the State Fire Marshal that the prohibition or limitation has been terminated.

- (c) In making the determination of whether or not to prohibit or limit open burning pursuant to this section the Department shall consider:
 - (A) The policy of the state set forth in ORS 468 (.280 A.010;
 - (B) The relevant criteria set forth in ORS 468[.295]A.025(2);
 - (C) The extent and types of materials available to be open burned;
 - (D) In the case of Agricultural open burning, the recommendations received from any local agricultural smoke management organization; and
 (E) Any other relevant factor.
- (d) In making the determination of whether or not to prohibit or limit any open burning pursuant to this section the Department shall give first priority to the burning of perennial grass seed crop used for grass seed production, second priority for annual grass seed crop used for grass seed production, third priority to grain crop burning and fourth priority to all other burning.
- (3) Unless and until prohibited or limited pursuant to sections (1) or (2) of this rule, open burning shall be allowed during a day, so long as it is not prohibited by, and is conducted consistent with the other rules in this Divisionf and the requirements and prohibitions of local jurisdiction and the State Fire Marshal.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468, 468A & 477 Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 2, f. & ef. 11-13-91

County Listing of Specific Open Burning Rules

340-23-045 Except as otherwise provided, in addition to the general requirements and prohibitions listed in OAR 340-23-040 and 340-23-042, specific prohibitions of Agricultural, Commercial, Construction, Demolition, Domestic, and Industrial open burning are listed in separate rules for each county. The following list identifies the rule where prohibitions of specific types of open burning applicable to a given county may be found:

(1) Baker County OAR rule number 340-23-055

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 23 - DEPARTMENT OF ENVIRONMENTAL QUALITY

										_	_	
(2)	Benton County											340-23-060
(3)	Clackamas County											340 - 23-065
(4)	Clatsop County .											340-23-055
(5)	Columbia County .											340-23-080
(6)	Coos County											340-23-090
(7)	Crook County											340-23-055
(8)	Curry County							•				230-23-055
(9)	Deschutes County							•				340-23-055
(10)	Douglas County .											340-23-090
(11)	Gilliam County .											340-23-055
(12)	Grant County											340-23-055
(13)	Harney County											340-23-055
	Hood River County											340-23-055
(15)	Jackson County .								OAR	rule	number	340-23-090
(16)	Jefferson County		•	•	•	•		•	OAR	rule	number	340-23-055
(17)	Josephine County		•		•			•	OAR	rule	number	340-23-090
(18)	Klamath County .	•		•		•	•	•	OAR	rule	number	340-23-055
(19)	Lake County	•					•	•	OAR	rule	number	340-23-055
(20)	Lane County	•	•		•		•	•	OAR	rule	number	340-23-085
(21)	Lincoln County .							•	OAR	rule	number	340-23-055
(22)	Linn County	•				•			OAR	rule	number	340-23-060
(23)	Malheur County .								OAR	rule	number	340-23-055
(24)	Marion County		•					•	OAR	rule	number	340-23-060
(25)	Morrow County								OAR	rule	number	340-23-055
(26)	Multnomah County								OAR	rule	number	340-23-070
(27)	Polk County								OAR	rule	number	340-23-060
(28)	Sherman County .			٠		•	•		OAR	rule	number	340-23-055
(29)	Tillamook County							•	OAR	rule	number	340-23-055
(30)	Umatilla County .								OAR	rule	number	340-23-055
(31)	Union County								OAR	rule	number	340-23-055
(32)	Wallowa County .											340-23-055
(33)	Wasco County											340-23-055
(34)	Washington County											340-23-075
(35)	Wheeler County .											340-23-055
(36)	Yamhill County .											340-23-060
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[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 123, f. & ef. 10-20-76; DEQ 23-1979, f. & ef. 7-5-79;
DEQ 1-1981(Temp), f. & ef. 1-9-81; DEQ 7-1981(Temp), f. & ef. 2-17-81; DEQ 8-1981(Temp), f. & ef. 3-13-81; DEQ 27-1981, f. & ef. 9-8-81

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

340-23-050 [Renumbered to 340-23-110]

Open Burning Prohibitions

Baker, Clatsop, Crook, Curry, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Morrow, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco and Wheeler Counties

340-23-055 Open burning prohibitions for the counties of Baker, Clatsop, Crook, Curry, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Morrow, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco and Wheeler:

- (1) Industrial open burning is prohibited except as provided in OAR 340-23-[070]100.
- (2) Agricultural open burning:
 - (a) In Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco and Wheeler Counties, agricultural open burning is allowed under these rules this Division subject to OAR 340-23-040(5).
 - (b) In Clatsop, Curry, Lincoln and Tillamook Counties agricultural open burning is allowed subject to OAR 340-23-040 and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (3) Commercial open burning is allowed subject to OAR 340-23-040 and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal, except that, unless authorized pursuant to OAR 340-23-100, all commercial open burning is prohibited in or within three (3) miles of the corporate city limits of the following cities unless authorized pursuant to OAR 340-23-100]:
 - (a) In Baker County, the City of Baker.
 - (b) In Clatsop County, the Cities of Astoria and Seaside.
 - (c) In Crook County, the City of Prineville,
 - (d) In Curry County, the City of Brookings
 - f(d) (e)
 In Deschutes County, the Cities of Bend and
 Redmond,
 - [(e)](f)
 In Hood River County, the City of Hood River,
 - [(f)](g) In Klamath County, the City of Klamath Falls.

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In Lincoln County, the Cities of Lincoln City
      <del>[(g)](h)</del>
                   and Newport.
      <del>[(h)](i)</del>
                   In Malheur County, the City of Ontario.
      (<del>i)</del> (i)
                   In Umatilla County, the Cities of Hermiston,
                   Milton-Freewater and Pendleton.
                   In Union County, the City of La Grande.
      \{(j)\}(k)
      <del>[(k)](1)</del>
                   In Wasco County, the City of The Dalles.
      Construction and Demolition open burning is allowed subject
(4)
      to the requirements and prohibitions of local
      jurisdictions, the State Fire Marshal, OAR 340-23-040+
      and], 340-23-042 and 340-23-043, except that, unless
      authorized pursuant to OAR 340-23-100, Construction and
      Demolition open burning is prohibited in or within three
      (3) miles of the corporate city limits of the following
      cities unless authorized pursuant to OAR 340-23-1001:
             In Baker County, the City of Baker,
      (a)
             In Clatsop County, the City of Astoria.
      (b)
      (c)
             In Crook County, the City of Prineville.
             In Curry County, the City of Brookings.
      <del>[(d)](e)</del>
                   In Deschutes County, the Cities of Bend and
                   Redmond.
      <del>[(e)](<u>f</u>)</del>
                   In Hood River County, the City of Hood River.
                   In Klamath County, the City of Klamath Falls.
      (<del>1) ] (q) ]</del>
                   In Malheur County, the City of Ontario.
      <del>[ (g) ] (h)</del>
                   In Umatilla County, the Cities of Hermiston,
      <del>[(h)](i)</del>
                   Milton-Freewater and Pendleton.
                   In Union County, the City of La Grande.
      (i)}(i)
                   In Wasco County, the City of The Dalles.
      \frac{\{(j)\}\{k\}}{}
      Domestic open burning is allowed subject to the
(5)
      requirements and prohibitions of local jurisdictions, the
      State Fire Marshal, and OAR 340-23-040 and 340-23-042
      and 340-23-043.
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Stat. Auth.: ORS Ch. 468 & 477] 468A Hist.: DEQ 27-1981, f. & ef. 9-8-81; AQ 18, f. & ef. ###

Benton, Linn, Marion, Polk, and Yamhill Counties
340-23-060 Open burning prohibitions for Benton, Linn,
Marion, Polk, and Yamhill Counties which form a part of the
Willamette Valley open burning control area described in OAR

340-23-115:

(1) Industrial open burning is prohibited except as provided in OAR 340-23-100.

- (2) Agricultural open burning is allowed subject to OAR 340-23-040 and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:
 - (a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.
 - (b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours and into prohibition condition days.
- (3) Commercial open burning is prohibited except as provided in OAR 340-23-100.
- (4) Construction and Demolition open burning is allowed <u>outside</u>
 of special control areas subject to the requirements and
 prohibitions of local jurisdictions, the State Fire
 Marshal, OAR 340-23-040 and 340-23-042 and 340-23-043.
 except that uf Unless authorized pursuant to OAR
 340-23-100, Construction and Demolition open burning is
 prohibited within special control areas including the
 following:
 - (a) Areas in or within six (6) miles of the corporate city limit of Salem:
 - (A) in Marion County, the cities of Salem and Keiser.
 - (B) [and]in Polk Count[ies]y, the city of Salem.
 - (b) Areas in or within three (3) miles of the corporate city limit of:
 - (A) In Benton County, the Cities of <u>Albany</u>, Corvallis and Philomath.
 - (B) In Linn County, the Cities of Albany, Brownsville, Harrisburg, Lebanon, Mill City and Sweet Home.
 - (C) In Marion County the Cities of Aumsville, <u>Gervais</u>, Hubbard, [Cervais,] Jefferson, Mill City, Mt. Angel, Silverton, Stayton, Sublimity, Turner and Woodburn.
 - (D) In Polk County, the Cities of Dallas, Independence and Monmouth and Willamina.
 - (E) In Yamhill County, the cities of Amity, Carlton, Dayton, Dundee, Lafayette, McMinnville, Newberg, Sheridan and Willamina.

(5) Domestic open burning:

- (a) As generally depicted in Figure 1 of OAR 340-23-115, domestic open burning is prohibited in the special control areas named in section (4) of this rule except that open burning of yard debris is allowed beginning March first and ending June fifteenth inclusive, and beginning October first and ending December fifteenth, inclusive, subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (b) Domestic open burning is allowed outside of special control areas named in section (4) of this rule subject to OAR 340-23-040 and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (c) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by the Department pursuant to OAR 340-23-043.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 477] 468A
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 18, f. & ef. ###

Clackamas County

340-23-065 Open burning prohibitions for Clackamas County:

- (1) Industrial open burning is prohibited except as provided in OAR 340-23-100.
- (2) Agricultural open burning is allowed subject to OAR 340-23-040 and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:
 - (a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.

- (b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours and into prohibition condition days.
- (3) Commercial open burning is prohibited except as may be provided by OAR 340-23-100.
- (4) Construction and Demolition open burning is allowed <u>outside</u> of special control areas subject to OAR 340-23-040 and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. [except that u]Unless authorized pursuant to OAR 340-23-100, Construction and Demolition open burning is prohibited within special control areas including the following:
 - (a) Areas in or within six (6) miles of the corporate city limits of Gladstone, Happy Valley, Lake Oswego, Milwaukie, Oregon City, Portland, Rivergrove, Tualatin, [and] West Linn and Wilsonville.
 - (b) Areas in or within three (3) miles of the corporate city limits of Canby, Estacada, Gresham, Molalla [,] and Sandy. [and Wilsonville].
- (5) Domestic open burning:
 - (a) As generally depicted in Figure 1A of OAR 340-23-115, domestic open burning is always prohibited within the following fire districts unless authorized pursuant to OAR 340-23-100: Clackamas County RFPD #1, that portion of Clackamas County RFPD #54 which lies within the Metropolitan Service District, that portion of Clackamas County RFPD #71 which lies west of a line extending due north of the western tip of Beebe Island in the Clackamas River, Glenmorrie RFPD #66, Gladstone, Lakegrove RFPD #57, Lake Oswego, Milwaukie, Oregon City, Oak Lodge, Portland, Riverdale RFPD #60, Rosemont RFPD #67, that part of Tualatin[-RFPD #64] Valley Fire and Rescue District which lies north of I-205 and West Linn.
 - (b) In a{A}reas of Clackamas County generally depicted in Figure 1 of OAR 340-23-115 and not included in the area where burning is prohibited by OAR 340-23-065(5)(a), domestic open burning is prohibited except that open burning of yard debris is allowed within the following fire districts between March first and June fifteenth inclusive and between October first and December fifteenth inclusive, subject to OAR 340-23-040, and 340-23-042 and 340-23-042 and 340-

<u>23-042</u> and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:

- (A) Beaver Creek RFPD #55,
- (B) Boring RFPD #59,
- (C) Canby,
- (D) Canby RFPD #62,
- (E) That portion of Clackamas Co. RFPD #[54]1 which lies outside the Metropolitan Service District,
- (F) That portion of Clackamas RFPD #1 which lies east of a line extending due north of the western tip of Beebe Island in the Clackamas a River,
- (G) Happy Valley RFPD #65,
- (H) Sandy RFPD #2,
- (I) That part of Tualatin[RFPD #64] Valley Fire
 and Rescue District which lies south of I-205.
- (c) Domestic open burning is allowed in all other areas of Clackamas County subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (d) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by Department pursuant to OAR 340-23-043.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 &[477] 468A
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 18, f. & ef. ###

Multnomah County

340-23-070 Open burning prohibitions for Multnomah County:

- (1) Industrial open burning is prohibited except as provided in OAR 340-23-100.
- (2) Agricultural open burning is allowed subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:
 - (a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.

- (b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours and into prohibition condition days.
- (3) Commercial open burning is prohibited except as provided in OAR 340-23-100.
- (4) Construction and Demolition open burning, unless authorized pursuant to OAR 340-23-100, is prohibited west of the Sandy River but is allowed east of the Sandy River subject to OAR 340-23-040. [and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (5) Domestic open burning:
 - As generally depicted in Figure 1A of OAR 340-23-115, open burning is always prohibited within the following area of Multnomah County unless authorized pursuant to OAR 340-23-100: west of a line beginning at the eastern most point where the Portland city limit meets the Multnomah-Clackamas Counties line, thence northward and eastward along the Portland city limits to Johnson Creek, thence continuing eastward and northward along Johnson Creek to the Gresham city limit, thence northward and eastward along the Gresham city limit to 182nd Avenue, thence northward along 182nd Avenue to its junction with 181st Avenue, thence northward along 181st Avenue to Sandy Boulevard, thence eastward along Sandy Boulevard to 185th Avenue, thence northward along 185th Drive and its extension to the Columbia River and the state line, but excluding that portion of western Multnomah County included in Skyline RFPR #20, Sauvie Island, Burlington Water District and all other areas in northwestern Multnomah County which are outside of a Fire Protection District.
 - (b) As generally depicted in Figure 1 of OAR 340-23-115, domestic open burning is prohibited in areas of Multnomah County west of the Sandy River not included in the area where burning is prohibited by OAR 340-23-070(5)(a), except, that open burning of yard debris is allowed from March first to June fifteenth inclusive and from October first to December fifteenth inclusive, subject to OAR 340-23-040, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

- (c) Domestic open burning is allowed east of the Sandy River subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (d) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by Department pursuant to OAR 340-23-043.

Stat. Auth.: ORS Ch. 468 &[477] 468A
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 18, f. & ef. ###

Washington County

340-23-075 Open burning prohibitions for Washington County:

- (1) Industrial open burning is prohibited except as provided in OAR 340-23-100.
- (2) Agricultural open burning is allowed subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:
 - (a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.
 - (b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours into prohibition condition days.
- (3) Commercial open burning is prohibited except as may be provided by OAR 340-23-100.
- (4) Construction and Demolition open burning, unless authorized pursuant to OAR 340-23-100, is prohibited in all incorporated areas and areas within rural fire protection districts. Construction and demolition open burning is allowed in all other areas subject to OAR 340-23-040, [-and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(5) Domestic open burning:

- (a) As generally depicted in Figure 1A of OAR 340-23-115, open burning is always prohibited within the following area of Washington County unless authorized pursuant to OAR 340-23-100:
 - That portion of Tualatin [RFPD] Valley Fire and (A) Rescue District north of I-205 plus the area including the cities of Tualatin, Durham, Tigard and King City, which is north of a line starting at the point where I-205 meets the Tualatin city limit, thence westward, southward, westward and finally northward along the Tualatin city limit to Highway 99W, thence northward along Highway 99W to the Tualatin River, thence westward along the Tualatin River to its intersection with the boundary of the Metropolitan Service District, thence generally northward and westward along the Metropolitan Service District Boundary between the Tualatin RFPD and Washington County RFPD #1.
 - (B) That part of [Washington County Rural] the Tualatin Valley Fire [Protection] and Rescue District [#1] which is within the Metropolitan Service District.
 - (C) That part of Washington County Rural Fire Protection District #2 starting at the point where Highway 26 crosses the eastern boundary of the fire district, thence westward along Highway 26 to Cornelius Pass Road, thence northward along Cornelius Pass Road to West Union Road, thence eastward along West Union Road to the fire district boundary, thence southerly along the district boundary to the point of beginning.
- (b) Excluding areas listed in subsection (a) of this section and the Tri-Cities RFPD, domestic open burning is prohibited in all municipal and rural fire protection districts of Washington County (excluding the Tri-Cities RFPD) as generally depicted in Figure 1 of OAR 340-23-115, except that open burning of yard debris is allowed between March first and June fifteenth inclusive and between October first and December fifteenth inclusive subject to OAR 340-23-040, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

- (c) Domestic open burning is allowed in the Tri-Cities RFPD and in all unincorporated areas of Washington County outside of municipal or rural fire protection districts subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (d) No person shall cause or allow to be initiated or maintained any domestic open burning other than during daylight hours between 7:30 a.m. and two hours before sunset unless otherwise specified by Department pursuant to OAR 340-23-043.

Stat. Auth.: ORS Ch. 468 & $\frac{477}{468A}$ Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 18, f. & ef. ###

Columbia County

340-23-080 Open burning prohibitions for Columbia County:

- (1) Industrial open burning is prohibited unless authorized pursuant to OAR 340-23-100.
- (2) Agricultural open burning is allowed subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (3) Commercial open burning is prohibited unless authorized pursuant to OAR 340-23-100.
- (4) Construction and demolition open burning:
 - (a) Unless authorized pursuant to OAR 340-23-100, Construction and Demolition open burning is prohibited in and within three (3) miles of the city limits of Clatskanie, Rainier, St. Helens, Scappoose, and Vernonia.
 - (b) Construction and Demolition open burning is allowed in all other parts of Columbia County subject to OAR 340-23-040, and 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (5) Domestic open burning is allowed subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

Stat. Auth.: ORS Ch. 468 & 477] 468A Hist.: DEQ 27-1981, f. & ef. 9-8-81

Lane County

340-23-085 Open burning prohibitions for Lane County. That portion of Lane County east of Range 7 West, Willamette Meridian, forms a part of the Willamette Valley open burning control area as generally described in OAR 340-23-115(5) and depicted in Figure 2:

- (1) The rules and regulations of the Lane Regional Air Pollution authority shall apply to all open burning in Lane County provided such rules are no less stringent than the provisions of these-rules this Division except that the Lane Regional Air Pollution Authority may not regulate agricultural open burning.
- (2) Industrial open burning is prohibited unless authorized pursuant to OAR 340-23-100.
- (3) Agricultural open burning is allowed subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal:
 - (a) Agricultural open burning within the purview of this rule will be prohibited between July 15 and September 15 unless specifically authorized by the Department on a particular day.
 - (b) Burning hours are during daylight hours unless otherwise set by the Department. Large piles of land clearing debris or stumps shall be handled in accordance with OAR 340-23-040(4)(c) and may be allowed, without addition of new waste material, to burn after hours and into prohibition condition days.
- (4) Commercial open burning, unless authorized pursuant to OAR 340-23-100, is prohibited in Lane County east of Range 7 West Willamette Meridian and in or within three (3) miles of the city limit of Florence on the coast. Commercial open burning is allowed in the remaining areas of Lane County subject to OAR 340-23-040 and 340-23-042 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (5) Construction and Demolition open burning, unless authorized pursuant to OAR 340-23-100, is prohibited within all fire districts and other areas specified in this section but is allowed elsewhere in Lane County subject to OAR

340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. Areas where open burning of construction and demolition waste is prohibited include:

- (a) Bailey-Spencer RFPD;
- (b) Coburg RFPD;
- (c) Cottage Grove;
- (d) Creswell RFPD;
- (e) Crow Valley RFPD;
- (f) Dexter RFPD except that portion east of the Willamette Meridian;
- (g) Elmira-Noti RFPD except that portion west of the line between Range 6 West and Range 7 West;
- (h) Eugene Fire District;
- (i) Eugene RFPD No. 1;
- (j) Goshen RFPD;
- (k) Junction City Fire District;
- (1) Junction City RFPD;
- (m) Lane RFPD No. 1;
- (n) Lowell RFPD;
- (o) Marcola RFPD;
- (p) McKenzie RFPD except that portion east of the Willamette Meridian;
- (q) Monroe RFPD that portion within Lane County;
- (r) Oakridge RFPD;
- (s) Pleasant Hill RFPD;
- (t) South Lane RFPD;
- (u) Springfield Fire Department and those areas protected by the Springfield Fire Department;
- (v) That portion of Western Lane Forest Protection District north of Section 11, T19S, R4W and bordering the City of Eugene and/or Crow Valley, Eugene #1, Goshen and Creswell RFPDs;
- (w) Willakenzie RFPD;
- (x) Zumwalt RFPD;
- (y) Those unprotected areas which are surrounded by or are bordered on all sides by any of the above listed fire protection districts or by Eastern Lane Forest Protection District.
- (6) Domestic open burning:
 - (a) Domestic open burning outside the fire districts listed in section (5) of this rule is allowed subject to OAR 340-23-040, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
 - (b) Domestic open burning is prohibited within all fire districts listed in section (5) of this rule except

that open burning of yard debris is allowed subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

(c) Refer to Lane Regional Air Pollution Authority open burning rules for specific seasons and hours for domestic open burning.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 477] 468A Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84; AQ 18, f. & ef. ###

Coos, Douglas, Jackson and Josephine Counties
340-23-090 Open burning prohibitions for Coos, Douglas,
Jackson and Josephine Counties:

(1) Open burning control areas:

- (a) The Coos Bay open burning control area as generally described in OAR 340-23-115 and depicted in Figure 3 is located in Coos County.
- (b) The Umpqua Basin open burning control area as generally described in OAR 340-23-115, and depicted in Figure 5, is located in Douglas County.
- (c) The Rogue Basin open burning control area as generally described in OAR 340-23-115 and depicted in Figure 4, is located in Jackson and Josephine Counties.
- (2) Industrial open burning is prohibited unless authorized pursuant to OAR 340-23-100.
- Agricultural open burning is allowed subject to OAR 340-23-040, 340-23-042, 340-23-043 and 340-23-090(7), and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (4) Commercial open burning is prohibited within the Coos Bay, Umpqua Basin and Rogue Basin open burning control areas and in or within three (3) miles of the corporate city limits of Coquille and Reedsport unless authorized pursuant to OAR 340-23-100. Commercial open burning is allowed in all other areas of these counties subject to OAR 340-23-040. † and 340-23-042 and 340-23-043 and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.

- (5) Construction and Demolition open burning is prohibited within the Coos Bay, Umpqua Basin and Rogue Basin open burning control areas unless authorized pursuant to OAR 340-23-100. Construction and Demolition open burning is allowed in other areas of these counties subject to OAR 340-23-040, [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (6) Domestic open burning is allowed subject to OAR 340-23-040, 340-23-042, 340-23-043 and 340-23-090(7), and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (7) Upon publication by EPA of notice in the Federal Register that the Medford-Ashland Air Quality Maintenance Area or the Grants Pass Urban Growth Area or the Grants Pass Urban Growth Area has failed to attain the <code>{n}National {a}Ambient {a}Air {q}Quality Standard for PM10 by the attainment date required in the Clean Air Act, all open burning is prohibited within the Rogue Basin open burning control area during November, December, January, and February unless authorized pursuant to 340-23-100.</code>

Stat. Auth.: ORS Ch. 468 & 477] 468A Hist.: DEQ 27-1981, f. & ef. 9-8-81; AQ 3, f. & ef. 11-13-91

Letter Permits 340-23-100

- (1) Open Burning of commercial, industrial, construction or demolition waste on a singly occurring or infrequent basis or the open burning of yard debris which is otherwise prohibited, may be permitted by a letter permit issued by the Department in accordance with this rule and subject to OAR 340-23-040. [and] 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal. OAR 340-14-025, 340-20-140, and 340-20-150 through 340-20-185 shall not apply.
- (2) A letter permit may only be issued on the basis of a written application for disposal of material by burning which has been approved by the Department. Each application for a letter permit shall contain the following items:
 - (a) The quantity and type of material proposed to be burned;

- (b) A listing of all alternative disposal methods and potential costs which have been identified or investigated;
- (c) The expected amount of time which will be required to complete the burning (not required for yard debris);
- (d) The methods proposed to be used to insure complete and efficient combustion of the material;
- (e) The location of the proposed burning site;
- (f) A diagram showing the proposed burning site and the structures and facilities inhabited or used in the vicinity including distances thereto;
- (g) The expected frequency of the need to dispose of similar materials by burning in the future.
- (h) Any other information which the applicant considers relevant or which the Department may require.
- (i) For open burning of yard debris:
 - (A) A "Hardship Permit Application" completed on a form supplied by the Department; and
 - (B) Either payment of the appropriate fee pursuant to section (11) of this rule or a "waiver request" completed on a form supplied by the Department.
- (3) Upon receipt of a written application the Department may approve the application if it is satisfied that:
 - (a) The applicant has demonstrated that all reasonable alternatives have been explored and no practicable alternative method for disposal of the materials exists; and
 - (b) The proposed burning will not cause or contribute to significant degradation of air quality.
- (4) The Department also may deny an application for a letter permit or revoke or suspend an issued letter permit on any of the following grounds:
 - (a) Any material misstatement or omission in the application or a history of such misstatements or omissions by the applicant;
 - (b) Any actual or projected violation of any statute, rule, regulation, order, permit, ordinance, judgment or decree.
- (5) In making its determination under section (3) of this rule, the Department may consider:
 - (a) The conditions of the airshed of the proposed burning:
 - (b) The other air pollution sources in the vicinity of the proposed burning;

- (c) The availability of other methods of disposal, and special circumstances or conditions which may impose a hardship on an applicant;
- (d) The frequency of the need to dispose of similar materials in the past and expected in the future;
- (e) The applicant's prior violations, if any;
- (f) The projected effect upon persons and property in the vicinity; and

(fq]q) Any other relevant factor.

- (6) Each letter permit issued by the Department pursuant to section (2) of this rule shall contain at least the following elements:
 - (a) The location at which the burning is permitted to take place.
 - (b) The number of actual calendar days on which burning is permitted to take place, not to exceed seven (7). Burning pursuant to a permit for yard debris shall be limited to three (3) days per season unless satisfactory justification for more burning is provided by the applicant.
 - (c) The period during which the permit is valid, not to exceed a period of thirty (30) consecutive days, except a permit for yard debris. The actual period in the permit shall be specific to the needs of the applicant.
 - (d) A letter permit for yard debris shall be valid for a single burning season or for both the spring and fall burning seasons during a calendar year, as appropriate to the application and the fee paid pursuant to the schedule in [OAR 340-23-100] section (11) of this rule. The spring burning is from March 1 to June 15, inclusive, and the fall burning season is from October 1 to December 15, inclusive.
 - (e) Equipment and methods required to be used by the applicant to insure that the burning is accomplished in the most efficient manner over the shortest period of time to minimize smoke production.
 - (f) The limitations, if any, based on meteorological conditions required before burning may occur. Open burning under permits for yard debris shall be limited to the hours and times which limit seasonal domestic yard debris burning permitted in the county where the burning under the letter permit is to occur.
 - (g) Reporting requirements for both starting the fire each day and completion of the requested burning, (optional for permits for yard debris).

- (h) A statement that OAR 340-23-040 and OAR 340-23-042 are fully applicable to all burning under the permit.
- (i) Such other conditions as the Department considers to be desirable.
- (7) Regardless of the conditions contained in any letter permit, each letter permit, except permits for yard debris, shall be valid for not more than thirty (30) consecutive calendar days of which a maximum of seven (7) can be used for burning. The Department may issue specific letter permits for shorter periods.

(8) Letter permits shall not be renewable. Any requests to conduct additional burning shall require a new application and a new permit.

- (9) For locations within Clackamas, Columbia, Multnomah and Washington Counties, letter permits may be issued only for the purpose of disposal of:
 - (a) Material resulting from emergency occurrences including, but not limited to floods, storms or oil spills.
 - (b) Material originating as yard debris which has been collected and stored by governmental jurisdictions provided that no other reasonable means of disposal are available.
 - (c) Yard debris excluding grass clippings and leaf piles, on the property of a private residence where the inability to burn creates a significant hardship due to:
 - (A) An economic burden when the estimated cost of alternative means of yard debris disposal presents a financial hardship in relation to household income and expenses of the applicant.
 - (B) A physical handicap, personal disability, chronic illness, substantial infirmity or other physical limitation substantially inhibiting the ability of the applicant to process or transport yard debris; or
 - (C) Inaccessibility of yard debris, where steepness of terrain or remoteness of the debris site makes access by processing or transportation equipment unreasonable.
- (10) No person shall violate any condition, limitation, or term of a letter permit.
- (11) All applications for a letter permit for yard debris shall be accompanied by a permit fee which shall be payable to the Department and become non-refundable upon issuance of the permit. The fee to be submitted is:
 - (a) For a single burning season, spring or fall \$20.

- (b) For a calendar year \$30.
- (12) The Department may waive the single season permit fee if the applicant shows that the cost of the hardship permit presents an extreme financial hardship in relation to the household income and expenses of the applicant.

Stat. Auth.: ORS Ch. 468 & 477] 468A
Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84

Forced Air Pit Incinerators

340-23-105 Forced air pit incineration may be approved as an alternative to open burning prohibited by these rules this Division, provided that the following conditions shall be met:

- (1) The person requesting approval of forced air pit incineration shall demonstrate to the satisfaction of the Department that no feasible or practicable alternative to forced-air pit incineration exists.
- (2) The forced-air pit incineration facility shall be designed, installed, and operated in such a manner that visible emissions do not exceed forty percent (40%) opacity, as measured by EPA Method 9, for more than three (3) minutes out of any one (1) hour of operation following the initial thirty (30) minute startup period.
- (3) The person requesting approval of a forced-air pit incineration facility shall be granted an approval of the facility only after a Notice of Construction and Application for Approval is submitted pursuant to OAR 340-20-020 through 340-20-030.
- (4) A forced-air pit permit for operation of a forced air pit incineration facility shall be required and shall be based on the same conditions and requirements stipulated for letter permits in OAR 340-23-100, which is included here by reference, except that the term of the permit shall not be limited to thirty (30) days and the operation of the facility shall not be limited to seven (7) days, but both the term of the permit and the operation limit of the facility shall be specified in the permit and shall be appropriate to the purpose of the facility.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 477] 468A Hist.: DEQ 27-1981, f. & ef. 9-8-81

Records and Reports

340-23-110[As required by ORS 476.380(4) and 478.960(7), fire permit issuing agencies shall maintain records of open burning permits and the conditions thereof, and shall submit such records or summaries thereof to the Commission as may be required. Forms for any reports required under this rule shall be provided by the Department.

Stat. Auth.: ORS Ch. 468 & 477-Hist.:] [DEQ 123, f. & ef. 10-20-76; DEQ 27-1981, f. & ef. 9-8-81; Renumbered from 340-23-050; Repealed by DEQ]

Open Burning Control Areas

340-23-115 Generally areas around the more densely populated locations in the state and valleys or basins which restrict atmospheric ventilation are designated open burning control areas. The practice of open burning may be more restrictive in open burning control areas than in other areas of the state. The specific open burning restrictions associated with these Open Burning Control Areas are listed in OAR 340-23-055 through OAR 340-23-090 by county. The general locations of Open Burning Control Areas are depicted in Figures 2 through 5 of this rule. The Open Burning Control Areas of the state are defined as follows:

- (1) All areas in or within three miles of the incorporated city limit of all cities with a population of 4,000 or more.
- (2) The Coos Bay Open Burning Control Area is located in Coos County with boundaries as generally depicted in Figure 3 of this rule. The area is enclosed by a line beginning at a point approximately 4-1/2 miles WNW of the City of North Bend, at the intersection of the north boundary of T25S, R13W, and the coastline of the Pacific Ocean; thence east to the NE corner of T25S, R12W; thence south to the SE corner of T26S, R12W; thence west to the intersection of the south boundary of T26S, R14W and the coastline of the Pacific Ocean; thence northerly and easterly along the coastline of the Pacific Ocean to its intersection with the north boundary of T25S, R13W, the point of beginning.
- (3) The Rogue Basin Open Burning Control Area is located in Jackson and Josephine Counties with boundaries as generally depicted in Figure 4 of this rule. The area is enclosed by a line beginning at a point approximately 4-1/2 miles NE of the City of Shady Cove at the NE corner of T34S, R1W, Willamette Meridian; thence south along the Willamette

Meridian to the SW corner of T37S, R1W; thence east to the NE corner of T38S, R1E; thence south to the SE corner of T38S, R1E; thence east to the NE corner of T39S, R2E; thence south to the SE corner of T39S, R2E; thence west to the SW corner of T39S, R1E; thence NW along a line to the NW corner of T39S, R1W; thence west to the SW corner of T38S, R2W; thence north to the SW corner of T36S, R2W; thence west to the SW corner of T36S, R4W; thence south to the SE corner of T37S, R5W; thence west to the SW corner of T37S, R6W; thence north to the NW corner of T36S, R1W; thence north to the NW corner of T34S, R1W; thence east to the point of beginning.

- The Umpqua Basin Open Burning Control Area is located in (4)Douglas County with boundaries as generally depicted in Figure 5 of this rule. The area is enclosed by a line beginning at a point approximately 4 miles ENE of the City of Oakland, Douglas County, at the NE corner of T25S, R5W, Willamette Meridian; thence south to the SE corner of T25S, R5W; thence east to the NE Corner of T26S, R4W; thence south to the SE corner of T27S, R4W; thence west to the SE corner of T27S, R5W; thence south to the SE corner of T30S, R5W; thence west to the SW corner of T30S, R6W; thence north to the NW corner of T29S, R6W; thence west to the SW corner of T28S, R7W thence north to the NW corner of T27S, R7W; thence east to the NE corner of T27S, R7W; thence north to the NW corner of T26, R6W; thence east to the NE corner of T26S, R6W; thence north to the NW corner of T25S, R5W; thence east to the point of beginning.
- (5) The boundaries of the Willamette Valley Open Burning Control Area are generally depicted in Figures 1 and 2 of this rule. The area includes all of Benton, Clackamas, Linn, Marion, Multnomah, Polk, Washington and Yamhill counties and that portion of Lane County east of Range 7 West.
- (6) Special control areas are established around cities within the Willamette Valley Open Burning control area. The boundaries of these special control areas are determined as follows:
 - (a) Any area in or within three (3) miles of the boundary of any city of more than 1,000 but less than 45,000 population.
 - (b) Any area in or within six (6) miles of the boundary of any city of 45,000 or more population.
 - (c) Any area between areas established by this rule where the boundaries are separated by three (3) miles or less.

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- (d) Whenever two or more cities have a common boundary, the total population of these cities will determine the applicability of subsection (a) or (b) of this section and the municipal boundaries of each of the cities shall be used to determine the limit of the special control area.
- (7) A domestic burning ban area around the Portland metropolitan area is generally depicted in Figure 1A. This area encompasses parts of the special control area in Clackamas, Multnomah and Washington Counties. Specific boundaries are listed in OAR 340-23-065(5), 340-23-070(5) and 340-23-075(5). Domestic burning is prohibited in this area except as allowed pursuant to OAR 340-23-100.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & $\frac{477}{468A}$ Hist.: DEQ 27-1981, f. & ef. 9-8-81; DEQ 10-1984, f. 5-29-84, ef. 6-16-84

MOTOR VEHICLES

DIVISION 24

VISIBLE EMISSIONS

Definitions

340-24-005 As used in these rules unless otherwise required by context OAR 340-24-005 through 340-24-040:

- (1) "Dealer" means any person who is engaged wholly or in part in the business of buying, selling, or exchanging, either outright or on conditional sale, bailment lease, chattel mortgage, or otherwise, motor vehicles.
- (2) "Department" means Department of Environmental Quality.
- (3) "Motor vehicle" means any self-propelled vehicle designed and used for transporting persons or property on a public street or highway.
- (4) "Motor vehicle fleet operation" means ownership, control, or management or any combination thereof by any person of five or more motor vehicles.
- (5) "Opacity" means the degree to which transmitted light is obscured, expressed in percent.
- (6) "Person" means any individual, public or private corporation, political subdivision, agency, board, department, or bureau of the state, municipality, partnership, association, firm, trust, estate, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.
- (7) "Regional authority" means a regional air quality control authority established under the provisions of ORS[449.760 to 449.840 and 449.850 to 449.920] 468A.005 to 468A.035, 468A.075, 468A.100 to 468A.130, and 468A.140 to 468A.175.
- (8) "Ringlemann Smoke Chart" means the Ringlemann Smoke Chart with instructions for use as published in May, 1967, by the U.S. Department of Interior, Bureau of Mines.
- ([8]9) "Visible emissions" means those gases or particulates, excluding uncombined water, which separately or in combination are visible upon release to the outdoor atmosphere.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Visible Emissions - General Requirements, Exclusions 340-24-010

- (1) No person shall operate, drive, or cause or permit to be driven or operated any motor vehicle upon a public street or highway which emits into the atmosphere any visible emission.
- (2) Excluded from this rule are those motor vehicles:
 - (a) Powered by compression ignition or diesel cycle engines;
 - (b) Excluded by written order of the Department by ORS{ 449.810} 468A.075.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Visible Emissions - Special Requirements for Excluded Motor Vehicles

340-24-015 No person shall operate, drive, or cause or permit to be driven or operated upon a public street or highway, any motor vehicle excluded from [rule] OAR 340-24-010 which:

- (1) When operated at an elevation of 3,000 feet or less, emits visible emissions into the atmosphere:
 - (a) Of an opacity greater than 40%;
 - (b) Of an opacity of ten percent or greater for a period exceeding seven consecutive seconds.
- (2) When operated at an elevation of over 3,000 feet, emits visible emissions into the atmosphere:
 - (a) Of an opacity greater than 60%;
 - (b) Of an opacity of 20% or greater for a period exceeding seven consecutive seconds.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Uncombined Water - Water Vapor

340-24-020 Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of rule OAR 340-24-010 or 340-24-015, such rules shall not apply.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Motor Vehicle Fleet Operation 340-24-025

- (1) The Department may, by written notice, require any motor vehicle fleet operation to certify annually that its motor vehicles are maintained in good working order, and if applicable, in accordance with motor vehicle manufacturer's specifications and maintenance schedule as may or tend to affect visible emissions. Records pertaining to observations, tests, maintenance, and repairs performed to control or reduce visible emissions from individual motor vehicles shall be available for review and inspection by the Department.
- (2) The Department, by written notice, may require any motor vehicle of a motor vehicle fleet operation to be tested for compliance with rules OAR 340-24-010 and 340-24-015.
- (3) A regional authority, within its territory, may perform the functions of the Department as set forth in sections (1) and (2) of this rule, upon written directive of the Department permitting such action.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Dealer Compliance

340-24-030 No dealer shall sell or offer for sale, exchange, or lease, any motor vehicle which operates in violation of rules OAR 340-24-010 or 340-24-015, except as permitted by federal regulations.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Method of Measurement

340-24-035 The opacity observation for purposes of these rules OAR 340-24-010 through 340-24-030 shall be made by a person trained as an observer; provided, however, that the a Ringlemann Smoke Opacity Chart, marked "Exhibit A", with instructions for use, attached hereto and by reference incorporated into these rules may be used in measuring the opacity of emissions for purposes of these rules OAR 340-24-010 through 340-24-030. (See Exhibit A at the end of this division.)

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Adoption of Alternative Methods of Measuring Visible Emissions 340-24-040

- (1) The Department may permit the use of alternative methods of measurement to determine compliance with the visible emissions standards in rules OAR 340-24-010 and 340-24-015 when such alternative methods are demonstrated to be reproducible, selective, sensitive, accurate and applicable to a specific program.
- (2) Any person desiring to utilize alternative methods of measurement shall submit to the Department such specifications and test data as the Department may require, together with a detailed specific program for utilizing the alternative methods. The Department shall require demonstration of the effectiveness and suitability of the program.
- (3) No person shall undertake a program using an alternative method of measurement without having obtained prior written approval of the Department.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70

Enforcement

340-24-045 [DEQ 8, f. 4-7-70; ef. 5-11-70 Repealed by DEQ 37, f. 2-15-72, ef. 3-1-72]

Pertaining to Motor Vehicle Inspection

County Designations 340-24-100

- (1) Pursuant to the requirements of ORS[449.957] 468A.360, Clackamas, Multnomah, and Washington [C]counties are hereby designated by the Environmental Quality Commission as counties in which all motor vehicles registered therein, unless otherwise exempted by statute or by rules subsequently adopted by the Commission, shall be equipped with a motor vehicle pollution control system and shall comply with motor vehicle emission standards adopted by the Commission.
- [(2) The effective date of this regulation is May-31, 1974.]

{Criteria for Certification of Motor Vehicle Pollution Control Systems

Criteria for Certification of Motor Vehicle Pollution Control Systems

340-24-200 Pursuant to the requirements of ORS[449.953(1)]
468A.365, the following are the criteria for certification of motor vehicle pollution control systems as defined by ORS[449.949] 468A.350:

- (1) A motor vehicle pollution control system which necessitates equipment designed for installation on a motor vehicle for the purpose of reducing the pollutants emitted from the vehicle shall not be certified.
- (2) A motor vehicle pollution control system which necessitates modifications, other than adjustments, to the original design of the motor vehicle shall not be certified.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 66, f. 2-5-74, ef. 2-25-74

Motor Vehicle Emission Control Inspection Test Criteria, Methods, and Standards

Scope

340-24-300 Pursuant to ORS[468.360 to 468.405, 803.350, 815.295 to 815.325 and] 467.030, 468A.350 to 468A.400, 803.350, and 815.295 to 815.325, the following rules OAR 340-24-300 through 340-24-350 establish the criteria, methods, and standards for inspecting motor vehicles to determine eligibility for obtaining a Certificate of Compliance or inspection.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 467, 468[& 481] & 468A
Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 139, f. 6-30-77, ef. 7-1-77; DEQ 23-1984, f. 11-19-84, ef. 4-1-85

Boundary Designations 340-24-301

(1) In addition to the area specified in ORS 815.300, pursuant to ORS 468.397 468A.390, the following geographical area, referred to as the Medford-Ashland AQMA, is designated as an area within which motor vehicles are subject to the requirement under ORS 815.300 to have a Certificate of Compliance issued pursuant to ORS 468.390 468A.380 to be

- registered or have the registration of the vehicle renewed. As used in this section, "Medford-Ashland Air Quality (2) Maintenance Area" means the area of the state beginning at a point approximately one mile northeast of the town of Eagle Point, Jackson County, Oregon, at the northeast corner of section 36, T35S, R1W; thence south along the Willamette Meridian to the southeast corner of section 25, T37S, R1W; thence southeast along a line to the southeast corner of section 9, T395, R2E; thence south-southeast to the southeast corner of section 22, T39S, R2E; thence south to the southeast corner of section 27, T39S, R2E; thence southwest to the southeast corner of section 33, T39S[.], R2E; thence west to the southwest corner of section 31, T39S, R2E; thence northwest to the northwest corner of section 36, T39S, R1E; thence west to the southwest corner of section 26, T39S, R1E; thence northwest along a line to the southeast corner of section 7, T39S, R1E; thence west to the southwest corner of section 12, T39S, R1W; thence northwest along a line to the southwest corner of section 20, T3[9]8S, R1W; thence west to the southwest corner of section 24, T38S, R2W; thence northwest along a line to the southwest corner of section 4, T38S, R2W; thence west to the southwest corner of section 5, T38S, R2W; thence northwest along a line to the southwest corner of section 31, T37S, R2W; thence north along a line to the Roque River, thence north and east along the Roque River to the north boundary of section 32, T35S, R1W; thence east along a line to the point of beginning.
- [(3) The above area is shown in Exhibit 1.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 11-1985, f. 9-30-85, ef. 1-1-86; DEQ 21-1988, f. &

cert. ef. 9-12-88

Definitions

340-24-305 As used in these rules unless otherwise required by context OAR 340-24-300 through 340-24-350:

- (1) "Carbon dioxide" means a compound consisting of the chemical formula (CO₂).
- (2) "Carbon monoxide" means a compound consisting of the chemical formula (CO).
- (3) "Certificate of Compliance" means a certification issued by a vehicle emission inspector that the vehicle identified on the certificate is equipped with the required functioning

motor vehicle pollution control systems and otherwise complies with the emission control criteria, standards, and rules of the Commission.

- (4) "Certificate of inspection" means a certification issued-by a vehicle emission inspector and affixed to a vehicle by the inspector to identify the vehicle as being equipped with the required functioning motor vehicle pollution control systems and as otherwise complying with the emission control criteria, standards, and rules of the Commission.]
- ([5]4) "Commission" means the Environmental Quality Commission.
- ([6]5) "Crankcase emissions" means substances emitted directly to the atmosphere from any opening leading to the crankcase of a motor vehicle engine.
- ([7]6) "Department" means the Department of Environmental Quality.
- ([8]7) "Diesel motor vehicle" means a motor vehicle powered by a compression-ignition internal combustion engine.
- ({9}8) "Director" means the director of the Department.
- ([10]9) "Electric vehicle" means a motor vehicle which uses a propulsive unit powered exclusively by electricity.
- (1[1]0) "Exhaust emissions" means substances emitted into the atmosphere from any opening downstream from the exhaust ports of a motor vehicle engine.
- "Factory-installed motor vehicle pollution control system" means a motor vehicle pollution control system installed by the vehicle or engine manufacturer to comply with United States motor vehicle emission control laws and regulations.
- "Gas analytical system" means a device which [-senses]

 measures the amount of contaminants in the exhaust
 emissions of a motor vehicle, and which has been issued
 a license by the Department pursuant to [rule] OAR
 340-24-350[of these rules] and ORS[468.390] 468A.380.
- "Gaseous fuel" means, but is not limited to, liquefied petroleum gases and natural gases in liquefied or gaseous forms.
- (1[5]4) "Gasoline motor vehicle" means a motor vehicle powered by a spark-ignition internal combustion engine.
- (15) "Gross vehicle weight rating" or "GVWR" means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.
- "Heavy duty motor vehicle" means any motor vehicle having a combined manufacturer vehicle and maximum load rating to be carried thereon of more than 3855 kilograms (8500 pounds) rated at more than 8500 pounds GVWR or that has an actual vehicle curb weight as delivered to the ultimate purchaser of

6000 pounds or over.

- (17) "Hydrocarbon gases" means a class of chemical compounds consisting of hydrogen and carbon.
- (18) "Idle speed" means the unloaded engine speed when accelerator pedal is fully released.
- (19) "In-use motor vehicle" means any motor vehicle which is not a new motor vehicle.
- (20) "Light duty motor vehicle" means any motor vehicle (7) excluding motorcycles, having a combined manufacturer vehicle and maximum load rating to be carried thereon of not more than 3855 kilograms (8500 pounds) | rated at 8500 pounds GVWR or less and has an actual vehicle curb weight as delivered to the ultimate purchaser of under 6000 pounds.
- (21) "Model year" means the annual production period of new motor vehicles or new motor vehicle engines designated by the calendar year in which such period ends. If the manufacturer does not designate a production period, the model year with respect to such vehicles or engines shall mean the 12-month period beginning January of the year in which production thereof begins.
- (22) "Motorcycle" means any motor vehicle, including mopeds, having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground and having a mass of 680 kilograms (1500 pounds) or less with manufacturer recommended fluids and nominal fuel capacity included.
- (23) "Motor vehicle" means any self-propelled vehicle used for transporting persons or commodities on public roads.
- (24) "Motor vehicle fleet operation" means ownership by any person of 100 or more Oregon_registered, in-use, motor vehicles, excluding those vehicles held primarily for the purpose(s) of resale.
- (25) "Motor vehicle pollution control system" means equipment designed for installation on a motor vehicle for the purpose of reducing the pollutants emitted from the vehicle, or a system or engine adjustment or modification which causes a reduction of pollutants emitted from the vehicle, or a system or device which inhibits the introduction of fuels which can adversely felaffect the overall motor vehicle pollution control system.
- (26) "New motor vehicle" means a motor vehicle whose equitable or legal title has never been transferred to a person who in good faith purchases the motor vehicle for purposes other than resale.
- (27) "Noise level" means the sound pressure level measured by use of metering equipment with an "A" frequency weighting network and reported as dBA.

- (28) "Owner" means the person having all the incidents of ownership in a vehicle or where the incidents of ownership are in different persons, the person, other than a security interest holder or lessor, entitled to the possession of a vehicle under a security agreement, or a lease for a term of ten or more successive days.
- (29) "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.
- (30) "PPM" means parts per million by volume.
- (31) "Propulsion exhaust noise" means that noise created in the propulsion system of a motor vehicle that is emitted into the atmosphere from any opening downstream from the exhaust ports. This definition does not include exhaust noise from vehicle auxiliary equipment such as refrigeration units powered by a secondary motor.
- (32) "Public roads" means any street, alley, road, highway, freeway, thoroughfare, or section thereof in this state used by the public or dedicated or appropriated to public use.
- (33) "RPM" means engine crankshaft revolutions per minute.
- (34) "Two-stroke cycle engine" means an engine in which combustion occurs, within any given cylinder, once each crankshaft revolution.
- (35) "Vehicle emission inspector" means any person possessing a current and valid license issued by the Department pursuant to [rule] OAR 340-24-340 [of these rules] and ORS[-468.390] 468A.380.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 139, f. 6-30-77, ef. 7-1-77; DEQ 9-1978, f. & ef. 7-7-78; DEQ 22-1979, f. & ef. 7-5-79; DEQ 18-1980, f. & ef. 6-25-80; DEQ 12-1982, f. & ef. 7-21-82; DEQ 23-1984, f. 11-19-84, ef. 4-1-85

{Publicly}Government-Owned and Permanent Fleet Vehicle Testing Requirements

340-24-306

- (1) All motor vehicles registered as government-owned vehicles under ORS[481.125] 805.040 which are required to be certified annually pursuant to ORS[481.190] 815.300 shall, as means of that certification, obtain a Certificate of Compliance.
- (2) All motor vehicles registered as permanent fleet vehicles under ORS 805.120 which are required to be certified pursuant to ORS 803.350 and 815.295 to 815.325 shall, as means of that certification, obtain a Certificate of Compliance.
- (3) Any motor vehicle which is to be registered under ORS 805.040 or 805.120, but is not a new motor vehicle, shall obtain a Certificate of Compliance prior to that registration as required by ORS 803.350 and 815.295 to 815.325.
- (4)For the purposes of providing a staggered certification schedule for vehicles registered as government-owned vehicles under ORS 805.040 or permanent fleet vehicles under ORS 805.120, such schedule shall, except as provided by section (5) of this rule, be on the basis of the final numerical digit contained on the vehicle license plate. certification shall be completed by the last day of the month provided below ([b]last [D]digit and [M]month, respectively):
 - 1 January; (a) (b) 2 February; (c) 3 March; (d) 4 April; (e) 5 May; (f) 6 June; 7 July; (q) (h) 8 August; (i) 9 September; (j) 0 October.
- (5) In order to accommodate a fleet's scheduled maintenance practices, the Department may establish a specific separate schedule for vehicles registered as government-owned vehicles under ORS 805.040 or permanent fleet vehicles under ORS 805.120 if these vehicles are owned by fleets[,] licensed under the self-inspection program, OAR 340-24-340.

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Stat. Auth.: ORS Ch. 183<del>[ &]</del>, 468<u> & 468A</u>
Hist.: DEQ 3-1978, f. 3-1-78, ef. 4-1-78; DEQ 19-1983, f. 11-29-83, ef. 12-31-83
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OREGON ADMINISTRATIVE RULES

CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Motor	Vehicle Inspection Program Fee Schedule									
	340-24-307[The following is] This rule sets out the fee									
	ale for Certificates of Compliance, and licenses issued by the									
Depart	tment of Environmental Quality, Vehicle Inspection Program:									
(1)	Certificates of Compliance \$10									
	Issued by Department									
(2)	Certificate of Compliance									
	Issued by Licensed Motor Vehicle Fleet Operation									
(3)	Motor Vehicle Fleet Operation:									
	(a) Initial									
	(b) Annual renewals									
(4)	Fleet Operation Vehicle Emission Inspectors:									
	(a) Initial									
	(b) Annual renewal									
(5)	Exhaust Gas Analy [s] zer System:									
	(a) Initial									
	(b) Annual renewal									
	[NOTE: This rule is included in the State of Oregon Clean Air									
	mplementation Plan as adopted by the Environmental Quality									
Commis	ssion under OAR 340-20-047.]									
a	Auth - ODG Ob 1005 C3 460 5 4603									
	Auth.: ORS Ch. 183 [&] , 468 <u> & 468A</u> DEQ 20-1981, f. 7-28-81, ef. 8-1-81; AQ 16, f & ef. 2-4-92									
птъс.	DEQ 20-1981, 1. /-28-81, et. 8-1-81, AQ 10, 1 & et. 2-4-92									
Light	Duty Motor Vehicle Emission Control Test Method									
Digne	340-24-310									
(1)	The vehicle emission inspector is to insure that the gas									
(-)	analytical system is properly calibrated prior to initiating									
	a vehicle test.									
(2)	The Department-approved vehicle information data form is to									
(2)	be completed at the time of the motor vehicle being is									
	inspected.									
(3)	Vehicles having coolant, oil, or fuel leaks or any other such									
(3)	defect that is unsafe to allow the emission test to be									
	conducted shall be rejected from the testing area. The									
	emission test shall not be conducted until the defects aref									
	eliminated corrected.									
(4)	The vehicle transmission is to be placed in neutral gear if									
(3)	equipped with a manual transmission, or in park position if									
	equipped with an automatic transmission. [with-t]The hand or									
	parking brake is to be engaged. If the brake is found to be									
	defective, then wheel chocks are to be placed in front and									
	behind the vehicle's tires.									
(5)	All vehicle accessories are to be turned off.									
\ ~ /	TILL TELLEC GOODBITTED GEO OF NO VALUE OFF.									

- (6) An inspection is to be made to insure that the motor vehicle is equipped with the required functioning motor vehicle pollution control system in accordance with the criteria of rule in OAR 340-24-320(3). Vehicles not meeting this criteria upon completion of the testing process, shall have a report issued to the driver stating all reasons for noncompliance.
- (7) With the engine operating at idle speed, the sampling probe of the gas analytical system is to be inserted into the engine exhaust outlet.
- (8) The steady state levels of the gases measured at idle speed by the gas analytical system shall be recorded. Except for diesel vehicles, the idle speed at which the gas measurements were made shall also be recorded.
- (9) Except for diesel vehicles, the engine is to be accelerated with no external loading applied, to a speed of between 2,200 RPM and 2,700 RPM. The engine speed is to be maintained at a steady speed within this speed range for a 10- to 15-second period and then returned to an idle speed condition. In the case of a diesel vehicle, the engine is to be accelerated to an above-idle speed. The engine speed is to be maintained at a steady above-idle speed for a 10- to 15-second period and then returned to an idle speed condition. The values measured by the gas analytical system at the raised rpm speed shall be recorded.
- (10) The steady_state levels of the gases measured at idle speed by the gas analytical system shall be recorded. Except for diesel vehicles, the idle speed at which the gas measurements were made shall also be recorded.
- (11) If the vehicle is equipped with a multiple-exhaust system, then the steps in sections (7) through (10) of this rule are to be repeated on the other exhaust outlet(s). The readings from the exhaust outlet, or the average reading from the exhaust outlets are to be compared to the standards of [rule] OAR 340-24-330.
- (12) If the vehicle does not comply with the standards specified in [rule] OAR 340-24-330, and it is a 1981 [or newer] through 1987 Ford Motor Company vehicle, or if it [s] is a 1984 [through 1986] or 1985 Honda Prelude [;], the vehicle shall have the ignition turned off, be restarted, and have the steps in sections (8) through (11) of this rule repeated.
- (13) If the vehicle is capable of being operated with both gasoline and gaseous fuels, then the steps in sections (7) through (10) of this rule are to be repeated so that emission test results are obtained for both fuels.

- (14) If it is judged that the vehicle may be emitting propulsion exhaust noise in excess of the noise standards of [rule] OAR 340-24-337, adopted pursuant to ORS 467.030, then a noise measurement is to be conducted and recorded while the engine is at the speed specified in section (9) of this rule. A reading from each exhaust outlet shall be recorded at the raised engine speed. This provision for noise inspection shall apply only within inspection boundaries located within Clackamas, Multnomah and Washington [C]counties.
- (15) If it is determined that the vehicle complies with the criteria of rule OAR 340-24-320, and the standards of rule 340-24-330, and 340-24-337, and ORS 467.030, 468A.350 through 468A.400, 803.350 and 815.295 through 815.325, then, following receipt of the required fees, the vehicle emission inspector shall issue the required cell certificates of [e]Compliance and inspection].
- [(16) The inspector shall affix any certificate of inspection issued to the lower left-hand side (normally the driver side) of the front windshield, being careful not to obscure the vehicle identification number nor to obstruct driver vision.]
- [(17) No certificate of compliance or inspection shall be issued unless the vehicle complies with all requirements of these rules and those applicable provisions of ORS 468.360 to 468.405, 803.350, 815.295 to 815.325 and 467.030.]

Stat. Auth.: ORS Ch. 183[&], 468 & 468A Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 139, f. 6-30-77, ef. 7-1-77; DEQ 20-1981, f. 7-28-81, ef. 8-1-81; DEQ 12-1982, f. & ef. 7-21-82; DEQ 19-1983, f. 11-29-83, ef. 12-31-83; DEQ 23-1984, f. 11-19-84, ef. 4-1-85; DEQ 6-1985, f. & ef. 5-1-85; DEQ 21-1988, f. & cert. ef. 9-12-88

Motorcycle Noise Emission Control Test Method 340-24-311

(1) The vehicle is to be in neutral gear with the brake engaged.

If the vehicle has no neutral gear, the rear wheel shall be at least [2] two inches clear of the ground.

- (2) The engine is to be accelerated to a speed equal to 45 percent of the red line speed. Red-line speed is the lowest numerical engine speed included in the red zone on the motorcycle tachometer. If the red-line speed is not available, the engine shall be accelerated to 50 percent of the speed at which the engine develops maximum rated net horsepower.
- (3) If it is judged that the vehicle may be emitting propulsion exhaust noise in excess of the noise standards of rule OAR 340-24-337, adopted pursuant to ORS 467.030, then a noise measurement is to be conducted and recorded while the engine is at the speed specified in section (2) of this rule. A reading from each exhaust outlet shall be recorded at the raised engine speed.
- (4) If it is determined that the vehicle complies with the standards of rule OAR 340-24-337, then, following receipt of the required fees, the vehicle emission inspector shall issue the required {c}Certificates of {c}Compliance and inspection}.
- (5) No Certificate of Compliance or inspection shall be issued unless the vehicle complies with all requirements of these rules OAR 340-24-300 through 350 and those applicable provisions of ORS 468.360 to 468.405 467.030, 468A.350 to 468A.400, 805.350 803.350, and 815.295 to 815.325 and 467.0301.
- [(6) This rule and section (2) of rule 340-24-337 shall become
 effective upon further action of the Environmental Quality
 Commission.]

Stat. Auth.: ORS Ch. 467, 468 & [-481] 468A

Hist.: DEQ 24-1984, f. 11-19-84, ef. 7-1-85; DEQ 7-1985(Temp), f. 6-16-85, ef. 7-1-85; DEQ 17-1985, f. & ef. 12-3-85

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Heavy Duty Gasoline Motor Vehicle Emission Control Test Method 340-24-315

- (1) The vehicle emission inspector is to insure that the gas analytical system is properly calibrated prior to initiating a vehicle test.
- (2) The Department_approved vehicle information data form is to be completed at the time of the motor vehicle being inspected.

(3) Vehic	cles having defects which make it unsafe to allow the
emiss	sion test to be conducted shall be rejected from the
test	ing area. The emission test shall not be conducted until
	lefects are corrected.
([3] 4)	The vehicle transmission is to be placed in neutral
(2 2—)	gear if equipped with a manual transmission, or in
	["]park["] position if equipped with an automatic
	transmission. The hand or parking brake is to be
	engaged. If the brake is found to be defective, then
	wheel chocks are to be placed in front and behind the
	vehicle's tires.
([4] 5)	All vehicle accessories are to be turned off.
([5] 6)	An inspection is to be made to insure that the motor
	vehicle is equipped with the required functioning motor
	vehicle pollution control system in accordance with the
	criteria of [rule] OAR 340-24-325.
([6] 7)	With the engine operating at idle speed, the sampling
	probe of the gas analytical system is to be inserted
	into the engine exhaust outlet.
([7] 8)	The steady state levels of the gases measured at idle
	speed by the gas analytical system shall be recorded.
	The idle speed at which the gas measurements were made
(5030)	shall also be recorded. The engine is to be accelerated, with no external
([8] 9)	loading applied, to a speed of between 2,200 RPM and
	2,700 RPM. The engine speed is to be maintained at a
	constant speed within this [speed] range for sufficient
	time to achieve a steady-state condition whereupon the
	steady-state levels of the gases measured by the gas
	analytical system shall be recorded on the Department
	approved vehicle information form. The engine speed
	shall then be returned to an idle speed condition.
([9] 10)	The steady-state levels of the gases measured at idle
\ L	speed by the gas analytical system shall be recorded on
	the Department_approved vehicle information form. The
	idle speed at which the gas measurements were made
	shall also be recorded.
(1 [0] 1)	If the vehicle is equipped with a multiple-exhaust
	system, then the steps in sections (6) through (9) of
	this rule are to be repeated on the other exhaust
	outlet(s). The readings from the exhaust outlets are to

this rule.

be averaged to determine a single reading for each gas measured in { each } the steps in sections (8) and (9) of

(1 [1] 2)	The reading from the exhaust outlet, or the average
	reading from the exhaust outlets obtained in [each] the
	steps in sections (8) and (9) of this rule are to be
	compared to the standards of [rule] OAR 340-24-335.
(1 [2] 3)	If the motor vehicle is capable of being operated with
	both gasoline and gaseous fuels, then the steps in
	sections (6) through (9) of this rule are to be
	repeated so that emission test results are obtained for
	both fuels.
(1 [3] 4)	If it is ascertained that the motor vehicle may be
	emitting noise in excess of the noise standards adopted
•	pursuant to ORS 467.030, then a noise measurement is to
	be conducted in accordance with the test procedures
	adopted by the Commission or to standard methods
	approved in writing by the Department.
(1 [4] 5)	If it is determined that the motor vehicle complies
	with the criteria of rule OAR 340-24-325 and the
	standards of rule] 340-24-335, and ORS 468A.350 through
	468A.400, 803.350 and 815.295 through 815.325, then,
	following receipt of the required fees, the vehicle
,	emission inspector shall issue the required
	<pre>{e}Certificate(s) of {e}Compliance(-and-inspection).</pre>
	inspector shall affix any certificate of inspection
	d to the lower left-hand side (normally the driver side)
	e-front-windshield, being careful not to obscure the
	le identification number nor to obstruct driver vision.]
	rtificate of compliance or inspection shall be issued
	s the vehicle complies with all requirements of these
	and those applicable provisions of ORS 468.360 to
	05, 803.350, 815.295 to 815.325.]
(1 [7] <u>6</u>)	Any motor vehicle registered on less than an annual
	basis pursuant to ORS 803.040 need not pass more than
	an annual inspection to assure compliance with ORS
	815.300. Such vehicles shall be issued a Certificate of
	Compliance in a form provided by the Department stating

four consecutive quarterly periods.

that the vehicle passed inspection by the Department on a certain date and was in compliance with the standards of the Commission, and having no information to the contrary, presumes the continuance of such compliance at the date of the issuance of the Certificate through Stat. Auth.: ORS Ch. 183[&], 468<u> & 468A</u>
Hist.: DEQ 136, f. 6-10-77, ef. 7-1-77; DEQ 20-1981, f. 7-28-81, ef. 8-1-81; DEQ 12-1982, f. & ef. 7-21-82; DEQ 19-1983, f. 11-29-83, ef. 12-31-83

Light Duty Motor Vehicle Emission Control Test Criteria 340-24-320

- (1) No vehicle emission control test shall be considered valid if the vehicle exhaust system leaks in such a manner as to dilute the exhaust gas being sampled by the gas analytical system. For the purpose of emission control tests conducted at state facilities, except for diesel vehicles, tests will not be considered valid if the exhaust gas is diluted to such an extent that the sum of the carbon monoxide and carbon dioxide concentrations recorded for the idle speed reading from an exhaust outlet is eight percent or less, and on 1975 and newer vehicles with air injection systems seven percent or less.
- (2) No vehicle emission control test shall be considered valid if the engine idle speed either exceeds the manufacturer's idle speed specifications by over 200 RPM on 1968 1972 and newer model vehicles, or exceeds 1,250 RPM for any pre-1968 model vehicle1.
- (3) No vehicle emission control test for a 1975 or newer (a) model vehicle shall be considered valid if any element the following factory-installed motor pollution control systems have been disconnected, plugged, or otherwise made inoperative in violation of ORS 815.305(1), except that for 1975 through 19[79]80 model year vehicles the inspection shall be limited to the [C]catalytic converter system and [F]fuel filler inlet restrictor listed below, and as noted in [-section (2) of this rule ORS 815.305(2) or as provided for by 40 CFR 85.1701-1709 (published July 1, 1991). Motor vehicle pollution control systems include, but are not necessarily limited to:
 - (A) Positive crankcase ventilation (PCV) system [,];
 - (B) Exhaust modifier system, including:
 - (i) Air injection reactor system [7];
 - (ii) Thermal reactor system [,]; and
 - (iii) Catalytic converter system[.];
 - (C) Exhaust gas recirculation (EGR) systems [,];
 - (D) Evaporative control system { , };
 - (E) Spark timing system, including:
 - (i) Vacuum advance system [,]; and
 - (ii) Vacuum retard system [.]; and

- (F) Special emission control devices [. Examples], including:
 - (i) Orifice spark advance control (OSAC) [,];
 - (ii) Speed control switch (SCS) [,];
 - (iii) Thermostatic air cleaner (TAC) [,];
 - (iv) Transmission controlled spark (TCS) [,];
 - (v) Throttle solenoid control (TSC) { ; };
 (vi) Fuel filler inlet restrictor { ; };
 - (vii) Oxygen sensor [,]; and
 - (viii) Emission [C]control [C]computer.
- (b) The Department may provide alternative criteria forf this those required under subsection (a) of this section when it can be determined that the component or an acceptable alternative is unavailable. [Relief] Such alternative criteria may be granted on the basis of the nonavailability of the original part, replacement part, or comparable alternative solution.
- (4) No vehicle emission control test for a 198[0] or newer model vehicle shall be considered valid if any element of the factory installed motor vehicle pollution control system has been modified or altered in such a manner so as to decrease its efficiency or effectiveness in the control of air pollution in violation of ORS 815.305(1), except as noted in fsection (2) of this rule ORS 815.305(2). For the purposes of this section, the following apply:
 - (a) The use of a nonf-joriginal equipment aftermarket part (including a rebuilt part) as a replacement part is not considered to be a violation of ORS 815.305, if a reasonable basis exists for knowing that such use will not adversely effect emission control efficiency. The Department will maintain a listing of those parts which have been determined to adversely effect emission control efficiency;
 - (b) The use of a nonf-joriginal equipment aftermarket part or system as an add-on, auxiliary, augmenting, or secondary part or system, is not considered to be a violation of ORS 483.825(2), if such part or system is on the exemption list of "Modifications to Motor Vehicle Emission Control Systems[-Permitted] Exempted Under California Vehicle Code Section 27156" granted by the Air Resources Board["], or is on the list maintained by the U.S. Environmental Protection Agency of "Certified to EPA Standards", or has been determined after review of testing data by the Department that there is no decrease in the efficiency or effectiveness in the control of air pollution;

- (c) Adjustments or alterations of a particular part or system parameter, if done for purposes of maintenance or repair according to the vehicle or engine manufacturer's instructions, are not considered violations of ORS 815.305.
- (5) A 198[0] and newer model motor vehicle which has been converted to operate on gaseous fuels shall not be considered in violation of ORS 815.305 when elements of the factory-installed motor vehicle air pollution control system are disconnected for the purpose of conversion to gaseous fuel as authorized by ORS 815.305.

(6) [The following applies:

- (a) To vehicles older than the 1980 model year.]If[these]

 a vehicle[s] older than the 1981 model year is[are]
 now equipped with other than the original engine and
 factory installed vehicles pollution control systems,
 the vehicle for the purposes of determining test
 standards, shall be classified by the vehicle's
 original model year classification and current fuel
 system.
- (7) To 1980 and newer motor vehicles. These motor]A 1981

 and newer vehicle[s] shall be classified by the model year and make of the vehicle as designated by the original chassis, engine, and its factory installed motor vehicle pollution control systems, or equivalent. This in no way prohibits the vehicle owner from upgrading the engine and emission control system to a more recent model year category including a diesel (compression ignition) power plant providing that all of the new factory installed pollution control system is maintained.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 183[&], 468<u>& 468A</u>
Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 116(Temp), f. & ef. 7-27-76; DEQ 121, f. & ef. 9-3-76; DEQ 139, f. 6-30-77, ef. 7-1-77; DEQ 9-1978, f. & ef. 7-7-78; DEQ 22-1979, f. & ef. 7-5-79; DEQ 6-1980, f. & ef. 1-29-80; DEQ 18-1980, f. & ef. 6-25-80; DEQ 12-1982, f. & ef. 7-21-82; DEQ 19-1983, f. 11-29-83, ef. 12-31-83; DEQ 6-1985, f. & ef. 5-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 21-1988, f. & cert. ef. 9-12-88

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Heavy Duty Gasoline Motor Vehicle Emission Control Test Criteria 340-24-325

- (1) No vehicle emission control test shall be considered valid if the vehicle exhaust system leaks in such a manner as to dilute the exhaust gas being sampled by the gas analytical system. For the purpose of emission control tests conducted at state facilities, tests will not be considered valid if the exhaust gas is diluted to such an extent that the sum of the carbon monoxide and carbon dioxide concentrations recorded for the idle speed reading from an exhaust outlet is eight percent or less.
- (2) No vehicle emission control test shall be considered valid if the engine idle speed either exceeds the manufacturer's idle speed specifications by over 200 RPM on 197[0]2 and newer model vehicles (, or exceeds 1,000 RPM for any age model vehicle).
- (3) (a) No vehicle emission control test for a 198[0]1 or newer model vehicle shall be considered valid if any element of the following factory-installed motor vehicle pollution control systems have been disconnected, plugged, or otherwise made inoperative in violation of ORS 815.305(1), except as noted in section (2) of this rule] ORS 815.305(2):
 - (A) Positive crankcase ventilation (PVC) system;
 - (B) Exhaust modifier system [. Examples], including:
 - (i) Air injection system [,];
 - (ii) Thermal reactor system[,]; or
 - (iii) Catalytic convertor system[.];
 - (C) Exhaust gas recirculation (EGR) system [s,]:
 - (D) Evaporative control system [,];
 - (E) Spark timing system [. Examples], including:
 - (i) Vacuum advance system [,]; or
 - (ii) Vacuum retard system[.]; or

- (F) Special emission control devices{. Examples},
 including:
 - (i) Orifice spark advance control (OSAC) [,]:
 - (ii) Speed control switch (SCS) [,];
 - (iii) Thermostatic air cleaner (TAC) [,];
 - (iv) Transmission controlled spark (TCS) [,]:
 - (v) Throttle solenoid control (TSC) {,};
 - (vi) Fuel filler inlet restrictor(.);
 - (vii) Oxygen sensor; or
 - (viii) Emission control computer.
- (b) The Department may provide alternative criteria forf this those required under subsection (a) of this section when it can be determined that the component or an acceptable alternative is unavailable. [Relief] Such alternative criteria may be granted on the basis of the nonavailability of the original part, replacement part, or comparable alternative solution.
- (4) No vehicle emission control test conducted for a 1980 or newer model vehicle shall be considered valid if any element of the factory-installed motor vehicle pollution control system has been modified or altered in such a manner so as to decrease its efficiency or effectiveness in the control of air pollution in violation of ORS 815.305(1), except as noted in section (2) of this rule ORS 815.305(2). For the purposes of this section, the following apply:
 - (a) The use of a non{-}original equipment aftermarket part (including a rebuilt part) as a replacement part is not considered to be a violation of ORS 815.305, if a reasonable basis exists for knowing that such use will not adversely {e}affect emission control efficiency. The Department will maintain a listing of those parts which have been determined to adversely effect emission control efficiency;
 - (b) The use of a non[-]original equipment aftermarket part or system as an add-on, auxiliary, augmenting, or secondary part or system, is not considered to be a violation of ORS[483.825(2)] 815.305, if such part or system is listed on the exemption list maintained by the Department;
 - (c) Adjustments or alterations of a particular part or system parameter, if done for purposes of maintenance or repair according to the vehicle or engine manufacturer's instructions, are not considered violations of ORS 815.305.
- (5) A 198[0] or newer model motor vehicle which has been converted to operate on gaseous fuels shall not be considered in violation of ORS 815.305 when elements of the

factory-installed motor vehicle air pollution control system are disconnected for the purpose of conversion to gaseous fuel as authorized by ORS 815.305.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[&], 468<u> & 468A</u>
Hist.: DEQ 136, f. 6-10-77, ef. 7-1-77; DEQ 22-1979, f. & ef. 7-5-79; DEQ 12-1982, f. & ef. 7-21-82; DEQ 19-1983, f. 11-29-83, ef. 12-31-83; DEQ 6-1985, f. & ef. 5-1-85; DEQ 12-1985, f. & ef. 9-30-85; DEQ 21-1988, f. & cert. ef. 9-12-88

Light Duty Motor Vehicle Emission Control (Cutpoints or) Standards 340-24-330

- (1) Light Duty Diesel Motor Vehicle Emission Control (Cutpoints) Standards: All 1.0% CO No HC Check.
- (2) Light Duty Gasoline Motor Vehicle Emission Control Cutpoints Standards: Two Stroke Cycle: All 6.5% CO No HC Check.
- (3) Light Duty Gasoline Motor Vehicle Emission Controlf Cutpoints Standards: Four Stroke Cycle Passenger Cars:
 - (a) Pre 1968 Model Year:
 - (A) Four or less cylinders: All 6.5% CO 1,550 ppm HC
 - (B) More than four cylinders: All 6.0% CO 1,250 ppm HC
 - (b) 1968 1969 Model Year:
 - (A) Four or less cylinders: All 5.5% CO 850 ppm
 - (B) More than four cylinders: All 5.0% CO 650 ppm HC
 - (c) 1970 1971 Model Year: All 4.5% CO 550 ppm HC
 - (d) 1972 1974 Model Year:
 - (i) 4 or less cylinders: All 4.0% CO 450 ppm HC
 - (ii) More than 4 cylinders: All 3.0% CO 350 ppm HC
 - (e) 1975 1980 Model Year:
 - (A) With Catalyst Equipped: All 0.5% CO 175 ppm HC
 - (B) <u>Without [Non-]</u>Catalyst[Equipped]: All 2.0% CO 250 ppm HC
 - (f) 1981 and Newer Model Year: All:
 - (A) At idle 0.5% CO 175 ppm HC
 - (B) At 2,500 rpm 0.5% CO 175 ppm HC

(4) Gasoline Motor Vehicle Emission Controlf Light Duty Cutpoints | Standards - Light Duty Trucks: 6,000 GVWR or less: (a) (A) Pre 1968 Model Year: Four or less cylinders: All - 6.5% CO -(i)1,550 ppm HC More than four cylinders: All - 6.5% CO (ii) - 1,250 ppm HC 1968 - 1969 Model Year: (B) Four or less cylinders: All - 5.5% CO -(i) 850 ppm HC (ii) More than four cylinders: All - 5.0% CO - 650 ppm HC (C) 1970 - 1971 Model Year: All - 4.5% CO - 550 ppm 1972 - 1974 Model Year: (D) (i)Four or less cylinders: All - 4.0% CO -450 ppm HC More than four cylinders: All - 3.0% CO (ii) - 350 ppm HC 1975 - 1980 Model Year: (E) (i) With Catalyst [Equipped]: All - 0.5% CO - 175 ppm HC <u>Without [Non-]</u>Catalyst[Equipped]: All -(ii) 2.0% CO - 250 ppm HC 1981 and Newer Model Year: All: (F) At idle - 0.5% CO - 175 ppm HC At 2,500 rpm - 0.5% CO - 175 ppm HC (ii) 6,001 to 8,500 GVWR: (b) Pre 1968 Model Year: All - 6.0% CO - 1,250 ppm HC (A) (B) 1968 - 1969 Model Year: All - 5.0% CO - 650 ppm (C) 1970 - 1971 Model Year: All - 4.5% CO - 550 ppm 1972 - 1974 Model Year: All - 3.0% CO - 350 ppm (D) 1975 - 1978 Model Year: All - 2.0% CO - 250 ppm (E) (F) 1979 - 1980 Model Year: (i) With_Catalyst{ Equipped}: All - 0.5% CO -175 ppm HC (ii) <u>Without (Non-)</u>Catalyst[Equipped]: All -2.0% CO - 250 ppm HC (G) 1981 and Newer: All: (i) At idle - 0.5% CO - 175 ppm HC (ii) At 2,500 rpm - 0.5% CO - 175 ppm HC

- (5) An enforcement tolerance of 0.5% carbon monoxide and 50 ppm hydrocarbon will be added to the <u>labove cutpoints</u> standards in sections (1) through (4) of this rule.
- (6) There shall be no visible emission during the steady-state unloaded and raised rpm engine idle portions of the emission test from either the vehicle's exhaust system or the engine crankcase. In the case of diesel engines and two-stroke cycle engines, the allowable visible emission shall be no greater than 20% opacity.
- (7) The Director may establish specific separate standards, differing from those listed in sections (1) {-, (2), (3), (4), (5) and} through (6) of this rule for vehicle classes which are determined to present prohibitive inspection problems using the listed standards.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 116(Temp), f. & ef. 7-27-76; DEQ 121, f. & ef. 9-3-76; DEQ 139, f. 6-30-77, ef. 7-1-77; DEQ 9-1978, f. & ef. 7-7-78; DEQ 22-1979, f. & ef. 7-5-79; DEQ 18-1980, f. & ef. 6-25-80; DEQ 15-1981(Temp), f. & ef. 5-6-81; DEQ 20-1981, f. 7-28-81, ef. 8-1-81; DEQ 18-1986, f. 9-18-86, ef. 10-1-86; DEQ 21-1988, f. & cert. ef. 9-12-88

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Heavy-Duty Gasoline Motor Vehicle Emission Control Emission Standards

340-24-335

- (1) Carbon monoxide idle emission values not to be exceeded: All Vehicles:
 - (a) Pre-1970: Base Standard 6.0% Enforcement Tolerance 0.5.
 - (b) 1970 through 1973: Base Standard 4.0% Enforcement Tolerance 1.0.
 - (c) 1974 through 1978: Base Standard = 3.0% Enforcement Tolerance 1.0.
 - (d) 1979 and { later } newer without catalyst: Base Standard { %1 2.0% Enforcement Tolerance 1.0.
 - (e) 1985 and { later | newer | with catalyst: Base Standard { % } 0.5% Enforcement Tolerance 0.5.

- (2) Carbon Monoxide nominal 2,500 rpm emission values not to be exceeded: All Vehicles:
 - (a) Pre-1970: Base Standard 3.0% Enforcement Tolerance 1.0.
 - (b) 1970 and [later] newer without catalyst with carburetor: Base Standard [%] 2.0% Enforcement Tolerance 1.0.
 - (c) 1970 and newer without catalyst with [F]fuel inject[ed]ion: No Check.
 - (d) 1985 and [later] newer with catalyst: Base Standard [%] 0.5% Enforcement Tolerance 0.5.
- (3) Hydrocarbon idle emission values not to be exceeded: All Vehicles:
 - (a) Pre-1970: Base Standard PPM 700 Enforcement Tolerance 200.
 - (b) 1970 through 1973: Base Standard PPM 500 Enforcement Tolerance 200.
 - (c) 1974 through 1978: Base Standard PPM 300 Enforcement Tolerance 200.
 - (d) 1979 and [later] newer without catalyst: Base Standard PPM 250 Enforcement Tolerance 100.
 - (e) 1985 and[later] newer with catalyst: Base Standard PPM
 175 Enforcement Tolerance 50.
- (4) Hydrocarbon nominal 2,500 RPM emission values not be exceeded: 1985 and newer with catalyst: Base Standard PPM 175 Enforcement Tolerance PPM 50.
- (5) There shall be no visible emission during the steady-state unloaded engine idle and raised rpm portion of the emission test from either the vehicle's exhaust system or the engine crankcase.
- (6) The Director may establish specific separate standards, differing from those listed in sections (1) [, (2), (3), and] through (4) of this rule for vehicle classes which are determined to present prohibitive inspection problems using the listed standard.

Stat. Auth.: ORS Ch. ORS 468 & 468A Hist.: DEQ 136, f. 6-10-77, ef. 7-1-77; DEQ 9-1978, f. & ef. 7-7-78; DEQ 22-1979, f. & ef. 7-5-79; DEQ 18-1980, f. & ef. 6-25-80; DEQ 15-1981(Temp), f. & ef. 5-6-81; DEQ 20-1981, f. 7-28-81, ef. 8-1-81; DEQ 18-1986, f. 9-18-86, ef. 10-1-86 [ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Motor Vehicle Propulsion Exhaust Noise Standards 340-24-337

(1) Light duty motor vehicle propulsion exhaust noise levels not to be exceeded as measured at no less than 20 inches from any opening to the atmosphere downstream from the exhaust ports of the motor vehicle engine:

Vehicle Type

Maximum Allowable Noise Level

<u> 1972 - 1974</u>	Ferrari GTB, GTC and GTS								
	with 4390 cc engine	. 102 dBA							
<u> 1973 - 1974</u>	Ford De Tomaso								
1972 - 1974	Ford Pantera	. 101 dBA							
<u> 1972 - 1974</u>	Jaquar XKE	. 96 dBA							
1972 - 1973 Pontiac Firebird TransAM									
	with 455 CID engine	. 99 dBA							
All Other Fr	ront Engine Vehicles								
	ear and Mid Engine Vehicles								

(2) Motorcycle propulsion exhaust noise levels not to be exceeded as measured at no less than 20 inches from any opening to the atmosphere downstream from the exhaust ports of the motorcycle engine:

Model Year

Maximum Allowable Noise Level

Pre-1976					•			102	dBA
1976 and [later] newer								99	dBA

(3) The Director may establish specific separate standards, differing from those listed in sections (1) and (2) of this rule, for vehicle classes which are determined to present prohibitive inspection problems using the listed standard.

Stat. Auth.: ORS Ch. 467, 468 & 481 468A

Hist.: DEQ 23-1984, f. 11-19-84, ef. 4-1-85; DEQ 24-1984, f. 11-19-84, ef. 7-1-85; DEQ 6-1985, f. & ef. 5-1-85

Criteria for Qualifications of Persons Eligible to Inspect Motor Vehicles and Motor Vehicle Pollution Control Systems and Execute Certificates

340-24-340

- (1) Three separate classes of licenses are established by these rules as follows:
 - (a) Motor vehicle fleet operations;

- (b) Fleet operation vehicle emission inspector;
- (c) State_employed vehicle emission inspector.
- (2) Application for a license must be completed on a form provided by the Department.
- (3) (a) Each motor vehicle fleet operation license shall be valid through December 31 of each year unless revoked, suspended, or returned to the Department;
 - (b) Each vehicle emission inspector license shall be validffor two years from the last day of the month of issue,] through December 31 of every other year unless revoked, suspended, or returned to the Department.
- (4) No license shall be issued until the applicant has fulfilled all requirements and paid the required fee.
- (5) No license shall be transferable.
- (6) Each license may be renewed upon application and receipt of renewal fee if the application for renewal is made within the 30-day period prior to the expiration date and the applicant complies with all other licensing requirements.
- (7) A license may be suspended, revoked, or not renewed if the licensee has violated these rules this Division or ORS 468.360 to 468.405 468A.350 to 468A.400, 815.295 to 815.325.
- (8) A fleet operation vehicle emission inspector license shall be valid only for inspection of, and execution of certificates for, motor vehicle pollution control systems and motor vehicles of the motor vehicle fleet operation by which the inspector is employed on a full time basis, except: A fleet operation vehicle emission inspector employed by a governmental agency may be authorized by the Department to perform inspections and execute Certificates of Compliance for vehicles of other governmental agencies that have contracted with that agency for that service and that contract having the approval of the Director.
- (9) To initially receive or renew a license as a vehicle emission inspector, the applicant must:
 - (a) Be an employee of the Vehicle Inspection Program of the Department; or
 - (b) Be an employee of a licensed motor vehicle fleet operation;
 - (c) Complete application;
 - (d) Satisfactorily complete a training program conducted by the Department. Only persons employed by the Department or by a motor vehicle fleet operation shall be eligible to participate in the training program unless otherwise approved by the Director. The duration of the training program for persons employed by a motor vehicle fleet operation shall not exceed 24 hours;

- (e) At the completion of this training program, satisfactorily complete an examination pertaining to the inspection program requirements. This examination shall be prepared, conducted, and graded by the Department.
- (10) To be licensed as a motor vehicle fleet operation, the applicant must:
 - (a) Be the owner of 100 or more Oregon registered in-use motor vehicles, or 50 or more publicly government-owned vehicles registered pursuant to ORS 805.040;
 - (b) Be equipped with an exhaust gas analyzer complying with criteria established in [rule] OAR 340-24-350;
 - (c) Be equipped with a sound level meter conforming to "Requirements for Sound Measuring Instruments and Personnel" (NPCS-2) manual, revised September 15, 1974, of this Department.
- (11) No person licensed as a motor vehicle fleet operation shall advertise or represent himself as being licensed to inspect motor vehicles to determine compliance with the criteria and standards of rules OAR 340-24-320 and 340-24-330.

[Publication: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[&], 468<u>& 468A</u>
Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 136, f. 6-10-77, ef. 7-1-77; DEQ 3-1978, f. 3-1-78, ef. 4-1-78; DEQ 9-1978, f. & ef. 7-7-78; DEQ 14-1978, f. & ef. 10-3-78; DEQ 6-1980, f. & ef. 1-29-80; DEQ 12-1982, f. & ef. 7-21-82; DEQ 19-1983, f. 11-29-83, ef. 12-31-83

Gas Analytical System Licensing Criteria 340-24-350

- (1) To be licensed, an exhaust gas analyzer must:
 - (a) Conform substantially with either:
 - (A) All specifications contained in the document "Specifications for Exhaust Gas Analyzer System Including Engine Tachometers" dated July 9, 1974, prepared by the Department and on file in the office of the Vehicle Inspection Program of the Department,

- (B) The technical specifications contained in the document "Performance Criteria, Design Guidelines, and Accreditation Procedures for Hydrocarbon (HC) and Carbon Monoxide (CO) Analyzers Required in California Official Motor Vehicle Pollution Control Stations", issued by the Bureau of Automotive Repair, Department of Consumer Affairs, State of California, and on file in the office of the Vehicle Inspection Program of the Department. Evidence that an instrument model is approved by the California Bureau of Automotive Repair will suffice to show conformance with this technical specification, or
- (C) If a gas analytical system is purchased after January 1, 1982, the technical specifications contained in the document "The California Bureau of Automotive Repair Exhaust Gas Analyzer Specification 1979" on file in the office of the Vehicle Inspection Program of the Department [,].

(D) Notwithstanding any of the above certifications, no license shall be issued or renewed for any battery powered exhaust gas analytical system after December 31, 1984.

- (E) Not withstanding any of the above certification, no license shall be issued or renewed for any exhaust gas analyzer which does not conform to subsection (C) after December 31, 1989.]
- (b) Be owned by the licensed motor vehicle fleet operation or the Department;
- Be span gas calibrated and leak checked within a 14-(c) calendar day period prior to the test date by the licensed inspector. The calibration and leak check is to be performed following the analyzer manufacturer's specified procedures. The manufacturer's operation manual and calibration and leak check procedures are defined as an integral part of the analyzer, and shall be kept with the analyzer at all times. The date of calibration and leak check and the inspector's initials are to be recorded on a form provided by the Department for verification. Prior to any day of testing for the purposes of issuing a Certificate of Compliance, the analyzer shall be mechanically checked and corrected for zero and span drift once a day prior to performing the day's first vehicle exhaust gas inspection.

- (2) Application for a license must be completed on a form provided by the Department.
- (3) Each license issued for an exhaust gas analyzer shall be valid through December 31 of each year, unless returned to the Department or revoked.
- (4) A license for an exhaust gas analyzer system shall be renewed upon submission of a statement by the motor vehicle fleet operation that all conditions pertaining to the original license issuance are still valid and that the unit has been gas calibrated and its proper operation verified within the last 30 days by a vehicle emission inspector in their employment.
- (5) Grounds for revocation of a license issued for an exhaust gas analyzer system include the following:
 - (a) The unit has been altered, damaged, or modified so as to no longer conform with the specifications of subsection (1)(a) of this rule;
 - (b) The unit is no longer owned by the motor vehicle fleet operation to which the license was issued;
 - (c) The Department verifies that a Certificate of Compliance has been issued to a vehicle which has been emission tested by an analyzer that has not met the requirements of subsection (1)(c) of this rule.
- (6) No license shall be transferable.
- (7) No license shall be issued until all requirements of section (1) of this rule are fulfilled and required fees paid.

[{: Publication: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 183[&], 468<u>& 468A</u>
Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 136, f. 6-10-77, ef. 7-1-77; DEQ 9-1978, f. & ef. 7-7-78; DEQ 14-1978, f. & ef. 10-3-78; DEQ 6-1980, f. & ef. 1-29-80; DEQ 20-1981, f. 7-28-81, ef. 8-1-81; DEQ 19-1983, f. 11-29-83, ef. 12-31-83; DEQ 6-1985, f. & ef. 5-1-85; DEQ 21-1988, f. & cert. ef. 9-12-88

DIVISION 25

SPECIFIC INDUSTRIAL STANDARDS {CONSTRUCTION AND OPERATION OF WIGWAM WASTE BURNERS;

Construction and Operation of Wiqwam Waste Burners

[ED. NOTE: Administrative Order DEQ 37 repealed applicable portions of SA 22, filed 6-7-68.]

Definitions

340-25-005 As used in these rules, unless required otherwise by context OAR 340-25-005 through 340-25-025:

(1) "Continuous-flow conveying methods" means methods which transport materials at uniform rates of flow, or at rates generated by the production process.

(2) "Modified wigwam waste burner" means a device having the general features of a wigwam waste burner, but with improved combustion air controls and other improvements installed in accordance with design criteria approved by the Department.

(3) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

(4) "Wigwam waste burner" means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for incineration of wastes.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Statement of Policy

340-25-010 Recent technological and economic developments have enhanced the degree to which wood waste residues currently being disposed of in wigwam waste burners may be utilized or otherwise disposed of in ways not damaging to the environment. While recognizing that complete utilization of wood wastes is not presently possible in all instances, consistent with the economic and geographical conditions in Oregon, it is hereby declared to be the policy of the Environmental Quality Commission to:

(1) Encourage the complete utilization of wood waste residues.

- (2) Phase out, wherever reasonably practicable, all disposal of wood waste residues by incineration.
- (3) Require the modification of all wigwam waste burners to minimize air contaminant emissions.
- (4) Require effective monitoring and reporting of wigwam waste burner operating conditions.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Authorization to Operate a Wigwam Burner 340-25-015

- (1) Operation of wigwam waste burners other than modified wigwam waste burners is prohibited without approval of the Department of Environmental Quality.
- (2) Persons seeking authorization to modify a wigwam waste burner or establish a new wigwam waste burner shall request authorization by submitting a Notice of Construction and submitting plans in accordance with OAR 340-20-025 and 340-20-030.
- (3) Authorization to establish a modified waste burner installation shall not be approved unless it is demonstrated to the Department that:
 - (a) No feasible alternative to incineration of wood waste residues exists. In demonstrating this, the applicant shall provide a statement of the relative technical and economic feasibility of alternatives, including but not limited to: utilization, off-site disposal and incineration in a boiler or incinerator other than a wigwam waste burner;
 - (b) The modified wigwam waste burner facility is to be constructed and operated in accordance with design criteria approved by the Department, and the emission standards set forth in OAR 340-25-020.
- (4) Authorization for establishment of a new modified wigwam waste burner in conjunction with the establishment of a new industrial facility or significant expansion of an existing facility shall not be granted without approval of the Department of Environmental Quality.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Emission and Operation Standards for Wigwam Waste Burners 340-25-020

(1) No person shall cause, suffer, allow, or permit the emission of air contaminants into the atmosphere from any wigwam waste burner for a period or periods aggregating more than three (3) minutes in any one hour which is equal to or greater than 20% opacity.

(2) Resultant emissions notwithstanding, no person shall use a wigwam waste burner for the incineration of other than production process wood wastes. Such wood wastes shall be transported to the burner by continuous-flow conveying methods.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Monitoring and Reporting 340-25-025

- (1) A thermocouple and recording pyrometer or other approved temperature measurement and recording devices shall be installed and maintained on every modified wigwam waste burner.
- (2) Exit gas temperature shall be recorded continuously using the installed pyrometer at all times when the burner is in operation.
- (3) Records of temperature and burner operation, or summaries thereof, shall be submitted at such frequency as the Department may prescribe.
- (4) In addition to temperature monitoring as prescribed above, in accordance with OAR 340-20-035 and 340-20-040, the Department may require installation of visible emissions monitoring devices and subsequent reporting of data

DIVISION 25

SPECIFIC INDUSTRIAL STANDARDS [CONSTRUCTION AND OPERATION OF WIGWAM WASTE BURNERS]

Construction and Operation of Wiqwam Waste Burners

[ED. NOTE: Administrative Order DEQ 37 repealed applicable portions of SA 22, filed 6-7-68.]

Definitions

340-25-005 As used in these rules, unless required otherwise by context OAR 340-25-005 through 340-25-025:

- (1) "Continuous-flow conveying methods" means methods which transport materials at uniform rates of flow, or at rates generated by the production process.
- (2) "Modified wigwam waste burner" means a device having the general features of a wigwam waste burner, but with improved combustion air controls and other improvements installed in accordance with design criteria approved by the Department.
- (3) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.
- (4) "Wigwam waste burner" means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for incineration of wastes.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Statement of Policy

340-25-010 Recent technological and economic developments have enhanced the degree to which wood waste residues currently being disposed of in wigwam waste burners may be utilized or otherwise disposed of in ways not damaging to the environment. While recognizing that complete utilization of wood wastes is not presently possible in all instances, consistent with the economic and geographical conditions in Oregon, it is hereby declared to be the policy of the Environmental Quality Commission to:

(1) Encourage the complete utilization of wood waste residues.

- (2) Phase out, wherever reasonably practicable, all disposal of wood waste residues by incineration.
- (3) Require the modification of all wigwam waste burners to minimize air contaminant emissions.
- (4) Require effective monitoring and reporting of wigwam waste burner operating conditions.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Authorization to Operate a Wigwam Burner 340-25-015

- (1) Operation of wigwam waste burners other than modified wigwam waste burners is prohibited without approval of the Department of Environmental Quality.
- (2) Persons seeking authorization to modify a wigwam waste burner or establish a new wigwam waste burner shall request authorization by submitting a Notice of Construction and submitting plans in accordance with OAR 340-20-025 and 340-20-030.
- (3) Authorization to establish a modified waste burner installation shall not be approved unless it is demonstrated to the Department that:
 - (a) No feasible alternative to incineration of wood waste residues exists. In demonstrating this, the applicant shall provide a statement of the relative technical and economic feasibility of alternatives, including but not limited to: utilization, off-site disposal and incineration in a boiler or incinerator other than a wigwam waste burner;
 - (b) The modified wigwam waste burner facility is to be constructed and operated in accordance with design criteria approved by the Department, and the emission standards set forth in OAR 340-25-020.
- (4) Authorization for establishment of a new modified wigwam waste burner in conjunction with the establishment of a new industrial facility or significant expansion of an existing facility shall not be granted without approval of the Department of Environmental Quality.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Emission and Operation Standards for Wigwam Waste Burners 340-25-020

- (1) No person shall cause, suffer, allow, or permit the emission of air contaminants into the atmosphere from any wigwam waste burner for a period or periods aggregating more than three (3) minutes in any one hour which is equal to or greater than 20% opacity.
- (2) Resultant emissions notwithstanding, no person shall use a wigwam waste burner for the incineration of other than production process wood wastes. Such wood wastes shall be transported to the burner by continuous-flow conveying methods.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Monitoring and Reporting 340-25-025

- (1) A thermocouple and recording pyrometer or other approved temperature measurement and recording devices shall be installed and maintained on every modified wigwam waste burner.
- (2) Exit gas temperature shall be recorded continuously using the installed pyrometer at all times when the burner is in operation.
- (3) Records of temperature and burner operation, or summaries thereof, shall be submitted at such frequency as the Department may prescribe.
- (4) In addition to temperature monitoring as prescribed above, in accordance with OAR 340-20-035 and 340-20-040, the Department may require installation of visible emissions monitoring devices and subsequent reporting of data therefrom.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Existing Administrative Agency Orders 340-25-0[80]27

- (1) The provisions of OAR 340-25-005 through 340-25-020 and OAR 340-25-025(1) {-of this-rule} are in addition thereto and do not modify, amend, repeal, alter, postpone, or in any other manner affect any specific existing agency orders directed against specific parties or persons to abate air pollution.
- (2) The provisions of OAR 340-25-025(2) { of this rule} shall not be made applicable nor extend in any manner to any specific existing agency orders directed against specific parties or persons to abate air pollution.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: SA 30 f. 6-7-68, ef. 8-1-68

Reduction of Animal Matter

[{ED. NOTE: Effective July-1, 1969, the Sanitary Authority was replaced by the Department of Environmental Quality, consisting of a Department and of a Commission, known as the Environmental Quality Commission. Where Sanitary Authority is presently used in these regulations, it should be noted by readers of these rules that Department of Environmental Quality should be substituted unless the context or statutes clearly require the use of Environmental Quality Commission.]]

Control Facilities Required 340-25-055

- (1) A person shall not operate or use any article, machine, equipment or other contrivance for the reduction of animal matter unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:
 - (a) Incinerated at temperatures of not less than 1200 degrees Fahrenheit for a period of not less than 0.3 seconds; or
 - (b) Processed in such a manner determined by the Sanitary Authority] Department to be equally, or more, effective for the purpose of air pollution control than section (1) of this rule.
- (2) A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this rule shall provide, properly install and maintain in calibration, in

- good working order and in operation, devices as specified by the [Sanitary Authority] Department, for indicating temperature, pressure or other operating conditions.
- (3) For the purpose of 1 through 340-25-075, "reduction" is defined as any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating.
- (4) The provisions of through 340-25-075 shall not apply to any article, machine, equipment, or other contrivance used exclusively for the processing of food for human consumption.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: SA 30, f. 6-7-68, ef. 8-1-68

Monitoring of Reduction Facilities 340-25-060

- (1) (a) When requested by the [Sanitary Authority] Department for the purpose of formulating plans in conjunction with industries who are or may be sources of air pollution, and to investigate sources of air pollution, monitoring data shall be submitted for plant operational periods and shall include:
 - (A) Continuous or at least hourly influent and effluent temperature readings on the condenser;
 - (B) Continuous or at least hourly temperature readings on the after-burner;
 - (C) Estimated weights of finished products processed in pounds per hour;
 - (D) Hours of operation per day; and
 - (E) A narrative description to accurately portray control practices, including the house-keeping measures employed.
 - (b) When requested by the plant manager any information relating to processing or production shall be kept confidential by the Sanitary Authority Department and shall not be disclosed or made available to competitors or their representatives in the rendering industry.
- (2) Whenever a breakdown of operating facilities occurs or unusual loads or conditions are encountered that cause or may cause release of excessive and malodorous gases or vapors, the <u>Sanitary Authority</u> <u>Department</u> shall be immediately notified.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: SA 30, f. 6-7-68, ef. 8-1-68

Housekeeping of Plant and Plant Area

340-25-065 The plant facilities and premises are to be kept clean and free of accumulated raw material, products, and waste materials. The methods used for housekeeping shall include, but not be limited to:

- (1) A washdown at least once each working day, of equipment, facilities and building interiors that come in contact with raw or partially processed material, with steam or hot water and detergent or equivalent additive.
- (2) All solid wastes shall be stored in covered containers and disposed of daily in an incinerator or fill, approved by the [Sanitary Authority] Department; or by contract with a company or municipal department providing such service.
- (3) Disposal of liquid and liquid-borne waste in a manner approved by the Sanitary Authority | Department.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: SA 30, f. 6-7-68, ef. 8-1-68

Application

340-25-070 This rule OAR 340-25-055 through 340-25-080 shall apply in all areas of the state which are within city limits or within two miles of the boundaries of incorporated cities.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: SA 30, f. 6-7-68, ef. 8-1-68

Effective Date

340-25-075

- [(1) These regulations shall be effective August 1, 1968.
- (2) The Sanitary Authority will consider on for the time of compliance with these regulations up to March 1, 1969, for plants who encounter special problems due to engineering or technical design difficulties or delay in the preparation and receipt of engineering plans, upon written application being submitted to the Sanitary Authority, prior to August 1, 1968, requesting an extension of time and the reasons therefor.

Stat. Auth.: ORS Ch.
Hist.:][SA 30, f. 6-7-68, ef. 8-1-68; Repealed]

Existing Administrative Agency Orders
340-25-080 [Renumbered to 340-25-027]

Hot Mix Asphalt Plants

[ED. NOTE: Administrative Order DEQ 49 repealed previous OAR 340-25-105 through 340-25-130 (consisting of SA 32, filed 8-5-68, effective 4-1-69).]

Definitions

340-25-105 As used in OAR 340-25-105 through 340-25-125 through 340-25-125 unless otherwise required by context:

- (1) "Hot mix asphalt plants" means those facilities and equipment which convey or batch load proportioned quantities of cold aggregate to a drier, and heat, dry, screen, classify, measure, and mix the aggregate with asphalt for purposes of paving, construction, industrial, residential, or commercial use.
- (2) "Collection efficiency" means the overall performance of the air cleaning device in terms of ratio of material collected to total input to the collector unless specific size fractions of the contaminant are stated or required.
- "Process weight by hour" means the total weight of all materials introduced into any specific process which process may cause any discharge into the atmosphere. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The "process weight per hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle.
- (4) "Dusts" means minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, or sweeping.
- (5) "Portable hot mix asphalt plants" means those hot mix asphalt plants which are designed to be dismantled and are transported from one job site to another job site.
- (6) "Particulate matter" means any matter except uncombined water, which exists as a liquid or solid at standard conditions.
- (7) "Special control areas" means for the purpose of this rule any location within:
 - (a) Multnomah, Clackamas, Columbia, Washington, Yamhill, Polk, Benton, Marion, Linn, and Lane counties;
 - (b) The Umpqua Basin as defined in OAR 340-21-010(2);
 - (c) The Rogue Basin as defined in OAR 340-21-010(3);
 - (d) Any incorporated city or within six (6) miles of the city limits of said incorporated city;

- (e) Any area of the state within one (1) mile of any structure or building used for a residence;
- (f) Any area of the state within two (2) miles straight line distance or air miles of any paved public road, highway, or freeway having a total of two (2) or more traffic lanes.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73

Control Facilities Required 340-25-110

- (1) No person shall operate any hot mix asphalt plant, either portable or stationary, located within any area of the state outside special control areas unless all dusts and gaseous effluents generated by the plant are subjected to air cleaning device or devices having a particulate collection efficiency of at least 80% by weight.
- (2) No person shall operate any hot mix asphalt plant, either portable or stationary located within any special control area of the state without installing and operating systems or processes for the control of particulate emissions so as to comply with the emission limits established by the process weight table, **Table 1**, attached herewith and by reference made a part of this rule and the emission limitations in OAR 340-21-015(2) and (3), and 340-21-030.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73

Other Established Air Quality Limitations

340-25-115 The emission limits established under[these rules] OAR 340-25-105 through 340-25-125 are in addition to visible emission and other ambient air standards, established or to be established by the Environmental Quality Commission unless otherwise provided by rule or regulation.

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 25 - DEPARTMENT OF ENVIRONMENTAL QUALITY

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73

Portable Hot Mix Asphalt Plants

340-25-120 Portable hot mix asphalt plants may apply for air contaminant discharge permits within the area of Department jurisdiction without indicating specific site locations. As a condition of said permit, the permittee will be required to obtain approval from the Department for the air pollution controls to be installed at each site location or set-up at least ten (10) days prior to operating at each site location or set-up.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73; DEQ 5-1983, f. & ef. 4-18-83

Ancillary Sources of Emission - Housekeeping of Plant Facilities 340-25-125

- (1) Ancillary air contamination sources from the plant and its facilities which emit air contaminants into the atmosphere such as, but not limited to, the drier openings, screening and classifying system, hot rock elevator, bins, hoppers, and pug mill mixer, shall be controlled at all times so as to maintain the highest possible level of air quality and the lowest possible discharge of air contaminants.
- (2) The handling of aggregate and traffic shall be conducted at all times so as to minimize emissions into the atmosphere.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 49, f. 2-9-73, ef. 3-1-73

Kraft Pulp Mills

[ED. NOTE: Administrative Order DEQ 50 repealed previous OAR 340-25-155 through 340-25-195 (consisting of SA 38, filed 4-4-69).]

Definitions

340-25-150 As used in these regulations, unless otherwise required by context 340-25-150 through 340-25-205:

- [(4)](1) "BLS" means Black Liquor Solids, dry weight.
- "Continual Monitoring" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect actual emission levels or concentrations on an ongoing basis.
- "Daily Arithmetic Average" means the average [(17)](4) concentration over the twenty-four hour period in a calendar day, or Department approved equivalent period, as determined by continuous monitoring equipment or reference method testing. Determinations based on EPA reference methods or equivalent methods in accordance with the Department Source {Test}Sampling Manual consist of three (3) separate consecutive runs having a minimum sampling time of sixty (60) minutes each and a maximum sampling time of eight (8) hours each. The three values for concentration (ppm or grains/dscf) are averaged and expressed as the daily arithmetic average which is used to determine compliance with process weight limitations, grain loading or volumetric. concentration limitations and to determine daily emission rate.
- "Department" means the Department of Environmental Quality.
- "Emission" means a release into the atmosphere of air contaminants.
- "Kraft Mill" or "Mill" means any industrial operation which uses for a cooking liquor an alkaline sulfide solution containing sodium hydroxide and sodium sulfide in its pulping process.
- "Lime Kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.
- "Non-Condensibles" mean [s] gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a mill.

- "Other Sources" mean{s} sources of TRS emissions in a
 kraft mill other than recovery furnaces and lime
 kilns, including but not limited to:
 - (a) Vents from knotters, brown stock washing systems, evaporators, blow tanks, blow heat accumulators, black liquor storage tanks, black liquor oxidation system, pre-steaming vessels, tall oil recovery operations; and
 - (b) Any vent which is shown to contribute to an identified nuisance condition.
- "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured by EPA Method 5 or an equivalent test method in accordance with the Department Source {Test}Sampling Manual. Particulate matter emission determinations by EPA Method 5 shall use water as the cleanup solvent instead of acetone, and consist of the average of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each, a maximum sampling time of eight (8) hours each, and a minimum sampling volume of 31.8 dscf each.
- "Parts Per Million (ppm)" means parts of a contaminant per million parts of gas by volume on a dry-gas basis (1 ppm equals 0.0001% by volume).
- "Production" means the daily amount of air-dried unbleached pulp, or equivalent, produced during the 24-hour period each calendar day, or Department approved equivalent period, and expressed in air-dried metric tons (admt) per day. The corresponding English unit is air-dried tons (adt) per day.
- "Recovery Furnace" means the combustion device in which dissolved wood solids are incinerated and pulping chemicals recovered from the molten smelt.

 For these regulations OAR 340-25-150 through 340-25-205, and where present, this term shall include the direct contact evaporator.
- "Significant Upgrading of Pollution Control Equipment" means a modification or a rebuild of an existing pollution control device for which a capital expenditure of 50 percent or more of the replacement cost of the existing device is required, other than ongoing routine maintenance.
- "Smelt dissolving tank vent" means the vent serving the vessel used to dissolve the molten smelt produced by the recovery furnace.

"Standard Dry Cubic Meter" means the amount of gas [(14)](17) that would occupy a volume of one cubic meter, if the gas were free of uncombined water, at a temperature of 20° C. (68° F.) and a pressure of 760 mm of [M]mercury (29.92 inches of [M]mercury). The corresponding English unit is standard dry cubic foot. When applied to recovery furnace gases "standard dry cubic meter" requires adjustment of the gas volume to that which would result in a concentration of 8% oxygen if the oxygen concentration exceeds 8%. When applied to lime kiln gases "standard dry cubic meter" requires adjustment of the gas volume to that which would result in a concentration of 10% oxygen if the oxygen concentration exceeds 10%. The mill shall demonstrate that oxygen concentrations are below noted values or furnish oxygen levels and corrected pollutant data.

"Total Reduced Sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, and any other organic sulfides present expressed as hydrogen sulfide (H_2S).

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90

Statement of Policy

340-25-155 Recent technological developments have enhanced the degree of malodorous emission control possible for the kraft pulping process. While recognizing that complete malodorous and particulate emission control is not presently possible, consistent with the meteorological and geographical conditions in Oregon, it is hereby declared to be the policy of the Department to:

- (1) Require, in accordance with a specific program and time table for all sources at each operating mill, the highest and best practicable treatment and control of atmospheric emissions from kraft mills through the utilization of technically feasible equipment, devices, and procedures. Consideration will be given to the economic life of equipment, which when installed, complied with the highest and best practicable treatment requirement.
- (2) Require degrees and methods of treatment for major and minor emission points that will minimize emissions of odorous gases and eliminate ambient odor nuisances.
- (3) Require effective monitoring and reporting of emissions and reporting of other data pertinent to air quality or emissions. The Department will use these data in conjunction with ambient air data and observation of conditions in the surrounding area to develop and revise emission and ambient air standards, and to determine compliance therewith.
- (4) Encourage and assist the kraft pulping industry to conduct a research and technological development program designed to progressively reduce kraft mill emissions, in accordance with a definite program, including specified objectives and time schedules.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73

Highest and Best Practicable Treatment and Control Required 340-25-160

- (1) Notwithstanding the specific emission limits set forth in OAR 340-25-165, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided, with consideration being given to the economic life of the existing equipment.
- (2) All installed process and control equipment shall be operated at full effectiveness and efficiency at all times, such that emissions of contaminants are kept at lowest practicable levels.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73

Emission Limitations

340-25-165

- (1) Emission of Total Reduced Sulfur (TRS):
 - (a) Recovery Furnaces:
 - (A) The emissions of TRS from each recovery furnace placed in operation before January 1, 1969, shall not exceed 10 ppm and 0.15 Kg/metric ton (0.30 lb/ton) of production as daily arithmetic averages;
 - (B) TRS emissions from each recovery furnace placed in operation after January 1, 1969, and before September 25, 1976, or any recovery furnace modified significantly after January 1, 1969, and before September 25, 1976, to expand production shall be controlled such that the emissions of TRS shall not exceed 5 ppm and 0.075 Kg/metric ton (0.150 lb/ton) of production as daily arithmetic averages.
 - (b) Lime Kilns. Lime kilns shall be operated and controlled such that emissions of TRS shall not exceed 20 ppm as a daily arithmetic average and 0.05 Kg/metric ton (0.10 lb/ton) of production as a daily arithmetic average. This subsection applies to those sources where construction was initiated prior to September 25, 1976;
 - (c) Smelt Dissolving Tanks:
 - (A) {As soon as practicable, but not later than July 1, 1990,}TRS emissions from each smelt dissolving tank shall not exceed 0.0165 gram/Kg BLS(0.033 lb/ton BLS) as a daily arithmetic average, except as provided in paragraph (B) of this subsection;
 - (B) Where an explosion hazard, which was in existence on March 26, 1989, exists and control is not practical or economically not feasible and adequate documentation of these conditions is provided to the Department, the affected smelt dissolving tank shall not exceed 0.033 gram/Kg BLS (0.066 lb/ton BLS) as a daily average.
 - (d) Non-Condensibles. Non-condensibles from digesters, multiple-effect evaporators and contaminated condensate stripping shall be continuously treated to destroy TRS gases by thermal incineration in a lime

kiln or incineration device capable of subjecting the non-condensibles to a temperature of not less than 650° C. (1200° F.) for not less than 0.3 second. An alternate device meeting the above requirements shall be available in the event adequate incineration in the primary device cannot be accomplished. Venting of TRS gases during changeover shall be minimized but in no case shall the time exceed one hour;

- (e) Other Sources:
 - (A) The total emission of TRS from other sources including, but not limited to, knotters and brown stock washer vents, brown stock washer filtrate tank vents, and black liquor oxidation vents shall not exceed 0.078 Kg/metric ton (0.156 lb/ton) of production as a daily arithmetic average;
 - (B) Miscellaneous Sources and Practices. If it is determined that sewers, drains, and anaerobic lagoons significantly contribute to an odor problem, a program for control shall be required.
- (2) Particulate Matter:
 - (a) Recovery Furnaces. The emissions of particulate matter from each recovery furnace stack shall not exceed:
 - (A) 2.0 kilograms per metric ton (4.0 pounds per ton) of production as a daily arithmetic average;
 - (B) 0.30 gram per dry standard cubic meter (0.13 grain per dry standard cubic foot) as a daily arithmetic average in accordance with OAR 340-25-150(17) and the Department Source Test Manual; and
 - (C) 35 percent opacity for a period or periods aggregating more than thirty (30) minutes in any one hundred eighty (180) consecutive minutes or more than sixty (60) minutes in any twenty-four (24) consecutive hours (excluding periods when the facility is not operating).
 - (b) Lime Kilns. The emissions of particulate matter from each lime kiln stack shall not exceed:
 - (A) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average;

- (C) SO₂ is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels and wood residue fired.
- (d) Compliance shall be based on the total heat input from all fossil burned, including gaseous fuels.
- (3) Standards for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:

(a) 86 nanograms per joule heat input (0.20 lb. per million BTU) derived from gaseous fossil fuel;

(b) 129 nanograms per joule heat input (0.30 lb. per million BTU) derived from [solid fossil fuel,]liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue;

(c) 300 nanograms per joule heat input (0.70 lb. per million BTU) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse);

(d) When different fossil fuels are burned simultaneously in any combination the applicable standard shall be determined by proration using the following formula:

 $PNO_{x} =$

w(260) + x(86) + y(130) = -1 + z(300)w + x + y + z

- (A) PNO_x is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels and wood residue fired; and
- (B) {B}w is the percentage of total heat input derived from lignite; and
- (C) {y}x is the percentage of total heat input derived from gaseous fossil fuel; and
- (D) y is the percentage of total heat input derived from liquid fossil fuel; and
- (E) z is the percentage of total heat input derived from solid fossil fuel (except lignite).
- (e) When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, section (3) of this rule does not apply;

- (B) 0.46 gram per dry standard cubic meter (0.20 grain per dry standard cubic foot) as a daily arithmetic average in accordance with OAR 340-25-150(17) and the Department Source Test Manual; and
- (C) The visible emission limitations in section (4) of this rule.
- (c) Smelt Dissolving Tanks. The emission of particulate matter from each smelt dissolving tank {stack}vent
 shall not exceed:
 - (A) A daily arithmetic average of 0.25 kilogram per metric ton (0.50 pound per ton) of production; and
 - (B) The visible emission limitations in section (4) of this rule.
- (d) Replacement or Significant Upgrading of existing particulate pollution control equipment after July 1, 1988 shall result in more restrictive standards as follows:
 - (A) Recovery Furnaces:
 - (i) The emission of particulate matter from each affected recovery furnace stack shall not exceed 1.00 kilogram per metric ton (2.00 pounds per ton) of production as a daily arithmetic average; and
 - (ii) 0.10 gram per dry standard cubic meter (0.044 grain per dry standard cubic foot) as a daily arithmetic average[in accordance with OAR 340-25-150(17) and the Department Source Test Manual].
 - (B) Lime Kilns:
 - (i) The emission of particulate matter from each affected lime kiln stack shall not exceed 0.25 kilogram per metric ton (0.50 pound per ton) of production as a daily arithmetic average; and
 - (ii) 0.15 gram per dry standard cubic meter (0.067 grain per dry standard cubic foot) as a daily arithmetic average[in accordance with OAR 340-25-150(17) and the Department Source Test Manual] when burning gaseous fossil fuel; or
 - (iii) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average; and
 - (iv) 0.30 gram per dry standard cubic meter

(0.13 grain per dry standard cubic foot) as a daily arithmetic average in accordance with OAR 340-25-150(17) and the Department Source Test Manual when burning liquid fossil fuel.

- (C) Smelt Dissolving Tanks. The emissions of particulate matter from each smelt dissolving tank vent {stack } shall not exceed 0.15 kilogram per metric ton (0.30 pound per ton) of production as a daily arithmetic average.
- (3) Sulfur Dioxide (SO₂). Emissions of sulfur dioxide from each recovery furnace stack shall not exceed a 3-hour arithmetic average of 300 ppm on a dry-gas basis except when burning fuel oil. The sulfur content of fuel oil used shall not exceed the sulfur content of residual and distillate oil established in OAR 340-22-010(2) and 340-22-015, respectively.
- (4) All kraft mill sources with the exception of recovery furnaces shall not exceed an opacity equal to or greater than 20 percent for a period exceeding three (3) minutes in any one (1) hour.
- (5) New Source Performance Standards. New or modified sources that commenced construction after September 24, 1976, are subject to each provision of this [section-legal and the New Source Performance Standards, OAR 340-25-630, whichever is more stringent.
- (6) Each mill with any recovery furnace, lime kiln, or smelt dissolving tank not in compliance by January 1, 1990 with the emission limitations of this section shall submit by July 1, 1990 a program and schedule for achieving compliance as soon as practicable but no later than July 1, 1991.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A
Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77; DEQ 2-1990, f. & cert. ef. 1-24-90

More Restrictive Emission Limits
340-25-170 The Department may establish more restrictive

emission limits than the numerical emission standards contained in OAR 340-25-165 and maximum allowable daily mill site emission limits in kilograms or pounds per day for an individual mill upon a finding by the Department that:

- (1) The individual mill is located or is proposed to be located in a special problem area or an area where ambient air standards are exceeded or are projected to be exceeded or where the emissions will have a significant air quality impact in an area where the standards are exceeded; or
- (2) An odor or nuisance problem has been documented at any mill, in which case the TRS emission limits may be reduced below the regulatory limits; or
- (3) Other rules which are more stringent apply.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A
Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77;
DEQ 2-1990, f. & cert. ef. 1-24-90

Plans and Specifications

340-25-175 Prior to construction of new kraft mills or modification of facilities affecting emissions at existing kraft mills, complete and detailed engineering plans and specifications for air pollution control devices and facilities and such other data as may be required to evaluate projected emissions and potential effects on air quality shall be submitted to and approved by the Department. All construction shall be in accordance with plans as approved in writing by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77

Monitoring

340-25-180

- (1) General:
 - (a) The details of the monitoring program for each mill shall be submitted to and approved by the Department. This submittal shall include diagrams and descriptions of all monitoring systems, monitoring frequencies, calibration schedules, descriptions of

- all sampling sites, data reporting formats and duration of maintenance of all data and reports. Any changes that are subsequently made in the approved monitoring program shall be submitted in writing to the Department for review and approved in writing prior to change;
- (b) All records associated with the approved monitoring program including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least 2 calendar years and shall be furnished to the Department upon request;
- (c) All source test data; TRS and SO₂ concentrations (ppm), corrected for oxygen content, if required, that are determined by continuous monitoring equipment; and opacity as determined by continuous monitoring equipment or EPA Method 9 will be used to determine compliance with applicable emission standards. All continuous monitoring data, excluding the above, will be used to evaluate performance of emitting processes and associated control systems, and for the qualitative determination of plant site emissions.
- (2) Total Reduced Sulfur (TRS). Each mill shall continuously monitor TRS in accordance with the following:
 - (a) The monitoring equipment shall determine compliance with the emission limits and reporting requirements established by these regulations OAR 340-25-150 through 340-25-205, and shall continuously sample and record concentrations of TRS;
 - (b) The sources monitored shall include, but are not limited to individual recovery furnaces, and lime kilns. All sources shall be monitored downstream of their respective control equipment, in either the ductwork or the stack, in accordance with the Department Continuous (Emissions | Monitoring (CEMS)) Manual;
 - (c) At least once per year, vents from other sources as required in OAR 340-25-165(1)(e), Other Sources, shall be sampled to demonstrate the representativeness of the emissions of TRS using EPA Method 16, 16A, 16B or continuous emission monitors. EPA methods shall consist of three (3) separate consecutive runs of one hour each in accordance with the Department Source [Test]Sampling Manual. Continuous emissions monitors shall be operated for

- three consecutive hours in accordance with the Department Continuous {Emissions-}Monitoring Manual. All results shall be reported to the Department;
- (d) Smelt dissolving tank vents shall be sampled for TRS quarterly except that testing may be semi-annual when the preceding six source tests were less than 0.0124 gram/Kg Bls (0.025 lb/ton Bls) using EPA Method 16, 16A, 16B or continuous emission monitors. EPA methods shall consist of three (3) separate consecutive runs of one hour each in accordance with the Department source [Test]Sampling Manual.
- (3) Particulate Matter:
 - (a) Each mill shall sample the recovery furnace(s), lime kiln(s) and smelt dissolving tank vent(s) for particulate emissions in accordance with the Department Source {Test}Sampling Manual;
 - (b) Each mill shall provide continuous monitoring of opacity of emissions discharged to the atmosphere from each recovery furnace stack in accordance with the Department Continuous [Emissions] Monitoring Manual; or
 - (c) Where monitoring of opacity from each recovery furnace is not feasible, provide continuous monitoring of particulate matter from each recovery furnace using sodium ion probes in accordance with the Department Continuous [Emissions] Monitoring Manual;
 - (d) Recovery furnace particulate source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.225 gram/dscm (0.097 grain/dscf) for furnaces subject to OAR 340-25-165(2)(a) or 0.075 gram/dscm (0.033 grain/dscf) for furnaces subject to OAR 340-25-165(2)(d)(A);
 - (e) Lime kiln source tests shall be performed semi-annually;
 - (f) Smelt dissolving tank vent source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 0.187 Kilogram per metric ton (0.375 pound per ton) of production.
- (4) Sulfur Dioxide (SO₂). Representative sulfur dioxide emissions from each recovery furnace shall be determined at least once each month by the average of three (3) one hour source tests in accordance with the **Department Source**[Test]Sampling Manual or from continuous emission monitors. If continuous emission monitors are used, the monitors

shall be operated for three consecutive hours in accordance with the **Department Continuous** [Emissions] Monitoring Manual.

(5) Combined Monitoring. The Department may allow the monitoring for opacity of a combination of more than one emission stream if each individual emission stream has been demonstrated with the exception of opacity to be in compliance with all the emission limits of OAR 340-25-165. The Department may establish more stringent emission limits for the combined emission stream.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of [Environemntal] Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A
Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77;
DEQ 2-1990, f. & cert. ef. 1-24-90

Reporting

340-25-185 Unless otherwise authorized or required by permit, data shall be reported by each mill for each calendar month by the fifteenth day of the subsequent calendar month as follows:

- (1) Applicable daily average emissions of TRS gases expressed in parts per million of H_2S on a dry gas basis with oxygen concentrations, if oxygen corrections are required, for each source included in the approved monitoring program.
- (2) Daily average emissions of TRS gases in pounds of total reduced sulfur per equivalent ton of pulp processed, expressed as H_2S , for each source included in the approved monitoring program.
- (3) 3-Hour average emission of SO₂ based on all samples collected in one sampling period from the recovery furnace(s), expressed as ppm, dry basis.
- (4) All daily average opacities for each recovery furnace stack where transmissometers are utilized.
- (5) All 6-minute average opacities from each recovery furnace stack that exceeds 35 percent.
- (6) Daily average kilograms of particulate per equivalent metric ton (pounds of particulate per equivalent ton) of pulp produced for each recovery furnace stack. Where

- transmissometers are not feasible, the mass emission rate shall be determined by alternative sampling conducted in accordance with OAR 340-25-180(3)(c).
- (7) The results of each recovery furnace particulate source test in grams per standard cubic meter (grains per dry standard cubic foot) and for the same source test period the hourly average opacity, where transmissometers are used, and the particulate monitoring record obtained in accordance with the approved or the alternate monitoring program in OAR 340-25-180(3)(c);
- (8) Unless otherwise approved in writing, all periods of non-condensible gas bypass shall be reported.
- (9) Upset conditions shall be reported in accordance with OAR 340-25-190(3).
- (10) Each kraft mill shall furnish, upon request of the Department, such other pertinent data as the Department may require to evaluate the mill's emission control program.
- (11) Monitoring data reported shall reflect actual observed levels corrected for oxygen, if required, and analyzer calibration.
- (12) Oxygen concentrations used to correct pollutant data shall reflect oxygen concentrations at the point of measurement of pollutants.
- (13) The Department shall be notified at least [ten (10)]fifteen (15) days in advance of all scheduled reference method testing including all scheduled changes.

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A
Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77;
DEQ 2-1990, f. & cert. ef. 1-24-90

Upset Conditions 340-25-190

(1) Each mill shall report to the Department abnormal mill operations including control and process equipment maintenance, or unexpected upsets that result in emissions in excess of the regulatory or air contaminant discharge permit limits within one hour, or when conditions prevent prompt notice, as soon as possible but no later than one hour after the start of the next working day. The mill shall also take immediate corrective action to reduce emission levels to regulatory or permit levels.

- (2) Upsets shall be reported in writing with an accompanying report on measures taken or to be taken to correct the condition and prevent its reoccurrence within five (5) working days of each incident.
- (3) Each mill shall report the cumulative duration in hours each month of the upsets reported in section (1) of this rule and classified as to:
 - (a) Recovery Furnace:
 - (A) TRS;
 - (B) Particulate.
 - (b) Lime Kiln:
 - (A) TRS;
 - (B) Particulate.
 - (c) Smelt Tank Particulate.

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Stat. Auth.: ORS Ch. 468<del>[.460(1)] & 468A</del>
Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 137, f. & ef. 6-10-77;
DEQ 2-1990, f. & cert. ef. 1-24-90
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Other Established Air Quality Limitations 340-25-195 [DEQ 50, f. 2-9-73, ef. 3-1-73; Repealed by DEQ 137, f. & ef. 6-10-77]

Public Hearing

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340-25-200 [DEQ 50, f. 2-9-73, ef. 3-1-73;
Repealed by DEQ 137,
f. & ef. 6-10-77]
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Chronic Upset Conditions

340-25-205 If the Department determines that an upset condition is chronic and correctable by installing new or modified process or control procedures or equipment, a program and schedule to effectively eliminate the deficiencies causing the upset conditions shall be submitted. Such reoccurring upset conditions causing emissions in excess of applicable limits may be subject to civil penalty or other appropriate action.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A

Hist.: DEQ 50, f. 2-9-73, ef. 3-1-73; DEQ 2-1990, f. & cert. ef. 1-24-90

Neutral Sulfite Semi-Chemical (NSSC) Pulp Mills

Definitions

340-25-220 As used in these regulations, unless otherwise required by context OAR 340-25-220 through 340-25-234:

- "Acid Absorption Tower" means the device where the sodium carbonate and sulfur dioxide react to form a sodium sulfite solution prior to use as the cooking liquor.
- [(4)](2) "BLS" means black liquor solids, dry weight.
- "Continual Monitoring" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect actual emission levels or concentrations on an ongoing basis.
- "Continuous Monitoring" means instrumental sampling of a gas stream on a continuous basis, excluding periods of calibration.
- Arithmetic Average" $\frac{(14)}{(5)}$ "Daily means the concentration over the twenty-four hour period in a calendar day or, Department approved equivalent period, as determined by continuous monitoring equipment or reference method testing. Determinations based on EPA reference methods or equivalent methods in accordance with the **Department Source[Test]Sampling** Manual consist of three (3) separate consecutive runs having a minimum sampling time of sixty (60) minutes each and a maximum sampling time of eight (8) hours each. The three values for concentration (ppm or grains/dscf) are averaged and expressed as the daily arithmetic average which is used to determine compliance with process limitations, grain loading or volumetric concentration limitations and to determine daily emission rate.
- [(2)](6) "Department" means the Department of Environmental Quality.
- (3)](7) "Emission" means a release into the atmosphere of air contaminants.
- "Neutral Sulfite Semi-Chemical (NSSC) Pulp Mill" means any industrial operation which uses for cooking, a liquor prepared from a sodium carbonate solution and sulfur dioxide at a neutral {PH}pH, range 6-8.
- (6) 1(9) "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the

ambient air as measured by EPA Method 5 or an equivalent test method in accordance with the Department Source [Test]Sampling Manual. Particulate matter emission determinations by EPA Method 5 shall use water as the cleanup solvent instead of acetone, and consist of the average of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each, a maximum sampling time of eight (8) hours each, and a minimum sampling volume of 31.8 dscf each.

- "Parts {p}Per Million (ppm)" means parts of a
 contaminant per million parts of gas by volume on a
 dry-gas basis (one ppm equals 0.0001% by volume).
- "Production" means the daily amount of virgin air-dried unbleached NSSC pulp, or equivalent, produced during the 24-hr period each calendar day, or Department approved equivalent period, expressed in air-dried metric tons (ADMT) per day. The corresponding English unit is air-dried tons (ADT) per day.
- "Spent Liquor Incinerator" means the combustion device in which pulping chemicals are subjected to high temperature to evaporate the water, incinerate organics and reclaim the sodium sulfate (saltcake) and sodium carbonate.
- "Standard Dry Cubic Meter" means the amount of gas that would occupy a volume of one cubic meter, if the gas were free of uncombined water, at a temperature of 20 °C. (68 °F.) and a pressure of 760 mm of mercury.
- "Total Reduced Sulfur (TRS)" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, and any other organic sulfides present expressed as hydrogen sulfide (H₂S). [These monitors shall be located downstream of the control device.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Highest and Best Practicable Treatment and Control Required 340-25-222

- (1) Notwithstanding the specific emission limits set forth in OAR 340-25-224, in order to maintain the lowest possible emission of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided, with consideration being given to the economic life of the existing equipment.
- (2) All installed process and control equipment shall be operated at full effectiveness and efficiency at all times, such that emissions of contaminants are kept at lowest practicable levels.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Emission Limitations 340-25-224

- (1) Emission of Total Reduced Sulfur (TRS): Spent Liquor Incinerator. The emissions of TRS from any spent liquor incinerator stack shall not exceed 10 ppm and 0.07 gram/kg BLS (0.14 lb/ton BLS) as a daily arithmetic average in accordance with OAR 340-25-220(14).
- (2) Particulate Matter: Spent Liquor Incinerator. The emissions of particulate matter from any spent liquor incinerator stack shall not exceed:
 - (a) lbs/ton BLS) 3.6 grams/kg BLS (7.2 as a arithmetic average accordance in with [OAR 340-25-220(14)----and-----]the Department . Source {Test | Sampling Manual; and
 - (b) {Exhibit a}An opacity equal to or greater than 35 percent for a period exceeding 3 minutes in any one hour{{}}excluding periods when the facility is not operating{}}.
- (3) Sulfur Dioxide (SO₂):
 - (a) Spent Liquor Incinerator. The emissions of sulfur dioxide from each spent liquor incinerator stack shall not exceed a 3-hr arithmetic average of 10 ppm on a dry[-] gas basis;
 - (b) Acid Absorption Tower. The emissions of sulfur dioxide from the acid absorption tower stack shall not exceed 20 ppm as a 3-hr arithmetic average on a dry gas basis.

(4) All NSSC sources, with the exception of spent liquor incinerators, shall not exhibit an opacity equal to or greater than 20 percent for a period exceeding three (3) minutes in any one hour.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

More Restrictive Emission Limits

340-25-226 The Department may establish more restrictive emission limits than the numerical emission standards contained in OAR 340-25-224 and maximum allowable daily mill site emission limits in kilograms or pounds per day, for an individual mill, upon a finding by the Department that:

(1) The individual mill is located or is proposed to be located in a special problem area or an area where ambient air standards are exceeded or are projected to be exceeded; or

- (2) When an odor or nuisance problem has been documented at any mill the TRS emission limits may be reduced below the regulatory limits [.]: or
- (3) Other rules which are more stringent apply.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Plans and Specifications

340-25-228 Prior to construction of new neutral sulfite semi-chemical (NSSC) pulp mills or modification of facilities affecting emissions at existing NSSC mills, complete and detailed engineering plans and specifications for air pollution control devices and facilities and such data as may be required to evaluate projected emissions and potential effects on air quality shall be submitted to and approved by the Department. All construction shall be in accordance with plans as approved in writing by the Department.

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Monitoring

340-25-230

- (1) General:
 - (a) The details of the monitoring program for each mill shall be submitted to and approved by the Department. This submittal shall include diagrams and descriptions of all monitoring systems, monitoring frequencies, calibration schedules, descriptions of all sampling sites, data reporting formats and duration of maintenance of all data and reports. Any changes that are subsequently made in the approved monitoring program shall be submitted in writing to the Department for review and approved in writing prior to change;
 - (b) All records associated with the approved monitoring program including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a period of at least two calendar years and shall be furnished to the Department upon request.
- Sulfur (2) (a) Total Reduced (TRS). Each mill continuously monitor the spent liquor incinerator for TRS emissions using: continuous monitoring equipment, except where a vibration problem, which was in existence on March 26, 1989, exists and continuous monitoring equipment is not practical or economically feasible; in which case, upon documentation of the above condition, the spent liquor incinerator shall be sampled for TRS emissions using the reference method and the analytical method (EPA Method 16, 16A, or 16B) as outlined in the Department Source [Test]Sampling Manual;
 - (b) Spent liquor incinerator TRS source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than 7.5 ppm;
 - (c) Flow rate measurements used to determine TRS mass emission rates shall be corrected for cyclonic flow, where applicable.
- (3) (a) Particulate Matter. Each mill shall sample the spent liquor incinerator for particulate emissions with:

The sampling method; and (A)

(B) analytical method specified Department Source {Test}Sampling Manual.

(b) Spent liquor incinerator particulate source tests shall be performed quarterly except that testing may be semi-annual when the preceding six (6) source tests were less than $\frac{[0.05]2.7}{}$ Grams/Kg BLS ($\frac{[0.10]5.4}{}$ lbs/ton BLS). All sampling data shall be corrected for cyclonic flow, where applicable;

(c) Each mill shall provide continuous monitoring of opacity of emissions discharged to the atmosphere from the spent liquor incinerator, and the acid plant in accordance with the Department Continuous (Emission) Monitoring Manual; except that when continuous monitoring of opacity is not feasible due to excessive moisture then EPA Method 9 shall be used for the determination of opacity.

Sulfur Dioxide $(S0_2)$. Representative sulfur dioxide emissions (4)from spent liquor incinerators and from the acid absorption tower shall be determined at least once every six (6) months

with:

(A) The sampling method; and

analytical the (B) The method specified in Department Source {Test}Sampling Manual.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.1

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Reporting

340-25-232 Unless otherwise authorized by permit, data shall be reported by each mill for each sampling period by the fifteenth day of the first month following the applicable sampling period as follows:

(1) Daily average emissions of TRS gases in kilograms of total reduced sulfur per metric ton (pounds of total reduced sulfur per ton) of black liquor solids expressed as H2S based on all samples collected in one sampling period from the spent liquor incinerator.

- (2) Daily average emissions of particulate in kilograms per metric ton (pounds per ton) of black liquor solids based on all samples collected in one sampling period from the spent liquor incinerator.
- (3) Daily average concentration of sulfur dioxide in ppm for each source included in the approved monitoring program based on all samples collected in any one sampling period.
- (4) Daily average amount of virgin air-dried unbleached NSSC pulp produced expressed as air dried metric tons per day (air dried tons per day).
- (5) Daily average amount of black liquor solids, dry weight, fired in the spent liquor incinerator during periods of operation.
- (6) Upset conditions shall be reported in accordance with OAR 340-25-234(3).
- (7) Each mill shall furnish, upon request of the Department, such other pertinent data as the Department may require to evaluate the mills emission control program.
- (8) The Department shall be notified at least [ten (10)]fifteen
 (15) days in advance of all scheduled reference method testing including all scheduled changes.
- (9) Data reported shall reflect actual observed levels.

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Upset Conditions 340-25-234

- (1) Each mill shall report abnormal mill operations to the Department including control and process equipment maintenance, or unexpected upsets that result in emissions in excess of the regulatory or air containment discharge permit limits within one hour, or when conditions prevent prompt notification, as soon as possible but no later than one hour after the start of the next working day. The mill shall also take immediate corrective action to reduce emission levels to regulatory or permit levels.
- (2) Upsets shall be reported in writing with an accompanying report on measures taken or to be taken to correct the condition and prevent its reoccurrence within five (5) working days of each incident.

- (3) Each mill shall report the cumulative duration in hours each month of the upsets reported in section (1) of this rule and classified as to:
 - (a) Spent Liquor Incinerator:
 - (A) TRS;
 - (B) Particulate;
 - (C) SO_2 ;
 - (D) Opacity.
 - (b) Acid Absorption Tower:
 - (A) SO_2 ;
 - (B) Opacity.

Stat. Auth.: ORS Ch. 468[.460(1)] & 468A Hist.: DEQ 2-1990, f. & cert. ef. 1-24-90

Primary Aluminum Plants

[ED. NOTE: Administrative Order DEQ 60 repealed previous OAR 340-25-255 through 340-25-290 (consisting of DEQ 19, filed 7-14-70 and effective 8-10-70).]

Statement of Purpose

340-25-255 In furtherance of the public policy of the state as set forth in ORS [468.280]468A.010, it is hereby declared to be the purpose of the Commission in adopting the following regulations to:

- (1) Require, in accordance with a specific program and time table for each operating primary aluminum plant, the highest and best practicable collection, treatment, and control of atmospheric pollutants emitted from primary aluminum plants through the utilization of technically feasible equipment, devices, and procedures necessary to attain and maintain desired air quality.
- (2) Require effective monitoring and reporting of emissions, ambient air levels of fluorides, fluoride content of forage, and other pertinent data, The Department will use these data, in conjunction with observation of conditions in the surrounding areas, to develop emission and ambient air standards and to determine compliance therewith.
- (3) Encourage and assist the aluminum industry to conduct a research and technological development program designed to reduce emissions, in accordance with a definite program, including specified objectives and time schedules.

(4) Establish standards which, based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and better technology are developed.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82

Definitions

340-25-260 As used in OAR 340-25-255 through 340-25-285:

- (1) "All Sources" means sources including, but not limited to, the reduction process, alumina plant, anode plant, anode baking plant, cast house, and collection, treatment, and recovery systems.
- (2) "Ambient Air" means the air that surrounds the earth, excluding the general volume of gases contained within any building or structure.
- (3) "Annual Average" means the arithmetic average of the monthly averages reported to the Department during the twelve most recent consecutive months.
- (4) "Anode Baking Plant" means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.
- (5) "Anode Plant" means all operations directly associated with the preparation of anode carbon except the anode baking operation.
- (6) "Commission" means Environmental Quality Commission.
- (7) "Cured Forage" means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.
- (8) "Department" means Department of Environmental Quality.
- (9) "Emission" means a release into the outdoor atmosphere of air contaminants.
- (10) "Emission Standards" means the limitation on the release of contaminant or multiple contaminants to the ambient air.
- (11) "Fluorides" means matter containing fluoride ion.
- (12) "Forage" means grasses, pasture, and other vegetation that is consumed or is intended to be consumed by livestock.
- (13) "Monthly Average" means the summation of the arithmetic average of all representative test results obtained during any calendar month and the emission rates established for sources not subject to routine testing.

- (14) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.
- (15) "Particulate Matter" means a small discrete mass of solid or liquid matter, but not including uncombined water.
- (16) "Primary Aluminum Plant" means those plants which will or do operate for the purpose of, or related to, producing aluminum metal from aluminum oxide (alumina).
- (17) "Pot Line Primary Emission Control Systems" means the system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is most directly related to the aluminum reduction cell.
- (18) "Regularly Scheduled Monitoring" means sampling and analyses in compliance with a program and schedule approved pursuant to OAR 340-25-280.
- (19) "Ringlemann Smoke Chart" means the Ringlemann Smoke Chart with instructions for use as published in May, 1967, by the U.S. Department of Interior, Bureau of Mines.
- (20) "Standard Dry Cubic Foot of Gas" means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 68 °F.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82

Emission Standards 340-25-265

- (1) The exhaust gases from each primary aluminum plant constructed after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:
 - (a) Total fluoride emissions from all sources shall not exceed:
 - (A) A monthly average of 1.3 pounds of fluoride ion per ton of aluminum produced; and

- (B) An annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and
- (C) 12.5 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.
- (b) The total of organic and inorganic particulate matter emissions from all sources shall not exceed:
 - (A) A monthly average of 7.0 pounds of particulate per ton of aluminum produced; and
 - (B) An annual average of 5.0 pounds of particulate per ton of aluminum produced.
- (c) Visible emissions from any source shall not exceed ten (10) percent opacity or 0.5 on the Ringlemann Smoke Chart at anytime.
- (2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with these regulations OAR 340-25-255 through 340-25-285 no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.
- (3) The exhaust gases from each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:
 - (a) Total fluoride emissions from all sources shall not exceed:
 - (A) A monthly average of 3.5 pounds of fluoride ion per ton of aluminum produced; and
 - (B) An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced; and
 - (C) 22.0 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.
 - (b) The total of organic and inorganic particulate matter emissions from all sources at plants using vertical stud Soderberg cells shall not exceed:
 - (A) A monthly average of 13.0 pounds of particulate per ton of aluminum produced; and
 - (B) An annual average of 10.0 pounds of particulate per ton of aluminum produced.
 - (c) The total of organic and inorganic particulate matter emissions from all sources at plants using prebake cells shall not exceed:
 - (A) A monthly average of 15.6 pounds of particulate per ton of aluminum produced; and
 - (B) An annual average of 13.5 pounds of particulate per ton of aluminum produced.

- (d) Visible emissions from any source shall not exceed 20 percent opacity or 1.0 on the Ringlemann Smoke Chart at any time.
- (4) Each existing primary aluminum plant shall comply with these regulations OAR 340-25-255 through 340-25-285 upon adoption.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 4-1980, f. & ef. 1-28-80; DEQ 10-1982, f. & ef. 6-18-82

Special Problem Areas

340-25-270 The Department may require more restrictive emission limits than the numerical emission standards contained in OAR 340-25-265 for an individual plant upon a finding by the Commission that the individual plant is located, or is proposed to be located, in a special problem area. Such more restrictive emission limits for special problem areas may be established on the basis of allowable emissions per ton of aluminum produced or total maximum daily emissions to the atmosphere, or a combination thereof, and may be applied on a seasonal or year-round basis.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73

Highest and Best Practicable Treatment and Control Requirement

340-25-275 In order to maintain the lowest possible emissions of air contaminants, the highest and best practicable treatment and control currently available shall in every case be provided, but this section shall not be construed to allow emissions to exceed the specific emission limits set forth in OAR 340-25-265.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73

Monitoring

340-25-280

- Each primary aluminum plant constructed and operated on or (1)before January 1, 1973, shall submit and conduct a detailed, effective monitoring program. The program shall include regularly scheduled monitoring and testing by the plant of emissions of gaseous and particulate fluorides and total particulates. Each plant shall test emissions from each operating potline once per calendar month. A minimum of three (3) representative tests shall be taken each month. All such testing shall include simultaneous sampling of control system(s) and/or roof vents. Anode bake oven control systems shall be tested at least once per month. All tests shall be taken on prespecified dates. A schedule for measurement of fluoride levels in forage and ambient air shall be submitted. The Department shall establish a monitoring program for each plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established monitoring program.
- Each primary aluminum plant proposed to be constructed and (2) operated after January 1, 1973, shall submit a detailed pre-construction and post-construction monitoring program as a part of the air contaminant discharge permit application.
- (3) All monitoring methods used to demonstrate compliance withf these rules OAR 340-25-255 through 340-25-285, including sampling and analytical procedures, must be filed with and approved by the Department. Where applicable, methods in the Department Source [Test]Sampling Manual, including, but not limited to, Methods 5 and 7 for particulates and Methods 13A or 13B for fluorides, shall be used.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82

Reporting 340-25-285

- (1) Unless otherwise authorized in writing by the Department, data for each source and station included in the approved monitoring program shall be reported by each primary aluminum plant within thirty (30) days of the end of each calendar month as follows:
 - (a) Ambient air: Twelve-hour concentrations of gaseous fluoride in ambient air expressed in micrograms per cubic meter of air, and in parts per billion (ppb); falso 28-day test results using calcium formate ("limed") paper expressed in micrograms of fluoride per centimeter squared per cubic meter (ug/-cm²/m²)];

(b) Forage: Concentrations of fluoride in forage expressed in parts per million (ppm) of fluoride on a dried weight basis;

- (c) Particulate emissions: Results of all emission sampling conducted during the month for particulates, expressed in grains per standard dry cubic foot, in pounds per day, and in pounds per ton of aluminum produced. The method of calculating pounds per ton shall be as approved specified in the monitoring Particulate data shall be reported as particulates and percentage of fluoride ion contained therein;
- (d) Gaseous emissions: Results of all sampling conducted during the month for gaseous fluorides. All results shall be expressed as fluoride ion in micrograms per cubic meter and pounds per day of fluoride ion, and in pounds of fluoride ion per ton of aluminum produced;

(e) Other emission and ambient air data as specified in the approved monitoring program;

(f) Changes in collection efficiency of any portion of the collection or control system that resulted from equipment or process changes.

- (2) Each primary aluminum plant shall furnish, upon request of the Department, such other data as the Department may require to evaluate the plant's emission control program. Each primary aluminum plant shall report the value of each emission test performed during that reporting period, and shall also immediately report abnormal plant operations which result in increased emission of air contaminants.
- (3) No person shall construct, install, establish, or operate a primary aluminum plant without first applying for and obtaining an air contaminant discharge permit from the Department. Addition to, or enlargement or replacement of, a primary aluminum plant or any major alteration thereof shall be construed as construction, installation, or establishment.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 60, f. 12-5-73, ef. 12-25-73; DEQ 10-1982, f. & ef. 6-18-82

Revision of Emission Standards

340-25-290 [DEQ 19, f. 7-14-70, ef. 8-10-70; Repealed by DEQ 60, f. 12-5-73, ef. 12-25-73]

Board Products Industries (Veneer, Plywood, Particleboard, Hardboard)

Definitions

340-25-305 As used in OAR 340-25-305 through 340-25-325 through 340-25

- (1) "Average Operating Opacity" means the opacity of emissions determined using EPA Method 9 on any three days within a 12-month period which are separated from each other by at least 30 days; a violation of the average operating opacity limitation is judged to have occurred if the opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.
- (2) "Department" means Department of Environmental Quality.
- (3) "Emission" means a release into the outdoor atmosphere of air contaminants.
- (4) "EPA Method 9" means the method for Visual Determination of the Opacity of Emissions From Stationary Sources as promulgated by the U.S. Environmental Protection Agency in Title 40 of the Code of Federal Regulations, Part 60, Appendix A, Method 9.
- (5) "Fuel Moisture Content By Weight Greater Than 20 Percent" means bark, hogged wood waste, or other wood with an average moisture content of more than 20 percent by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.
- (6) "Fuel Moisture Content By Weight Less Than 20 Percent" means pulverized ply trim, sanderdust, or other wood with an average moisture content of 20 percent or less by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.

- (7) "Fugitive Emissions" means dust, fumes, gases, mist, odorous matter, vapors or any combination thereof not easily given to measurement, collection, and treatment by conventional pollution control methods.
- (8) "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.
- (9) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).
- (10) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.
- (11) "Operations" includes plant, mill, or facility.
- (12) "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.
- other than uncombined water, emitted to the ambient air as measured in accordance with the Department Source Sampling Manual. Particulate matter emission determinations shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 7, each run shall have a minimum sampling time of one hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.
- "Person" includes individuals, corporations,
 associations, firms, partnerships, joint stock
 companies, public and municipal corporations, political
 subdivisions, the state and any agencies thereof, and
 the Federal Government and any agencies thereof.
- "Plywood" means flat panel built generally of an odd number of thin sheets of veneers of wood in which the grain direction of each ply or layer is at right angles to the one adjacent to it.
- "Special problem area" means the formally designated Portland, Eugene-Springfield, and Medford AQMAs and other specifically defined areas that the Environmental Quality Commission may formally designate in the future. The purpose of such designation will be to assign more stringent emission limits as may be necessary to attain and maintain ambient air standards or to protect the public health or welfare.

- [(16)](17) "Tempering oven" means any facility used to bake hardboard following an oil treatment process.
- [(17)](18) "Veneer" means a single flat panel of wood not
 exceeding 1/4 inch in thickness formed by slicing or
 peeling from a log.
- "Wood fired veneer dryer" means a veneer dryer which is directly heated by the products of combustion of wood fuel in addition to or exclusive of steam or natural gas or propane combustion.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 132, f. & ef. 4-11-77;
DEQ 7-1979, f. & ef. 4-20-79; AQ 12, f. & ef. 11-13-91

General Provisions 340-25-310

- (1) {These regulations}OAR 340-25-305 through 340-25-325 establish minimum performance and emission standards for veneer, plywood, particleboard, and hardboard manufacturing operations.
- (2) Emission limitations established herein are in addition to, and not in lieu of, general emission standards for visible emissions, fuel burning equipment, and refuse burning equipment, except as provided for in OAR 340-25-315.
- (3) Emission limitations established herein and stated in terms of pounds per 1000 square feet of production shall be computed on an hourly basis using the maximum 8 hour production capacity of the plant.
- Upon adoption of these regulations OAR 340-25-305 through 340-25-325, each affected veneer, plywood, particle-board, and hardboard plant shall proceed with a progressive and timely program of air pollution control, applying the highest and best practicable treatment and control currently available. Each plant shall at the request of the Department submit periodic reports in such form and frequency as directed to demonstrate the progress being made toward full compliance with these regulations OAR 340-25-305 through 340-25-325.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 132, f. & ef. 4-11-77

Veneer and Plywood Manufacturing Operations 340-25-315

- (1) Veneer Dryers:
 - (a) Consistent with section 340-25-310(1) through (4), it is the object of this section to control air contaminant emissions, including, but not limited to, condensible hydrocarbons such that visible emissions [form]from each veneer dryer are limited to a level which does not cause a characteristic "blue haze" to be observable;
 - (b) No person shall operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:
 - (A) An average operating opacity of 10%; and
 - (B) A maximum opacity of 20%.
 - (c) Particulate emissions from wood fired veneer dryers shall not exceed:
 - (A) 0.75 pounds per 1000 square feet of veneer dried (3/8" basis) for units using fuel which has a moisture content by weight of 20% or less;
 - (B) 1.50 pounds per 1000 square feet of veneer dried (3.8" basis) for units using fuel which has a moisture content by weight of greater than 20%;
 - (C) In addition to paragraphs \(\frac{\{(9)\}(1)}{\{(1)}}\)(c) (A) and (B) of this section, 0.40 pounds per 1000 pounds of steam generated in boilers which exhaust gases to the veneer dryer.
 - (d) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from OAR 340-21-020.
 - (e) Each veneer dryer shall be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment shall be at full efficiency and effectiveness so that the emission of air contaminants are kept at the lowest practicable levels;
 - (f) No person shall willfully cause or permit the installation or use of any means, such as dilution, which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate this rule;

- (g) Where effective measures are not taken to minimize fugitive emissions, the Department may require that the equipment or structures in which processing handling, and storage are done be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air;
- (h) The Department may require more restrictive emission limits than provided in subsections (1)(b) and (c) of this rule for an individual plant upon a finding by the Commission that the individual plant is located or is proposed to be located in a special problem area. The more restrictive emission limits for special problem areas may be established on the basis of allowable emissions expressed in opacity, pounds per hour, or total maximum daily emissions to the atmosphere, or a combination thereof.
- (2) Other Emission Sources:
 - (a) No person shall cause to be emitted particulate matter from veneer and plywood mill sources, including, but not limited to, sanding machines, saws, presses, barkers, hogs, chippers, and other material size reduction equipment, process or space ventilation systems, and truck loading and unloading facilities in excess of a total from all sources within the plant site of one (1.0) pound per 1000 square feet of plywood or veneer production on a 3/8 inch basis of finished product equivalent;
 - (b) Excepted from subsection (2)(a) of this rule [,] are veneer dryers, fuel burning equipment, and refuse burning equipment.
- (3) Monitoring and Reporting: The Department may require any veneer dryer facility to establish an effective program for monitoring the visible air contaminant emissions from each veneer dryer emission point. The program shall be subject to review and approval by the Department and shall consist of the following:
 - (a) A specified minimum frequency for performing visual opacity determinations on each veneer dryer emission point;
 - (b) All data obtained shall be recorded on copies of a "Veneer Dryer Visual Emissions Monitoring Form" which shall be provided by the Department of Environmental Quality or on an alternative form which is approved by the Department; and

(c) A specified period during which all records shall be maintained at the mill site for inspection by authorized representatives of the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 43 (Temp), f. & ef. 5-5-72 thru 9-1-72; DEQ 48, f. 9-20-72, ef. 10-1-72; DEQ 52, f. 4-9-73, ef. 5-1-73; DEQ 83, f. 1-30-75, ef. 2-25-75; DEQ 132, f. & ef. 4-11-77; DEQ 7-1979, f. & ef. 4-20-79; DEQ 10-1985, f. & ef. 8-8-85; AQ 12, f. & ef. 11-13-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Particleboard Manufacturing Operations 340-25-320

- (1) Truck Dump and Storage Areas:
 - (a) Every person operating or intending to operate a particleboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed to prevent windblown particle emissions from these areas from being deposited upon property not under the ownership of said person;
 - (b) The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials first notifies the Department of Environmental Quality and receives written approval for said storage:
 - (A) When authorized by the Department of Environment Quality, temporary storage areas shall be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials;
 - (B) Any temporary storage areas authorized by the Department shall not be operated in excess of six (6) months from the date they are first authorized.

- (c) Any person who proposes to control windblown particulate emissions from truck dump storage areas other than by enclosure shall apply to the Department for authorization to utilize alternative controls. The application shall be submitted pursuant to OAR 340-20-020 to 340-20-030, and shall describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.
- (2) Other Emission Sources:
 - (a) No person shall cause to be emitted particulate matter from particleboard plant sources including, but not limited to, hogs, chippers, and other material size reduction equipment, process or space ventilation systems, particle dryers, classifiers, presses, sanding machines, and materials handling systems in excess of a total from all sources within the plant site of three (3.0) pounds per 1000 square feet of particleboard produced on a 3/4 inch basis of finished product equivalent;
 - (b) Excepted from subsection (2)(a) of this rule are truck dump and storage areas, fuel burning equipment, and refuse burning equipment.
- [(3) Compliance Schedule. Not later than September 5, 1971, every person operating a particleboard manufacturing plant shall submit to the Department of Environmental Quality a proposed schedule for complying with sections (1) and (2) of this rule. The schedule shall provide for compliance with the applicable provisions at the earliest practicable date, but in no case shall final compliance be achieved by later than December 31, 1973.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 130, f. & ef. 3-22-77

Hardboard Manufacturing Operations 340-25-325

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- (1) Truck Dump and Storage Areas:
 - (a) Every person operating or intending to operate a hardboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed to prevent windblown particle

- emissions from these areas from being deposited upon property not under the ownership of said person;
- (b) The temporary storage of raw materials outside the regularly used areas of the plant site is prohibited unless the person who desires to temporarily store such raw materials first notifies the Department of Environmental Quality and receives written approval:
 - (A) When authorized by the Department of Environmental Quality, temporary storage areas shall be operated to prevent windblown particulate emissions from being deposited upon property not under the ownership of the person storing the raw materials;
 - (B) Any temporary storage areas authorized by the Department shall not be operated in excess of six (6) months from the date they are first authorized.
- Alternative Means of Control. Any person who desires to (c) control windblown particulate emissions from truck dump and storage areas other than by enclosure shall first apply to the Department for authorization to utilize alternative controls. The application shall 340-20-020 [to]through submitted pursuant to OAR 340-20-030, and shall describe in detail the plan proposed to control windblown particulate emissions and indicate on a plot plan the nearest location of property not under ownership of the applicant.
- (2) Other Emission Sources:
 - (a) No person shall cause to be emitted particulate matter from hardboard plant sources including, but not limited to, hogs, chippers, and other material size reduction equipment, process or space ventilation systems, particle dryers, classifiers, presses, sanding machines, and materials handling systems, in excess of a total from all sources within the plant site of one (1.0) pound per 1000 square feet of hardboard produced on a 1/8 inch basis of finished product equivalent;
 - (b) Excepted from subsection (2)(a) of this rule are truck dump and storage areas, fuel burning equipment, and refuse burning equipment.
- (3) Emissions from Hardboard Tempering Ovens:
 - (a) No person shall operate any hardboard tempering oven unless all gases and vapors emitted from said oven are treated in a fume incinerator capable of raising the temperature of said gases and vapors to at least 1500° F. for 0.3 seconds or longer;

- (b) Specific operating temperatures lower than 1500° F. may be approved by the Department upon application, provided that information is supplied to show that operation of said temperatures provides sufficient treatment to prevent odors from being perceived on property not under the ownership of the person operating the hardboard plant;
- (c) In no case shall fume incinerators installed pursuant to this section be operated at temperatures less than 1000° F.;
- (d) Any person who proposes to control emissions from hardboard tempering ovens by means other than fume incineration shall apply to the Department for authorization to utilize alternative controls. The application shall be submitted pursuant to OAR 340-20-020 [to]through 340-20-030, and shall describe in detail the plan proposed to control odorous emissions and indicate on a plot plan the location of the nearest property not under ownership of the applicant.
- [(4) Compliance Schedule. No later than September 5, 1971, every person operating a hardboard manufacturing plant shall submit to the Department of Environment Quality a proposed schedule for complying with sections (1), (2) and (3) of this rule. The schedule shall provide for compliance with the applicable provisions at the earliest practicable date, but in no case shall final compliance be achieved by later than December 31, 1973.

Stat. Auth.: ORS Ch. 468 & 468 A Hist.: DEQ 26, f. 3-31-71, ef. 4-25-71; DEQ 130, f. & ef. 3-22-77

Regulations For Sulfite Pulp Mills

Definitions

340-25-350 As used in OAR 340-25-350 through 340-25-380:

- (1) "Acid plant" [T]means the facility in which the cooking liquor is either manufactured or fortified when not associated with a recovery furnace.
- (2) "Average daily emission" [-T]means the total weight of sulfur oxides emitted in each month divided by the number of days of production that month.

- (3) "Average daily production" [- A]means air dry tons of unbleached pulp produced in a month, divided by the number of days of production in that month.
- (4) "Blow system" [- Includes]means the storage chest, tank, or pit to which the digester pulp is discharged following the cook.
- (5) "Continual monitoring" [- S]means sampling and analysis in a continuous or timed sequence, using techniques which will adequately reflect actual emission levels, ambient air levels, or concentrations on a continuous basis.
- (6) "Department" [- T]means the Department of Environmental Quality.
- (7) "Other sources" [- M]mean[s] sources of sulfur oxide emissions including, but not limited to washers, washer filtrate tanks, digester dilution tanks, knotters, multiple effect evaporators, storage tanks, any operation connected with the handling of condensate liquids or storage of condensate liquids, and any vent or stack which may be a significant contributor of sulfur oxide gases other than those mentioned in emission standard limitations (OAR 340-25-360).
- (8) "Particulate matter" [- A]means a small, discrete mass of solid matter, including the solids dissolved or suspended in liquid droplets but not including uncombined water.
- (9) "Recovery system" [- T]means the process by which all or part of the cooking chemicals may be recovered, and cooking liquor regenerated from spent cooking liquor, including evaporation, combustion, dissolving, fortification, and storage facilities associated with the recovery cycle.
- (10) "Sulfite mill" or "mill" [- A]means a pulp mill producing cellulose pulp using a cooking liquor consisting of sulfurous acid and/or a bisulfite salt.
- (1<u>1</u>) "Sulfur oxides" [- S]means sulfur dioxide, sulfur trioxide, and other sulfur oxides.
- (12) "Total reduced sulfur (TRS)" [- H]means hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and other organic sulfides present expressed as hydrogen sulfide (H,S).

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80

Statement of Purpose

340-25-355 It is the policy of the Commission:

- (1) To require, in accordance with a specific program and timetable for each operating mill, the highest and best practicable treatment and control of emissions from sulfite mills through the utilization of technically feasible equipment, devices, and procedures.
- (2) To require the evaluation of improved and effective measuring techniques for sulfur oxides, total reduced sulfur, particulates, and other emissions from sulfite mills.
- (3) To require effective measuring and reporting of emissions and reporting of other data pertinent to emissions. The Department will use these data in conjunction with ambient air data and observation of conditions in the surrounding area to develop and revise emission standards and air quality standards, and to determine compliance therewith.
- (4) To encourage and assist the sulfite pulping industry to conduct a research and technological development program designed to progressively reduce sulfite mill emissions, in accordance with a definite program with specific objectives.
- (5) To establish standards deemed to be technically feasible, reasonably attainable, and necessary for the attaining of satisfactory air quality with the intent of revising the standards as new information and better technology are developed.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80

Minimum Emission Standards 340-25-360

(1) Notwithstanding the specific emission limits set forth in this rule, the Department of Environmental Quality may, after notice and hearing, establish more restrictive emission limits and compliance schedules for mills located in recognized problem areas, for new mills, for mills expanding existing facilities, for mills installing substantial modifications of existing facilities which result in increased emissions; or for mills in areas where it is shown ambient air standards are exceeded.

- (2) The total average daily emissions from a sulfite pulp mill shall not exceed 20 pounds of sulfur dioxide per ton of air dried unbleached pulp produced and in addition:
 - (a) The blow system emissions shall not exceed 0.2 pounds of sulfur dioxide per minute per ton of unbleached pulp (charged to digester) on a 15 minute average;

(b) Emissions from the recovery system, acid plant, and other sources shall not exceed 800 ppm of sulfur dioxide as an hourly average.

(3) Mills of less than 110 tons of air dried unbleached pulp per day may be exempted from the limitations of section (2) of this rule provided that a minimum of 80% collection efficiency for sulphur dioxide (SO_2) is maintained.

(4) The total emission of particulate matter from the recovery furnace stacks shall not exceed four (4) pounds per air dried ton of unbleached pulp produced.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80

Compliance Schedule

340-25-365 [DEQ 32, f. 11-23-71, ef. 12-15-71; Repealed by DEQ 15-1980, f. & ef. 5-23-80]

Monitoring and Reporting 340-25-370

(1) Each mill shall maintain a Department approved detailed sampling and testing program.

(2) The monitoring equipment shall be capable of determining compliance with the emission limits established by these rules OAR 340-25-350 through 340-25-380, and shall be capable of continual sampling and recording of concentrations of sulfur dioxide contaminants from the recovery system. Unless otherwise approved in writing, compliance shall be determined by Source Test JEPA Method Six (6) which is contained in the Department files as part of the Source Sampling Manual.

(3) Each mill shall sample the recovery system, blow system, and acid plant for sulfur dioxide emissions on a regularly scheduled basis.

- (4) Each mill shall sample the recovery furnace stacks for particulate on a regularly scheduled basis. Unless otherwise approved in writing, compliance shall be determined by [Source Test]EPA Method Five (5) (front half only) which is contained in the Department [files as part of the] Sampling Manual.
- (5) Unless otherwise authorized, data shall be reported by each mill at the end of each calendar month as follows:
 - (a) Average daily emissions of sulfur dioxides expressed as pounds of sulfur dioxide per ton of pulp produced from the blow system, recovery system, and acid plant;
 - (b) The daily average and peak concentrations of sulfur dioxides expressed in pounds per hour and expressed in ppm of sulfur dioxide and the number of hours each day that the concentration exceeds 500 ppm;
 - (c) The average daily production of unbleached pulp and the maximum daily production.
- (6) Each mill shall furnish upon request of the Department, such other pertinent data as the Department may require to evaluate the mill's emission control program. Unless otherwise prescribed, each mill shall report immediately to the Department abnormal mill operations which adversely affect the emission of air contaminants.
- (7) All measurements shall be made in accordance with techniques approved by the Department.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80

Special Studies

340-25-375 [DEQ 32, f. 11-23-71, ef. 12-15-71; Repealed by DEQ 15-1980, f. & ef. 5-23-80]

Exceptions

340-25-380[These rules] OAR 340-25-350 through 340-25-380 do not apply to open burning or power boiler operations conducted at sulfite pulp mills unless such boilers are an integral part of the sulfite process or recovery system.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 32, f. 11-23-71, ef. 12-15-71; DEQ 15-1980, f. & ef. 5-23-80

Public Hearing

340-25-385 [DEQ 32, f. 11-23-71, ef. 12-15-71; Repealed by DEQ 15-1980, f. & ef. 5-23-80]

Notice of Construction and Submission of Plans and Specifications 340-25-390 [DEQ 32, f. 11-23-71, ef. 12-15-71; Repealed by DEQ 15-1980, f. & ef. 5-23-80]

Laterite Ore Production of Ferronickel

Statement of Purpose

340-25-405 In furtherance of the public policy of the state as set forth in ORS [449.765]468A.010, it is hereby declared to be the purpose of the Commission in adopting the following rule OAR 340-25-405 through 340-25-430 to:

- (1) Require, in accordance with a specific program and timetable, the highest and best practicable collection, treatment, and control of atmospheric pollutants through the utilization of technically feasible equipment, devices, and procedures necessary to attain and maintain desired air quality.
- (2) Establish standards which based upon presently available technology, are reasonably attainable with the intent of revising the standards as needed when new information and/or better technology are developed.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Definitions

340-25-410 As used in OAR 340-25-405 through 340-25-430:

(1) "Laterite ore" means a red residual soil containing commercially valuable amounts of nickel, about 1% to 2% by weight.

- (2) "Dry laterite ore" means laterite ore free of uncombined water or as it is discharged from an ore drying equipment or process.
- (3) "Ferronickel" means a metallic alloy containing about 50% fnicklelnickel and 50% iron.
- (4) "All sources" means all equipment, structures, processes, and procedures directly related to or involved in the production of ferronickel from laterite ore excluding open storage areas and mining activities.
- (5) "Average dry laterite ore production rate" means the average amount of dry laterite ore produced per hour based upon annual production records.
- (6) "Particulate matter" means a small, discrete mass of solid or liquid matter, but not including uncombined water.
- (7) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Emission Standards 340-25-415

- (1) No source shall have visible emissions in excess of twenty (20) percent opacity, provided that where the presence of uncombined water is the only reason for failure of an emission to meet this requirement, such requirement shall not apply.
- (2) The total combined emission of particulate matter from all sources shall not exceed 3.5 pounds per ton of dry laterite ore produced, based upon the average dry laterite ore production rate.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Highest and Best Practicable Treatment and Control Required

340-25-420 Notwithstanding the specific emission limits set forth in OAR 340-25-415, the highest and best practicable treatment and control currently available shall in every case be provided.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Compliance Schedule

340-25-425 [Compliance with the specific emission standards set forth in OAR 340-25-415 shall be accomplished on or before July 1, 1974, in accordance with an approved program and schedule:]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Monitoring and Reporting 340-25-430

- (1) Emission testing shall be conducted by the industry using Department approved methods to determine compliance with this rule.
- (2) Abnormal operations which adversely affect the emission of air contaminants shall be reported to the Department within 1 hour of the occurrence, or as soon as is reasonably possible.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Emission Standards and Procedural Requirements for Hazardous Air Contaminants

Policy

340-25-450 The Commission finds and declares that certain air contaminants for which there is no ambient air standard may cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness, and are therefore considered to be hazardous air contaminants. Air contaminants currently considered to be in this category are asbestos, beryllium, and mercury. Additional air contaminants may be added to this category provided that no ambient air standard exists for the contaminant, and evidence is presented which demonstrates that the particular contaminant may be considered as hazardous. It is hereby declared the policy of the Department that the standards contained herein in OAR 340-25-450 through 340-25-485 and applicable to operators are to be minimum standards, and as technology advances, conditions warrant, and Department or regional authority rules require or permit, more stringent standards shall be applied.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 9-1988, f. 5-19-88, cert. ef. 6-1-88 (and corrected 6-3-88)

DEFINITIONS

340-25-455 As used in this rule, and unless otherwise required by context OAR 340-25-450 through 340-25-485:

- (1) "Adequately wet" means to sufficiently mix or penetrate asbestos-containing material with liquid to prevent the release of particulate asbestos materials. The absence of visible emissions is not sufficient evidence of being adequately wet.
- (2) "Asbestos" means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonitegrunerite (amosite), anthophyllite, actinolite and tremolite."
- "Asbestos-containing waste material" means any waste which contains <a href="mailto:fmill]asbestos tailings or any commercial asbestos, and is generated by a source subject to fthis subpart]OAR 340-25-450 through 340-25-469., or friable asbestos material] This term fincludes, but not limited to, filters from control devices asbestos waste, friable asbestos waste material, asbestos abatement project waste, and bags or containers that previously contained commercial asbestos.

- (4) "Asbestos abatement project" means any demolition, renovation, repair, construction or maintenance activity of any public or private facility that involves the repair, enclosure, encapsulation, removal, salvage, handling or disposal of any material with the potential of releasing asbestos fibers from asbestos-containing material into the air."
 - NOTE: An asbestos abatement project is not considered to be a source under OAR 340-25-460(2) through (6). Emergency fire fighting is not an asbestos abatement project.
- (5) "Asbestos manufacturing operation" means the combining of commercial asbestos, or in the case of woven friction products, the combining of textiles containing commercial asbestos with any other material(s) including commercial asbestos, and the processing of this combination into a product as specified in [rule] OAR 340-25-465(3).
- (6) "Asbestos-containing material" means asbestos or any material containing more than one percent (1%) asbestos by weight, including particulate asbestos material.
- (7) "Asbestos mill" means any facility engaged in the conversion or any intermediate step in the conversion of asbestos ore into commercial asbestos.
- (8) "Asbestos tailings" mean any solid waste product of asbestos mining or milling operations which contains asbestos.
- (9) "Beryllium" means the element beryllium. Where weight or concentrations are specified in these rules OAR 340-25-470 and 340-25-475, such weights or concentrations apply to beryllium only, excluding any associated elements.
- (10) "Beryllium alloy" means any metal to which beryllium has been added in order to increase its beryllium content, and which contains more than 0.1 percent beryllium by weight.
- (11) "Beryllium containing waste" means any material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to [these-rules-joar-340-25-450 through 340-25-485.
- (12) "Beryllium ore" means any naturally occurring material mined or gathered for its beryllium content.
- (13) "Commercial asbestos" means any variety of asbestos which is produced by extracting asbestos from asbestos ore.
- (14) "Commission" means the Environmental Quality Commission.
- (15) "Demolition" means the wrecking or removal of any loadsupporting structural member of a facility together with any related handling operations or the intentional burning of any facility.
- (16) "Department" means the Department of Environmental Quality.
- (17) "Director" means the Director of the Department or regional authority and authorized deputies or officers.

- (18) "Fabricating" means any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.
- (19) "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel, including but not limited to ships.
- (20) "Friable asbestos material" means any asbestos-containing material that hand pressure can crumble, pulverize or reduce to powder when dry.
- (21) "Fugitive emissions" means any emissions which escape from a point or area that is not identifiable as a stack, vent, duct or equivalent opening.
- (22) "Hazardous air contaminant" means any air contaminant considered by the Department or Commission to cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness and for which no ambient air standard exists.
- (23) "HEPA filter" means a high efficiency particulate air filter capable of filtering 0.3 micron particles with 99.97 percent efficiency.
- (24) "Inactive waste disposal site" means any disposal site where the operator has allowed the Department's solid waste permit to lapse, has gone out of business, or no longer receives asbestos-containing waste.
- (25) "Interim storage of asbestos containing material" means the storage of asbestos-containing waste material which has been placed in a container outside a regulated area until transported to an authorized landfill.
- (26) "Mercury" means the element mercury, excluding any associated elements and includes mercury in particulates, vapors, aerosols, and compounds.
- (27) "Mercury ore" means any mineral mined specifically for its mercury content.
- (28) "Mercury ore processing facility" means a facility processing mercury ore to obtain mercury.
- (29) "Mercury chlor-alkali cell" means a device which is basically composed of an electrolyzer section and a denuder (decomposer) section, and utilizes mercury to produce chlorine gas, hydrogen gas, and alkali metal hydroxide.

- (30) "Nonfriable asbestos-containing material" means any material containing more than one percent (1%) asbestos as determined by weight that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- (31) "Particulate asbestos material" means any finely divided particles of asbestos material.
- (32) "Person" means any individual, corporation, association, firm, partnership, joint stock company, public and municipal corporation, political sub-division, the state and any agency thereof, and the federal government and any agency thereof.
- (33) "Propellant" means a fuel and oxidizer physically or chemically combined, containing beryllium or beryllium compounds, which undergoes combustion to provide rocket propulsion.
- (34) "Propellant plant" means any facility engaged in the mixing, casting, or machining of propellant.
- (35) "Regional authority" means any regional air quality control authority established under the provisions of ORS {468.505}468A.105.
- (36) "Renovation" means altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or removed are excluded.
- (37) "Roadways" mean surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.
- (38) "Small-scale asbestos abatement project" means any asbestos abatement project which meets the definition given in OAR 340-33-020(17).
- (39) "Small scale, short duration renovating and maintenance activity" means an activity which meets the definition given in OAR 340-33-020(18).
- (40) "Startup" means commencement of operation of a new or modified source resulting in release of contaminants to the ambient air.
- (41) "Structural member" means any load-supporting member of a facility, such as beams and load-supporting walls; or any non-supporting member, such as ceilings and non-load-supporting walls.
- (42) "Waste generator" means any person performing an asbestos abatement project or any owner or operator of a source covered by this section whose act or process generates asbestos-containing waste material.
- (43) "Waste shipment record" means the shipment document, required to be originated and signed by the waste generator; used to track and substantiate the disposition of asbestos-containing waste material.

Stat. Auth.: ORS Ch. $468\frac{\text{[.020]}}{\text{[.020]}}$ & $468\frac{\text{[.893]}}{\text{[.020]}}$ Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88, cert. ef. 6-1-88 (and corrected 6-3-88); DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90 & 7-8-91); AQ 11, f. & ef. 10-7-91

GENERAL PROVISIONS 340-25-460

- (1) Applicability. [The provisions of these rules] OAR 340-25-450 through 340-25-485 shall apply to any source which emits air contaminants for which a hazardous air contaminant standard is prescribed. Compliance with the provisions of these rules] OAR 340-25-450 through 340-25-485 shall not relieve the source from compliance with other applicable rules of the Oregon Administrative Rules, Chapter 340, or with applicable provisions of the Oregon Clean Air Implementation Plan.
- (2) Prohibited activities:
 - (a) No person shall construct, install, establish, develop or operate any source of emissions subject to these tules OAR 340-25-450 through 340-25-485 without first obtaining an Air Contaminant Discharge Permit in accordance with OAR 340-20-140 through 340-20-185.
 - (b) No person shall modify any existing source such that emissions of contaminants subject to these rules OAR 340-25-450 through 340-25-485 are significantly increased without first applying for and obtaining a modified permit.
 - (c) No person subject to the provisions of the [se] emission standards contained in OAR 340-25-450 through 340-25-485 shall fail to provide reports or report revisions as required in [these rules] OAR 340-25-450 through 340-25-485.
- (3) Application for approval of construction or modification. All applications for construction or modification shall comply with the requirements of OAR 340-20-140 through OAR 340-20-185 and the requirements of the standards-set forth in these rules OAR 340-25-450 through 340-25-485.
- (4) Notification of startup. Notwithstanding the requirements of rules OAR 340-20-140 through OAR 340-20-185, any person owning or operating a new source of emissions subject to these emission standards shall furnish the Department written notification as follows:
 - (a) Notification of the anticipated date of startup of the source not more than 60 days nor less than 30 days prior to the anticipated date.
 - (b) Notification of the actual startup date of the source within 15 days after the actual date.

- (5) Source reporting and approval request. Any person operating any existing source, or any new source for which a standard is prescribed in these rules which had an initial startup which preceded the effective date of these rules shall provide the following information to the Department within 90 days of the effective date of these rules:
 - (a) Name and address of the owner or operator.
 - (b) Location of the source.
 - (c) A brief description of the source, including nature, size, design, method of operations, design capacity, and identification of emission points of hazardous contaminants.
 - (d) The average weight per month of materials being processed by the source and percentage by weight of hazardous contaminants contained in the processed materials, including yearly information as available.
 - (e) A description of existing control equipment for each emission point, including primary and secondary control devices and estimated control efficiency of each control device.]
- {(6)}(5)
 Source emission tests and ambient air monitoring:
 - (a) Emission tests and monitoring shall be conducted using methods set forth in [40 CFR, Part 61, Appendix B. The methods described in 40 CFR, Part 61, Appendix B, are adopted by reference and made a part of these rules. Copies of these methods are on file at the Department of Environmental Quality]the Department's Source Sampling Manual.
 - (b) At the request of the Department, any source subject to standards set forth in these rules OAR 340-25-450 through 340-25-485 may be required to provide emission testing facilities as follows:
 - (A) Sampling ports, safe sampling platforms, and access to sampling platforms adequate for test methods applicable to such source.
 - (B) Utilities for sampling and testing equipment.

 (c) Emission tests may be deferred if the Department determines that the source is meeting the standard as proposed in these rules required by OAR 340-25-450
 - proposed in these rules required by OAR 340-25-450 through 340-25-485. If such a deferral of emission tests is requested, information supporting the request shall be submitted with the request for written

approval of operation. Approval of a deferral of emission tests shall not in any way prohibit the Department from canceling the deferral if further information indicates that such testing may be necessary to insure compliance with [these rules] OAR 340-25-450 through 340-25-485.

[(7)](6)

Delegation of authority. The Commission may, when any regional authority requests and provides evidence demonstrating its capability to carry out the provisions of these rules OAR 340-25-450 through 340-25-485 relating to hazardous contaminants, authorize and confer jurisdiction within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 19-1986, f. & ef. 11-7-86; DEQ 9-1988, f. 5-19-88, cert. ef. 6-1-88 (and corrected 6-3-88); DEQ 24-1989, f. & cert. ef. 10-26-89; AQ 11, f. & ef. 10-7-91

EMISSION STANDARDS AND PROCEDURAL REQUIREMENTS FOR ASBESTOS 340-25-465

- (1) Emission standard for asbestos mills. No person shall cause to be discharged into the atmosphere any visible emissions from any asbestos milling operation, including fugitive emissions, except as provided under OAR 340-25-468(14) Air Cleaning. For purposes of these this rule the presence of uncombined water in the emission plume shall not be cause for failure to meet the visible emission requirement. Outside storage of asbestos materials is not considered a part of an asbestos mill. Each owner or operator of an asbestos mill shall meet the following requirements:
 - (a) Monitor each potential source of asbestos emissions from any part of the mill facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operations. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

- (b) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this [paragraph]subsection, submit to the Department, revise as necessary, and implement a written maintenance plan to include, at a minimum, the following:
 - (A) Maintenance schedule.

(B) Recordkeeping plan.

- (c) Maintain records of the results of visible emissions monitoring and air cleaning device inspections using a format approved by the Department which includes the following:
 - (A) Date and time of each inspection.
 - (B) Presence or absence of visible emissions.
 - (C) Condition of fabric filters, including presence of any tears, holes, and abrasions.
 - (D) Presence of dust deposits on clean side of fabric filters.
 - (E) Brief description of corrective actions taken, including date and time.
 - (F) Daily hours of operation for each air cleaning device.
- (d) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Department, all records required under this section.
- (e) Retain a copy of all monitoring and inspection records for at least two years.
- (f) Submit a copy of visible emission monitoring records to the Department quarterly. The quarterly reports shall be postmarked by the 30th day following the end of the calendar quarter.
- (g) Asbestos-containing waste material produced by any asbestos milling operation will be disposed of according to OAR 340-25-469.
- (2) Roadways and Parking Lots. No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless (for asbestos tailings):
 - (a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine); or

- (b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or
- (c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.
- (3) Manufacturing. No person shall cause to be discharged into the atmosphere any visible emissions, except as provided in OAR 340-25-468(14) Air Cleaning, from any building or structure in which manufacturing operations utilizing commercial asbestos are conducted, or directly from any such manufacturing operations if they are conducted outside buildings or structures, or from any other fugitive emissions. All asbestos-containing waste material produced by any manufacturing operation shall be disposed of according to OAR 340-25-469. Visible emissions from boilers or other producing not emissions directly points from manufacturing operation; and having no possible asbestos material in the exhaust gases, shall not be considered for purposes of this rule. The presence of uncombined water in the exhaust plume shall not be cause for failure to meet the visible emission requirements.
 - (a) Applicability. Manufacturing operations considered for purposes of this rulethis rulethis
 - (A) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.
 - (B) The manufacture of cement products.
 - (C) The manufacture of fire proofing and insulating materials.
 - (D) The manufacture of friction products.
 - (E) The manufacture of paper, millboard, and felt.
 - (F) The manufacture of floor tile.
 - (G) The manufacture of paints, coatings, caulks, adhesives, or sealants.
 - (H) The manufacture of plastics and rubber materials.
 - (I) The manufacture of chlorine, using asbestos diaphragm technology.
 - (J) The manufacture of shotgun shell wads.
 - (K) The manufacture of asphalt concrete.

- (L) Any other manufacturing operation which results or may result in the release of asbestos material to the ambient air.
- (b) Monitor each potential source of asbestos emissions from any part of the manufacturing facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once each day during daylight hours for visible emissions to the outside air during periods of operation. The monitoring shall be visual observation of at least 15 seconds.
- (c) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this [paragraph]subsection, submit to the Department, revise as necessary, and implement a written maintenance plan to include, at a minimum, the following:
 - (A) Maintenance schedule.
 - (B) Recordkeeping plan.
- (d) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format approved by the Department which includes the following:
 - (A) Date and time of each inspection.
 - (B) Presence or absence of visible emissions.
 - (C) Condition of fabric filters, including presence of any tears, holes and abrasions.
 - (D) Presence of dust deposits on clean side of fabric filters.
 - (E) Brief description of corrective actions taken, including date and time.
 - (F) Daily hours of operation for each air cleaning device.
- (e) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Department, all records required under this section.
- (f) Retain a copy of all monitoring and inspection records for at least two years.

- (g) Submit quarterly a copy of the visible emission monitoring records to the Department if visible emissions occurred during the report period. Quarterly reports shall be postmarked by the 30th day following the end of the calendar quarter.
- (h) Asbestos-containing waste material produced by any asbestos milling operation shall be disposed of according to OAR 340-25-469.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; AQ 11, f. & ef. 10-7-91

ASBESTOS ABATEMENT PROJECTS 340-25-466

- (1) Any person who conducts an asbestos abatement project shall comply with OAR 340-25-467 and OAR 340-25-468(1) through (11). The following asbestos abatement projects are exempt from [these requirements OAR 340-25-467 and OAR 340-25-468(1) through (11):
 - (a) Asbestos abatement conducted in a private residence which is occupied by the owner and the owner-occupant performs the asbestos abatement.
 - (b) Removal of nonfriable asbestos-containing materials that are not shattered, crumbled, pulverized or reduced to dust until disposed of in an authorized disposal site. This exemption shall end whenever the asbestos-containing material becomes friable and releases asbestos fibers into the environment.
 - (c) Removal of less than three square feet or three linear feet of asbestos-containing material provided that the removal of asbestos is not the primary objective and methods of removal are in compliance with OAR 437 Division 3 "Construction" (29 CFR 1926.58 Appendix G). An asbestos abatement project shall not be subdivided into smaller sized units in order to qualify for this exemption.
 - (d) Removal of asbestos-containing materials which are sealed from the atmosphere by a rigid casing, provided that the casing is not broken or otherwise altered such that asbestos fibers could be released during removal, handling, and transport to an authorized disposal site.
- (2) Open storage of friable asbestos-containing material or asbestos-containing waste material is prohibited.
- (3) Open accumulation of friable asbestos-containing material or asbestos-containing waste material is prohibited.

NOTE: The requirements and jurisdiction of the Department of Insurance and Finance, Oregon Occupational Safety and Health Division and any other state agency are not affected by [these rules] OAR 340-25-450 through 340-25-485.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 11, f. & ef. 10-7-91

NOTIFICATIONS REQUIREMENTS

340-25-467 Written notification of any asbestos abatement project shall be provided to the Department on a Department form. The notification must be submitted by the facility owner or operator or by the contractor in accordance with one of the procedures specified in section (1) or (2) $\{$, below $\}$ of this rule except as provided in sections $\{(3), \{(4), (5)\}\}$ and $\{(6), (6)\}$

(1) Submit the notifications as specified in subsection (c) below and the project notification fee to the Department at least ten days before beginning any asbestos abatement project.

(a) The project notification fee shall be:

- (A) \$25 for each small-scale asbestos abatement project except for small-scale projects in residential buildings described in OAR 340-25-467(4).
- (B) \$50 for each project greater than a small-scale asbestos abatement project and less than 260 linear feet or 160 square feet.
- (C) \$200 for each project greater than 260 linear feet or 160 square feet, and less than 2,600 linear feet or 1,600 square feet.
- (D) \$500 for each project greater than 2,600 linear feet or 1,600 square feet, and less than 26,000 linear feet or 16,000 square feet.
- (E) \$750 for each project greater than 26,000 linear feet or 16,000 square feet, and less than 260,000 linear feet or 160,000 square feet.
- (F) \$1,000 for each project greater than 260,000 linear feet or 160,000 square feet.
- (b) Project notification fees shall be payable with the completed project notification form. No notification will be considered to have occurred until the notification fee is submitted.

- (c) The ten day notification requirement in (1) above may be temporarily waived in emergencies which directly affect human life, health, and property. This includes:
 - (A) Emergencies where there is an imminent threat of loss of life or severe injury; or
 - (B) Emergencies where the public is exposed to airborne asbestos fibers; or
 - (C) Emergencies where significant property damage will occur if repairs are not made.
- (d) The ten day notification requirement in (1) above may be temporarily waived for asbestos abatement projects which were not planned, resulted from unexpected events, and which if not immediately performed will cause damage to equipment or impose unreasonable financial burden. This includes the non-routine failure of equipment.
- (e) In either (c) or (d) above persons responsible for such asbestos abatement projects shall notify the Department by telephone prior to commencing work, or by 9_am of the next working day if the work was performed on a weekend or holiday. In any case notification as specified in (3) below and the appropriate fee shall be submitted to the Department within three days of commencing emergency or unexpected event asbestos abatement projects.
- (f) The Department shall be notified prior to any changes in the scheduled starting or completion dates or other substantial changes or the notification will be void.
- (g) If an asbestos project, equal to or greater than 2,600 linear feet or 1,600 square feet continues for more than one year, a new notification and fee shall be submitted annually thereafter until the project is complete.
- (2) For small-scale asbestos abatement projects conducted at one or more facilities by a single contractor or a single facility owner with centrally controlled asbestos operations and maintenance the notification may be submitted as follows:
 - (a) Establish eligibility for use of this notification procedure with the Department prior to use;
 - (b) Maintain on file with the Department a general asbestos abatement plan. The plan shall contain the information specified in subsections (3)(a) through (3)(i) {below, of this rule} to the extent possible;
 - (c) Provide to the Department a summary report of all small-scale asbestos abatement projects conducted in the previous three months by the 15th day of the month

following the end of the calendar quarter. The summary report shall include the information specified in subsections (3)(i) through (3)(m) {below}of this rule for each project, a description of any significant variations from the general asbestos abatement plan; and a description of asbestos abatement projects anticipated for the next quarter;

- (d) Provide to the Department, upon request, a list of asbestos abatement projects which are scheduled or are being conducted at the time of the request;
- (e) Submit a project notification fee of \$200 per year prior to use of this notification procedure and annually thereafter while this procedure is in use;
- (f) Failure to provide payment for use of this notification procedure shall void the general asbestos abatement plan and each subsequent abatement project shall be individually assessed a project notification fee.
- (3) The following information shall be provided for each notification:
 - (a) Name and address of person conducting asbestos abatement.
 - (b) Contractor's Oregon asbestos abatement license number, if applicable, and certification number of the supervisor for full-scale asbestos abatement or certification number of the trained worker for a project which does not have a certified supervisor.
 - (c) Method of asbestos abatement to be employed.
 - (d) Procedures to be employed to insure compliance with OAR 340-25-468 and 340-25-469.
 - (e) Names, addresses, and phone numbers of waste transporters.
 - (f) Name and address or location of the waste disposal site where the asbestos-containing waste material will be deposited.
 - (g) Description of asbestos disposal procedure.
 - (h) Description of building, structure, facility, installation, vehicle, or vessel to be demolished or renovated, including:
 - (A) The age, present and prior use of the facility;
 - (B) Address or location where the asbestos abatement project is to be accomplished.
 - (i) Facility owner's or operator's name, address and phone number.
 - (j) Scheduled starting and completion dates of asbestos abatement work.

- (k) Description of the asbestos type, approximate asbestos content (percent), and location of the asbestos-containing material.
- (1) Amount of asbestos to be abated: linear feet, square feet, thickness.
- (m) For facilities described in OAR 340-25-468(5) provide the name, title and authority of the State or local government official who ordered the demolition, date the order was issued, and the date demolition is to begin.
- Any other information requested on the Department form. (n) No project notification fee shall be assessed for asbestos (4)abatement projects conducted in the following residential buildings: site-built homes, modular homes constructed off site, condominium units, mobile homes, and duplexes or other multi-unit residential buildings consisting of four units or Project notification for a full-scale asbestos abatement project, as defined in OAR 340-33-020(14), in any these residential buildings shall otherwise be accordance with section (1) of this rule. Project notification for a small-scale asbestos abatement project, as defined in OAR 340-33-020(17), in any of these residential buildings is not required.
- (5) The project notification fees specified in this section shall be increased by 50% when an asbestos abatement project is commenced without filing of a project notification and/or submittal of a notification fee or when notification of less than ten days is provided under subsection (1)(c) of this rule.
- (6) The Director may waive part or all of a project notification fee. Requests for waiver of fees shall be made in writing to the Director, on a case-by-case basis, and be based upon financial hardship. Applicants for waivers must describe the reason for the request and certify financial hardship.
- (7) Pursuant to ORS [468.535]468A.135, a regional authority may adopt project notification fees for asbestos abatement projects in different amounts than are set forth in this rule. The fees shall be based upon the costs of the regional authority in carrying out the delegated asbestos program. The regional authority may collect, retain, and expend such project notification fees for asbestos abatement projects within its jurisdiction.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 11, f. & ef. 10-7-91

WORK PRACTICES AND PROCEDURES

340-25-468 The following procedures shall be employed during an asbestos abatement project to prevent emissions of particulate asbestos material into the ambient air:

- (1) Remove asbestos-containing materials before any wrecking or dismantling that would break up the materials or preclude access to the materials for subsequent removal. However, asbestos-containing materials need not be removed before demolition if:
 - (a) They are on a facility component that is encased in concrete or other similar material;
 - (b) They were not discovered before demolition and cannot be removed because of unsafe conditions as a result of the demolition. Upon discovery the owner or operator performing the demolition shall:
 - (A) Stop demolition work immediately.
 - (B) Notify the Department immediately of the occurrence.
 - (C) Keep the exposed asbestos-containing materials and any asbestos-contaminated waste material adequately wet at all times until a licensed asbestos abatement contractor begins removal activities.
 - (D) Have the licensed asbestos abatement contractor remove and dispose of the asbestos-containing waste material.
 - (c) These materials are adequately wetted whenever exposed during demolition.
- (2) Asbestos-containing materials shall be adequately wetted when they are being removed. In renovation, maintenance, repair, and construction operations, where wetting would unavoidably damage equipment or is incompatible with specialized work practices, or presents a safety hazard, adequate wetting is not required if the owner or operator:
 - (a) Obtains prior written approval from the Department for dry removal of asbestos-containing material;
 - (b) Keeps a copy of the Department's written approval available for inspection at the work site;
 - (c) Adequately wraps or encloses any asbestos-containing material during handling to avoid releasing fibers;
 - (d) Uses a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the asbestos abatement project.
- (3) When a facility component covered or coated with asbestoscontaining materials is being taken out of the facility as units or in sections:

- (a) Adequately wet any asbestos-containing materials exposed during cutting or disjointing operation;
- (b) Carefully lower the units or sections to ground level, not dropping them or throwing them;
- (c) Asbestos-containing materials do not need to be removed from large facility components such as reactor vessels, large tanks, steam generators, but excluding beams if the following requirements are met:
 - (A) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the regulated asbestos-containing material; and
 - (B) The component is encased in leak-tight wrapping; and
 - (C) The leak-tight wrapping is labeled according to OAR 340-25-469(2)(b) during all loading and unloading operations and during storage.
- (4) For asbestos-containing materials being removed or stripped:
 - (a) Adequately wet the materials to ensure that they remain wet until they are disposed of in accordance with OAR 340-25-469;
 - (b) Carefully lower the materials to the floor, not dropping or throwing them;
 - (c) Transport the materials to the ground via dust-tight chutes or containers if they have been removed or stripped above ground level and were not removed as units or in sections.
- (5) If a facility is being demolished under an order of the State or a local governmental agency, issued because the facility is structurally unsound and in danger of imminent collapse, the requirements of section (1), (2), (3), (4), and (6) of this rule shall not apply, provided that the portion of the facility that contains asbestos-containing materials is adequately wetted during the wrecking operation.
- (6) Before a facility is demolished by intentional burning, all asbestos-containing material shall be removed and disposed of in accordance with OAR 340-25-466 through -469.
- (7) None of the operations in sections (1) through (4) of this rule shall cause any visible emissions. Any local exhaust ventilation and collection system or other vacuuming equipment used during an asbestos abatement project, shall be equipped with a HEPA filter or other filter of equal or greater collection efficiency.

- (8) Contractors licensed and workers certified to conduct only small-scale asbestos abatement projects under OAR 340-33-040 and 340-33-050 respectively may use only those work practices and engineering controls specified by OAR 437 Division 3 "Construction" (29 CFR 1926.58 Appendix G).
- (9) The Director may approve, on a case-by-case basis, requests to use an alternative to a public health protection requirement as provided by these this rule for an asbestos abatement project. The contractor or facility owner or operator must submit in advance a written description of the alternative procedure which demonstrates to the Director's satisfaction that the proposed alternative procedure provides public health protection equivalent to the protection that would be provided by the specific provision, or that such level of protection cannot be obtained for the asbestos abatement project.
- (10) Final Air Clearance Sampling Requirements apply to projects involving more than 160 square feet or 260 linear feet of asbestos-containing material. Before a containment around such an area is removed, the person(s), contractor or facility owner/operator performing the abatement shall document that the air inside the containment has no more than 0.01 fibers per cubic centimeter of air. The air sample(s) collected shall not exceed 0.01 fibers per cubic centimeter of air. The Department may grant a waiver to this section or exceptions to the following requirements upon written request.
 - (a) The air clearance samples shall be performed and analyzed by a party who is National Institute of Occupational Safety and Health (NIOSH) 582 certified and financially independent from the person(s) conducting the asbestos abatement project.
 - (b) Before final air clearance sampling is performed the following shall be completed:
 - (A) All visible asbestos-containing debris shall be removed according to the requirements of this section;
 - (B) The air and surfaces within the containment shall be sprayed with an encapsulant;
 - (C) Air sampling may commence when the encapsulant has settled sufficiently so that the filter of the sample is not clogged by airborne encapsulant;
 - (D) Air filtration units shall remain on during the air monitoring period.
 - (c) Air clearance sampling inside containment areas shall be aggressive and comply with the following procedures:

- (A) Immediately prior to starting the sampling pumps, direct exhaust from a minimum one horse power forced air blower against all walls, ceilings, floors, ledges, and other surfaces in the containment.
- (B) Then place stationary fans in locations which will not interfere with air monitoring equipment and directed toward the ceiling. Use one fan per 10,000 cubic feet of room space.
- (C) Start sampling pumps and sample an adequate volume of air to detect concentrations of 0.01 fibers of asbestos per cubic centimeter according to the U.S. National Institute of Occupational Safety and Health, (NIOSH) 7400 method.
- (D) When sampling is completed turn off the pump and then the fan(s).
- (E) As an alternative to meeting the requirements of (A) through (D) of this subsection, air clearance sample analysis may be performed according to Transmission Electron Microscopy Analytical Methods prescribed by 40 CFR 763.99, Appendix A to Subpart E.
- (d) The person{(s)} performing asbestos abatement projects requiring air clearance sampling shall submit the clearance results to the Department on a Department form.[7] The clearance results must be received by the Department within 30 days after [the monitoring procedures were performed] the completion date of the asbestos abatement project.
- (11) Related Work Practices and Controls Work practices and engineering controls employed for asbestos abatement projects by contractors and/or workers who are not otherwise subject to the requirements of the Oregon Department of Insurance and Finance, Oregon Occupational Safety and Health Division shall comply with the subsections of OAR 437 Division 3 "Construction" (29 CFR 1926.58 Appendix G) which limit the release of asbestos-containing material or exposure of other persons. As used in this subsection the term employer shall mean the operator of the asbestos abatement project and the term employee shall mean any other person.
- (12) Spraying:
 - (a) No person shall cause to be discharged into the atmosphere any visible emissions from any spray-on application of materials containing more than one (1%) percent asbestos on a dry weight basis used to insulate or fireproof equipment or machinery, except as provided

in Air Cleaning section (14) of this rule. Spray-on materials used to insulate or fireproof buildings, structures, pipes, and conduits shall contain less than one (1%) percent asbestos on a dry weight basis. In the case of any city or area of local jurisdiction having ordinances or regulations for spray application materials more stringent than those in this section, the provisions of such ordinances or regulations shall apply.

- (b) Twenty days before any person sprays asbestos materials to insulate or fireproof buildings, structures, pipes, conduits, equipment, or machinery, that person shall notify the Department in writing before the spraying operation begins. The notification shall contain the following:
 - (A) Name and address of person intending to conduct the spraying operation.
 - (B) Address or location of the spraying operation.
 - (C) The name and address of the owner of the facility being sprayed.
- (c) The spray-on application of materials in which the asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and which are not friable after drying is exempted from the requirements of subsections (8)(a) and (b) of this rule.
- (13) Options for air cleaning. Rather than meet the no visible emissions requirements of OAR 340-25-465(1) and (3), owners and operators may elect to use methods specified in section (14) of this rule [, below].
- (14) Air cleaning. All persons electing to use air cleaning methods rather than comply with the no visible emission requirements must meet one of the provisions of (a) through (d) and all of the requirements specified sections (e), (f) and (g) below:
 - (a) Fabric filter collection devices must be used, except as provided in subsections (b) and (c) of this section. Such devices must be operated at a pressure drop of no more than four inches (10.16 cm) water gauge as measured across the filter fabric. The air flow permeability, as determined by ASTM Method D737-75, must not exceed 30 ft.3/min./ft.2 (9 m3/min./m2) for woven fabrics or 35 ft.3/min.ft.2 (11 m3/min./m2) for felted fabrics with the exception that airflow permeability of 40 ft.3/min./ft.2 (12 m3/min./m2) for woven and 45 ft.3/min./ft.2 (14 m3/min./m2) for felted fabrics shall be allowed for filtering air emissions from asbestos ore dryers. Each square yard of felted

- fabric must weigh at least 14 ounces (475 grams per square meter) and be at least one-sixteenth (1/16) inch (1.6mm) thick throughout. Any synthetic fabrics used must not contain fill yarn other than that which is spun.
- (b) If the use of fabric filters creates a fire or explosion hazard, the Department may authorize the use of wet collectors designed to operate with a unit contacting energy of at least 40 inches (101.6 cm) of water gauge pressure.
- (c) If High Efficiency Particulate Air (HEPA) filters are used to control emissions the certified efficiency shall be at least 99.97 percent for particles 0.3 microns or greater.
- (d) The Department may authorize the use of filtering equipment other than that described in subsections (14)(a), (b), or (c) of this rule if such filtering equipment is satisfactorily demonstrated to provide filtering of asbestos material equivalent to that of the described equipment.
- (e) All air cleaning devices authorized by this section must be properly installed, operated, and maintained. Devices to bypass the air cleaning equipment may be used only during upset and emergency conditions, and then only for such time as is necessary to shut down the operation generating the particulate asbestos material.
- [(f) All persons operating any existing source using air
 cleaning devices shall, within 90 days of the effective
 date of these rules, provide the following information
 to the Department:
 - (A) A description of the emission control equipment used for each process.
 - (B) If a fabric is utilized, the following information shall be reported:
 - (i) The pressure drop across the fabric filter in inches, water gauge and the airflow permeability in ft.3/min./ft.2 (m3/min./m2).
 - (ii) For woven fabrics, indicate whether the fill yarn is spun or not spun.
 - (iii) For felted fabrics, the density in ounces/yard³ (gms/m³) and the minimum thickness in inches (centimeters).
 - (C) If a wet collector is used the unit contact energy shall be reported in inches of pressure, water gauge.]

- For fabric filters collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.
- (15) Fabricating. No person shall cause to be discharged into the atmosphere any visible emissions including fugitive emissions, except as provided in Air Cleaning section (14) of this rule, from any fabricating operations including the following:
 - (a) Applicability. This section applies to the following fabricating operations using commercial asbestos:
 - (A) The fabrication of cement building products.
 - (B) The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles.
 - (C) The fabrication of cement or silicate board for ventilation hoods; ovens; electrical panels; laboratory furniture; bulkheads, partitions and ceilings for marine construction; and flow control devices for the molten metal industry.
 - (b) Monitor each potential source of asbestos emissions from any part of the fabricating facility, including air cleaning devices, process equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.
 - (c) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Department, revise as necessary, and implement a written maintenance plan to include, at a minimum, the following:
 - (A) Maintenance schedule.
 - (B) Recordkeeping plan.
 - (d) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format approved by the Department which includes the following:
 - (A) Date and time of each inspection
 - (B) Presence or absence of visible emissions.

- (C) Condition of fabric filters, including presence of any tears, holes, and abrasions.
- (D) Presence of dust deposits on clean side of fabric filters.
- (E) Brief description of corrective actions taken, including date and time.
- (F) Daily hours of operation for each air cleaning device.
- (e) Furnish upon request and make available at the affected facility during normal business hours for inspection by the Department, all records required under this section.
- (f) Retain a copy of all monitoring and inspection records for at least two years.
- (g) Submit a copy of the visible emission monitoring records to the Department quarterly. The quarterly report shall be postmarked by the 30th day following the end of the calendar quarter.
- (16) Insulation: Molded insulating materials which are friable and wet-applied insulating materials which are friable after drying, installed after the effective date of these regulations]October 21, 1982, shall contain no commercial asbestos. The provisions of this section do not apply to insulating materials which are spray applied; such materials are regulated under section (12) of this rule.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 11, f. & ef. 10-7-91

ASBESTOS DISPOSAL REQUIREMENTS

340-25-469 Work practices and procedures for packaging, storage, transport, and disposal of asbestos-containing waste material: The owner or operator of any source covered under the provisions of OAR 340-25-465(3), 340-25-466(1), or 340-25-468(12) and (15) of this rule or any other source of friable asbestos-containing waste material shall meet the following standards:

(1) There shall be no visible emissions to the atmosphere, except as provided in section (12) of this section, during the collection; processing, including incineration; packaging; transporting; or deposition of any asbestoscontaining waste material which is generated by such source.

- (2) All asbestos-containing waste materials shall be adequately wetted to ensure that they remain wet until disposed of, then:
 - (a) Processed into nonfriable pellets or other shapes; or
 - (b) Packaged in leak-tight containers such as two plastic bags each with a minimum thickness of 6 mill., or fiber or metal drum. Containers are to be labeled as follows:
 - (A) The name of the waste generator and the location at which the waste was generated; and
 - (B) A warning label that states:

DANGER

Contains Asbestos Fibers
Avoid Creating Dust
Cancer and Lung Disease Hazard
Avoid Breathing Airborne
Asbestos Fibers

Alternatively, warning labels specified by 29 CFR 1910.1001 (7/1/88) may be used.

- (c) Where the asbestos-containing materials are not removed from a facility prior to demolition as described in OAR 340-25-468(15), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Such asbestos-containing waste materials, shall be transported in lined and covered containers for bulk disposal.
- (4) The interim storage of asbestos-containing waste material shall protect the waste from dispersal into the environment and provide physical security from tampering by unauthorized persons. The interim storage of asbestos-containing waste material is the sole responsibility of the contractor, owner or operator performing the asbestos abatement project.
- (5) All asbestos-containing waste material shall be deposited as soon as possible by the waste generator at:
 - (a) A waste disposal site authorized by the Department and operated in accordance with the provisions of this rule; or
 - (b) A Department approved site that converts asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of 40 CFR 61.155 Standard for Operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.

- (6) Persons disposing of asbestos-containing waste material shall notify the landfill operator of the type and volume of the waste material and obtain the approval of the landfill operator prior to bringing the waste to the disposal site.
- (7) For each waste shipment the following information shall be recorded on a Department form:
 - (a) Waste Generation
 - (A) The name, address, and telephone number of the waste generator.
 - (B) The number and type of asbestos-containing waste material containers and volume in cubic yards.
 - (C) A certification that the contents of this consignment are carefully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highways according to applicable regulations.
 - (b) Waste Transportation
 - (A) The date transported.
 - (B) The name, address, and telephone number of the transporter(s).
 - (c) Waste Disposal
 - (A) The name and telephone number of the disposal site operator.
 - (B) The name and address or location of the waste disposal site.
 - (C) The quantity of the asbestos-containing waste material in cubic yards.
 - (D) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers.
 - (E) The date asbestos-containing waste is received at disposal site.
- (8) For the transportation of asbestos-containing waste material:
 (a) The waste generator shall:
 - (A) Maintain the waste shipment records and ensure that all the information requested on the Department form regarding waste generation and transportation has been supplied.
 - (B) Limit access into loading and unloading area to authorized personnel.
 - (C) Mark vehicles, while loading and unloading asbestos-containing waste, with signs (20 in. x 14 in.) that state:

DANGER ASBESTOS DUST HAZARD CANCER AND LUNG DISEASE HAZARD Authorized Personnel Only

Alternatively, language that conforms to the requirements of 29 CFR 1910.1001 (7/1/88) may be used.

(b) The waste transporter shall:

(A) Immediately notify the landfill operator upon arrival of the waste at the disposal site.

(B) Provide a copy of the waste shipment record to the disposal site owners or operators when the asbestos-containing waste material is delivered to the disposal site.

(9) After initial transport of asbestos-containing waste material

the waste generator shall:

- (a) Receive a copy of the completed waste shipment record within 35 days, or determine the status of the waste shipment. A completed waste shipment record will include the signature of the owner or operator of the designated disposal site.
- (b) Have a copy of the completed waste shipment record within 45 days, or submit to the Department a written report including:
 - (A) A copy of the waste shipment record for which a confirmation of delivery was not received; and
 - (B) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.
- (c) Keep waste shipment records, including a copy signed by the owner or operator of the designated waste disposal site, for at least three years. Make all disposal records available upon request to the Department. For an asbestos abatement project conducted by a contractor licensed under OAR 340-33-040, the records shall be retained by the licensed contractor. For any other asbestos abatement project, the records shall be retained by the facility owner.
- (10) Each owner or operator of an active asbestos-containing waste disposal site shall meet the following standards:
 - (a) For all asbestos-containing waste material received:
 - (A) Ensure that off-loading of asbestos-containing waste material is done under the direction and supervision of the landfill operator or their authorized agent and accomplished in a manner

- that prevents the leak-tight transfer containers from rupturing and prevents visible emissions to the air.
- (B) Ensure that off-loading of asbestos-containing waste material occurs at the immediate location where the waste is to be buried and restrict public access to off-loading area until waste is covered in accordance with (I), below.
- (C) Maintain waste shipment records and ensure that all information requested on the Department form regarding waste disposal has been supplied.
- (D) Retain a copy of waste shipment records for at least three years.
- (E) Immediately notify the Department by telephone, followed by a written report to the Department the following working day, of the presence of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
- (F) As soon as possible and no longer than 30 days after receipt of the waste send a copy of the signed waste shipment record to the waste generator.
- (G) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. Report in writing to the Department within the 15th day receiving the waste any discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received which cannot be reconciled between the waste generator and the waste disposal site. Describe the discrepancy and attempts reconcile it, and submit a copy of the waste shipment record along with the report. the Department assigned asbestos project number in the discrepancy report.
- (H) Select the waste burial site in an area of minimal work activity that is not subject to future excavation.

- (I) Cover all asbestos-containing waste material deposited at the disposal site with at least 12 inches of soil or six inches of soil plus 12 inches of other waste before compacting equipment runs over it but not later than the end of the operating day.
- (b) Maintain, until closure, record of the location, depth and area, and quantity in cubic yards of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.
- (c) Excavation or disturbance of asbestos-containing waste material, that has been deposited at a waste disposal site and is covered, shall be considered an asbestos abatement project. The notification for any such project shall be submitted as specified in OAR 340-25-467 but modified as follows:
 - (A) Submit the project notification and project notification fee to the Department at least 45 days before beginning any excavation or disturbance of asbestos-containing waste disposal site.
 - (B) Reason for disturbing the waste.
 - (C) Procedures to be used to control emissions during the excavation, storage, transport and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
 - (D) Location of any temporary storage site and the final disposal site.
- (d) Upon closure of an active asbestos-containing waste disposal site each owner or operator shall:
 - (A) Comply with all the provisions for inactive asbestos-containing waste disposal sites.
 - (B) Submit to the department a copy of records of asbestos waste disposal locations and quantities.
 - (C) Furnish upon request, and make available during normal business hours for inspection by the Department, all records required under this section.
- (11) The owner or operator of an inactive asbestos-containing waste disposal site shall meet the following standards:
 - (a) Insure that a cover of at least two feet of soil or one foot of soil plus one foot of other waste be maintained.
 - (b) Grow and maintain a cover of vegetation on the area to prevent erosion of the non asbestos-containing cover of soil or other waste materials or in desert areas where vegetation would be difficult to maintain, a layer of

- at least three inches of well-graded, nonasbestos crushed rock may be placed and maintained on top of the final cover instead of vegetation.
- (c) For inactive waste disposal sites for asbestoscontaining tailings, a resinous or petroleum-based dust
 suppression agent that effectively binds dust to
 control surface air emissions may be used and
 maintained to achieve the requirements of (a) and (b)
 of this section, provided prior written approval of the
 Department is obtained.
- (d) Excavation or disturbance at any inactive asbestoscontaining waste disposal site shall be considered an asbestos abatement project. The notification for any such project shall be submitted as specified in OAR 340-25-467, but modified as follows:
 - (A) Submit the project notification and project notification fee to the Department at least 45 days before beginning any excavation or disturbance of asbestos-containing waste disposal site.
 - (B) Reason for disturbing the waste.
 - (C) Procedures to be used to control emissions during the excavation, storage, transport and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.
 - (D) Location of any temporary storage site and the final disposal site.
- (e) Within 60 days of a site becoming inactive, request in writing that the Commission issue an environmental hazard notice for the site. This environmental hazard notice will in perpetuity notify any potential purchaser of the property that:
 - (A) The land has been used for the disposal of asbestos-containing waste material; and
 - (B) That the survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required for active asbestos disposal sites have been filed with the Department; and
 - (C) The site is subject to OAR 340-25-465 through OAR 340-25-469.
- (12) Any waste which contains nonfriable asbestos-containing material not subject to this rule shall be handled and disposed of using methods that will prevent the release of airborne asbestos-containing material.

(13) Rather than meet the requirements of this rule, an owner or operator may elect to use an alternative storage, transport, or disposal method which has received prior written approval by the Department.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 11, f. & ef. 10-7-91

Emission Standard for Beryllium 340-25-470

- (1) Applicability. The provisions of this rule are applicable to the following emission sources of beryllium:
 - (a) Extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium, beryllium ore, oxides, alloys, or beryllium containing waste;
 - (b) Machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than five percent (5%) beryllium by weight;
 - (c) Other sources, the operation of which results or may result in the emission of beryllium to the outside air.
- (2) Emission limit:
 - (a) No person shall cause to be discharged into the atmosphere emissions from any source exceeding 10 grams of beryllium for any 24 hour period;
 - (b) The burning of beryllium and/or beryllium containing waste except propellants is prohibited except in incinerators, emissions from which must comply with the standard;
 - (c) Stack sampling:
 - (A) Unless a deferral of emission testing is obtained under the provisions of OAR 340-25-460(6)(c), each person operating a source subject to the provisions of this the source subject to the following schedule:
 - (i) {Within ninety (90) days of the effective date of these rules}By December 24, 1975 for existing sources or for new sources having startup dates prior to{ the effective date of this standard} September 25, 1975;
 - (ii) Within ninety (90) days of startup in the case of a new source having a startup date after [the effective date of this standard] September 25, 1975.

- (B) The Department shall be notified at least thirty (30) days prior to an emission test so that they may, at their option, observe the test;
- Samples shall be taken over such periods and (C) frequencies as necessary to determine the maximum emissions occurring during any 24 hour Calculations of maximum emissions shall be based on that combination of process operating hours and any variation in capacities or processes that will result in maximum emissions. No changes in operation which may be expected to increase total emissions over those determined by the most recent stack test shall be made until estimates of the increased emissions have been calculated, and have been reported to and approved in writing by the Department:
- (D) All samples shall be analyzed and beryllium emissions shall be determined and reported to the Department within thirty (30) days following the stack test. Records of emission test results and other data needed to determine beryllium emissions shall be retained at the source and made available for inspection by the Department for a minimum of two (2) years following such determination.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u> Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82

Emission Standard for Beryllium Rocket Motor Firing

340-25-475 The emission standard for Beryllium Rocket Motor Firing, 40 CFR, Part 61, Section 61.40 through 61.44, as last amended on November 7, 1985, is adopted by reference and made a part of these rules OAR 340-25-450 through 340-25-485. A copy of this emission standard is on file at the Department of Environmental Quality.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 19-1986, f. & ef. 11-7-86

Emission Standard for Mercury 340-25-480

- (1) Applicability. The provisions of this rule are applicable to sources which process mercury ore to recover mercury, sources using mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and to any other source, the operation of which results or may result in the emission of mercury to the ambient air.
- (2) Emission Standard. No person shall cause to be discharged into the atmosphere emissions from any source exceeding 2,300 grams of mercury during any 24 hour period, except that mercury emissions to the atmosphere from sludge incineration plants, sludge drying plants, or a combination of these that process wastewater treatment plant sludges shall not exceed 3,200 grams of mercury per 24 hour period.
- (3) Stack sampling:
 - (a) Mercury ore processing facility:
 - (A) Unless a deferral of emission testing is obtained under OAR 340-25-460(6)(c) to these rules, each person operating a source processing mercury ore shall test emissions from this the source, subject to the following:
 - (i) [Within ninety (90) days of the effective date of these rules]By December 24, 1975 for existing sources or for new sources having startup dates prior to [the effective date of this standard] September 25, 1975;
 - (ii) Within ninety (90) days of startup in the case of a new source having a startup date after the effective date of this standard September 25, 1975.
 - (B) The Department shall be notified at least thirty (30) days prior to an emission test so that they may, at their option, observe the test;
 - (C) Samples shall be taken over such periods and frequencies as necessary to determine maximum emissions occurring during any 24 hour Calculations period. of maximum 24 emissions shall be based on that combination of process operating hours and any variation in capacities or processes that will result in maximum emissions. No changes in operation which may be expected to increase total emissions over those determined by the most recent stack test shall be made until estimates of the increased emissions have been calculated, and have been reported to and approved in writing by the Department;

- (D) All samples shall be analyzed and mercury emissions shall be determined and reported to the Department within thirty (30) days following the stack test. Records of emission test results and other data needed to determine mercury emissions shall be retained at the source and made available for inspection by the Department for a minimum of two (2) years following such determination.
- (b) Mercury Chlor-alkali plant:
 - (A) Hydrogen and end-box ventilation gas streams. Unless a deferral of emission testing is obtained under OAR 340-25-460(6)(c), each person operating a source of this type shall test emissions from his source following the provisions of subsection (3)(a) of this rule;
 - (B) Room ventilation system:
 - (i) Unless a deferral of emission testing is obtained under OAR 340-25-460(6)(c), all persons operating mercury chlor-alkali plants shall pass all cell room air in forced gas streams through stacks suitable for testing;
 - (ii) Emissions from cell rooms may be tested in accordance with provisions of paragraph (3)(b)(A) of this rule or may demonstrate compliance with subparagraph (3)(b)(B)(iii) of this rule and assume ventilation emissions of 1,300 grams/day of mercury;
 - (iii) If no deferral of emission testing is requested, each person testing emissions shall follow the provisions of subsection (3)(a) of this rule.
- (c) Any person operating a mercury chlor-alkali plant may elect to comply with room ventilation sampling requirements by carrying out approved design, maintenance, and housekeeping practices. A summary of these approved practices shall be available from the Department;
- (d) Stack sampling and sludge sampling at wastewater treatment plants shall be performed in accordance with 40 CFR 61.53(d) or 40 CFR 61.54, last amended by Federal Register March 19, 1987, pages 8724 to 8728.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 19-1986, f. & ef. 11-7-86; DEQ 24-1989, f. & cert. ef. 10-26-89

Work Practice Standard for Radon 222 Emissions from Underground Uranium Mines

340-25-485 The work practice standard for Radon-222 Emissions from active Underground Uranium Mines, 40 CFR, Part 61, Section 61.20 through 61.28, as published in 50 FR 15392 on April 17, 1985, is adopted by reference and made a part of these rules OAR 340-25-450 through 340-25-485. The standard requires airtight bulkheads to prevent Radon-222 from escaping from abandoned parts of uranium mines that are extracting greater than 10,000 tons of ore per year, or will extract more than 100,000 tons of ore during the life of the mine.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for New Stationary Sources

Statement of Purpose

340-25-505 The U.S. Environmental Protection Agency has adopted in Title 40, Code of Federal Regulations, Part 60, Standards of Performance for certain new stationary sources. It is the intent of this rule OAR 340-25-505 through 340-25-805 to specify requirements and procedures necessary for the Department to implement and enforce the aforementioned Federal Regulation.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75

Definitions

340-25-510 As used in OAR 340-25-505 through 340-25-805:

(1) "Administrator" herein and in Title 40, Code of Federal Regulations, Part 60, means the Director of the Department or appropriate regional authority.

[(3)](2) "CFR" means Code of Federal Regulations.

- "Federal Regulation" means Title 40, Code of Federal Regulations, Part 60, as promulgated prior to March 29, 1989.
- (4) "Regional authority" means a regional air quality control authority established under provisions of ORS [468.505]468A:105.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89

Statement of Policy

340-25-515 It is hereby declared the policy of the Department to consider the performance standards for new stationary sources contained [herein] in OAR 340-25-505 through 340-25-805 to be minimum standards; and, as technology advances, conditions warrant, and Department or regional authority rules require or permit, more stringent standards shall be applied.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75

Delegation

340-25-520 The Commission may, when any regional authority requests and provides evidence demonstrating its capability to carry out the provisions of these-rules OAR 340-25-505 through 340-25-805, authorize and confer jurisdiction upon such regional authority to perform all or any of such provisions within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75

Applicability

340-25-525[This rule] OAR 340-25-505 through 340-25-805 shall be applicable to stationary sources identified in OAR 340-25-550 through 340-25-7[15]25 for which construction, reconstruction, or modification has been commenced, as defined in Title 40, Code of Federal Regulations (40 CFR) 60.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85

General Provisions

340-25-530 Title 40, CFR, Part 60, Subpart A, as promulgated prior to March 29, 1989, is by this reference adopted and incorporated herein. Subpart A includes paragraphs 60.1 to 60.18 which address, among other things, definitions, performance tests, monitoring requirements, and modifications.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; DEQ 22-1982, f. & ef. 10-21-82; DEQ 17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89

Performance Standards

Federal Regulations Adopted by Reference

340-25-535 Title 40, CFR, Parts 60.40 through 60.154, and 60.250 through 60.648, and 60.680 through 60.685, as established as final rules prior to March 29, 1989, is by this reference adopted and incorporated herein, with the exception of the December 27, 1985 federal register revision to 40 CFR 60.11(b). As of March 29, 1989, the Federal Regulations adopted by reference set the emission standards for the new stationary source categories set out in OAR 340-25-550 through 340-25-725 (these are summarized for easy screening, but testing conditions, the actual standards, and other details will be found in the Code of Federal Regulations).

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; sections (1) thru (12) of this rule renumbered to 340-25-550 thru 340-25-605; DEQ 22-1982, f. & ef. 10-21-82; DEQ

17-1983, f. & ef. 10-19-83; DEQ 16-1984, f. & ef. 8-21-84; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86; DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89

340-25-540 [Renumbered to 340-25-700]

340-25-545 [Renumbered to 340-25-705]

Standards of Performance for Fossil Fuel-Fired Steam Generators 340-25-550 The pertinent federal rules are 40 CFR 60.40 to 60.46, also known as Subpart D. The following emission standards, summarizing the federal standards set forth in Subpart D, apply to each fossil fuel-fired and to each combination wood-residue fossil-fuel fired steam generating unit of more than 73 megawatts (250 million BTU/hr) heat input:

- (1) Standards for Particulate Matter. No owner or operator subject to the provision of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which:
 - (a) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb. per million BTU) derived from fossil fuel or fossil fuel and wood residue;
 - (b) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.
- (2) Standards for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
 - (a) 340 nanograms per joule heat input (0.80 lb. per million BTU) derived from liquid fossil fuel or liquid fossil fuel and wood residue;
 - (b) 520 nanograms per joule heat input (1.2 lb. per million BTU) derived from solid fossil fuel or solid fossil fuel and wood residue;
 - (c) When different fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: 50, =

 $\frac{y(340) + z(520)}{y + z}$

where:

- (A) y is the percentage of total heat input derived from liquid fossil fuel; and
- (B) z is the percentage of total heat input derived from solid fossil fuel; and

- (C) SO₂ is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels and wood residue fired.
- (d) Compliance shall be based on the total heat input from all fossil burned, including gaseous fuels.
- (3) Standards for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:
 - (a) 86 nanograms per joule heat input (0.20 lb. per million BTU) derived from gaseous fossil fuel;
 - (b) 129 nanograms per joule heat input (0.30 lb. per million BTU) derived from [solid fossil fuel,]liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue;
 - (c) 300 nanograms per joule heat input (0.70 lb. per million BTU) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse);
 - (d) When different fossil fuels are burned simultaneously in any combination the applicable standard shall be determined by proration using the following formula:

 $PNO_x =$

w(260) + x(86) + y(130) = -1 + z(300)w + x + y + z

- (A) PNO_x is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels and wood residue fired; and
- (B) {B}w is the percentage of total heat input derived from lignite; and
- (C) {y}x is the percentage of total heat input derived from gaseous fossil fuel; and
- (D) y is the percentage of total heat input derived from liquid fossil fuel; and
- (E) z is the percentage of total heat input derived from solid fossil fuel (except lignite).
- (e) When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, section (3) of this rule does not apply;
- (f) This rule does not apply to Electric Utility Steam Generating Units for which construction is commenced after September 18, 1978. These units must comply with more stringent OAR 340-25-610.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(1); DEQ 17-1987, f. & ef. 8-24-87

Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

340-25-553 The pertinent federal rules are 40 CFR 60.40b to 60.49b, also known as Subpart bf. The following emission standards, summarizing the federal standard set forth in Subpart bf, apply to each steam generating unit of more than 29 MW (100 million BTU/hr) heat input capacity, which commenced construction, modification, or reconstruction after June 19, 1984:

- (1) Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which:
 - (a) Contain particulate matter in excess of 22 to 86 nanograms per joule (0.05 to 0.20 lb/million BTU) heat input from firing the fuels as specified in 40 CFR 60.43b;
 - (b) Exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (2) Standards for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides in excess of 43 to 340 nanograms per joule (0.10 to 0.80 lb/million BTU) heat input, as specified in the table in 40 CFR 60.44b(a).
- (3) Standards for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of the amounts specified in 40 CFR 60.42b:
 - (a) 10 to 50 percent of the potential sulfur dioxide emission rate;
 - (b) 520 nanograms per joule (1.2 lb/million BTU) of heat input;
 - (c) Amount determined according to the formula in 40 CF 60.42b.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468 A Hist.: DEQ 17-1987, f. & ef. 8-24-87; DEQ 24-1989, f. & cert. ef. 10-26-89

Standards of Performance for Incinerators

340-25-555 The pertinent federal rules are 40 CFR 60.50 to 60.54, also known as Subpart E. The following emission standards, summarizing the federal standards set forth in Subpart E, apply to each incinerator whose charging rate is more than 45.36 metric tons (50 tons) per day: Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere any gases which contain particulate matter in excess of 0.18 g/dscm (0.080 gr/dscf) corrected to 12 percent CO2.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(3)

Standards of Performance for Portland Cement Plants

340-25-560 The pertinent federal rules are 40 CFR 60.60 to 60.65, also known as Subpart F. The following emission standards, summarizing the federal standards set forth in Subpart F, shall apply to each Portland cement plant:

- (1) Standards for Particulate Matter from Kiln. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any kiln any gases which:
 - (a) Contain particulate matter in excess of 0.15 Kg. per metric ton (0.30 lb. per ton) of feed (dry basis) to the kiln;
 - (b) Exhibit greater than 20 percent opacity.
- (2) Standards for Particulate Matter from Clinker Cooler. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any clinker cooler any gases which:
 - (a) Contain particulate matter in excess of 0.050 Kg. per metric ton (0.10 lb. per ton) of feed (dry basis) to the kiln;
 - (b) Exhibit 10 percent opacity or greater.
- (3) Standards for Particulate Matter for Other Facilities. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility other than the kiln and clinker cooler any gases which exhibit 10 percent opacity or greater.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(3); DEQ 24-1989, f. &cert. ef. 10-26-89

Standards of Performance for Nitric Acid Plants

340-25-565 The pertinent federal rules are 40 CFR 60.70 to 60.74, also known as Subpart G. The following emission standards summarizing the federal standards set forth in Subpart G, apply to each nitric acid plant which produces "weak nitric acid", which is 30 to 70 percent in strength by either the pressure or atmospheric pressure process: Standards for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which:

- (1) Contain nitrogen oxides, expressed as NO_2 in excess of 1.5 Kg. per metric ton of acid produced (3.0 lb. per ton), the production being expressed as 100 percent nitric acid.
- (2) Exhibit 10 percent opacity or greater.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468 Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(4)

Standards of Performance for Sulfuric Acid Plants

340-25-570 The pertinent federal rules are 40 CFR 60.80 to 60.85, also known as Subpart H. The following emission standards, summarizing the federal standards set forth in Subpart H, apply to each sulfuric acid production unit but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds:

- (1) Standards for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of 2.0 Kg. per metric ton of acid produced (4.0 lb. per ton), the production being expressed as 100 percent H₂SO₄.
- (2) Standards for Acid Mist. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which:

- (a) Contain acid mist expressed as H_2SO_4 , in excess of 0.075 Kg. per metric ton of acid produced (0.15 lb. per ton) the production being expressed as 100 percent H_2SO_4 ;
- (b) Exhibit 10 percent opacity or greater.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(5)

Standards of Performance for Hot Mix Asphalt Facilities

340-25-575 The pertinent federal rules are 40 CFR 60.90 to 60.93, also known as Subpart I. The following emission standards, summarizing the federal standards set forth in Subpart I, apply to each hot mix asphalt facility: Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

- (1) Contain particulate matter in excess of 90 mg/dscm (0.040 gr/dscf).
- (2) Exhibit 20 percent opacity or greater.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(6); DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for Petroleum Refineries

340-25-580 The pertinent federal rules are 40 CFR 60.100 to 60.106, also known as Subpart J. The following emission standards, summarizing the federal standards set forth in Subpart J, apply to the following affected facilities in petroleum refineries: Fluid catalytic cracking unit catalyst regenerators, Claus sulfur recovery plants exceeding 20 long tons per day, and fuel gas combustion devices:

- (1) Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any fluid catalytic cracking unit catalyst regenerator:
 - (a) Particulate matter in excess of 1.0 Kg/1000 Kg. (1.0 lb./1000 lb.) of coke burn-off in the catalyst regenerator;

- (b) Gases exhibiting 30 percent opacity or greater, except for 6.0 minutes in any one hour;
- (c) In those instances in which auxiliary liquid or solid fossil fuels are burned in the fluid catalytic cracking unit incinerator-waste boiler, particulate matter in excess of that permitted by subsection (1)(a) of this rule may be emitted to the atmosphere, except that the incremental rate of particulate emissions shall not exceed 43.0 g/MJ (0.10 lb./million BTU) of heat input attributable to such liquid or solid fuel.
- (2) Standard [s] for Carbon Monoxide. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from the fluid catalytic cracking unit catalyst regenerator any gases which contain carbon monoxide in excess of 0.050 percent by volume.
- (3) Standards for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall burn in any fuel gas combustion device any fuel gas which contains H₂S in excess of 230 mg/dscm (0.10 gr/dscf), except as provided in this section. The combustion of process upset gas in a flare, or the combustion in a flare of process gas or fuel gas which is released to the flare as a result of relief valve leakage, is exempt from this section. The owner or operator may elect to treat the gases resulting from the combustion of fuel gas in a manner which limits the release of SO₂ to the atmosphere if it is [shown to the satisfaction of]demonstrated through a submission to, and approved by the Department that this prevents SO₂ emissions as effectively as compliance with the requirements of this section.
- (4) No owner or operator subject to the provisions of this rule shall discharge or cause the discharge of any gases into the atmosphere from any Claus sulfur recovery plant containing in excess of:
 - (a) 0.025 percent by volume of sulfur dioxide at zero percent oxygen on a dry basis if emissions are controlled by an oxidation control system, or a reduction control system followed by incineration; or
 - (b) 0.030 percent by volume of reduced sulfur compounds and 0.0010 percent by volume of hydrogen sulfide calculated as sulfur dioxide at zero percent oxygen on a dry basis if emissions are controlled by a reduction control system not followed by incineration.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(7)

Standards of Performance for Storage Vessels for Petroleum Liquids

340-25-585 The pertinent federal rules are 40 CFR 60.110 to 60.115a, also known as Subparts K and Ka. The following requirements, summarizing the federal requirements set forth in Subparts K and Ka, apply to each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons). These requirements do not apply to storage vessels for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Number 2 through Number 6 fuel oils as specified in ASTM D-396-69, gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-71, or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM D-975-68: Standard for Hydrocarbons. The owner or operator of any storage vessel to which this section applies shall store petroleum liquids as follows:

- (1) If the true vapor pressure of the petroleum liquid as stored is equal to or greater than 78 mm Hg (1.5 psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or an equivalent.
- (2) If the true vapor pressure of the petroleum liquid as stored is greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.
- (3) If construction is commenced after May 18, 1978, vessels in section (1) of this rule shall have double seals if external floating roof vessels, and comply with 40 CFR 60.110a to 115a.
- (4) If construction is commenced after May 18, 1978, vapor recovery systems allowed by sections (1) and (3) of this rule, and required by section (2) of this rule shall be designed so as to reduce Volatile Organic Compounds emissions to the atmosphere by at least 95 percent by weight.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-35-535(8)

Standards of Performance for Volatile Organic Liquid Storage Vessels

340-25-587 The pertinent federal rules at are 40 CFR 60.110b to 60.116b, also known as Subpart Kb. The following requirements, summarizing the federal requirements set forth in Subpart Kb, apply to each storage vessel for volatile organic liquids (VOL's) which

has a storage capacity greater than or equal to 40 cubic meters (m³), for which construction, reconstruction, or modification is commenced after July 23, 1984. "Volatile organic liquid" (VOL) means any organic liquid which can emit volatile organic compounds into the atmosphere. These compounds are identified in EPA statements on ozone abatement policy for SIP revisions (42 FR 35314, 44 FR 32042, 45 FR 32424, and 45 FR 48941). Each storage vessel with a design capacity greater than or equal to 40 m³ and less than 75 m³ shall have readily accessible records showing the dimension of the vessel and an analysis showing the capacity of the vessel. The owner or operator of any storage vessel to which this section applies shall store a VOL as follows:

- If the storage capacity is greater than or equal to 151 m³ and the true vapor pressure of the VOL as stored is equal to or greater than 5.2 kPa but less than 76.6 kPa, or the storage capacity is greater than or equal to 75 m³ but less than 151 m³ and the true vapor pressure is equal to or greater than 27.6 kPa but less than 76.6 kPa, the storage vessel shall be equipped with either a fixed-internal roof combination, an external floating roof, closed vent system and control devise, or an equivalent.
- (2) If the storage capacity is greater than or equal to 75 m³ and the true vapor pressure of the VOL as stored is greater than or equal to 76.6 kPa, the storage vessel shall be equipped with either a closed vent system and control devise, or an equivalent.

Stat. Auth.: 468 & 468A Hist.: DEQ 24-1989, f. & cert. ef. 10-26-89

Standards of Performance for Secondary Lead Smelters

340-25-590 The pertinent federal rules are 40 CFR 60.120 to 60.123, also known as Subpart L. The following emission standards, summarizing the federal standards set forth in Subpart L, apply to the following facilities subject to this rule in secondary lead smelters: Pot furnaces of more than 250 Kg. (550 lbs.) charging capacity, blast (cupola) furnaces, and reverberatory furnaces: Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which:

- (1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).
- (2) Exhibit 20 percent opacity or greater.
- (3) No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(9)

Standards of Performance for Secondary Brass and Bronze Production Plants

340-25-595 The pertinent federal rules are 40 CFR 60.130 to 60.133, also known as Subpart M. The following emission standards, summarizing the federal standards set forth in Subpart M, apply to the following affected facilities in secondary brass or bronze production plants subject to this rule: Reverberatory and electric furnaces of 1000 Kg. (2205 lbs.) or greater production capacity and blast (cupola) furnaces of 250 Kg/hr. (550 lbs./hr.) or greater production capacity; Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from a reverberatory furnace any gases which:

- (1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).
- (2) Exhibit 20 percent opacity or greater.
- (3) No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any blast (cupola) or electric furnace any gases which exhibit 10 percent opacity or greater.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(10); DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973

340-25-600 The pertinent federal rules are 40 CFR 60.140 to 60.144, also known as Subpart N. The following emission standards, summarizing the federal standards set forth in Subpart N, apply to each basic oxygen process furnace in iron and steel plants subject to this rule if the furnace was modified or constructed after June 11, 1973: Standards for Particulate Matter. No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any affected facility any gases which:

- (1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).
- (2) Exit from a control device and exhibit 10 percent opacity or greater, except that an opacity of greater than 10 percent but less than 20 percent may occur once per steel production cycle.
- (3) Contain particulate matter in excess of 68 mg/dscm (0.030 gr/dscf) as measured for the primary oxygen blow, if constructed, modified, or reconstructed after January 20, 1983.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(11); DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983

340-25-602 The pertinent federal rules are 40 CFR 60.140a to 60.145a, also known as Subpart Na. The following emission standards, summarizing the federal standards set forth in Subpart Na, apply to top-blown Basic Oxygen Process Facilities and hot metal transfer stations and skimming stations used with bottom-blown or top-blown Basic Oxygen Process Facilities, that commenced construction, modification, or reconstruction after January 20, 1983, in any iron and steel plant:

Standard for Particulate Matter. No owner or operator shall discharge or cause the discharge into the atmosphere any secondary emissions that:

- (1) Exit from the Basic Oxygen Process Facility (BOPF) shop roof monitor (or other building openings) and exhibit greater than {20}10 percent opacity during the steel production cycle of any top-blown BOPF or during hot metal transfer or skimming operations for any bottom-blown BOPF; except that an opacity greater than 10 percent but less than 20 percent may occur once per steel production cycle.
- (2) Exit from a control device used solely for the collection of secondary emissions from a top-blown BOPF or from hot metal transfer or skimming for a top-blown or a bottom-blown BOPF and contain particulate matter in excess of 23 mg/dscm (0.010 gr/dscf).
- (3) Exit from a control device used solely for the collection of secondary emissions from a top-blown BOPF or from hot metal transfer or skimming for a top-blown or a bottom-blown BOPF and exhibit more than 5 percent opacity.

- (4) A fume suppression system used to control secondary emissions from an affected facility is not subject to paragraphs (b) and (c) of this standard.
- (5) A control device used to collect both primary and secondary emissions from a BOPF is not subject to paragraphs (b) and (c) of this standard.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for Sewage Treatment Plants

340-25-605 The pertinent federal rules are 40 CFR 60.150 to 60.154, also known as Subpart O. The following emission standards, summarizing the federal standards set forth in Subpart O, apply to each incinerator which burns the sludge produced by municipal sewage treatment facilities: Standards for Particulate Matter. No owner or operator of any sewage sludge incinerator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere of:

- (1) Particulate matter at a rate in excess of 0.65 g/Kg. (1.30 lb./ton) dry sludge input.
- (2) Any gases which exhibit 20 percent opacity or greater.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; DEQ 16-1981, f. & ef. 5-6-81; Renumbered from 340-25-535(12)

Standards of Performance for Electric Utility Steam Generating Units

- 340-25-610 The pertinent federal rules are 40 CFR 60.40a to 60.49a, also known as Subpart Da. The following emission standards, summarizing the federal standards set forth in Subpart Da, apply to each electric utility steam generating unit that is capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel (either alone or in combination with any other fuel) and for which construction commenced after September 18, 1978:
- (1) Standards for Particulate Matter. No owner or operator subject to the provision of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of:

- (a) 13 ng/J (0.030 lb/million Btu) heat input derived from the combustion of solid, liquid, or gaseous fuel;
- (b) 1.00 percent of the potential combustion concentration when combusting solid fuel;
- (c) 30 percent of the potential combustion concentration when combusting liquid fuel; and
- (d) An opacity of 20 percent, except for one 6-minute period per hour of not more than 27 percent opacity.
- (2) Standards for Sulfur Dioxide. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
 - (a) 520 ng/J (1.20 lb. per million Btu) heat input for solid fuel or solid-derived fuel and 10 percent of the potential combustion concentration (90 percent reduction); or
 - (b) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 260 ng/J (0.60 lb. per million Btu) heat input for solid fuel or solid-derived fuel;
 - (c) 340 ng/J (0.80 lb. per million Btu) heat input from liquid or gaseous fuels and 10 percent of the potential combustion concentration (90 percent reduction); or
 - (d) When emissions are less than 80 ng/J (0.20 lb. per million Btu) heat input from liquid or gaseous fuels, 100 percent of the potential combustion concentration (zero percent reduction);
 - (e) 520 ng/J (1.20 lb. per million Btu) heat input from any affected facility which combusts 100 percent anthracite or is classified as a resource recovery facility.
- (3) Standards for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides in excess of:
 - (a) 86 ng/J heat input for gaseous fuels except for coal-derived gaseous fuels;
 - (b) 130 ng/J heat input for liquid fuels except for coal-derived or shale oil;
 - (c) 210 ng/J heat input for coal-derived gaseous, liquid, and solid fuels; for shale oil; or for subbituminous coal;
 - (d) 260 ng/J heat input from bituminous and anthracite coal; from lignite except as noted in subsection (e) of this section; from all other solid fossil fuels not specified elsewhere in this rule;
 - (e) 340 ng/J heat input from any solid fuel containing more than 25% by weight of lignite mined in the Dakotas or Montana, and is combusted in a slag tap furnace;
 - (f) No limit for any solid fuel containing more than 25% by weight of coal refuse.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81

Standards of Performance for Coal Preparation Plants

340-25-615 The pertinent federal rules are 40 CFR 60.250 to 60.254, also known as Subpart Y. These standards, summarizing the federal standards set forth in Subpart Y, for Particulate Matter and for Visible Emissions apply only to coal preparation plants which process more than 200 tons of coal per day. Standards for Particulate Matter: [An]No owner or operator shall [not]cause to be discharged into the atmosphere from a:

(1) {Any t}Thermal dryer, gases which:

(a) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf);

(b) Exhibit 20 percent opacity or greater.

- (2) {Any p}Pneumatic coal cleaning equipment, gases which:
 - (a) Contain particulate matter in excess of 0.040 g/dscm (0.018 gr/dscf);
 - (b) Exhibit 10 percent opacity or greater.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81

Standards of Performance for Ferroalloy Production Facilities

340-25-620 The pertinent federal rules are 40 CFR 60.260 to 60.266, also known as Subpart Z. These standards, summarizing the federal standards set forth in Subpart Z, for Ferroalloy plants are applicable only to electric submerged arc furnaces and to dust handling equipment, built or modified after October 21, 1974:

- (1) Standard for Particulate Matter and Visible Emissions from Electric Arc Furnaces. No owner or operator shall cause to be discharged into the atmosphere from any electric submerged arc furnace any gases which:
 - (a) Exit from a control device and contain particulate matter in excess of 0.45 Kg/MW-hr (0.99 lb/MW-hr) while silicon metal, ferrosilicon, calcium silicon, or silicomanganese zirconium is being produced;

- (b) Exit from a control device and contain particulate matter in excess of 0.23 Kg/MW-hr (0.51 lb/MW-hr) while high-carbon ferrochrome, charge chrome, standard ferromanganese, silico-manganese, calcium carbide, ferrochrome silicon, ferromanganese silicon, or silvery iron is being produced;
- (c) Exit from a control device and exhibit 15 percent opacity or greater;
- (d) Escape the capture system at the tapping station and are visible for more than 40 percent of each tapping period, except a blowing tap is exempted.
- (2) Standard for Visible Emissions From Dust Handling Equipment.
 No owner or operator shall cause to be discharged into the atmosphere from any dust-handling equipment any gases which exhibit 10 percent opacity or greater.
- (3) Standard for Carbon Monoxide. No owner or operator shall cause to be discharged into the atmosphere from any electric submerged arc furnace any gases which contain, on a dry basis, 20 or greater volume percent of carbon monoxide.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81

Standards of Performance for Steel Plants: Electric Arc Furnaces 340-25-625 The pertinent federal rules are 40 CFR 60.270 to 60.276a, also known as Subpart AA and AAa. These standards, summarizing the federal standards set forth in Subpart AA and AAa, for Steel Plants are applicable only to electric arc furnaces, argon-oxygen decarburization vessels, and dust-handling equipment, built or modified after October 21, 1974:

- (1) No owner or operator shall cause to be discharged into the atmosphere from an electric arc furnace any gases which:
 - (a) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);
 - (b) Exit from a control device and exhibit 3.0 percent opacity or greater;
 - (c) Exit from a shop and, due solely to operations of any electric arc furnaces or argon-oxygen decarburization vessels, exhibit 6 percent or greater shop opacity, except that if constructed before August 17, 1983 then shop opacity must be only less than 20 percent during charging periods and only less than 40 percent during tapping periods.

(2) Standard for Visible Emissions From Dust Handling Equipment.
No owner or operator shall cause to be discharged into the atmosphere from dust-handling equipment any gases which exhibit 10 percent opacity or greater.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81; DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for Kraft Pulp Mills

340-25-630 The pertinent federal rules are 40 CFR 60.280 to 60.286, also known as Subpart BB. The standards for kraft pulp mills' facilities, summarizing the federal standards set forth in Subpart BB, are applicable only to a recovery furnace, smelt dissolving tank, lime kiln, digester system, brown stock washer system, multiple-effect evaporator system, and condensate stripper system built or modified after September 24, 1976:

- (1) <u>Standard for Particulate Matter:</u> No owner or operator shall cause to be discharged into the atmosphere particulate matter from:
 - (a) {From-a}Any recovery furnace:
 - (A) In excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen; or
 - (B) Exhibit 35 percent opacity or greater.
 - (b) {From a}Any smelt dissolving tank in excess of 0.10 g/Kg black liquor solids, dry weight (0.20 lb/ton);
 - (c) [From a]Any lime kiln:
 - (A) In excess of 0.15 g/dscm (0.067 gr/dscf) corrected to 10 percent oxygen, when gaseous fossil fuel is burned;
 - (B) In excess of 0.30 g/dscm (0.13 gr/dscf) corrected to 10 percent oxygen, when liquid fossil fuel is burned.
- (2) Standard for Total Reduced Sulfur: No owner or operator shall cause to be discharged in the atmosphere Total Reduced Sulfur compounds, (TRS), which are hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide from:
 - (a) {From a}Any digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system in excess of 5.0 ppm by volume on a dry basis, corrected to the actual oxygen content of the untreated gas stream;
 - (b) [From a]Any straight kraft recovery furnace in excess of 5.0 ppm by volume on a dry basis corrected to 8 percent oxygen;

- (c) {From a}Any cross recovery furnace in excess of 25 ppm by volume on a dry basis, corrected to 8.0 percent oxygen;
- (d) [From a]Any smelt dissolving tank in excess of 0.016 g/Kg black liquor solids, dry weight (0.033 lb/ton);
- (e) [From a]Any lime kiln in excess of 8.0 ppm by volume on a dry basis, corrected to 10 percent oxygen.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 16-1981, f. & ef. 5-6-81; DEQ 15-1985, f. & ef. 10-21-85; DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for Glass Manufacturing Plants

340-25-635 The pertinent federal rules are 40 CFR 60.290 to 60.296, also known as Subpart CC. The following particulate matter standard, summarizing the federal standards set forth in Subpart CC, applies to each glass melting furnace which commenced construction or modification after June 15, 1979, at glass manufacturing plants but does not apply to hand glass melting furnaces, furnaces with a design capacity of less than 4,550 kilograms of glass per day, or to all-electric melters. Standard for Particulate Matter: No owner or operator of a glass melting furnace subject to this rule shall cause to be discharged into the atmosphere from a glass melting furnace particulate matter exceeding the rates specified in 40 CFR 60.292.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81

Standards of Performance for Grain Elevators

340-25-640 The pertinent federal rules are 40 CFR 60.300 to 60.304, also known as Subpart DD. The following emission standards, summarizing the federal standards set forth in Subpart DD, apply to any grain terminal elevator (over 2.5 million bushel storage capacity) or any grain storage elevator (over 1 million bushel storage capacity) which commenced construction, modification, or reconstruction after August 3, 1978. Standards for Particulate Matter:

- (1) On and after the 60th day of achieving the maximum production rate, but no later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any gases or fugitive dusts which exhibit opacity greater than:
 - (a) Zero percent opacity from any column dryer with column plate perforation exceeding 2.4 mm (0.094 inch) diameter;
 - (b) Zero percent opacity from any rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh;
 - (c) 5.0 percent opacity from any individual truck unloading station, railcar unloading station, or railcar loading station;
 - (d) Zero percent opacity from any grain handling operation;
 - (e) 10.0 percent opacity from any truck loading station;
 - (f) Any barge or ship loading station which exhibits greater than 20 percent opacity.
- (2) After initial startup, no owner or operator shall cause to be discharged into the atmosphere from any affected facility, except a grain dryer, any process emission which:
 - (a) Contains particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf);
 - (b) Exhibits greater than zero percent opacity.
- (3) The owner or operator of any barge or ship unloading station shall operate as follows:
 - (a) The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper;
 - (b) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³/bu);
 - (c) Rather than meet the requirements of subsections (a) and (b) of this section the owner or operator may use other methods of emission control if it is demonstrated to the Department's satisfaction that they would reduce emissions of particulate matter to the same level or less.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81

Standards of Performance for Metal Furniture Surface Coating 340-25-642

- (1) The pertinent federal rules are 40 CFR 60.310 to 60.316, also known as Subpart EE. The following emission standard, summarizing the federal standard set forth in Subpart EE, applies to metal furniture surface coating operations in which organic coatings are applied which commenced construction, modification, or reconstruction after November 28, 1980, that use 3,842 liters of coating (as applied) or more per year.
- (2) Standard for Volatile Organic Compounds: No owner or operator shall cause to be discharged into the atmosphere Volatile Organic Compounds in excess of 0.90 kilograms per liter of coating solids applied.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 17-1983, f. & ef. 10-19-83; DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for Gas Turbines

340-25-645 The pertinent federal rules are 40 CFR 60.330 to 60.335, also known as Subpart GG. The following emission standards, summarizing the federal standards set forth in Subpart GG, apply to any stationary gas turbine with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (1,000 HP) for which construction, modification, or reconstruction was commenced after October 3, 1977:

- (1) Standard for Nitrogen Oxides. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any stationary gas turbine, nitrogen oxides in excess of the rates specified in 40 CFR 60.332.
- (2) Standards for Sulfur Dioxide. Owners or operators shall:
 - (a) Not cause to be discharged into the atmosphere from any gas turbine any gases which contain sulfur dioxide in excess of 150 ppm by volume at 15 percent oxygen, on a dry basis; or
 - (b) Not burn in any gas turbine any fuel which contains sulfur in excess of 0.80 percent by weight.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1981, f. & ef. 5-6-81; DEQ 22-1982, f. & ef. 10-21-82; DEQ 24-1989, f. & cert. ef. 10-26-89

Standards of Performance for Lime Manufacturing Plants

340-25-647 The pertinent federal rules are 40 CFR 60.340 to 60.344, also known as Subpart HH. The following standards set forth in Subpart HH apply to each rotary lime kiln used in the manufacture of lime, except those at kraft pulp mills, for which construction or modification of any facility affected by the this rule commenced after May 3, 1977. Standards for Particulate: No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any rotary lime kiln any gases which:

(1) Contain particulate matter in excess of 0.30 kilogram per

megagram (0.60 lb/ton) of stone feed.

(2) Exhibit greater than 15 percent opacity when exiting from a dry emission control device.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for Lead-Acid Battery Manufacturing Plants

340-25-650 The pertinent federal rules are 40 CFR 60.370 to 60.374, also known as Subpart KK. The following standards set forth in Subpart KK apply to any lead-acid battery manufacturing plant that produces or has the design capacity to produce in one day (24 hours) batteries containing an amount of lead equal to or greater than 5.9 Mg (6.5 tons), for which construction or modification of any facility affected by the this rule commenced after January 14, 1980. Standards for Lead: No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere any gases from:

(1) [From a]Any grid casting facility [any gases] that contain lead in excess of 0.40 milligram of lead per dry standard

cubic meter of exhaust (0.000176 gr/dscf).

(2) [From a]Any paste mixing facility [any gases] that contain in excess of 1.00 milligram of lead per dry standard cubic meter of exhaust (0.00044 gr/dscf).

(3) {From a]Any three-process operation facility {any gases }that contain in excess of 1.00 milligram of lead per dry standard

cubic meter of exhaust (0.00044 gr/dscf).

(4) [From a]Any lead oxide manufacturing facility [any-gases] that contain in excess of 5.0 milligrams of lead per kilogram of lead feed (0.010 lb/ton).

(5) {From a}Any lead reclamation facility {any gases }that contain in excess of 4.50 milligrams of lead per dry standard

cubic meter of exhaust (0.00198 gr/dscf).

- (6) [From a]Any other lead-emitting operation [any gases]that contain in excess of 1.00 milligram per dry standard cubic meter of exhaust (0.00044 gr/dscf).
- [From a]Any affected facility other than a lead reclamation (7) facility [any gases] with greater than 0 percent opacity. [From a] Any lead reclamation facility [any gases] with
- (8) greater than 5 percent opacity.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 22-1982, f. & ef. 10-21-82

340-25-652 The pertinent federal rules are 40 CFR 60.380 to 60.386 also known as Subpart LL. The following emission standards, summarizing the federal standards set forth in Subpart LL, apply to the following affected facilities in metallic mineral processing plants; each crusher and screen in open pit mines; at the mill or concentrator, each crusher, screen, bucket elevator, conveyor belt

Standards of Performance for Metallic Mineral Processing Plants

transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station. facilities affected are only if construction, modification, commenced after August 24, 1982, and if they are not located in underground mines.

Standards for Particulate Matter: No owner or operator shall cause to be discharged into the atmosphere from any affected facility:

- (1) Any stack emissions that contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.02 gr/dscf);
- (2) Any stack emissions that exhibit greater than 7 percent opacity:
- (3) Any process fugitive emissions that exhibit greater than 10 percent opacity.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1984, f. & ef. 8-21-84

Standards of Performance for Phosphate Rock Plants

340-25-655 The pertinent federal rules are 40 CFR 60.400 to 60.404 also known as Subpart NN. The following standards set forth in Subpart NN apply to phosphate rock plants which have maximum plant production capacity greater than 3.6 megagrams per hour (4.0

tons per hour), for which construction or modification of the facility affected by this rule commenced after September 21, 1979. Standard for Particulate: No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere:

(1) From any phosphate rock dryer any gases which:

(a) Contain particulate matter in excess of 0.030 kilogram per megagram of phosphate rock feed (0.060 lb/ton); or

(b) Exhibit greater than 10 percent opacity.

(2) From any phosphate rock calciner processing unbeneficiated rock or blends of beneficiated and unbeneficiated rock, any gases which:

(a) Contains particulate matter in excess of 0.12 kilogram per megagram of phosphate rock feed (0.23 lb/ton); or

(b) Exhibit greater than 10 percent opacity.

(3) From any phosphate rock calciner processing beneficiated rock any gases which:

(a) Contain particulate matter in excess of 0.055 kilogram per megagram of phosphate rock feed (0.11 lb/ton); or

(b) Exhibit greater than 10 percent opacity.

(4) From any phosphate rock grinder any gases which:

(a) Contain particulate matter in excess of 00.006 kilogram per megagram of phosphate rock feed (0.012 lb/ton); or

(b) Exhibit greater than zero percent opacity.

(5) From any ground phosphate rock handling and storage system any gases which exhibit greater than zero percent opacity.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 22-1982, f. & ef. 10-21-82

Standards of Performance for Publication Rotogravure Printing 340-25-660

- (1) The pertinent federal rules are 40 CFR 60.430 to 60.435, also known as Subpart QQ. The following emission standard, summarizing the federal standard set forth in Subpart QQ, applies to publication rotogravure printing presses, but not proof presses, which commenced construction, modification, or reconstruction after October 28, 1980.
- (2) Standard for Volatile Organic Compounds: No owner or operator shall cause to be discharged into the atmosphere Volatile Organic Compounds in excess of 16 per cent of the total mass of Volatile Organic Compounds solvent and water used at that facility during any one performance averaging period.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 17-1983, f. & ef. 10-19-83

Standards of Performance for Tape and Label Surface Coating 340-25-662

- (1) The pertinent federal rules are 40 CFR 60.440 to 60.447, also known as Subpart RR. The following emission standard, summarizing the federal standard set forth in Subpart RR, applies to each coating line used in the manufacture of pressure sensitive tape and label materials which commenced construction, modification, or reconstruction after December 30, 1980.
- (2) Standard for Volatile Organic Compounds: no owner or operator shall cause to be discharged into the atmosphere Volatile Organic Compounds in excess of 0.20 kilograms per kilogram of coating solids applied, averaged over a calendar month.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1984, f. & ef. 8-21-84

Standards of Performance for Large Appliance Surface Coating 340-25-665

- (1) The pertinent federal rules are 40 CFR 60.450 to 60.456, also known as Subpart SS. The following emission standard, summarizing the federal standard set forth in Subpart SS, applies to large appliance surface coating lines which commenced construction, modification, or reconstruction after December 24, 1980.
- (2) Standard for Volatile Organic Compounds: No owner or operator shall cause to be discharged into the atmosphere Volatile Organic Compounds in excess of 0.90 kilograms per liter of coating solids applied.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 17-1983, f. & ef. 10-19-83

Standards of Performance for Metal Coil Surface Coating

340-25-670 The pertinent federal rules are 40 CFR 60.460 to 60.466, also known as Subpart TT. The following emission standard, summarizing the federal standard set forth in Subpart TT, applies to each prime coating operation, and/or to each finish coating operation, at a metal coil surface coating facility, which commenced construction, modification, or reconstruction after January 5, 1981.

Standards for Volatile Organic Compounds: No owner or operator shall cause to be discharged into the atmosphere more than:

- (1) 0.28 kilogram VOC per liter (kg VOC/1) of coating solids applied for each calendar month for each affected facility that does not use an emission control device(s).
- (2) 0.14 kg VOC/1 of coating solids applied for each calendar month for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency.
- (3) 10 percent of the VOC's applied for each calendar month (90 percent emission reduction) for each affected facility that continuously uses an emission control device(s) operated at the most recently demonstrated overall efficiency.
- (4) A value between 0.14 (or a 90 percent emissions reduction) and 0.28 kg VOC/1 of coating solids applied for each calendar month for each affected facility that intermittently uses an emission control device operated at the most recently demonstrated overall efficiency.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 17-1983, f. & ef. 10-19-83

Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture

340-25-675 The pertinent federal rules are 40 CFR 60.470 to 60.474, also known as Subpart UU. The following emission standards, summarizing the federal standards set forth in Subpart UU, applies to each saturator and each mineral handling and storage facility at asphalt roofing plants; and each asphalt storage tank and each blowing still at asphalt processing plants, petroleum refineries, and asphalt roofing plants. The standards apply to facilities commenced after November 18, 1980.

- (1) Standards for Particulate Matter: No owner or operator shall cause to be discharged into the atmosphere from any saturator:
 - (a) Particulate matter in excess of:

- (A) 0.04 kilograms of particulate per megagram of asphalt shingle or mineral-surfaced roll roofing produced; or
- (B) 0.4 kilograms per megagram of saturated felt or smooth-surfaced roll roofing produced.
- (b) Exhaust gases with opacity greater than 20 percent; and
- (c) Any visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes.
- (2) No owner or operator shall cause to be discharged into the atmosphere from any blowing still:
 - (a) Particulate matter in excess of 0.67 kilograms of particulate per megagram of asphalt charged to the still when a catalyst is added to the still; and
 - (b) Particulate matter in excess of 0.71 kilograms of particulate per megagram of asphalt charged to the still when a catalyst is added to the still and when No. 6 fuel oil is fired in the afterburner; and
 - (c) Particulate matter in excess of 0.60 kilograms of particulate per megagram of asphalt charged to the still during blowing without a catalyst; and
 - (d) Particulate matter in excess of 0.64 kilograms of particulate per megagram of asphalt charged to the still during blowing without a catalyst and when No. 6 fuel oil is fired in the afterburner; and
 - (e) Exhaust gases with an opacity greater than 0 percent unless an opacity limit for the blowing still when fuel oil is used to fire the afterburner has been established by the Department.
- (3) No owner or operator shall cause to be discharged into the atmosphere from any asphalt storage tank exhaust gases with opacity greater than 0 percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be bypassed during this 15-minute period.
- (4) No owner or operator shall cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than 1 percent.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 17-1983, f. & ef. 10-19-83

Standards of Performance for VOC Leaks from Synthetic Organic Chemical Manufacturing

340-25-680 The pertinent federal rules are 40 CFR 60.480 to 60.489, also known as Subpart VV. The emissions standards, in the federal standards set forth in Subpart VV, apply to VOC leaks from the following equipment which commenced construction or modification after January 5, 1981:

- (1) The affected facilities are those in the Synthetic Organic Chemicals Manufacturing Industry with a design capacity of 1000 Mg/yr (1102 tons/yr) or greater:
 - (a) Pumps in light liquid service;
 - (b) Compressors;
 - (c) Pressure relief devices in gas/vapor service;
 - (d) Sampling connection systems;
 - (e) Open-ended valves or lines;
 - (f): Valves;
 - (g) Closed vent systems and control devices.
- (2) The detailed standards are found in { seven pages of } federal rules, along with the record keeping and reporting requirements.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1984, f. & ef. 8-21-84

Standards of Performance for Beverage Can Surface Coating

340-25-685 The pertinent federal rules are 40 CFR 60.490 to 60.496, also known as Subpart WW. The following emission standard, summarizing the federal standard set forth in Subpart WW, applies to beverage can surface coating lines which commenced construction, modification, or reconstruction after November 26, 1980.

Standard for Volatile Organic Compounds: No owner or operator shall cause to be discharged into the atmosphere Volatile Organic Compounds (VOC) that exceed the following volume-weighted calendar month average emissions:

- (1) 0.29 kilograms of VOC per liter of coating solids from each two piece can exterior base coating operation, except clear base coat.
- (2) 0.46 kilograms of VOC per liter of coating solids from each two-piece can clear base coating operation and from each overvarnish coating operation.
- (3) 0.89 kilograms of VOC per liter of coating solids from each two-piece can inside spray coating operation.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1984, f. & ef. 8-21-84

Standards of Performance for Bulk Gasoline Terminals

340-25-690 The pertinent federal rules are 40 CFR 60.500 to 60.506, also known as Subpart XX. The following emission standard, summarizing the federal standard set forth in Subpart XX, applies to each gasoline tank truck loading rack at a Bulk Gasoline Terminal, which commenced construction, modification, or reconstruction after August 18, 1983.

Standards for {VOC} Volatile Organic Compounds:

- (1) The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in section (2) of this rule.
- (2) For each affected facility equipped with an existing vapor processing system, the emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 80 milligrams of total organic compounds per liter of gasoline loaded.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 16-1984, f. & ef. 8-21-84

345-25-700 [Renumbered to 340-25-800]

Standards of Performance for Flexible Vinyl and Urethane Coating and Printing

340-25-701 The pertinent federal rules are 40 CFR 60.580 to 60.585, also known as Subpart FFF. The following emission standards set forth in Subpart FFF apply to each rotogravure printing line used to print or coat flexible vinyl or urethane products, for which construction, modification, or reconstruction was commenced after January 18, 1983. Standards for Volatile Organic Compounds (VOC); Each owner or operator subject to this subpart shall either:

- (1) Use inks with a weighted average VOC content of less than 1.0 kilogram VOC per kilogram ink solids.
- (2) Reduce VOC emissions to the atmosphere by 85 percent.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for VOC Leaks in Petroleum Refineries 340-25-702 The pertinent federal rules are 40 CFR 60.590 to 60.593, also known as Subpart GGG. The following emission standards set forth in Subpart GGG apply to volatile Organic Compound (VOC) leaks from petroleum refineries, modified or constructed after January 4, 1983:

- (1) VOC leaks from the following components:
 - (a) Pumps;
 - (b) Compressors;
 - (c) Pressure relief devices;
 - (d) Sampling connection systems;
 - (e) Open-ended valves or lines;
 - (f) Valves.
- The detailed standards, recordkeeping and reporting requirements are found in seven pages of federal rules (see) 40 CFR 60.592, which references 60.482-1 to 60.482-10) (7) along with the recordkeeping and reporting requirements).

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for Synthetic Fiber Plants

340-25-704 The pertinent federal rules are 40 CFR 60.600 to 60.604, also known as Subpart HHH. The following emission standards set forth in Subpart HHH apply to each solvent-spun synthetic fiber process that produces more than 500 megagrams of fiber per year, that commenced construction or reconstruction after November 23, 1982. Standards for Volatile Organic Compounds (VOC): No owner or operator shall cause the discharge into the atmosphere from any process, VOC in excess of:

- (1) 10 kilograms of VOC per megagram of solvent fed to the spinning solution preparation system or precipitation bath for processes producing acrylic fibers, or producing both acrylic and non-acrylic fiber types.
- (2) 17 kilograms of VOC per megagram of solvent feed if producing only non-acrylic fiber types.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1985, f. & ef. 10-21-85

340-25-705 [Renumbered to 340-25-805]

Standards of Performance for Petroleum Dry Cleaners

340-25-706 The pertinent federal rules are 40 CFR 60.620 to 60.625, also known as Subpart JJJ. The following work practice standards set forth in Subpart JJJ apply to petroleum dry cleaning plants with a total dryer capacity equal to or greater than 38 kilograms (84 pounds), for which construction or modification was commenced after December 14, 1982. Standards for Volatile Organic Compounds:

- (1) Each dryer shall be a solvent recovery dryer.
- (2) Each filter shall be a cartridge filter, which shall be drained in its sealed housing for at least 8 hours prior to its removal.
- (3) Dryers, washers, filters, stills, and settling tanks shall have a leak repair instruction posted on the unit and printed in the operating manual by the manufacturer.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for Leaks from Onshore Natural Gas Processing Plants

340-25-708 The pertinent federal rules are 40 CFR 60.630 to 60.636, also known as Subpart KKK. The emission standards set forth in Subpart KKK apply to each onshore natural gas processing plant that commenced construction, reconstruction, or modification after January 20, 1984. The detailed standards for VOC leaks from these plants are set forth in 40 CFR 60.632 through 60.634[, three pages of detailed rules].

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for SO_2 from Onshore Natural Gas Processing Plants

340-25-710 The pertinent federal rules are 40 CFR 60.640 to 60.648, also known as Subpart LLL. The emission standards set forth in Subpart LLL, paragraph 60.642 and Tables 1 and 2 attached thereto, apply to each onshore natural gas processing plant that commenced construction, or modification after January 20, 1984, which emits 2 long tons per day or more of hydrogen sulfide (expressed as sulfur) in the acid gas.

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 19-1986, f. & ef. 11-7-86

Standards of Performance for Fiberglass Insulation Manufacturing 340-25-715 The pertinent federal rules are 40 CFR 60.680 to 60.685, also known as Subpart PPP. The following emission standard set forth in Subpart PPP applies to each rotary spin wool fiberglass insulation manufacturing line, for which construction, modification, or reconstruction was commenced after February 7, 1984. Standard for Particulate: No owner or operator shall cause to be discharged into the atmosphere from an affected facility any gases which contain particulate matter in excess of 5.5 kg/Mg (11.0 lb/ton) of glass pulled.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 15-1985, f. & ef. 10-21-85

Standards of Performance for Surface Coating of Plastic Parts for Business Machines

340-25-725 The pertinent federal rules are 40 CFR 60.720 to 60.725, also known as Subpart TTT. The following emission standard, summarizing the federal standard set forth in Subpart TTT, applies to each spray booth in which plastic parts for use in the manufacture of business machines receive prime coats, color coats, texture coats, or touch-up coats. The standard applies to any affected facility which commenced construction, modification, or reconstruction after January 8, 1986. Standards for Volatile Organic Compounds: No owner or operator shall cause to be discharged into the atmosphere Volatile Organic Compounds (VOC) that exceed the following:

(1) 1.5 kilograms of VOC per liter of coating solids applied from prime coating and color coating.

(2) 2.3 kilogram of VOC per liter of coating solids applied from texture coating and touch-up [casting]coating.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 24-1989, f. &cert. ef. 10-26-89

Compliance

340-25-800 Compliance with standards set forth in [this-rule-oar-340-25-505 through 340-25-800 shall be determined by performance tests and monitoring methods as set forth in the Federal Regulation adopted by reference in OAR 340-25-530.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; Renumbered from 340-25-540;
DEQ 15-1985, f. & ef. 10-21-85; Renumbered from 340-700

More Restrictive Regulations

340-25-805 If at any time there is a conflict between Department or regional authority rules and the Federal Regulation (40 CFR, Part 60), the more stringent shall apply.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 97, f. 9-2-75, ef. 9-25-75; Renumbered from 340-25-545;
DEQ 15-1985, f. & ef. 10-21-85; Renumbered from 340-25-705

Incinerator Regulations

Purposes and Application

340-25-850 The purpose of these rules OAR 340-25-850 through 340-25-905 is to establish state of the art emission standards, design requirements, and performance standards for all solid and infectious waste and crematory incinerators in order to minimize air contaminant emissions and provide adequate protection of public health. The rules Except as provided in OAR 340-25-885 and 340-25-905, OAR 340-25-850 through 340-25-905 apply to all existing waste incinerators and to all that will be built, modified, or installed in the State of Oregon. OAR 340-25-860 through 340-35-885 apply to solid waste facilities and infectious waste facilities. OAR 340-25-890 through 340-25-905 apply to crematory incinerators.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Definitions

340-25-855 As used in OAR 340-25-850 through 340-25-905:

- (1) "Acid Gases" means any exhaust gas which includes hydrogen chloride and sulfur dioxide.
- (2) "Best Available Control Technology (BACT)" means an emission limitation as defined by OAR 340-20-225(4).
- (3) "Continuous Emission Monitoring" (CEM) means a monitoring system for continuously measuring the emissions of a pollutant from an affected incinerator. Continuous monitoring equipment and operation shall be certified in accordance with EPA performance specifications and quality assurance procedures outlined in 40 CFR 60, Appendices B and F, and the Department's CEM Manual.
- (4) "Crematory Incinerator" means an incinerator used solely for the cremation of human and animal bodies.
- (5) "Department" means the Department of Environmental Quality.
- (6) "Dry Standard Cubic Foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions. When applied to combustion flue gases from waste or refuse burning, "Standard Cubic Foot (SCF)" implies adjustment of gas volume to that which would result at a concentration of 7% oxygen or 50% excess air.
- (7) "Existing" means constructed or modified prior to March 13, 1990.
- (7) (8) "Emission" means a release into the atmosphere of air contaminants.
- "Fugitive Emissions" means the same as defined in OAR 340-20-225(11).
- "Incinerator" means any structure or furnace in which combustion takes place, the primary purpose of which is the reduction in volume and weight of unwanted material.
- "Infectious Waste" means waste as defined in ORS 763, Oregon Laws 1989, which contains or may contain any disease producing microorganism or material, and includes, but not limited to the following:
 - (a) "Biological waste", which includes blood and blood products, and body fluids that cannot be directly discarded into a municipal sewer system, and waste materials saturated with blood or body fluids, but does not include soiled diapers;

- (b) "Cultures and stocks", which includes etiologic agents and associated biologicals; including specimen cultures and dishes, devices used to transfer, inoculate and mix cultures, wastes from production of biologicals, and serums and discarded live and attenuated vaccines. "Cultures" does not include throat and urine cultures;
- (c) "Pathological waste", which includes biopsy materials and all human tissues, anatomical parts that emanate from surgery, obstetrical procedures, autopsy and laboratory procedures and animal carcasses exposed to pathogens in research and the bedding and other waste from such animals. "Pathological wastes" does not include teeth or formaldehyde or other preservative agents.
- (d) "Sharps", which includes needles, IV tubing with needles attached, scalpel blades, lancets, glass tubes that could be broken during handling and syringes that have been removed from their original sterile containers.
- "Infectious Waste Facility" or "Infectious Waste Incinerator" means an incinerator which is operated or utilized for the disposal or treatment of infectious waste, including combustion for the recovery of heat, and which utilizes high temperature thermal destruction technologies.
- (13) "New" means constructed or modified on or after March 13, 1990.
- [(12)](14) "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background.
- "Particulate Matter" [(13)](15) means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured by EPA Method 5 or equivalent test method in accordance with the Department Source Test Manual. Particulate matter emission determinations by EPA Method 5 shall consist of the average of three (3) separate consecutive runs having a minimum sampling time of 60 minutes each and a minimum sampling volume of 30.0 dscf each.
- "Parts Per Million (ppm)" means parts of a contaminant per million parts of gas by volume on a dry-gas basis (1 ppm equals 0.0001% by volume).
- "Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.

- "Primary Combustion Chamber" means the discrete equipment, chamber or space in which drying of the waste, pyrolysis, and essentially the burning of the fixed carbon in the waste occurs.
- "Secondary" {(}or "Final{)} Combustion Chamber" means the discrete equipment, chamber, or space in which the products of pyrolysis are combusted in the presence of excess air such that essentially all carbon is burned to carbon dioxide.
- "Solid Waste" means refuse, more than 50 percent of
 which is waste consisting of a mixture of paper, wood,
 yard wastes, food wastes, plastics, leather, rubber,
 and other combustible materials, and noncombustible
 materials such as metal, glass, and rock.
- "Solid Waste Facility" or "Solid Waste Incinerator" means an incinerator which is operated or utilized for the disposal or treatment of solid waste including combustion for the recovery of heat, and which utilizes high temperature thermal destruction technologies.
- "Standard Conditions" means temperature of 68 degrees fahrenheit (15.6 degrees Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 kilograms per square centimeter).
- "Startup/Shutdown" means the time during which an air contaminant source or emission control equipment is brought into normal operation and normal operation is terminated, respectively.
- "Transmissometer" means a device that measures opacity and conforms to EPA Specification Number 1 in Title 40 Code of Federal Regulations, Part 60, Appendix B.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Solid and Infectious Waste Incinerators

Best Available Control Technology 340-25-860

(1) Notwithstanding the specific emission limits set forth in OAR 340-25-865, in order to maintain overall air quality at the highest possible levels, all <u>incinerator</u> solid waste facilities and infectious waste facilities are required to

use fb]Best fa]Available fc]Control ft]Technology (BACT). In no event shall the application of BACT result in emissions of any air contaminant which would exceed the emission limits set forth in these rules OAR 340-25-860 through 885.

All installed equipment shall be operated and maintained in (2) such a manner that emissions of air contaminants are kept at lowest possible levels.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Emissions Limitations

340-25-865 No person shall cause, suffer, allow, or permit the operation of any [waste incinerator] solid waste facility or infectious waste facility in a manner which violates the following emission limits and requirements:

- Particulate Emissions: (1)
 - For new incinerator facilities, emissions from each (a) stack shall not exceed 0.015 grains per dry standard cubic foot of exhaust gases corrected to 7 percent 0, at standard conditions;
 - For existing incinerator facilities, emissions from (b) each stack shall not exceed 0.030 grains per dry standard cubic foot of exhaust gases corrected to 7 percent 0, at standard conditions.
- (2) Hydrogen Chloride (HCl) for all incinerator facilities, emissions of hydrogen chloride from each stack shall not exceed 50 ppm during any 60-minute period corrected to 7 percent 02; or shall be reduced by at least ninety (90) percent by weight on an hourly basis.
- (3) Dioxide (SO₂) for all incinerator facilities, emissions of sulfur dioxide from each stack shall not exceed 50 ppm as a running three-hour average corrected to 7 percent 02; or shall be reduced by at least seventy (70) percent by weight on a three-hour basis.
- (4)Carbon Monoxide (CO) for all incinerator facilities, emissions of carbon monoxide from each stack shall not exceed 100 ppm as a running eight-hour average corrected to 7 percent 02.
- (5) Nitrogen Oxide (NO_x). Emissions of nitrogen oxide from each stack shall not exceed 200 ppm as a running 24-hour average corrected to 7 percent 02 for new incinerator facilities capable of processing more than 250 tons/day of wastes.
- (6) The opacity as measured visually transmissometer shall not exceed 10 percent for a period aggregating more than six minutes in any 60 minute period.

- (7) Fugitive Emissions. Solid waste incinerator facilities shall be operated in a manner which prevents or minimizes fugitive emissions, including the paving of all normally traveled roadways within the plant boundary and enclosing all material transfer points.
- (8) Other Wastes. No solid waste incinerator or infectious waste incinerator subject to these rules shall burn radioactive or hazardous waste, or any other waste not specifically authorized in the Department's Air Contaminant Discharge Permit.
- (9) Other Contaminants. In the absence of an air-contaminant-specific emission limit or ambient air quality standard, the Department may establish by permit emission limits for any hazardous air contaminants that are more protective of human health and the environment for any solid waste incinerator or infectious waste incinerator subject to these rules.

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Design and Operation 340-25-870

- (1) Temperature and Residence Time. Each incinerator shall be designed and operated to maintain combustion gases at a minimum temperature of 1800 °F. for at least one second residence time. For a multi-chamber incinerator, these parameters must be met after the primary combustion chamber, which shall be maintained at no less than 1400 °F.
- (2) Auxiliary Burners. Each incinerator shall be designed and operated with automatically controlled auxiliary burners capable of maintaining the combustion chamber temperatures specified in section (1) of this rule, and shall have sufficient auxiliary fuel capacity to maintain said temperatures.
- (3) Interlocks. Each incinerator shall be designed and operated with an interlock system which:
 - (a) Prevents charging until the final combustion chamber reaches 1800 °F.;
 - (b) For batch-fed incinerators, prevents recharging until each combustion cycle is complete;
 - (c) Ceases charging if the incinerator temperature falls below either 1800 °F. for any continuous 15-minute period; and

- (d) Ceases charging if carbon monoxide levels exceed 150 ppm, corrected to 7 percent 02 over a continuous 15-minute period. Existing incinerators may request from the Department, and the Department may grant, an exemption for installing an interlock system, if it can be shown to the satisfaction of the Department that such a system would not allow sufficient flexibility in operation, or that significant technical or economic constraints would prevent retrofitting.
- (4) Air Locks. All infectious waste facilities with mechanically fed incinerators shall be designed and operated with an air lock control system to prevent opening the incinerator to the room environment. The volume of the loading system must be designed so as to prevent overcharging to assure complete combustion of the waste.
- (5) Flue Gas Outlet Temperature. Each incinerator shall be designed and operated such that the flue gas temperature at the outlet from the primary control device does not exceed 350 °F., unless it can be demonstrated that a greater collection of condensible matter can be achieved at a higher outlet temperature.
- (6) Combustion efficiency. Except during periods of startup and shutdown, all waste incinerators shall achieve a combustion efficiency of 99.9 percent based on a running eight-hour average, computed as follows:

$$\frac{\text{CE} = \text{CO}_2}{\text{CO}_2 + \text{CO}}$$

$$\frac{\text{CE}}{\text{CO}_2 + \text{CO}_2} \times 100$$

- CO = Carbon monoxide in the exhaust gas, parts per million by volume (dry)
- CO₂ = Carbon dioxide in the exhaust gas, parts per million by volume (dry)
- (7) Stack Height. All incinerator stacks shall be designed in accordance with Good Engineering Practice (GEP) as defined in Title 40, Code of Federal Regulations, Parts 51.100(ii) and 5118, in order to assure compliance with applicable air standards, and to avoid the flow of stack pollutants into any building ventilation intake plenum.
- (8) Operator Training and Certification. Each incinerator shall be operated at all times under the direction of one or more individuals who have received training necessary for proper operation. A description of the training program shall be

submitted to the Department for approval. A satisfactory training program shall consist of any of the following:

- (a) Certification by the American Society of Mechanical Engineers (ASME) for solid waste incinerator operation; or
- (b) For infectious waste incineration, successful completion of EPA's Medical Waste Incinerator Operating training course; or
- (c) Other certification or training by a qualified organization as to proper operating practices and procedures, which has been pre-approved by the Department prior to enrollment. In addition, the owner or operator of an incinerator facility shall develop and submit a manual for proper operation and maintenance, to be reviewed with employees responsible for incinerator operation on an annual basis.
- (9) In cases where incinerator operation may cause odors which unreasonably interfere with the use and enjoyment of property, the Department may require by permit the use of good practices and procedures to prevent or eliminate those odors.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Continuous Emission Monitoring

340-25-875

- (1) All solid waste incinerators shall operate and maintain continuous monitoring for the following:
 - (a) Sulfur dioxide;
 - (b) Carbon monoxide;
 - (c) Opacity;
 - (d) Final Combustion Chamber Exit Temperature;
 - (e) Control Equipment Outlet Temperature;
 - (f) Oxygen; and
 - (g) Nitrogen Oxide new facilities only (over 250 tons/day).
- (2) All infectious waste incinerators shall operate and maintain continuous monitoring for the following:
 - (a) Carbon monoxide;
 - (b) Opacity; and
 - (c) Final Combustion Chamber Exit Temperature.

- (3) The Department may at any time[<u>following the effective date of these rules,</u>] require the installation of hydrogen chloride monitors for any solid and infectious waste incinerator, or sulfur dioxide monitors for any infectious waste incinerator, if the Department determines such monitoring is necessary, in order to demonstrate compliance with the hydrogen chloride emission limit.
- (4) The monitors specified above shall comply with EPA performance specifications in Title 40, Code of Federal Regulations, Part 60, Appendix B, and the Department's CEM Manual. All monitoring equipment shall be located so as to accurately monitor emission levels, in order to demonstrate compliance with OAR 340-25-865.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Reporting and Testing

340-25-880

- (1) Reporting:
 - (a) Stack test results shall be reported to the Department within sixty (60) days of completion;
 - (b) All records associated with continuous monitoring data including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least one year and shall be furnished to the Department upon request.
- (2) Source Testing:
 - (a) All solid waste incinerators and infectious waste incinerators [subject to these rules] must be tested to demonstrate compliance with the standards in [these rules] OAR 340-25-860 through 340-25-885;
 - (b) Source testing shall be conducted at the maximum design rate using waste that is representative of normal operation. If requested by the owner/operator, source testing may be performed at a lower rate, however, permit limits will be established based on the lower rate of operation;

- (c) Unless otherwise specified by the Department, each incinerator shall be tested at start-up and annually thereafter for particulate, hydrogen chloride, sulfur dioxide, and carbon monoxide emissions.
- (3) Hazardous or Toxic Air Contaminant Source Testing. The Department may at any time after the effective date of this rule, conduct or require source testing and require access to information specific to the control, recovery, or release of hazardous or toxic air contaminants.

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Compliance

340-25-885

- (1) All existing waste incinerators must demonstrate compliance with the applicable provisions of { these rules } OAR 340-25-860 through 340-25-885 by March 13, 1995 (within five (5) years of the effective date of these rules], or by the date required by applicable federal guidelines adopted by the Environmental Protection Agency, whichever is sooner. Existing data such as that collected in accordance with the requirements of an Air Contaminant Discharge Permit may be used to demonstrate compliance. {(2) All existing waste incinerators shall be subject to these rules upon demonstration of compliance pursuant to paragraph (1) of this section.] Until compliance is demonstrated, existing sources shall {continue to}be subject to{ the provisions of} OAR 340-21-025 and 340-21-027 and all applicable permit conditions.
- New solid waste incinerators and infectious waste incinerators must demonstrate compliance with the emission limits and operating requirements of these rules OAR 340-25-860 through 340-25-885 in accordance with a schedule established by the Department before commencing regular operation.
- Compliance with these rules OAR 340-25-860 through 340-25-885 does not relieve the owner or operator of the source from the responsibility to comply with requirements of the Department's Solid and Hazardous Waste rules, Oregon Administrative Rules, Chapter 340, Division 61, regarding the disposal of ash generated from waste incinerators.

Stat. Auth.: ORS Ch. 183[.341-&], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Crematory Incinerators

Emission Limitations 340-25-890

- (1) No person shall cause to be emitted particulate matter from any crematory incinerator in excess of 0.080 grains per dry standard cubic foot of exhaust gases corrected to 7 percent 0, at standard conditions.
- (2) Opacity. No visible emissions shall be present except for a period aggregating no more than six minutes in any 60 minute period.
- (3) Odors. In cases where incinerator operation may cause odors which unreasonably interfere with the use and enjoyment of property, the Department may require by permit the use of good practices and procedures to prevent or eliminate those odors.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A
Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90; AQ 20-1992, f & cert. ef. 8-3-92

Design and Operation 340-25-895

- (1) Temperature and Residence Time. The temperature at the final combustion chamber shall be 1800 °F. for new incinerators, and 1600 °F. for existing, with a residence time of at least 0.5 second. At no time while firing waste shall the temperature in the final chamber fall below 1400 °F.
- (2) Operator Training and Certification. Each crematory incinerator shall be operated at all times under the direction of individuals who have received training necessary for proper operation. A description of the training program shall be submitted to the Department for approval.
- (3) As defined in OAR 340-25-855(4) [-of these rules], crematory incinerators may only be used for incineration of human and animal bodies. No waste, including infectious waste as defined in OAR 340-25-855(10) [of these rules], may be incinerated unless specifically authorized in the Department's Air Contaminant Discharge Permit.

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A
Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90; AQ 20-1992, f. & cert. ef. 8-3-92

Monitoring and Reporting 340-25-900

(1) All crematory incinerators shall operate and maintain continuous monitoring for final combustion chamber exit temperature.

(2) All records associated with continuous monitoring data including, but not limited to, original data sheets, charts, calculations, calibration data, production records and final reports shall be maintained for a continuous period of at least one year and shall be furnished to the Department upon request.

(3) All crematory incinerators must conduct testing to demonstrate compliance with through 340-25-905 in accordance with a schedule specified by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 183[.341-&], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90

Compliance

340-25-905

(1) All existing crematory incinerators must demonstrate compliance with the applicable provisions of [-these rules] OAR 340-25-890 through 340-25-905 [within three (3) years of the effective date of these rules] by March 13, 1993. Existing data such as that collected in accordance with the requirements of an Air Contaminant Discharge Permit may be used to demonstrate compliance. [(2) All existing crematory incinerators shall be subject to these rules upon demonstration of compliance pursuant to paragraph (1) of this section.]Until compliance is demonstrated, existing sources shall continue to be subject to the provisions of OAR 340-21-025 and all applicable permit conditions.

New crematory incinerators must demonstrate compliance with the emission limits and operating requirements of these rules OAR 340-25-890 through 340-25-905 in accordance with a schedule established by the Department before commencing regular operation.

Stat. Auth.: ORS Ch. 183[.341 &], 468[.370] & 468A Hist.: DEQ 9-1990, f. & cert. ef. 3-13-90; AQ 20-1992, f. & cert. ef. 8-3-92

TABLE I (340-25-110) PROCESS WEIGHT TABLE

Process Wt/hr (lbs)	Maximum Weight <u>Disch/hr (lbs)</u>	Process Wt/hr (lbs)	Maximum Weight Disch/hr (lbs)
50	.24	3400	5.44
100	.46	3500	5.52
150	.66	3600	5.61
200	.85	3700	5.69
250	1.03	3800	5.77
300	1.20	3900	5.85
350	1.35	4000	5.93
400	1.50	4100	6.01
450	1.63	4200	. 6.08
500	1.77	4300	6.15
550	1.89	4400	6.22
600	2.01	4500	6.30
650	2.12	4600	6.37
700	2.24	4700	6.45
750	2.34	4800	6.52
800	2.43	4900	6.60
850	2.53	5000	6.67
900	2.62	5500	7.03
950	2.72	6000	7.37
1000	2.80	6500 ·	7.71
1100	2.97	7000	8.05
1200	3.12	7500	8.39
1300	3.26	8000	8.71
1400 .	3.40	8500	9.03
1500	3.54	9000	9.36
1600	3.66	9500	9.67
1700	3.79	10000	10.0
1800	3.91	11000	10.63
1900	4.03	12000	11.28
2000	4.14	13000	11.89
2100	4.24	14000	12.50
2200	4.34	15000	13.13
2300	4.44	16000	13.74
2400	4.55	17000	14.36
2500	4.64	18000	14.97
2600	4.74	19000	15.58
2700	4.84	20000	16.19
2800	4.92	30000	22.22
2900	5.02	40000	28.3
3000	5.10	50000	34.3
3100	5.18	60000	40.0
3200	5.27	or	
3300	5.36	more	

DIVISION 26

[RULES FOR OPEN] FIELD BURNING RULES (Willamette Valley)

Introduction

340-26-001

- (1) {These rules}This Division appl{y}ies to the open field burning, propane flaming, and stack and pile burning of all perennial and annual grass seed and cereal grain crops or associated residue within the Willamette Valley. The open burning of all other agricultural waste material, including sanitizing perennial and annual grass seed crops by open burning in counties outside the Willamette Valley, (referred to as "fourth priority agricultural burning") is governed by OAR Chapter 340, Division 23, Rules for Open Burning. Enforcement procedure and civil penalties for open field burning, propane flaming, and stack and pile burning are established in Oregon Administrative Rules Chapter 340 Division 12.
 - (2) Organization of rules:
 - (a) OAR 340-26-003 is the policy statement of the Environmental Quality Commission setting forth the goals of these rules this Division;
 - (b) OAR 340-26-005 contains definitions of terms which have specialized meanings within the context off these rules this Division;
 - (c) OAR 340-26-010 lists general provisions and requirements pertaining to all open field burning, propane flaming, and stack and pile burning with particular emphasis on the duties and responsibilities of the grower registrant;
 - (d) OAR 340-26-012 lists procedures and requirements for registration of acreage, issuance of permits, collection of fees, and keeping of records, with particular emphasis on the duties and responsibilities of the local permit issuing agencies;
 - (e) OAR 340-26-013 establishes acreage limits and methods of determining acreage allocations;
 - (f) OAR 340-26-015 establishes criteria for authorization of open field burning, propane flaming, and stack and pile burning pursuant to the administration of a daily smoke management control program;
 - (g) OAR 340-26-031 establishes special provisions pertaining to field burning by public agencies for official purposes, such as "training fires";

- (h) OAR 340-26-033 establishes special provisions
- pertaining to "preparatory burning"; OAR 340-26-035 establishes special provisions (i) pertaining to open field burning for experimental purposes;
- (j) OAR 340-26-040 establishes special provisions and procedures pertaining to emergency cessation of burning;
- OAR 340-26-045 establishes provisions pertaining to (k) propane flaming;
- (1)OAR 340-26-055 establishes provisions pertaining to "stack and pile burning".

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 5-1984, f. & ef. 3-7-84; DEQ 12-1984, f. & ef. 7-13-84; DEQ 11-1987, f. & ef. 6-15-87; AQ 17, f. & ef. 3-11-92

Policy

340-26-003 In the interest of public health and welfare, it is the declared public policy of the State of Oregon to reduce the practice of open field burning while developing and providing alternative methods of field sanitation and alternative methods of utilizing and marketing crop residues and to control, reduce, and prevent air pollution from open field burning, propane flaming, and stack and pile burning by smoke management. In developing and carrying out a smoke management control program it is the policy of the Environmental Quality Commission:

- To provide for a maximum level of burning with a minimum (1) level of smoke impact on the public, recognizing:
 - The importance of flexibility and judgment in the (a) daily decision-making process, within established and necessary limits;
 - The need for operational efficiency within and (b) between each organizational level;
 - (C) The need for effective compliance with all regulations and restrictions.
- To study, develop and encourage the use of reasonable and (2) economically feasible alternatives to the practice of open field burning.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]_

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 5-1984, f. & ef. 3-7-84; AQ 17, f. & ef. 3-11-92

Definitions

340-26-005 As used in these rules, unless otherwise required by context this Division:

- (1) "Actively extinguish" means the direct application of water or other fire retardant to an open field fire.
- (2) "Approved alternative method(s)" means any method approved by the Department to be a satisfactory alternative field sanitation method to open field burning.
- (3) "Approved alternative facilities" means any land, structure, building, installation, excavation, machinery, equipment, or device approved by the Department for use in conjunction with an approved alternative method.
- (4) "Commission" means the Environmental Quality Commission.
- (5) "Cumulative hours of smoke intrusion in the Eugene-Springfield area" means the average of the totals of cumulative hours of smoke intrusion recorded for the Eugene site and the Springfield site. Provided the Department determines that field burning was a significant contributor to the smoke intrusion:
 - (a) The Department shall record one hour of intrusion for each hour the nephelometer hourly reading exceed a background level by 1.8 X 10⁴ b-scat units or more but less than the applicable value in subsection (b) or (c) of this section;
 - (b) Between June 16 and September 14 of each year, two hours of smoke intrusion shall be recorded for each hour the nephelometer hourly reading exceeds a background level of 5.0 X 10⁴ b-scat units;
 - (c) Between September 15 and June 15 of each year two hours of intrusion shall be recorded for each hour the nephelometer hourly reading exceeds a background level by 4.0 X 10⁴ b-scat units.

The background level shall be the average of the three hourly readings immediately prior to the intrusion.

- (6) "Department" means the Department of Environmental Quality.
- (7) "Director" means the Director of the Department or delegated employee representative pursuant to ORS 468.045(3).

(8) "District allocation" means the total amount of acreage sub-allocated annually to the fire district, based on the district's pro rata share of the maximum annual acreage limitation, representing the maximum amount for which burning permits may be issued within the district, subject to daily authorization. District allocation is defined by the following identity:

District Allocation =

Maximum annual acreage limit
Total acreage registered in the Valley

x Total acreage registered in the District

- (9) "Drying day" means a 24-hour period during which the relative humidity reached a minimum less than 50% and no rainfall was recorded at the nearest reliable measuring site.
- (10) "Effective mixing height" means either the actual height of plume rise as determined by aircraft measurement or the calculated or estimated mixing height as determined by the Department, whichever is greater.
- (11) "Field-by-field burning" means burning on a limited or restricted basis in which the amount, rate, and area authorized for burning is closely controlled and monitored. Included under this definition are "training fires" and experimental open field burning.
- "Field reference code" means a unique four-part code which identifies a particular registered field for mapping purposes. The first part of the code shall indicate the grower registration (form) number, the second part the line number of the field as listed on the registration form, the third part the crop type, and the fourth part the size (acreage) of the field (e.g., a 35 acre perennial (bluegrass) field registered on line 2 of registration form number 1953 would be 1953-2-P-BL-35).
- (13) "Fire district" or "district" means a fire permit issuing agency.
- (14) "Fire permit" means a permit issued by a local fire permit issuing agency pursuant to ORS 477.515, 477.530, 476.380, or 478.960.
- (15) "Fires-out time" means the time announced by the Department when all flames and major smoke sources associated with open field burning should be out and prohibition conditions are scheduled to be imposed.

- (16)"Fire safety buffer zone" shall have the same meaning as defined in the State Fire marshal rules.
- (17)"Fluffing" means an approved mechanical method of stirring or tedding crop residues for enhanced aeration and drying of the full fuel load, thereby improving the field's combustion characteristics.
- "Grower allocation" means the amount of acreage (18)sub-allocated annually to the grower registrant, based on the grower registrant's pro rata share of the maximum annual acreage limitation, representing the maximum amount for which burning permits may be issued, subject to daily authorization. Grower allocation is defined by the following identity:

Grower Allocation =

Maximum annual acreage limit Total acreage registered in the Valley

x Total acreage registered by grower registrant

- "Grower registrant" means any person who registers acreage (19)with the Department for purposes of open field burning, propane flaming or stack or pile burning.
- (20)"Marginal conditions" means atmospheric conditions such that smoke and particulate matter escape into the upper atmosphere with some difficulty but not such that limited additional smoke and particulate matter would constitute a danger to the public health and safety.
- "Marginal day" means a day on which marginal conditions (21)
- "Nephelometer" means an instrument for measuring ambient (22)smoke concentrations.
- "Northerly winds" means winds coming from directions from (23)290° to 90° in the north part of the compass, averaged through the effective mixing height.
- "Open field burning" means burning of any perennial or (24)annual grass seed or cereal grain crop, or associated residue, in such manner that combustion air and combustion products are not effectively controlled.
- "Open burning" means the burning of agricultural, construction, demolition, domestic, or commercial waste or any other burning which occurs in such a manner that combustion air is not effectively controlled and combustion products are not effectively vented through a stack or chimney pursuant to OAR 340-23-030.

- (26) "Open field burning permit" means a permit issued by the Department pursuant to ORS 468A.575.
- (27) "Permit issuing agency" or "Permit agent" means the county court or board of county commissioners, or fire chief or a rural fire protection district or other person authorized to issue fire permits pursuant to ORS 477.515, 477.530, 476.380, or 478.960.
- (28) "Preparatory burning" means controlled burning of portions of selected problem fields for the specific purpose of reducing the fire hazard potential or other conditions which would otherwise inhibit rapid ignition burning when the field is subsequently open burned.
- (29) "Priority acreage" means acreage located within a priority area.
- (30) "Priority areas" means the following areas of the Willamette Valley:
 - (a) Areas in or within three miles of the city limits of incorporated cities having populations of 10,000 or greater;
 - (b) Areas within one mile of airports servicing regularly scheduled airline flights;
 - (c) Areas in Lane County south of the line formed by U.S. Highway 126 and Oregon Highway 126;
 - (d) Areas in or within three miles of the city limits of the City of Lebanon;
 - (e) Areas on the west and east side of and within 1/4 mile of these highways: 99, 99E, and 99W. Areas on the south and north side of and within 1/4 mile of U.S. Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis, Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.
- (31) "Prohibition conditions" means conditions under which open field burning is not allowed except for individual burns specifically authorized by the Department pursuant to OAR 340-26-015(2).
- (32) "Propane flaming" means an approved alternative method of burning which employs a mobile flamer device which meets the following design specifications and utilizes and auxiliary fuel such that combustion is nearly complete and emissions significantly reduced:
 - (a) Flamer nozzles shall not be more than 15 inches apart;
 - (b) A heat deflecting hood is required and shall extend a minimum of 3 feet beyond the last row of nozzles.
- (33) "Propane flaming permit" means a permit issued by the Department pursuant to ORS 468A.575 and consisting of a

- validation number and specifying the conditions and acreage specifically registered and allocated for propane flaming.
- (34) "Quota" means an amount of acreage established by the Department for each fire district for use in authorizing daily burning limits in a manner to provide, as reasonably as practicable, an equitable opportunity for burning in each area.
- (35) "Rapid ignition techniques" means a method of burning in which all sides of the field are ignited as rapidly as practicable in order to maximize plume rise. Little or no preparatory backfire burning shall be done.
- (36) "Released allocation" means that part of a growers allocation, by registration form, that is unused and voluntarily released to the Department for first come-first serve dispersal to other grower registrants.
- (37) "Residue" means straw, stubble and associated crop material generated in the production of grass seed and cereal grain crops.
- "Responsible person" means each person who is in ownership, control, or custody of the real property on which open burning occurs, including any tenant thereof, or who is in ownership, control or custody of the material which is burned, or the grower registrant. Each person who causes or allows open field burning, propane flaming, or stack or pile burning to be maintained shall also be considered a responsible person.
- "Small-seeded seed crops requiring flame sanitation" means small-seeded grass, legume, and vegetable crops, or other types approved by the Department, which are planted in early autumn, are grown specifically for seed production, and which require flame sanitation for proper cultivation. For purposes of these rules this Division, clover and sugar beets are specifically included. Cereal grains, hairy vetch, or field peas are specifically not included.
- (40) "Smoke management" means a system for the daily or hourly control of open field burning, propane flaming, or stack or pile burning through authorization of the times, locations, amounts and other restrictions on burning, so as to provide for suitable atmospheric dispersion of smoke particulate and to minimize impact on the public.
- (41) "Southerly winds" means winds coming from directions from 90° to 290° in the south part of the compass, averaged through the effective mixing height.
- (42) "Stack burning" means the open burning of piled or stacked residue from perennial or annual grass seed or cereal grain crops.

- (43) "Stack burning permit" means a permit issued by the Department pursuant to ORS 468A.575 and consisting of a validation number and specifying the conditions and acreage specifically registered for stack or pile burning.
- (44) "Test fires" means individual field burns specifically authorized by the Department for the purpose of determining or monitoring atmospheric dispersion conditions.
- (45) "Training fires" means individual field burns set by or for a public agency for the official purpose of training personnel in fire-fighting techniques.
- (46) "Unusually high evaporative weather conditions" means a combination of meteorological conditions following periods of rain which result in sufficiently high rates of evaporation, as determined by the Department, where fuel (residue) moisture content would be expected to approach about 12 percent or less.
- (47)"Validation number" means a unique five-part number issued by a permit issuing agency which validates a specific open field burning, propane flaming, or stack or pile burning permit for a specific acreage in a specific location on a specific day. The first part of the validation number shall indicate the grower registration (form) number, the second part the line number of the field as listed on the registration form, the third part the number of the month and the day of issuance, the fourth part the hour burning authorization was given based on a 24-hour clock, and the fifth part shall indicate the size of acreage to be burned (e.g., a validation number issued August 26 at 2:30 p.m. for a 70-acre burn for a field registered on line 2 of registration form number 1953 would be 1953-2-0826-1430-070).
- (48) "Ventilation Index (VI)" means a calculated value used as a criterion of atmospheric ventilation capabilities. The Ventilation Index as used in these rules this Division is defined by the following identity:

VI = (Effective mixing height (feet)) 1000

- x (Average wind speed through the effective mixing height (knots))
- (49) "Willamette Valley" means the areas of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties lying between the crest of the Coast Range and the crest of the Cascade Mountains, and includes the following:

- (a) "South Valley", the areas of jurisdiction of all fire permit issuing agents or agencies in the Willamette Valley portions of the counties of Benton, Lane, or Linn;
- (b) "North Valley", the areas of jurisdiction of all other fire permit issuing agents or agencies in the Willamette Valley.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 29, f. 6-12-71, ef. 7-12-71; DEQ 93(Temp), f. & ef.

7-11-75 thru 11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114, f. & ef. 6-4-76; DEQ 138, f. 6-30-77; DEQ 140(Temp), f. & ef. 7-27-77 thru 11-23-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 22-1978, f. & ef. 12-28-78; DEQ 24-1979(Temp), f. & ef. 7-5-79; DEQ 28-1979, f. & ef. 9-13-79; DEQ 30-1979, f. & ef. 9-27-79; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; DEQ 5-1984, f. & ef. 3-7-84; DEQ 11-1987, f. & ef. 6-15-87; DEQ 20-1988(Temp), f. 8-12-88, cert. ef. 8-12-88 thru 2-2-89; DEQ 8-1989, f. & cert. ef. 6-7-89; AQ 17, f. & ef. 3-11-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

General Requirements 340-26-010

(1) No person shall cause or allow open field burning, propane flaming, or stack or pile burning on any acreage unless said acreage has first been registered and mapped pursuant to OAR 340-26-012(1), the registration fee has been paid, and the registration (permit application) has been approved by the Department.

- (2) No person shall cause or allow open field burning, propane flaming, or stack or pile burning without first obtaining and being able to readily demonstrate a valid burning permit and fire permit from the appropriate permit issuing agent pursuant to OAR 340-26-012(2). On the specific day of and prior to the open field burning, propane flaming, or pile or stack burning of any grass seed or cereal grain crop or associated residue the grower registrant shall obtain, in person or by telephone, a valid burning permit and fire permit from the appropriate permit issuing agent pursuant to OAR 340-26-012.
- (3) No person shall open field burn cereal grain acreage unless that person first issues to the Department a signed statement, and then acts to insure, that said acreage will be planted in the following growing season to a small-seeded seed crop requiring flame sanitation for proper cultivation, as defined in OAR 340-26-005(34).
- (4) No person shall cause or allow open field burning, propane flaming, or stack or pile burning which is contrary to the Department's announced burning schedule specifying the times, locations and amounts of burning permitted, or to any other provision announced or set forth by the Department or these rules this Division.
- (5) Each responsible person open field burning or propane flaming shall have an operating radio receiver and shall directly monitor the Department's burn schedule announcements at all times while open field burning or propane flaming.
- (6) Each responsible person open field burning or propane flaming shall actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department or when instructed to do so by an agent or employee of the Department.
- (7) No open field burning shall be conducted within 1/4 mile of either side of any Interstate freeway within the Willamette Valley or within 1/8 mile of either side of the designated roadways listed in OAR 837-110-080(2)(c). In addition, no open field burning shall be conducted in any of the remaining area within a fire safety buffer zone without prior authorization from the Department.
- (8) Each responsible person open field burning, propane flaming, or stack or pile burning within a priority area or fire safety buffer zone around a designated city, airport or highway shall refrain from burning and promptly extinguish any burning if it is likely that the resulting smoke would noticeably affect the designated city, airport or highway.

- (9) Ignition devices shall meet the requirements of the State Fire Marshal in OAR 837-110-040 and 050:
 - (a) Ensuring that field residues are evenly distributed and in generally good burning condition;
 - (b) Utilizing ignition devices, fire control equipment and water supplies which meet the requirements of the State Fire Marshal, as specified in OAR 837-110-020 through 837-110-040;
 - (c) Employing rapid ignition techniques on all acreage where there are no imminent fire hazards or public safety concerns.
- (10) Each responsible person open field burning shall attend the burn until effectively extinguished.
- (11) Open field burning, propane flaming, or stack or pile burning in compliance with [the rules of] this Division does not exempt any person from any civil or criminal liability for consequences or damages resulting from such burning, nor does it exempt any person from complying with any other applicable law, ordinance, regulation, rule, permit, order or decree of the Commission or any other government entity having jurisdiction.
- (12) Any revisions to the maximum acreage to be burned, allocation or permit issuing procedures, or any other substantive changes to these rules this Division affecting open field burning, propane flaming, or stack or pile burning for any year shall be made prior to June 1 of that year. In making rule such changes, the Commission shall consult with Oregon State University.
- (13) Open field burning shall be regulated in a manner consistent with the requirements of the Oregon Visibility Protection Plan for Class I areas (sec. 5.2 of the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047).

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 29, f. 6-12-71, ef. 7-12-71; DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114, f. 6-4-76; DEQ 138, f. 6-30-77; DEQ 140(Temp), f. & ef. 7-27-77 thru 11-23-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 22-1978, f. & ef. 12-28-78; DEQ 30-1979, f. & ef. 9-27-79; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; DEQ 5-1984, f. & ef. 3-7-84; DEQ 11-1987, f. & ef. 6-15-87; DEQ 20-1988(Temp), f. 8-12-88, cert. ef. 8-12-88 thru 2-2-88; DEQ 8-1989, f. & cert. ef. 6-7-89; AQ 17, f. & ef. 3-11-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Certified Alternative to Open Field Burning 340-26-011 [DEQ 105, f. & ef. 12-26-75; DEQ 114, f. 6-4-76; DEQ 138, f. 6-30-77; DEQ 140(Temp), f. & ef. 7-27-77 thru 11-23-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81;

Repealed by DEQ 5-1984,

Registration, Permits, Fees, Records

f. & ef. 3-7-84]

340-26-012 In administering a field burning smoke management program, the Department may contract with counties or fire districts or other responsible individual to administer registration of acreage, issuance of permits, collection of fees and keeping of records for open field burning, propane flaming, or stack or pile burning within their permit jurisdictions. The Department shall pay said authority for these services in accordance with the payment schedule provided for in ORS 468A.615:

- (1) Registration of acreage.
 - (a) On or before April 1 of each year, all acreage to be open burned, propane flamed, or stack or pile burned under these rules this Division shall be registered with the Department or its authorized permit agent on registration forms provided by the Department. Said

acreage shall also be delineated on specially provided registration map materials and identified using a unique field reference code. Registration and mapping shall be completed according to the established procedures of the Department. A non-refundable registration fee of \$2 for open field burning and \$1 for propane flaming for each acre registered shall be paid at the time of registration. A complete registration (permit application) shall consist of a fully executed registration form, map and fee. Acreage registered by April 1 under any classification (open field burning, propane flaming, or stack or pile burning) may be issued a burn permit under another classification if:

- (A) allocation is available for the subsequent classification and;
- (B) the initial registration fee is made equal to or greater than the subsequent classification and allocation is transferred under the direction of the Department.
- (b) Registration of open field burning, propane flaming, or stack or pile burning acreage after April 1 of each year shall require the prior approval of the Department and an additional \$1 per acre late registration fee if the late registration is due to the fault of the late registrant or one under [his]the registrant's control.
- (c) Copies of all registration forms and fees shall be forwarded to the Department promptly by the permit agent. Registration map materials shall be made available to the Department at all times for inspection and reproduction.
- (d) The Department shall act on any registration application within 60 days of receipt of a completed application. The Department may deny or revoke any registration application which is incomplete, false or contrary to state law or these rules this Division.
- (e) It is the responsibility of the grower registrant to insure that the information presented on the registration form and map is complete and accurate.

(2) Permits.

- (a) Permits for open field burning, propane flaming, or stack or pile burning shall be issued by the Department, or its authorized permit agent, to the grower registrant in accordance with the established procedures of the Department, and the times, locations, amounts and other restrictions set forth by the Department or [these rules] this Division.
- (b) A fire permit from the local fire permit issuing agency is also required for all open burning pursuant to ORS 477.515, 477.530, 476.380, 478.960.
- (c) A valid open field burning permit shall consist of:
 - (A) An open field burning permit issued by the Department which specifies the permit conditions in effect at all times while burning and which identifies the acreage specifically registered and annually allocated for burning;
 - (B) A validation number issued by the local permit agent on the day of the burn identifying the specific acreage allowed for burning and the date and time the permit was issued; and
 - (C) Payment of the required \$8.00 per acre burn fee.
- (d) A valid propane flaming permit shall consist of:
 - (A) A propane flaming permit issued by the Department which specifies the permit conditions in effect at all times while flaming and which identifies the acreage specifically registered and annually allocated for propane flaming;
 - (B) A validation number issued by the local permit agent identifying the specific acreage allowed for propane flaming and the date and time the permit was issued; and
 - (C) Payment of the required \$2 per acre propane flaming fee.
- (e) A valid stack or pile burning permit shall consist of:
 - (A) A stack or pile burning permit issued by the Department which specifies the permit conditions in effect at all times while burning and which identifies the acreage specifically registered for burning;
 - (B) A validation number issued by the local permit agent identifying the specific acreage allowed for burning and the date and time the permit was issued; and

- (C) Payment of the required [\$2 per acre] burn fee:

 (i) \$2 per acre from January 1, 1992, to

 December 31, 1997;

 ([i]ii) \$4 per acre burn fee in 1998;

 ([ii]iii) \$6 per acre burn fee in 1999;

 ([ii]iv]) \$8 per acre burn fee in 2000;

 and

 ([iv]v) \$10 per acre burn fee in 2001 and

 thereafter.
- (f) Burning permits shall at all times be limited by and subject to the burn schedule and other requirements or conditions announced or set forth by the Department.
- (g) No person shall issue burning permits for open field burning, propane flaming, or stack or pile burning of:
 - (A) More acreage than the amount sub-allocated annually to the District by the Department pursuant to OAR 340-26-013(2);
 - (B) Priority or fire safety buffer zone acreage located on the upwind side of any city, airport, Interstate freeway or highway within the same priority area or buffer zone.
- (h) It is the responsibility of each local permit issuing agency to establish and implement a system for distributing open field burning, propane flaming, or stack or pile burning permits to individual grower registrants when burning is authorized, provided that such system is fair, orderly and consistent with state law, [these rules] this Division and any other provisions set forth by the Department.
- (3) Fees.
 - (a) Permit agents shall collect, properly document and promptly forward all required registration and burn fees to the Department.
 - (b) All fees shall be deposited in the State Treasury to the credit of the Department of Agriculture Service Fund and shall be appropriated pursuant to ORS 468A.550 to 468A.620.
- (4) Records.
 - (a) Permit agents shall at all times keep proper and accurate records of all transactions pertaining to registrations, permits, fees, allocations, and other matters specified by the Department. Such records shall be kept by the permit agent for a period of at least five years and made available for inspection by the appropriate authorities.

(b) Permit agents shall submit to the Department on specially provided forms weekly reports of all acreage burned in their permit jurisdictions. These reports shall cover the weekly period of Monday through Sunday, and shall be mailed and post-marked no later than the first working day of the following week.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114, f. 6-4-76; DEQ 138, f. & ef. 6-30-77; DEQ 140(Temp), f. & ef. 7-27-77 thru 11-23-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; DEQ 5-1984, f. & ef. 3-7-84; DEQ 20-1988(Temp), f. 8-12-88, cert. ef. 8-12-88 thru 2-2-89; DEQ 8-1989, f. & cert. ef. 6-7-89; AQ 17, f. & ef. 3-11-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Acreage Limitations, Allocations 340-26-013

- (1) Limitation of Acreage.
 - (a) Except for acreage and residue open field burned pursuant to OAR 340-26-035, 340-26-040, 340-26-045, and 340-26-055 the maximum acreage to be open field burned annually in the Willamette Valley under these rules this Division shall not exceed:

 (A) 140,000 acres for 1992 and 1993;
 - ([A]B) 120,000 acres for 1994 and 1995;
 - ([B]C) 100,000 acres for 1996 and 1997; and ([C]D) 40,000 acres for 1998 and thereafter.
 - (b) Notwithstanding the annual limitations, up to 25,000 acres of steep terrain and species identified by the Director of Agriculture may be open burned annually and shall be considered outside the limitation.
 - (c) Other limitations on acreage allowed to be open field burned are specified in OAR 340-26-015(7), 340-26-033(2) and 340-26-035(1).

- (d) The maximum acreage to be propane flamed annually in the Willamette Valley under [these rules] this Division shall not exceed 75,000 acres.
- (e) Other limitations on acreage allowed to be propane flamed are specified in OAR 340-26-045.
- (2) Allocation of Acreage.
 - (a) In the event that total registration as of April 1 is less than or equal to the maximum acreage allowed to be open field burned or propane flamed annually, pursuant to subsection (1)(a) and (d) of this rule, the Department shall sub-allocate to each grower registrant and each district (subject to daily burn authorization) 100 percent of their respective registered acreage.
 - (b) In the event that total registration as of April 1 exceeds the maximum acreage allowed to be open burned annually, pursuant to subsection (1)(a) of this rule, the Department may sub-allocate to growers on a prorata share basis not more than 100 percent of the maximum acreage limit, referred to as "grower allocation". In addition, the Department shall sub-allocate to each respective fire district, its prorata share of the maximum acreage limit based on acreage registered within the district, referred to as "district allocation".
 - (c) To insure optimum permit utilization, the Department may adjust fire district allocations.
 - (d) Transfer of allocations for farm management purposes may be made within and between fire districts and between grower registrants on a one-in/one-out basis under the supervision of the Department. The Department may assist grower registrants by administering a reserve of released allocation for first come-first served utilization.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114, f. & ef. 6-4-76; DEQ 138, f. & ef. 6-30-77; DEQ 140(Temp), f. & ef. 7-27-77 thru 11-23-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 22-1978, f. & ef. 12-28-78; DEQ 13-1979, f. & ef. 6-8-79; DEQ 30-1979, f. & ef. 9-27-79; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; DEQ 5-1984, f. & ef. 3-7-84; DEQ 11-1987, f. & ef. 6-15-87; AQ 17, f. & ef. 3-11-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Daily Burning Authorization Criteria

340-26-015 As part of the smoke management program provided for in ORS 468A.590 the Department shall set forth the types and extent of open field burning, propane flaming, and stack and pile burning to be allowed each day according to the provisions established in this section and these rules this Division:

- (1) During the active burning season and on an as needed basis, the Department shall announce the field burning schedule over the field burning radio network operated specifically for this purpose. The schedule shall specify the times, locations, amounts and other restrictions in effect for open field burning, propane flaming, and stack and pile burning. The Department shall notify the State Fire Marshal of the burning schedule for dissemination to appropriate Willamette Valley agencies.
- (2) Prohibition conditions.
 - (a) Prohibition conditions shall be in effect at all times unless specifically determined and announced otherwise by the Department.
 - (b) Under prohibition conditions, no permits shall be issued and no open field burning shall be conducted in any area except for individual burns specifically authorized by the Department on a limited extent basis. Such limited burning may include field-by-field burning, preparatory burning, or burning of test fires, except that:
 - (A) No open field burning shall be allowed: (i) In any area subject to a ventilation index of less than 10.0, except for experimental burning specifically authorized by the Department pursuant to OAR 340-26-035;

- (ii) In any area upwind, or in the immediate vicinity, of any area in which, based upon real-time monitoring, a violation of federal or state air quality standards is projected to occur.
- (B) Only test-fire burning may be allowed:

 (i) In any area subject to a ventilation index of between 10.0 and 15.0, inclusive, except for experimental burning specifically authorized by the Department pursuant to OAR 340-26-035;

 (ii) When relative humidity at the nearest
 - (ii) When relative humidity at the nearest reliable measuring station exceeds 50 percent under forecast northerly winds or 65 percent under forecast southerly winds.
- (3) Marginal conditions.
 - (a) The Department shall announce that marginal conditions are in effect and open field burning is allowed when, in its best judgment and within the established limits of [these rules] this Division, the prevailing atmospheric dispersion and burning conditions are suitable for satisfactory smoke dispersal with minimal impact on the public, provided that the minimum conditions set forth in paragraphs (2) (b) (A) and (B) of this rule are satisfied.
 - (b) Under marginal conditions, permits may be issued and open field burning may be conducted in accordance with the times, locations, amounts, and other restrictions set forth by the Department and these rules this Division.
- (4) Hours of burning.
 - (a) Burning hours shall be limited to those specifically authorized by the Department each day and may be changed at any time when necessary to attain and maintain air quality.
 - (b) Burning hours may be reduced by the fire chief or his deputy, and burning may be prohibited by the State Fire Marshal, when necessary to prevent danger to life or property from fire, pursuant to ORS 478.960.
- (5) Locations of burning:
 - (a) Locations of burning shall at all times be limited to those areas specifically authorized by the Department, except that:

- (A) No priority or fire safety buffer zone acreage shall be burned upwind of any city, airport, Interstate freeway or highway within the same priority area or buffer zone;
- (B) No south Valley priority acreage shall be burned upwind of the Eugene-Springfield non-attainment area.
- (6) Amounts of burning.
 - (a) In order to provide for an efficient and equitable distribution of burning, daily authorizations of acreages shall be issued by the Department in terms of single or multiple fire district quotas. The Department shall establish quotas for each fire district and may adjust the quotas of any district when conditions in its judgment warrant such action.
 - (b) Unless otherwise specifically announced by the Department, a one quota limit shall be considered in effect for each district authorized for burning.
 - (c) The Department may issue more restrictive limitations on the amount, density or frequency of burning in any area or on the basis of crop type, when conditions in its judgment warrant such action.
- (7) Limitations on burning based on air quality.
 - (a) The Department shall establish the minimum allowable effective mixing height required for burning based upon cumulative hours of smoke intrusion in the Eugene-Springfield area as follows:
 - (A) Except as provided in paragraph (B) of this subsection, burning shall not be permitted whenever the effective mixing height is less than the minimum allowable height specified in Table 1, and by reference made a part of these rules this Division;
 - (B) Notwithstanding the effective mixing height restrictions of paragraph (A) of this subsection, the Department may authorize burning of up to 1000 acres total per day for the Willamette Valley, consistent with smoke management considerations and [these rules] this Division.
- (8) Limitations on burning based on rainfall.
 - (a) Open field burning and propane flaming shall be prohibited in any area for one drying day (up to a maximum of four consecutive drying days) for each 0.10 inch increment of rainfall received per day at the nearest reliable measuring station.

- (b) The Department may waive the restrictions of subsection (a) of this section when dry fields are available as a result of special field preparation or condition, irregular rainfall patterns, or unusually high evaporative weather condition.
- (9) Other discretionary provisions and restrictions.
 - (a) The Department may require special field preparations before burning, such as, but not limited to, mechanical fluffing of residues, when conditions in its judgment warrant such action.
 - (b) The Department may designate specified periods following permit issuance within which time active field ignition must be initiated and/or all flames must be actively extinguished before said permit is automatically rendered invalid.
 - (c) The Department may designate additional areas as priority areas when conditions in its judgment warrant such action.

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 29, f. 6-12-71, ef. 7-12-71; DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114, f. & ef. 6-4-76; DEQ 138, f. 6-30-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 22-1978, f. & ef. 12-28-78; DEQ 24-1979(Temp), f. & ef. 7-5-79; DEQ 28-1979, f. & ef. 9-13-79; DEQ 30-1979, f. & ef. 9-27-79; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; DEQ 5-1984, f. & ef. 3-7-84; DEQ 20-1988(Temp), f. 8-12-88, cert. ef. 8-12-88 thru 2-2-89; DEQ 8-1989, f. & cert. ef. 6-7-89; AQ 17, f. & ef. 3-11-92

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Winter Burning Season Regulations

340-26-020 [DEQ 29, f. 6-12-71, ef. 7-12-71; DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114, f. 6-4-76; DEQ 138, f. 6-30-77; DEQ 6-1978, f. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; Repealed by DEQ 5-1984, f. & ef. 3-7-84]

Civil Penalties

340-26-025 [DEQ 93(Temp), f. & ef. 7-11-75 thru
11-28-75; DEQ 104, f. & ef. 12-26-75; DEQ 114,
f. 6-4-76; DEQ 1, f. 6-30-77; DEQ 6-1978, f. &
ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78
thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ
12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef.
3-19-81; DEQ 5-1984, f. & ef. 3-7-84; Repealed
by DEQ 15-1990, f. & cert. ef. 3-30-90]

Tax Credits for Approved Alternative Methods, and Approved Alternative Facilities

340-26-030 [DEQ 114, f. & ef. 6-4-76; DEQ 138, f. 6-30-77; DEQ 6-1978, f. & ef. 4-18-78; DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78; DEQ 2-1980, f. & ef. 1-21-80; DEQ 12-1980, f. & ef. 4-21-80; DEQ 9-1981, f. & ef. 3-19-81; DEQ 5-1984, f. & ef. 3-7-84; Repealed by DEQ 12-1984, f. & ef. 7-13-84]

Burning by Public Agencies (Training Fires)

340-26-031 Open field burning on grass seed or cereal grain acreage by or for any public agency for official purposes, including the training of fire-fighting personnel, may be permitted by the Department on a prescheduled basis consistent with smoke management considerations and subject to the following conditions:

- (1) Such burning must be deemed necessary by the official local authority having jurisdiction and must be conducted in a manner consistent with its purpose.
- (2) Such burning must be limited to the minimum number of acres and occasions reasonably needed.
- (3) The responsible person shall insure that such burning complies with the provisions of OAR 340-26-010 through 340-26-013.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 5-1984, f. & ef. 3-7-84; AQ 17, f. & ef. 3-11-92

Preparatory Burning

340-26-033 The Department may allow preparatory burning of portions of selected problem fields, consistent with smoke management considerations and subject to the following conditions.

- (1) Such burning must, in the opinion of the Department, be necessary to reduce or eliminate a potential fire hazard or safety problem in order to expedite the subsequent burning of the field.
- (2) Such burning shall be limited to the minimum number of acres necessary, in no case exceeding 5 acres for each burn or a maximum of 100 acres each day.
- (3) Such burning must employ backfiring burning techniques.
- (4) Such burning is exempt from the provisions of OAR 340-26-015 but must comply with the provisions of OAR 340-26-010 through 340-26-013.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1987, f. & ef. 6-15-87

Experimental Burning

340-26-035 The Department may allow open field burning for demonstration or experimental purposes pursuant to the provisions of ORS 468A.620, consistent with smoke management considerations and subject to the following conditions:

- (1) Acreage experimentally open burned, propane flamed, or stack or pile burned shall not exceed 1,000 acres annually.
- (2) Acreage experimentally open burned shall not apply to the district allocation or to the maximum annual acreage limit specified in OAR 340-26-013(1)(a) or (d).
- (3) Such burning is exempt from the provisions of OAR 340-26-015 but must comply with the provisions of OAR 340-26-010 and 340-26-012, except that the Department may elect to waive all or part of the per acre open field burning or propane flaming fee.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 5-1984, f. & ef. 3-7-84; DEQ 11-1987, f. & ef. 6-15-87; AQ 17, f. & ef. 3-11-92

Emergency Burning, Cessation

340-26-040 Pursuant to ORS 468A.610 and upon finding of extreme danger to public health or safety, the Commission may order temporary emergency cessation of all open field burning in any area of the Willamette Valley.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u> Hist.: DEQ 5-1984, f. & ef. 3-7-84; AQ 17, f. & ef. 3-11-92

Propane Flaming 340-26-045

- (1) The use of propane flamers, mobile field sanitizing devices, and other field sanitation methods specifically approved by the Department are subject to the following conditions:
 - (a) The field must first be prepared as follows:
 - (A) Either the field must have previously been open burned and the appropriate fees paid; or
 - (B) The field stubble must be flail-chopped, mowed, or otherwise cut close to the ground and the loose straw removed to the extent practicable and the remaining stubble will not sustain an open fire.
 - (b) Propane flaming operations shall comply with the following criteria:
 - (A) Unless otherwise specifically restricted by the Department, and except for the use of propane flamers in preparing fire breaks, propane flaming may be conducted only between the hours of 9 a.m. and sunset (9 a.m. to one-half hour before sunset on or after September 1);
 - (B) Every effort shall be made to operate propane flamers in overlapping strips, crosswise to the prevailing wind, beginning along the downwind edge of the field;

- (C) The remaining field residue must not sustain an open fire;
- (D) A fire permit must first be obtained from the local fire permit issuing agency;
- (E) Every effort shall be made to conduct propane flaming in a manner which minimizes smoke emissions;
- (F) No person shall cause or allow to maintain any propane flaming which results in visibility impairment on any Interstate highways or roadways specified in OAR 837-110-080(1) and (2). Should visibility impairment occur, all flame and smoke sources shall be immediately and actively extinguished;

(G) The acreage must be registered and permits obtained pursuant to OAR 340-26-012.

- (c) In addition to the conditions specified in paragraphs (a) and (b) of this section, propane flaming operations within any fire safety buffer zone must comply with the following criteria:
 - (A) Propaning shall be conducted at a vehicle speed appropriate for complete combustion and minimum smoke emissions but should not exceed 5 miles per hour:
 - (B) No propaning shall be allowed when either the relative humidity at the nearest reliable measuring station exceeds 65 percent or the surface winds exceed 15 miles per hour;
 - (C) The presence of any regrowth in the field between 6 and 12 inches in height shall be mowed or cut close to the ground, and removed providing mechanical removal of the resultant field residue is practicable. Any regrowth exceeding 12 inches shall be mowed or cut close to the ground and removed.
- (2) No person shall cause or allow to be initiated or maintained any propane flaming on any day or at any time if the Department has determined and notified the State Fire Marshal that propane flaming is prohibited because of adverse meteorological or air quality conditions.
- (3) The Department may issue restrictive limitations on the amount, density or frequency of propane flaming in any area when meteorological conditions are unsuitable for adequate smoke dispersion, or deterioration of ambient air quality occurs.

(4) All propane flaming operations shall be conducted in accordance with the State Fire Marshal's safety requirements, as specified in OAR 837-110-100 through 837-110-160.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 5-1984, f. & ef. 3-7-84; DEQ 11-1987, f. & ef. 6-15-87; DEQ 20-1988(Temp), f. 8-12-88, cert. ef. 8-12-88 thru 2-2-89; DEQ 8-1989, f. & cert. ef. 6-7-89; AQ 17, f. & ef. 3-11-92

Stack Burning

340-26-055 The open burning of piled or stacked residue from perennial or annual grass seed or cereal grain crops used for seed production is allowed subject to the following conditions:

- (1) No person shall cause or allow to be initiated or maintained any stack or pile burning on any day or at any time if the Department has notified the State Fire Marshal that such burning is prohibited because of meteorological or air quality conditions;
- (2) A fire permit must be obtained from the local permit issuing agency;
- (3) All residue to be burned must be dry to the extent practicable and free of all other combustible and non-combustible material. Covering the stacks is advised when necessary and practicable to protect the material from moisture:
- (4) It shall be the duty of each responsible person to make every reasonable effort to extinguish any stack burning which is in violation of any rule of the Commission;
- (5) No stack or pile burning shall be conducted within any State Fire Marshal buffer zone "non-combustible ground surface" area (e.g., within 1/4 mile of Interstate I-5, or 1/8 mile of any designated roadway), as specified in OAR 837-110-080;
- (6) The acreage must be registered and permits obtained pursuant to OAR 340-26-012.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 26 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1987, f. & ef. 6-15-88; DEQ 8-1989, f. & cert. ef. 6-7-89; AQ 17, f. & ef. 3-11-92

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 26 - DEPARTMENT OF ENVIRONMENTAL QUALITY

TABLE 1 (340-26-015)

MINIMUM ALLOWABLE EFFECTIVE MIXING HEIGHT REQUIRED FOR BURNING BASED UPON THE CUMULATIVE HOURS OF SMOKE INTRUSION IN THE EUGENE-SPRINGFIELD AREA

Cumulative Hours of Smoke Intrusion in the Eugene-Springfield Area

Minimum Allowable Effective Mixing Height (feet)

0 - 14 15 - 19 20 - 24 25 and greater No minimum 4,000 4,500 5,500

DIVISION 27

AIR POLLUTION EMERGENCIES

Introduction

340-27-005 OAR 340-27-010, 340-27-015 and 340-27-025 are effective within priority I and II air quality control regions (AQCR) designated in 40 CFR Part 52 subpart MM, when the AQCR contains a nonattainment area listed in 40 CFR Part 81. All other rules in this Division are equally applicable to all areas of the state. Notwithstanding any other regulation or standard, [these emergency rules are this Division is designed to prevent the excessive accumulation of air contaminants during periods of atmospheric stagnation or at any other time, which if allowed to continue to accumulate unchecked could result in concentrations of these contaminants reaching levels which could cause significant harm to the health of persons. [These rules] This Division establishes criteria for identifying and declaring air pollution episodes at levels below the level of significant harm and are adopted pursuant to the requirements of the Federal Clean Air Act as amended and 40 CFR Part 51. [16] 151. [Legislative authority for these rules is contained in Oregon Revised Statutes including ORS 468.020, 468.095, 468.115, 468.280, 468.285, 468.305 and 468.410.] Levels of significant harm for various pollutants listed in 40 CFR Part 51.1[6]51 are:

- (1) For sulfur dioxide (SO₂) 1.0 ppm, 24-hour average.
- (2) For particulate matter (PM₁₀) 600 micrograms per cubic meter, 24-hour average.
- (3) For carbon monoxide (CO):
 - (a) 50 ppm, 8-hour average.
 - (b) 75 ppm, 4-hour average.
 - (c) 125 ppm, 1-hour average.
- (4) For ozone (O_3) 0.6 ppm, $\{1\}2$ -hour average.
- (5) For nitrogen dioxide (NO2):
 - (a) 2.0 ppm, 1-hour average.
 - (b) 0.5 ppm, 24-hour average.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publication: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality in Portland.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88)

Episode Stage Criteria For Air Pollution Emergencies

340-27-010 Three stages of air pollution episode conditions and a pre-episode standby condition are established to inform the public of the general air pollution status and provide a management structure to require preplanned actions designed to prevent continued accumulation of air pollutants to the level of significant harm. The three episode stages are: Alert, Warning, and Emergency. The Department shall be responsible to enforce the provisions of these rules this Division which require actions to reduce and control emissions during air pollution episode conditions.

An air pollution alert or air pollution warning shall be declared by the Director or appointed representative when the appropriate air pollution conditions are deemed to exist. When conditions exist which are appropriate to an air pollution emergency, the Department shall notify the Governor and declare an air pollution emergency pursuant to ORS 468.115. The statement declaring an air pollution Alert, Warning or Emergency shall define the area affected by the air pollution episode where corrective actions are required. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Department determines that the accumulation of air contaminants in any place is increasing or has increased to levels which could, if such increases are sustained or exceeded, lead to a threat to the health of the public. In making this determination, the Department will be guided by the following criteria for each pollutant and episode stage f as listed in this rule:

(1) "Pre-episode Standby" condition, indicates that ambient levels of air pollutants are within standards or only moderately exceed standards. In this condition, there is no imminent danger of any ambient pollutant concentrations reaching levels of significant harm. The Department shall maintain at least a normal monitoring schedule but may conduct additional monitoring. An air stagnation advisory issued by the National Weather Service, an equivalent local forecast of air stagnation or observed ambient air levels in excess of ambient air standards may be used to indicate the need for increased sampling frequency. The pre-episode standby condition is the lowest possible air pollution episode condition and may not be terminated.

- "Air Pollution Alert" condition indicates that air (2) pollution levels are significantly above standards but there is no immediate danger of reaching the level of significant harm. Monitoring should be intensified and readiness to implement abatement actions should be reviewed. At the Air Pollution Alert level the public is to be kept informed of the air pollution conditions and of potential activities to be curtailed should it be necessary to declare a warning or higher condition. An Air Pollution Alert condition is a state of readiness. When the conditions in both subsection (a) and (b) of this section are met, an Air Pollution Alert will be declared and all appropriate actions described in Tables 1 and 4 shall be implemented.
 - Meteorological dispersion conditions are not expected (a) to improve during the next twenty-four (24) or more
 - (b) Monitored pollutant levels at any monitoring site exceed any of the following:

 - Sulfur dioxide 0.3 ppm, 24 hour average. Particulate Matter (PM_{10}) 350 micrograms per (B) cubic meter $(ug/m^3) - 24$ hour average.
 - (C) Carbon monoxide - 15 ppm - 8 hour average.
 - Ozone 0.2 ppm 1 hour average. (D)
 - Nitrogen dioxide:
 - 0.6 ppm 1 hour average; or (ii) 0.15 ppm - 24 hour average.
- (3) "Air Pollution Warning" condition indicates that pollution levels are very high and that abatement actions are necessary to prevent these levels from approaching the level of significant harm. At the Air Pollution Warning level substantial restrictions may be required limiting motor vehicle use and industrial and commercial activities. When the conditions in both subsections (a) and (b) of this section are met, an Air Pollution Warning will be declared by the Department and all appropriate actions described in Tables 2 and 4 shall be implemented:
 - Meteorological dispersion conditions are not expected (a) to improve during the next twenty-four (24) or more
 - Monitored pollutant levels at any monitoring site (b) exceed any of the following:
 - Sulfur dioxide 0.6 ppm 24 hour average. (A)
 - Particulate Matter (PM₁₀) 420 ug/m³ 24 hour (B) average.
 - Carbon monoxide 30 ppm 8 hour average. (C)
 - Ozone 0.4 ppm 1 hour average. (D)

- (E) Nitrogen dioxide:
 - (i) 1.2 ppm 1 hour average; or(ii) 0.3 ppm 24 hour average.
- (4) "Air Pollution Emergency" Condition indicates that air pollutants have reached an alarming level requiring the most stringent actions to prevent these levels from reaching the level of significant harm to the health of persons. At the Air Pollution Emergency level extreme measures may be necessary involving the closure of all manufacturing, business operations and vehicle traffic not directly related to emergency services. Pursuant to ORS 468.115, when the conditions in both subsections (a) and (b) of this section are met, an air pollution emergency will be declared by the Department and all appropriate actions described in Tables 3 and 4 shall be implemented:
 - (a) Meteorological dispersion conditions are not expected to improve during the next twenty-four (24) or more hours.
 - (b) Monitored pollutant levels at any monitoring site exceed any of the following:
 - (A) Sulfur dioxide 0.8 ppm 24 hour average.
 - (B) Particulate Matter (PM₁₀) 500 ug/m³ 24 hour average.
 - (C) Carbon monoxide 40 ppm 8 hour average.
 - (D) Ozone 0.5 ppm 1 hour average.
 - (E) Nitrogen dioxide:
 - (i) 1.6 ppm 1 hour average; or
 - (ii) 0.4 ppm 24 hour average.
- (5) "Termination": Any air pollution episode condition (Alert, Warning or Emergency) established by these criteria may be reduced to a lower condition when the elements required for establishing the higher conditions are no longer observed.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88)

Special Conditions 340-27-012

(1) The Department shall issue an "Ozone Advisory" to the public when monitored ozone values at any site exceed the ambient air quality standard of 0.12 ppm but are less than 0.2 ppm for a 1 hour average. The ozone advisory shall clearly identify the area where the ozone values have exceeded the ambient air standard and shall state that significant health effects are not expected at these levels, however, sensitive individuals may be affected by some sympto [n]ms.

(2) Where particulate is primarily soil from windblown dust or fallout from volcanic activity, episodes dealing with such conditions must be treated differently than particulate episodes caused by other controllable sources. In making a declaration of air pollution alert, warning, or emergency for such particulate, the Department shall be guided by the

following criteria:

"Air Pollution Alert for Particulate from Volcanic (a) Fallout or Windblown Dust" means total suspended particulate values are significantly above standard but the source is volcanic eruption or dust storm. In this condition there is no significant danger to public health but there may be a public nuisance created from the dusty conditions. It may be advisable under these circumstances to voluntarily restrict traffic volume and/or speed limits on major thoroughfares and institute cleanup procedures. The Department will declare an air pollution alert for particulate from volcanic fallout or wind-blown dust when total suspended particulate values at any monitoring site exceed or are projected to exceed 800 ug/m³ - 24 hour average and the suspended particulate is primarily from volcanic activity or dust storms, meteorological conditions not withstanding;

(b) "Air Pollution Warning for Particulate from Volcanic Fallout or Windblown Dust" means total suspended particulate values are very high but the source is volcanic eruption or dust storm. Prolonged exposure over several days at or above these levels may produce respiratory distress in sensitive individuals. Under these conditions staggered work hours in metropolitan areas, mandated traffic reduction, speed limits and cleanup procedures may be required. The Department will declare an air pollution warning for particulate from volcanic fallout or wind-blown dust when total suspended

- particulate values at any monitoring site exceed or are expected to exceed 2000 ug/m^3 24 hour average and the suspended particulate is primarily from volcanic activity or dust storms, meteorological conditions not withstanding;
- "Air Pollution Emergency for Particulate from (C) Volcanic Fallout or Windblown Dust" means total suspended particulate values are extremely high but the source is volcanic eruption or dust storm. Prolonged exposure over several days at or above these levels may produce respiratory distress in a significant number of people. Under these conditions cleaning procedures must be accomplished before normal traffic can be permitted. An air pollution emergency for particulate from volcanic fallout or wind-blown dust will be declared by the Director, who shall keep the Governor advised of the situation, when total suspended particulate values at any monitoring site exceed or are expected to exceed 5000 ug/m³ - 24 hour average and the suspended particulate is primarily from volcanic activity or dust storms, meteorological conditions notwithstanding.
- (3) Termination: Any air pollution condition for particulate established by these criteria may be reduced to a lower condition when the criteria for establishing the higher condition are no longer observed.
- (4) Action: Municipal and county governments or other governmental agency having jurisdiction in areas affected by an air pollution Alert, Warning or Emergency for particulate from volcanic fallout or windblown dust shall place into effect the actions pertaining to such episodes which are described in Table 4.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1983, f. & ef. 10-24-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88)

Source Emission Reduction Plans 340-27-015

(1) Tables 1, 2, and 3 of these air pollution emergency rules this Division set forth specific emission reduction measures which shall be taken upon the declaration of an air pollution alert, air pollution warning, or air

- pollution emergency. Any person responsible for a source of air contamination within a priority I AQCR shall, upon declaration of any air pollution episode condition affecting the locality of the air contamination source, take all appropriate actions specified in the applicable Table and shall take appropriate actions specified in an approved source emission reduction plan which has been submitted and is on file with the Department.
- Any person responsible for the operation of any point (2) source of air pollution which is [:] located in a Priority I AQCR, located within an Air Quality Maintenance Area (AQMA) or located within a nonattainment area listed in 40 CFR Part 81, and Emits 100 tons or more of any air pollutant specified by subsection (a) or (b) of this section [;] shall file a Source Emission Reduction Plan (SERP) with the Department in accordance with the schedule described in section (4) of this rule. Persons responsible for other point sources of air pollution located in a Priority I AQCR may optionally file a SERP with the Department for approval. Such plans shall specify procedures to implement the actions required by Tables 1, 2, and 3 of { these rules} this Division and shall be consistent with good engineering practice and safe operating procedures. Source emission reduction plans specified by this section are mandatory only for those sources which:
 - (a) Emit 100 tons per year or more of any pollutant for which the nonattainment area, AQMA, or any portion of the AQMA is designated nonattainment; or
 - (b) Emit 100 tons per year or more of volatile organic compounds when the nonattainment area, AQMA or any portion of the AQMA is designated nonattainment for ozone.
- (3) Municipal and county governments or other governmental body having jurisdiction in nonattainment areas where ambient levels of carbon monoxide, ozone or nitrogen dioxide qualify for Priority I ACQR classification, shall cooperate with the Department in developing a traffic control plan to be implemented during air pollution episodes of motor vehicle related emissions. Such plans shall implement the actions required by Tables 1, 2 and 3 of these rules this Division and shall be consistent with good traffic management practice and public safety.
- (4) The Department shall periodically review the source emission reduction plans to assure that they meet the requirements of these rules this Division. If deficiencies are found, the Department shall notify the persons responsible for the source. Within 60 days of such

- notice the person responsible for the source shall prepare a corrected plan for approval by the Department. Source emission reduction plans shall not be effective until approved by the Department.
- (5) During an air pollution alert, warning or emergency episode, source emission reduction plans required by this rule shall be available on the source premises for inspection by any person authorized to enforce the provisions of these rules this Division.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83

Preplanned Abatement Strategies

340-27-020 [DEQ 37, f. 2-15-72, ef. 9-1-72; Repealed by DEQ 18-1983, f. & ef. 10-24-83]

Regional Air Pollution Authorities 340-27-025

- (1) The Department of Environmental Quality and the regional air pollution authorities shall cooperate to the fullest extent possible to insure uniformity of enforcement and administrative action necessary to implement these rules this Division. With the exception of sources of air contamination where jurisdiction has been retained by the Department of Environmental Quality, all persons within the territorial jurisdiction of a regional air pollution authority shall submit the source emission reduction plans prescribed in rule OAR 340-27-015 to the regional air pollution authority. The regional air pollution authority shall submit copies of approved source emission reduction plans to the Department of Environmental Quality.
- (2) Declarations of air pollution alert, air pollution warning, and air pollution emergency shall be made by the appropriate regional authority. In the event such a declaration is not made by the regional authority, the Department of Environmental Quality shall issue the declaration and the regional authority shall take appropriate remedial actions as set forth in { these rules} this Division.

- (3) Additional responsibilities of the regional authorities shall include, but are not limited to:
 - (a) Securing acceptable source emission reduction plans;
 - (b) Measurement and reporting of air quality data to the Department of Environmental Quality;
 - (c) Informing the public, news media, and persons responsible for air contaminant sources of the various levels set forth in these rules this Division and required actions to be taken to maintain air quality and the public health;
 - (d) Surveillance and enforcement of source emission reduction plans.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 9-1-72; DEQ 18-1983, f. & ef. 10-24-83

Effective Date

340-27-030 [DEQ 37, f. 2-15-72, ef. 9-1-72; Repealed by DEQ 18-1983, f. & ef. 10-24-83]

Operations Manual

340-27-035 The Department shall maintain an operations manual to administer the provisions of these air pollution emergency rules this Division. This manual shall be available to the Department Emergency Action office at all times. At a minimum the Operations Manual shall contain the following elements:

- A copy of these rules this Division;
- (2) A chapter on communications which shall include:
 - (a) Telephone lists naming public officials, public health and safety agencies, local government agencies, emission sources, news media agencies and individuals who need to be informed about the episode status and information updates. These telephone lists shall be specific to episode conditions and will be used when declaring and cancelling episode conditions;
 - (b) Example and sample messages to be released to the news media for declaring or modifying an episode status.
- (3) A chapter on data gathering and evaluation which shall include:

- (a) A description of ambient air monitoring activities to be conducted at each episode stage including "Standby";
- (b) Assignment of responsibilities and duties for ascertaining ambient air levels of specified pollutants and notification when levels reach the predetermined episode levels;
- (c) Assignment of responsibilities and duties for monitoring meteorological developments from teletype reports and National Weather Service contacts. Part of this responsibility shall be to evaluate the meteorological conditions for their potential to affect ambient air pollutant levels.
- (4) A chapter defining responsibilities and duties for conducting appropriate source compliance inspections during episode stages requiring curtailment of pollutant emissions.
- (5) A chapter establishing the duties and responsibilities of the emergency action center personnel to assure coordinated operation during an air pollution episode established in accordance with these rules this Division.
- (6) An appendix containing individual source emission reduction plans required by these rules this Division plus any approved voluntary plans.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 18-1983, f. & ef. 10-24-83

Table 1

Air Pollution Episode
ALERT Conditions
Source Emission Reduction Plan

Emission Control Actions to be Taken as Appropriate in Alert Episode Area

Part A - Pollution Episode Conditions for Particulate Matter (PM₁₀)
(Except Particulate from Volcanic Activity or Windblown Dust.)

- a. There shall be no open burning of any material in the designated area.
- b. Where appropriate and if air quality maintenance strategies have not already prohibited the use of woodstoves and fireplaces, the public is requested to refrain from using coal or wood in uncertified woodstoves and fireplaces for domestic space heating where other heating methods are available.
- c. Sources having Emission Reduction Plans, review plans and assure readiness to put them into effect if conditions worsen.

Part B - Pollution Episode Conditions for Carbon Monoxide, Ozone

- a. All persons operating motor vehicles voluntarily reduce or eliminate unnecessary operations within the designated alert area.
- b. Where appropriate, the public is requested to refrain from using coal or wood in uncertified woodstoves and fireplaces for domestic space heating where other heating methods are available.
- c. Governmental and other agencies, review actions to be taken in the event of an air pollution warning.

Table 2

Air Pollution Episode WARNING Conditions Emission Reduction Plan

Part A - Pollution Episode Conditions for Particulate Matter (PM_{10}) (Except Particulate from Volcanic Activity or Windblown Dust.)

Source

- general public)
- a. General (all sources and a. Continue alert procedures.
 - b. Where legal authority exists, governmental agencies shall prohibit all use of woodstoves and fireplaces for domestic space heating except where such woodstoves and fireplaces provide the sole source of heat.
 - c. The use of incinerators for disposal of solid or liquid waste is prohibited.
 - d. Reduce emissions as much as possible consistent with safety to people and prevention of irreparable damage to equipment.
 - e. Prepare for procedures to be followed if an emergency episode develops.

Table 2 - Continued

Air Pollution Episode WARNING Conditions Emission Reduction Plan

Part A - Pollution Episode Conditions for Particulate (Except Particulate from Volcanic Activity or Windblown Dust.)

Continued

Source

- b. Specific additional general requirements for coal, oil or wood-fired electric power or steam generating facilities.
- a. Effect a maximum reduction in emissions by switching to fuels having the lowest available ash and sulfur content.
- b. Switch to electric power sources located outside the Air Pollution Warning area or to noncombustion sources (hydro, thermonuclear).
- c. Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.

Table 2 - Continued

Air Pollution Episode WARNING Conditions Emission Reduction Plan

Part A - Pollution Episode Conditions for Particulate (Except Particulate from Volcanic Activity or Windblown Dust.)

Continued

Source

- c. Specific additional
 general requirements for
 manufacturing industries
 including: Petroleum
 Refining, Chemical,
 Primary Metals, Glass,
 Paper and Allied
 Products, Mineral
 Processing, Grain and
 Wood Processing
- a. Reduce process heat load demand to the minimum possible consistent with safety and protection of equipment.
- b. Reduce emission of air contaminants from manufacturing by closing, postponing or deferring production to the maximum extent possible without causing injury to persons or damage to equipment. In so doing, assume reasonable economic hardships. Do not commence new cooks, batches or furnace changes in batch operation. Reduce continuous operations to minimum operating level where practicable.
- c. Defer trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances.

Table 2 - Continued (340-27-010, 340-27-015)

Air Pollution Episode WARNING Conditions Emission Reduction Plan

Part B - Pollution Episode Conditions for Carbon Monoxide, Ozone: control actions to be taken as appropriate in warning area.

- a. All operators of motor vehicles continue alert procedures.
- b. Operation of motor vehicles carrying fewer than three persons shall be requested to avoid designated areas from 6 a.m. to 11 a.m. and 2 p.m. to 7 p.m. or other hours as may be specified by the Department. Exempted from this request are:
 - 1. Emergency vehicles
 - 2. Public transportation
 - 3. Commercial vehicles
 - 4. Through traffic remaining on Interstate or primary highways
 - 5. Traffic controlled by a preplanned strategy
- c. In accordance with a traffic control plan prepared pursuant to OAR 340-27-015(3), public transportation operators shall provide the additional service necessary to minimize the public inconvenience resulting from actions taken in accordance with paragraph b. above.
- d. For ozone episodes there shall be:
 - 1. No bulk transfer of gasoline without vapor recovery from 2 a.m. to 2 p.m.
 - No service station pumping sales of gasoline from 2 a.m. to 2 p.m.
 - No operation of paper coating plants from 2 a.m. to 2 p.m.
 - 4. No architectural painting or auto refinishing.
 - 5. No venting of dry cleaning solvents from 2 a.m. to 2 p.m., (except perchloroethylene).
- e. When appropriate for carbon monoxide episodes during the heating season and where legal authority exists, governmental agencies shall prohibit all use of woodstoves and fireplaces for domestic space heating except where such woodstoves and fireplaces provide the sole source of heat.

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Table 3 (340-27-010, 340-27-015)

Air Pollution Episode EMERGENCY Conditions Emission Reduction Plan

Pollution Episode Conditions for all Pollutants (Except Particulate from Volcanic Activity or Windblown Dust.)

Source

Emission control actions to be taken as appropriate in emergency area

a. Requirements for all measures sources and general public.

- a. Continue emission reduction taken under warning conditions.
- b. All places of employment, commerce, trade, public gatherings, government, industry, business, or manufacture shall immediately cease operations.
- c. Paragraph b. above does not apply to:
 - Police, fire, medical and other emergency services.
 - 2. Utility and communication services.
 - Governmental functioning necessary for civil control and safety.
 - Operations necessary to prevent injury to persons or serious damage to equipment or property.
 - 5. Food stores, drug stores and operations necessary for their supply.
 - 6. Operations necessary for evacuation of persons leaving the area.

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Table 3 (continued) (340-27-015)

Air Pollution Episode EMERGENCY Conditions Emission Reduction Plan

Pollution Episode Conditions for all Pollutants (continued) (Except Particulate from Volcanic Activity or Windblown Dust.)

Source

- 7. Operations conducted in accordance with an approved Source Emission Reduction Plan on file with the Department.
- d. The operation of motor vehicles is prohibited except for the conduct of the functions exempted in paragraph c. above.
- e. Reduce heat and power loads to a minimum by maintaining heated occupied spaces no higher than 65°F and turning off heat to all other spaces.
- f. Where legal authority exists, governmental agencies shall prohibit all use of woodstoves and fireplaces for domestic space heating.

Table 3 (continued) (340-27-010, 340-27-015)

Air Pollution Episode EMERGENCY Conditions Emission Reduction Plan

Pollution Episode Conditions for all Pollutants (continued) (Except Particulate from Volcanic Activity or Windblown Dust.)

Source

Emission control actions to be taken as appropriate in emergency area

- b. Specific additional requirements for coal oil or wood-fired electric power generating facilities operating under an approved source emission reduction plan.
- c. Specific additional requirements for coal, oil or wood-fired steam generating facilities operating under an approved source emission reduction plan.
- a. Maintain operation at the lowest level possible consistent with prevention of damage to equipment and power production no higher than is required to supply power which is obtained elsewhere for essential services.
- a. Reduce operation to lowest level possible consistent with preventing damage to equipment.

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 27 - DEPARTMENT OF ENVIRONMENTAL QUALITY

- d. Specific additional requirements for industries operating under an approved source emission reduction plan including: Petroleum Refining; Chemical; Primary Metals; Glass; Paper and Allied Products; Mineral Processing; Grain; Wood Processing.
- a. Cease all trade waste disposal operations.
- b. If meteorological conditions are expected to persist for 24 hours or more, cease all operations not required for safety and protection of equipment.

Table 4 (340-27-012)

Air Pollution Episode Conditions Due to Particulate Which is Primarily Fallout from Volcanic Activity

> or Windblown Dust

Ambient Particulate Control Measures to be Taken as Appropriate in Episode Area

Part A - ALERT Condition Actions

- 1. Traffic reduction by voluntary route control in contaminated areas.
- Voluntary motor vehicle speed limits in dusty or fallout areas.
- 3. Voluntary street sweeping.
- 4. Voluntary wash down of traffic areas.

Part B - WARNING Condition Actions

- 1. Continue and intensify alert procedures.
- Mandated speed limits and route control in contaminated areas.
- 3. Mandate wash down of exposed horizontal surfaces where feasible.
- 4. Request businesses to stagger work hours where possible as a means of avoiding heavy traffic.

Part C - EMERGENCY Condition Actions

- 1. Continue warning level procedures, expanding applicable area if necessary.
- Prohibit all except emergency traffic on major roads and thoroughfares until the area has been cleaned.
- 3. Other measures may be required at the discretion of the Governor.

DIVISION 28

{SPECIFIC AIR-POLLUTION CONTROL RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH, AND WASHINGTON COUNTIES}

Purpose and Application

340-28-001 [The rules in this division shall apply in Clackamas, Columbia, Multnomah, and Washington Counties. The purposes of these rules are to provide continuity of the air quality control program previously administered by the Columbia-Willamette Air Pollution Authority and to deal specially with the critical and unique air quality control needs of the four county area. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the four county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-400]

Exclusions

340-28-003 [The requirements contained in this division shall apply to all activities conducted in Clackamas, Columbia, Multnomah, and Washington Counties, other than those for which specific industrial standards have been adopted (Division 25), except for the reduction of animal matter, sections 340-25-055(1) and (2).

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 34030-410]

Definitions

340-28-005 [As used in this division:

- (1) "Fuel Burning Equipment" means a device which burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat, except marine installations and internal combustion engines that are not stationary gas turbines.
- (2) "Odor" means the property of a substance which allows its detection by the sense of smell.

Stat. Auth.: ORS Ch. Hist.: }[DEQ 61, f. 2-5-73, ef. 12-25-73; DEQ 88, f. 4-3-75, ef. 4-3-75(Temp), 4-25-75(Perm); DEQ 123, f. & ef. 10-20-76, Repealed by DEQ1 Open Outdoor Fires - General **340-28-010** [DEQ 61, f. 12-5-73, ef. 12-25-73; Repealed by DEQ 123, f. & ef. 10-20-76] Open Outdoor Fires - Domestic **340-28-015** [DEQ 61, f. 12-5-73, ef. 12-25-73; DEQ 88, f. 4-3-75, ef. 4-3-75(Temp), ef. 4-25-75(Perm); Repealed by DEQ 123, f. & ef. 10-20-76] Open Outdoor Fires - Land Clearing 340-28-020 [DEQ 61, f. 12-5-73, ef. 12-25-73; Repealed by DEQ 123, f. & ef. 10-20-76] Incinerators and Refuse Burning Equipment 340-28-025 f (1) No person shall cause, permit, or maintain any emission from any refuse burning equipment which does not comply with the emission limitations of these rules.

- (2) Refuse Burning Hours:
 - (a) No person shall cause, permit, or maintain the operation of refuse burning equipment at any time other than one-half hour before sunrise to one-half hour after sunset, except with prior approval of the Department.
 - (b) Approval of the Department for the operation of such equipment may be granted upon the submission of a written request stating:
 - (A) Name and address of the applicant;
 - (B) Location of the refuse burning equipment;
 - (C) Description of refuse burning equipment and its control apparatus;
 - (D) Type and quantity of refuse; -
 - (E) Good cause for issuance of such approval;
 - (F) Hours during which the applicant seeks to operate the equipment;
 - (G) Time duration for which approval is sought.

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-420]

Effective Capture of Air Contaminant Emissions

340-[28-040]30-440 Air contaminants which are, or may be, emitted to the atmosphere through doors, windows, or other openings in a structure or which are, or may be, emitted from any process not contained in a structure, shall be captured and transferred to air pollution control equipment using the most efficient and best practicable hooding, shrouding, or ducting equipment available. New sources shall comply at the time of installation.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-040

Odor Control Measures 340-[28-045]30-450

- (1) Control apparatus and equipment, using the highest and best practicable treatment currently available, shall be installed and operated to reduce to a minimum odor-bearing gases or odor-bearing particulate matter emitted into the atmosphere.
- (2) Gas effluents from incineration operations and process after-burners shall be maintained at a temperature of 1,400 degrees Fahrenheit for at least <u>a</u> 0.5 second <u>residence</u> <u>time</u>, or controlled in another manner determined by the Department to be equally or more effective.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-045

Storage and Handling of Petroleum Products 340-[28-050]30-460

- (1) In volumes of greater than 40,000 gallons, gasoline or any volatile petroleum distillate or organic liquid having a vapor pressure of 1.5 p.s.i.a. or greater under actual storage conditions shall be stored in pressure tanks or reservoirs or shall be stored in containers equipped with a floating roof or vapor recovery system or other vapor emission control device.
- (2) Gasoline or petroleum distillate tank car or tank loading facilities handling 20,000 gallons per day or more shall be equipped with submersible filling devices or other vapor emission control systems.

Incinerators and Refuse Burning Equipment 340-[28-025]30-420

- (1) No person shall cause, permit, or maintain any emission from any refuse burning equipment which does not comply with the emission limitations of these this rule:
- (2) Refuse Burning Hours:
 - (a) No person shall cause, permit, or maintain the operation of refuse burning equipment at any time other than one-half hour before sunrise to one-half hour after sunset, except with prior approval of the Department.
 - (b) Approval of the Department for the operation of such equipment may be granted upon the submission of a written request stating:
 - (A) Name and address of the applicant;
 - (B) Location of the refuse burning equipment;
 - (C) Description of refuse burning equipment and its control apparatus;
 - (D) Type and quantity of refuse;
 - (E) Good cause for issuance of such approval;
 - (F) Hours during which the applicant seeks to operate the equipment;
 - (G) Time duration for which approval is sought.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28025

Concealment and Masking of Emissions 340-[28-030]30-430

- (1) No person shall willfully cause or permit the installation or use of any device or use of any means such as dilution, which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminants which would otherwise violate [rules of the Department] OAR Chapter 340.
- (2) No person shall cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which air contaminant causes or is likely to cause detriment to health, safety, or welfare of any person.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-030

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

SPECIFIC AIR POLLUTION CONTROL RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH, AND WASHINGTON COUNTIES

{Purpose and }Application

340-[28-001]30-400 [The rules in this division]OAR 340-30-400 through 340-30-540 shall apply in Clackamas, Columbia, Multnomah, and Washington Counties. [The purposes of these rules are to provide continuity of the air quality control program previously administered by the Columbia-Willamette Air Pollution Authority and to deal specially with the critical and unique air quality control needs of the four county area. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the four county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-001

Exclusions

340-[28-003]30-410 The requirements contained in [this division]OAR 340-30-400 through 340-30-540 shall apply to all activities conducted in Clackamas, Columbia, Multnomah, and Washington Counties, other than those for which specific industrial standards have been adopted (Division 25), except for the reduction of animal matter, sections 340-25-055(1) and (2).

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-003

Hardboard Manufacturing Plants

340-30-220 No person shall cause or permit the total emissions of particulate matter from all sources within a hardboard plant, other than press/cooling vents, in excess of 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

Air Conveying Systems 340-30-225

- (1) No person shall cause or permit the emission of particulate matter in excess of 0.1 grains per standard cubic foot from any air conveying system emitting less than or equal to 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990.
- (2) All air conveying systems emitting greater than 10 tons of particulate matter to the atmosphere during any 12-month period beginning on or after January 1, 1990 shall be equipped with a control system with a collection efficiency of at least 98.5 percent or equivalent control as approved by the Department.
- (3) No person shall cause or permit the emission of any air contaminant which is equal to or greater than 5% opacity from any air conveying system subject to section (2) of this rule.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

Fugitive Emissions

340-30-230 The owner or operator of a large sawmill, any plywood mill or veneer manufacturing plant, particleboard plant, hardboard plant, or charcoal manufacturing plant that is located in the La Grande Urban Growth Area shall comply with OAR 340-30-043.

Wood-Waste Boilers

340-30-210 No person shall cause or permit the emission into the atmosphere from any wood-waste boiler that is located on a plant site where the total heat input capacity from all wood-waste boilers is greater than 35 million BTU/hr:

- (1) Any air contaminant for a period or periods aggregating more than three minutes in any one hour which is equal to or greater than 10% opacity, unless the permittee demonstrates by source test that the source can comply with the emission limit in section (2) of this rule at higher opacity but in no case shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.
- (2) Particulate matter in excess of 0.05 grains per standard cubic foot, corrected to 12% CO₂.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

Wood Particle Dryers at Particleboard Plants 340-30-215

- (1) No person shall cause or permit the total emission of particulate matter from all wood particle dryers at a particleboard plant site to exceed 0.40 pounds per 1,000 square feet of board produced by the plant on a 3/4" basis of finished product equivalent.
- (2) No person shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed 10% opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

- (c) No later than eight months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department vendor drawings as approved for construction of any emission-control devices and specifications of any other major equipment in the emission control system in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;
- (d) No later than nine months after receiving the Department's approval of the Design Criteria, the owner or operator shall begin construction of any emission-control devices;
- (e) No later than sixteen months after receiving the Department's approval of Design Criteria, the owner or operator shall complete construction in accordance with the Design Criteria;
- (f) No later than May 15, 1994, the owner or operator shall demonstrate compliance with the applicable contingency requirements.
- (2) Section (1) of this rule shall not apply if the owner or operator has demonstrated by May 15, 1992 that the source is capable of being operated and is operated in continuous compliance with applicable requirements of OAR 340-30-200 through 340-30-230 and the Department has agreed with the demonstration in writing. The Department may grant an extension until November 15, 1992 for a source to demonstrate compliance under this section. The applicable requirements shall be incorporated in the Air Contaminant Discharge Permit issued to the source.
- (3) The Department may adjust the schedule specified in paragraphs (a) through (e) of section (1) of this rule if necessary to ensure timely compliance with paragraph (f) of section (1) of this rule or if necessary to conform to an existing compliance schedule with an earlier compliance demonstration date.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 30 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

SPECIFIC AIR POLLUTION CONTROL RULES FOR THE LA GRANDE URBAN GROWTH AREA

Application

340-30-200 OAR 340-30-200 through 340-30-230 shall apply in the La Grande Urban Growth Area.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

Compliance Schedule for Existing Sources 340-30-205

- (1) Except as provided in sections (2) and (3) of this rule, compliance with applicable requirements of OAR 340-30-200 through 340-30-230 for a source that is located in the La Grande Urban Growth Area prior to November 15, 1991 shall be demonstrated as expeditiously as possible, but in no case later than the following schedule:
 - (a) No later than May 15, 1992, the owner or operator shall submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval; and if the Department disapproves the Design Criteria, the owner or operator shall revise the Design Criteria to meet the Department's objections and submit the revised Design Criteria to the Department no later than one month after receiving the Department's disapproval;
 - (b) No later than three months after receiving the Department's approval of the Design Criteria, the owner or operator shall submit to the Department a General Arrangement and copies of purchase orders for any emission-control devices;

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89

Dual-Fueling Feasibility Study For Wood-Waste Boilers 340-30-115

- (1) On or before July 1, 1994, the owner or operator of a plant site in the Medford-Ashland AQMA where the total heat input capacity from all wood-waste boilers is greater than 35 million BTU/hr shall submit to the Department the results of a dual-fueling feasibility study conducted in accordance with a study protocol submitted under section (2) of this rule which has been approved by the Department.
- On or before January 1, 1993, a person subject to section (2) (1) of this rule shall submit to the Department for approval a study protocol to evaluate the feasibility, costs and benefits of implementing a program to provide alternate fueling capability after December 31, 1994, for wood-waste boilers during periods of actual, anticipated or potential exceedance of the ambient air quality standard for PM10. The protocol shall identify the methodology and schedule for evaluating the adequacy of supply of natural gas and other alternate fuels during the winter months, the cost and technical feasibility of modifying existing woodwaste boilers, the air quality benefits and costs of fuel switching prior to or during periods of poor air quality, and relevant maintenance and operational concerns including start-up and shut-down impacts.
- (3) One or more persons subject to section (1) of this rule may submit a combined study protocol to the Department, conduct a combined study and submit combined results to the Department. Such a combined study shall evaluate the cost and technical feasibility of modifying existing wood-waste boilers at the plant site of each participating person. The combined study may jointly evaluate fuel supply, air quality, and maintenance and operational concerns applicable to all participating persons. A combined study shall be conducted by an independent contractor hired by the participating persons and approved by the Department.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1988, f. & cert. ef. 9-26-89

Rebuilt Boilers

340-30-067 Rebuilt boilers shall immediately comply with the requirements of OAR 340-30-015(3) except that in the Grants Pass Urban Growth Area this provision will apply to sources that are rebuilt after they have complied with [coar] OAR
340-30-015(1).

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 22-1988, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

Open Burning

340-30-070 No open burning of domestic waste shall be initiated on any day or at any time when the Department advises fire permit issuing agencies that open burning is not allowed because of adverse meteorological or air quality conditions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78

Emission Offsets

340-30-110 [DEQ 9-1979, f. & ef. 5-3-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Emission Offsets

340-30-111 In the Medford-Ashland AQMA, emission offsets required in accordance with OAR 340-20-240 for new or modified sources shall provide reductions in emissions equal to 1.2 times the emission increase from the new or modified sources.

- (a) Wood Waste Boilers with heat input greater than 35 million Btu/hr. Once every year;
- (b) Veneer Dryers Once every year during 1991, 1992, and 1993 and once every 3 years thereafter;
- (c) Wood Particle Dryers at Hardboard and Particleboard Plants Once every year;
- (d) Charcoal Producing Plants Once every year.
- (e) Wood Waste Boilers with heat input equal to or less than 35 million BTU/hr with dry emission control equipment - Once in 1992 and once every 3 years thereafter.
- (2) Source testing shall begin at these frequencies within 90 days of the date by which compliance is to be achieved for each individual emission source.
- (3) These source testing requirements shall remain in effect unless waived in writing by the Department because of adequate demonstration that the source is consistently operating at lowest practicable levels, or that continuous emission monitoring systems are producing equivalent information.
- (4) Source tests on wood waste boilers shall not be performed during periods of soot blowing, grate cleaning, or other abnormal operating conditions. The steam production rate during the source test shall be considered the maximum permittee's steaming rate for the boiler.
- (5) Source tests shall be performed within 90 days of the startup of air pollution control systems.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1988, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

Total Plant Site Emissions
340-30-060 [DEQ 4-1978, f. & ef. 4-7-78;
Repealed by DEQ 25-1981,
f. & ef. 9-8-81]

New Sources

340-30-065 New sources shall be required to comply with OAR 340-30-015(3) and $340-30-02\frac{\{0\}}{2}$ through 340-30-111 immediately upon initiation of operation.

responsible for the affected facilities based on unavailability of suitable equipment or other problems.

- (2) At a minimum, the monitoring clan submitted under paragraph (1)(a) of this section shall include:
 - (a) Continuous monitoring and monthly reporting of carbon monoxide concentration and oxygen concentration for any wood-waste fired boiler with a heat input greater than 35 million BTU/hr or for any wood-waste boiler using a wet scrubber as pollution control equipment and steam production rate for any wood-waste fired boiler;
 - (b) Continuous monitoring and monthly reporting of pressure drop, scrubber water pressure, and scrubber water flow for any wood-waste fired boiler, veneer dryer, particle dryer, or fiber dryer using a wet scrubber as pollution control equipment;

(c) Continuous monitoring and monthly reporting of opacity for any wood-waste fired boiler not controlled by a wet scrubber; and

(d) Continuous availability by electronic means to the Department of the emission and performance data specified in subsection (2)(a) through (c) of this section for any wood-waste fired boiler subject to the emission requirements of OAR 340-30-015.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

Source Testing 340-30-055

(1) The person responsible for the following sources of particulate emissions shall make or have made tests to determine the type, quantity, quality, and duration of emissions, and/or process parameters affecting emissions, in conformance with test methods on file with the Department at the following frequencies:

Continuous Monitoring 340-30-050

- (1)The Department will require the installation and operation of instrumentation for measuring and recording emissions and/or the parameters which affect the emission of air contaminants from wood-waste fired boilers, veneer dryers, fiber dryers, and particle dryers to ensure that the sources and the air pollution control equipment are operated at all times at their full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable level. The instrumentation shall be periodically calibrated. The method and frequency of calibration shall be approved in writing by the Department. Continuous monitoring equipment and operation shall be in accordance with continuous emission monitoring systems guidance provided by the Department and shall be consistent, where applicable, with the EPA performance specifications and quality assurance procedures outlined in 40 CFR 60, Appendices B and F, and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume III. The recorded information shall be kept for a period of at least one year and shall be made available to the Department upon request. The selection, installation, and use of the instrumentation shall be done according to the following schedule:
 - (a) [Within six months from the effective date of these rules] By March 27, 1990, the persons responsible for the affected facilities shall submit to the Department a plan for process and or emission monitoring. The Department's primary criterion for review and approval of the plans will be the ability of proposed instrumentation to demonstrate continuous compliance with[these regulations] OAR 340-30-012 through 340-30-115;
 - (b) Within one year from the Department's approval of the plan(s), but no later than July 1, 1992, the persons responsible for the affected facilities shall purchase, install, place in operation the instrumentation as approved, verify that it is capable of demonstrating continuously the compliance status of the affected facilities, and commence continuous monitoring and reporting results to the Department, at a frequency and in a form agreed upon by the Department and the responsible persons;
 - (c) The implementation date in subsection (1)(b) of this section can be extended up to one year, subject to Department approval, if justified by the persons

devices and specifications of other major equipment in the emission control system (such as fans, scrubber-medium recirculation and make up systems) in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;

- (d) Within one year of receiving the Department's approval of Design Criteria, complete construction;
- (e) Within fifteen months of receiving the Department's approval of Design Criteria, but no later than June 30, 1991, demonstrate compliance.
- (2) Compliance with the emission limits for wood-waste boilers in OAR 340-30-015(3) shall be provided according to OAR 340-30-067 or the following schedule, whichever occurs first:
 - (a) By no later than September 1, 1993, submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval;
 - (b) Within three months of receiving the Department's approval of the Design Criteria, submit a General Arrangement and copies of purchase orders for the emission-control devices;
 - (c) Within two months of placing purchase orders for emission-control devices, submit vendor drawings as approved for construction of the emission-control devices and specifications of other major equipment in the emission-control system (such as fans, scrubber-medium recirculation and make up systems) in sufficient detail to demonstrate that the requirements of the Design Criteria will be satisfied;
 - (d) Within one year of receiving the Department's approval of Design Criteria, complete construction;
 - (e) Within fifteen months of receiving the Department's approval of Design Criteria, but no later than December 31, 1994, demonstrate compliance.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

- (b) Preventative maintenance procedures, schedule and records;
- (c) Logging of the occurrence and duration of all upsets, breakdowns and malfunctions which result in excessive emissions;
- (d) Routine follow-up evaluation of upsets to identify the cause of the problem and changes needed to prevent a recurrence;
- (e) Periodic source testing of pollution control units as required by air contaminant discharge permits;
- (f) Inspection of internal wear points of pollution control equipment during scheduled shutdowns; and
- (g) Inventory of key spare parts.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89

Compliance Schedules

340-30-045 [DEQ 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80; DEQ 14-1981, f. & ef. 5-6-81; DEQ 6-1983, f. & ef. 4-18-83; Repealed by DEQ 22-1989, f. & cert. ef. 9-26-89]

Emission-Limits Compliance Schedules 340-30-046

- (1) Compliance with the emission limits for wood-waste boilers in the Grants Pass area and veneer dryers established in OAR 340-30-015(1) and (2) and 340-30-021 shall be provided according to the following schedules:
 - (a) [Within three months of the effective date of these rules] By December 25, 1989, submit Design Criteria and a Notice of Intent to Construct for emission control systems for Department review and approval;
 - (b) Within three months of receiving the Department's approval of the Design Criteria, submit a General Arrangement and copies of purchase orders for the emission-control devices;
 - (c) Within two months of placing purchase orders for emission-control devices, submit vendor drawings as approved for construction of the emission-control

airborne. Such reasonable measures shall include, but not be limited to the following:

- (a) Scheduled application of asphalt, oil, water, or other suitable chemicals on unpaved roads, log storage or sorting yards, materials stockpiles, and other surfaces which can create airborne dust;
- (b) Full or partial enclosure of materials stockpiled in cases where application of oil, water, or chemicals are not sufficient to prevent particulate matter from becoming airborne;
- (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- (d) Adequate containment during sandblasting or other similar operations;
- (e) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; and
- (f) Procedures for the prompt removal from paved streets of earth or other material which does or may become airborne.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 6-1983, f. & ef. 4-18-83; DEQ 22-1989, f. & cert. ef. 9-26-89

Requirement for Operation and Maintenance Plans (Medford-Ashland AQMA Only)

340-30-044

- (1) Operation and Maintenance Plans shall be prepared by all holders of Air Contaminant Discharge Permits except minimal source permits and special letter permits. All sources subject to regular permit requirements shall be subject to operation and maintenance requirements.
- (2) The purposes of the operation and maintenance plans are to:
 - (a) Reduce the number of upsets and breakdowns in particulate control equipment;
 - (b) Reduce the duration of upsets and downtimes; and
 - (c) Improve the efficiency of control equipment during normal operations.
- (3) The operation and maintenance plans should consider, but not be limited to, the following:
 - (a) Personnel training in operation and maintenance;

Stat. Auth.: ORS Ch. 468 <u>& 468A</u> Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80

Charcoal Producing Plants 340-30-040

- (1) No person shall cause or permit the emission of particulate matter from charcoal producing plant sources including, but not limited to, charcoal furnaces, heat recovery boilers, and wood dryers using any portion of the charcoal furnace off-gases as a heat source, in excess of a total from all sources within the plant site of 10.0 pounds per ton of char produced (5.0 grams per Kilogram of char produced).
- (2) Emissions from char storage, briquette making, boilers not using charcoal furnace off-gases, and fugitive sources are excluded in determining compliance with section (1) of this rule.
- (3) Charcoal producing plants as described in section (1) of this rule shall be exempt from the limitations of OAR 340-21-030(1) and (2) and 340-21-040 which concern particulate emission concentrations and process weight.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1989, f. & cert. ef. 9-26-89

Control of Fugitive Emissions (Medford-Ashland AQMA Only) 340-30-043

- (1) Large sawmills, all plywood mills and veneer manufacturing plants, particleboard and hardboard plants, charcoal manufacturing plants, stationary asphalt plants and saurces sabject to OAR 340-21-245 or 340-30-230 shall prepare and implement site-specific plans for the control of fugitive emissions. (The air contaminant sources listed are described in OAR 340-20-155, Table 1, paragraphs 10a, 14a, 14b, 15, 17, 18, 29, 34a and 42a, respectively.)
- (2) Fugitive emission control plans shall identify reasonable measures to prevent particulate matter from becoming

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89

Wood Particle Dryers at Particleboard Plants 340-30-030

- (1) No person shall cause or permit the total emission of particulate matter from all wood particle dryers at a particleboard plant site to exceed 0.40 pounds per 1,000 square feet of board produced by the plant on a 3/4" basis of finished product equivalent.
- (2) No person shall cause or permit the visible emissions from the wood particle dryers at a particleboard plant to exceed 10% opacity, unless the permittee demonstrates by source test that the particulate matter emission limit in section (1) can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 14-1981, f. & ef. 5-6-81; DEQ 14-1986, f. & ef. 6-20-86; AQ 8, f. & ef. 11/13/91

Hardboard Manufacturing Plants

340-30-031 No person shall cause or permit the total emissions of particulate matter from all facilities at a hardboard plant to exceed 0.25 pounds per 1,000 square feet of hardboard produced on a 1/8" basis of finished product equivalent.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 14-1981, f. & ef. 5-6-81; DEQ 14-1986, f. & ef. 6-20-86

Wigwam Waste Burners

340-30-035 No person owning or controlling any wigwam burner shall cause or permit the operation of the wigwam burner.

- Department as being capable of complying with subsections (1)(a) through (q);
- (b) The veneer dryer is equipped with an emission control system which has been approved in writing by the Department and is capable of complying with subsections (1)(a) through (g); or
- (c) The owner or operator has demonstrated and the Department has agreed in writing that the dryer is capable of being operated and is operated in continuous compliance with subsections (1)(a) through (q).
- (4) Each veneer dryer shall be maintained and operated at all times such that air contaminant generating processes and all contaminant control equipment shall be at full efficiency and effectiveness so that the emission of air contaminants is kept at the lowest practicable levels.
- (5) No person shall willfully cause or permit the installation or use of any means, such as dilution, which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission which would otherwise violate this rule.
- (6) Where effective measures are not taken to minimize fugitive emissions, the Department may require that the equipment or structures in which processing, handling and storage are done, be tightly closed, modified, or operated in such a way that air contaminants are minimized, controlled, or removed before discharge to the open air.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

Air Conveying Systems (Medford-Ashland AOMA Only)

340-30-025 All air conveying systems emitting greater than 10 tons per year of particulate matter to the atmosphere at the time of adoption of these this rule shall, with the prior written approval of the Department, be equipped with a control system with collection efficiency of at least 98.5 percent.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Veneer Dryer Emission Limitations 340-30-020 [DEQ 4-1978, f. & ef. 4-7-78; DEQ 3-1980, f. & ef. 1-28-80; Repealed by DEQ 10-1985, f. & ef. 8-8-85]

Veneer Dryer Emission Limitations 340-30-021

- (1) No person shall operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed the opacity limits specified in subsections (a) and (b) or such that emissions of particulate matter exceed the mass emission limits of subsections (c) through (g):
 - (a) An average operating opacity of 5%; and
 - (b) A maximum opacity of 10%, unless the permittee demonstrates by source test that the emission limits in subsections (c) through (g) can be achieved at higher visible emissions than specified in subsections (a) and (b), but in no case shall emissions exceed the visible air contaminant limitations of section 340-25-315(1)(b). Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.
 - (c) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct natural gas or propane fired veneer dryers;
 - (d) 0.30 pounds per 1,000 square feet of veneer dried (3/8" basis) for steam heated veneer dryers;
 - (e) 0.40 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight less than 20%;
 - (f) 0.45 pounds per 1,000 square feet of veneer dried (3/8" basis) for direct wood fired veneer dryers using fuel which has a moisture content by weight greater than 20%;
 - (g) In addition to subsections (e) and (f), 0.20 pounds per 1,000 pounds of steam generated in boilers which exhaust combustion gases to the veneer dryer.
- (2) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from OAR 340-21-020.
- (3) No person shall operate a veneer dryer unless:
 - (a) The owner or operator has submitted a program and time schedule for installing an emission control system which has been approved in writing by the

- (2) No person owning or controlling any wood waste boiler with a heat input greater than 35 million BTU/hour shall cause or permit the emission of any air contaminant into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour equal to or greater than 10 percent opacity, unless the permittee demonstrates by source test that the emission limit in paragraph (1) of this section can be achieved at higher visible emissions, but in no case shall emissions equal or exceed 20% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected source.
- (3) In accordance with the compliance schedule in 340-30-046(2), no person shall cause or permit the emission of particulate matter from any boiler with a heat input greater than 35 million Btu/hour unless the boiler has been equipped with emission control equipment which:
 - (a) Limits emissions of particulate matter to LAER as defined by the Department at the time the Department approves the control device; and
 - (b) Limits visible emissions such that their opacity does not exceed 5% for more than an aggregate of 3 minutes in any one hour, unless the permittee demonstrates by source test that emissions can be limited to LAER at higher visible emissions, but in no case shall emissions equal or exceed 10% opacity for more than an aggregate of 3 minutes in any one hour. Specific opacity limits shall be included in the Air Contaminant Discharge Permit for each affected
 - (c) For purposes of OAR 340-20-265 and 340-20-310, the boiler mass emission limits shall be based on particulate matter emissions of 0.030 grains per standard dry cubic foot, corrected to 12% CO₂.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 29-1980, f. & ef. 10-29-80; DEQ 14-1986, f. & ef. 6-20-86; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

- "Wigwam Waste Burner" means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for the incineration of wastes.
- "Wood Waste Boiler" means equipment which uses indirect heat transfer from the products of combustion of wood waste to provide heat or power.

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 9-1979, f. & ef. 5-3-79;
DEQ 3-1980, f. & ef. 1-28-80; DEQ 14-1981, f. & ef. 5-6-81; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

SPECIFIC AIR POLLUTION CONTROL RULES FOR THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA AND THE GRANTS PASS URBAN GROWTH AREA

Application

340-30-012 OAR 340-30-012 through 340-30-115 shall apply in the Medford-Ashland Air Quality Maintenance Area (AQMA) and the Grants Pass Urban Growth Area (Area) except where expressly provided that a rule applies only in the Medford-Ashland AQMA.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 8, f. & ef. 11/13/91

Wood Waste Boilers 340-30-015

(1) No person shall cause or permit the emission of particulate matter from any wood waste boiler with a heat input greater than 35 million BTU/hr in excess of 0.050 grain per dry standard cubic foot of exhaust gas, corrected to 12 percent carbon dioxide.

matter emission determinations shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run shall have a minimum sampling time of one hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers and charcoal producing plants shall be tested with DEQ Method 5; veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.

- "Person" includes individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the state and any agencies thereof, and the federal government and any agencies thereof.
- "Rebuilt Boiler" means a physical change after April 29, 1988, to a wood-waste boiler or its air-contaminant emission control system which is not considered a "modified source" and for which the fixed, depreciable capital cost of added or replacement components equals or exceeds fifty percent of the fixed depreciable cost of a new component which has the same productive capacity.
- "Source" means any structure, building, facility, equipment, installation or operation, or combination thereof, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person, or by persons under common control.
- "Standard Conditions" means a temperature of 60 degrees Fahrenheit (15.6 degrees Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 Kilograms per square centimeter).
- "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.
- [(34)](37) "Veneer Dryer" means equipment in which veneer is dried.
- "Wood-fired Veneer Dryer" means a veneer dryer which is directly heated by the products of combustion of wood fuel in addition to or exclusive of steam or natural gas or propane combustion.

Section 36, T35S, R1W; thence south along the Willamette Meridian to the SE corner of Section 25, T37S, R1W; thence SE along a line to the SE corner of Section 9, T39S, R2E; thence SSE to the corner of Section 22, T39S, R2E; thence south to the SE corner of Section 27, T39S, R2E; thence SW to the SE corner of Section 33, T39S, R2E; thence NW to the NW corner of Section 36, T39S, R1E; thence west to the SW corner of Section 26, T39S, T1E; thence west to the SW corner of Section 12, T39S, R1W; thence NW along a line to the SW corner of Section 20, T38S, R1W; thence west to the SW corner of Section 24, T38S, R2W; thence NW along a line to the SW corner of Section 4, T38S, R2W; thence west to the SW corner of Section 5, T38S, R2W; thence NW along a line to the SW corner of Section 31, T37S, R2W; thence north along a line to the Rogue River, thence north and east along the Roque River to the north boundary of Section 32, T35S, R1W; thence east along a line to the point of beginning.

- [(22)](24) "Modified Source" means any source with a "major
 modification" as defined in OAR 340-20-225.
- "New Source" means any source not previously existing in existence prior to April 7, 1978 or any source not having an Air Contaminant Discharge Permit on the effective date of these rules as of April 7, 1978.
- (26) "Odor" means that property of an air contaminant that affects the sense of smell.
- $\frac{(24)}{(27)}$ "Offset" is defined by OAR 340-20-225.
- "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background as measured in accordance with the Department's Source Sampling Manual.
- "Open Burning" means burning conducted in such a manner that combustion air and combustion products may not be effectively controlled including, but not limited to, burning conducted in open outdoor fires, burn barrels, and backyard incinerators.
- "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binders.
- "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured in accordance with the Department Source Sampling Manual. Particulate

"Fuel Moisture Content By Weight Greater Than 20 $\frac{(12)}{(14)}$ Percent" means bark, hogged wood waste, or other wood with an average moisture content of more than 20 percent by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing. "Fuel Moisture Content By Weight Less Than 20 $\frac{(13)}{(15)}$ Percent" means pulverized ply trim, sanderdust, or other wood with an average moisture content of 20 percent or less by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing. "Fugitive Emissions" means dust, fumes, gases, mist, $\frac{(14)}{(16)}$ odorous matter, vapors, or any combination thereof not easily given to measurement, collection and treatment by conventional pollution control methods. "General Arrangement", in the context of the [(15)](17) compliance schedule requirements in section 340-32-045(2), means drawings or reproductions which show as a minimum the size and location of the control equipment on a source plot plan, the location of equipment served by the emission-control system, and the location, diameter, and elevation above grade of the ultimate point of discharging contaminants to the atmosphere. [(16)](18) "Grants Pass Urban Growth Area" and "Grants Pass Area" means the area within the Grants Pass Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of Grants Pass as of 1 February 1988. "Hardboard" means a flat panel made from wood that $\frac{(17)}{(19)}$ has been reduced to basic wood fibers and bonded by adhesive properties under pressure. [(18)](20) "La Grande Urban Growth Area" means the area within the La Grande Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of La Grande as of 1 October 1991. "Lowest Achievable Emission Rate" or "LAER" is $\frac{(19)}{(21)}$ defined by section 340-20-225 "Maximum Opacity" means the opacity as determined by $\frac{(20)}{(22)}$ EPA Method 9 (average of 24 consecutive observations).

[(21)](23)

"Medford-Ashland Air Quality Maintenance Area" and

"Medford-Ashland AQMA" is defined as beginning at a point approximately one mile NE of the town of Eagle Point, Jackson County, Oregon, at the NE corner of

[(3)](4)	"Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of
	wood to obtain the fixed carbon in the wood.
[(4)](5)	"Collection Efficiency" means the overall performance
	of the air cleaning device in terms of ratio of weight of material collected to total weight of input
	to the collector.
[(5)](6)	"Department" means Department of Environmental
	Quality.
[(6)]<u>(7)</u>	"Design Criteria" means the numerical as well as
	verbal description of the basis of design, including but not necessarily limited to design flow rates,
	temperatures, humidities, contaminant descriptions in
	terms of types and chemical species, mass emission
	rates, concentrations, and specification of desired
	results in terms of final emission rates and concentrations, and scopes of vendor supplies and
	owner-supplied equipment and utilities, and a
	description of any operational controls.
[(7)](8)	"Domestic Waste" means combustible household waste,
	other than wet garbage, such as paper, cardboard,
	leaves, yard clippings, wood, or similar materials generated in a dwelling housing four (4) families or
	less, or on the real property on which the dwelling
	is situated.
[(8)](9)	"Dry Standard Cubic Foot" means the amount of gas
	that would occupy a volume of one cubic foot, if the
	gas were free of uncombined water at standard conditions.
[(9)](10)	"Emission" means a release into the outdoor
	atmosphere of air contaminants.
[(10)](11)	"EPA Method 9" means the method for Visual
	Determination of the Opacity of Emissions From
	Stationary Sources as promulgated by the U.S. Environmental Protection Agency in Title 40 of the
	Code of Federal Regulations, Part 60, Appendix A,
	Method 9.
[(11)](12)	"Facility" means an identifiable piece of process
	equipment. A stationary source may be comprised of one or more pollutant-emitting facilities.
(13) "Fuel	Burning Equipment" means a device which burns a
solid	, liquid, or gaseous fuel, the principal purpose of
which is to produce heat, except marine installations and	
internal combustion engines that are not stationary gas	

turbines.

DIVISION 30

SPECIFIC AIR POLLUTION CONTROL RULES FOR AREAS WITH UNIQUE AIR QUALITY CONTROL NEEDS

Purpose and Application

340-30-005 The purpose of these rules this Division is to deal specifically with the unique air quality control needs of areas of the state specified in OAR 340-30-012, and OAR 340-30-200, OAR 340-30-400 and OAR 340-30-600. These rules This Division shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules this Division shall not, in any way, affect the applicability in the specified areas of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent conflict, the most stringent rule shall apply.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

Definitions

340-30-010 As used in this Division , and unless otherwise required by context:

- (1) "Air contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter, or any combination thereof.
- "Air Conveying System" means an air moving device, such as a fan or blower, associated ductwork, and a cyclone or other collection device, the purpose of which is to move material from one point to another by entrainment in a moving airstream.
- "Average Operating Opacity" means the opacity of emissions determined using EPA Method 9 on any three days within a 12-month period which are separated from each other by at least 30 days; a violation of the average operating opacity limitation is judged to have occurred if the opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.

Rules and Regulations of the Mid-Willamette Valley Air Pollution Authority

340-29-010 [DEQ 29-1979, f. & ef. 7-6-79; Repealed by DEQ 11-1982, f. & ef. 6-18-82]

Odors

340-29-011 f

- (1) Unless otherwise regulated by specific odor regulation or standard, no person shall cause or permit the emission of odorous matter in such a manner as to cause a public nuisance or that occurs for sufficient duration or frequency so that two measurements made within a period of one (1) hour, separated by at least 15 minutes, off the property surrounding the emission point, that is equal to or greater than a Scentometer No. 0 or equivalent dilutions in areas used for residential, recreational, educational, institutional, hotel, retail sales or other similar purposes.
- (2) In all land use areas other than section (1) of this rule, release of odorous matter shall be prohibited if equal to or greater than a Scentometer No. 2 odor strength, or equivalent dilutions.

Stat. Auth.: ORS Ch. 468
Hist.:][DEQ 11-1982, f. & ef. 6-18-82, Renumbered to OAR 340-30-610]

Other Emissions

340-29-020 [DEQ 11-1982, f. & ef. 6-18-82; Repealed by DEQ 4-1983, f. & ef. 4-18-83]

Emission Restrictions --- Large Particulate Matter

340-29-030 [No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon real property of another person.

Stat. Auth.: ORS Ch. 468
Hist.:][DEQ 11-1982, f. & ef. 6-18-82, Renumbered to OAR 340-30-620]

Open Burning

340-29-055 [DEQ 109, f. 3-15-76, ef. 3-25-76; Repealed by DEQ 123, f. & ef. 10-20-76]

DIVISION 29

[SPECIFIC AIR POLLUTION CONTROL RULES FOR BENTON, LINN, MARION, POLK, AND YAMHILL COUNTIES]

Purposes and Application

340-29-001 [The rules in this Division shall apply in Benton, Linn, Marion, Polk and Yamhill counties. The purpose of these rules are to deal specifically with the air quality control needs of the five county area. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the five county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.

Stat. Auth.: ORS Ch. 468
Hist.:][DEQ 109, f. 3-15-76, ef. 3-25-76; DEQ 11-1982, f. & ef.
6-18-82, Renumbered to OAR 340-30-600]

Definitions

340-29-005 [As used in this Division: —

- (1) "Air contaminant" means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof.
- (2) "Emission" means the release into the outdoor atmosphere of air contaminants.
- (3) "Odor" means that property of an air contaminant that affects the sense of smell.
- (4) "Particulate matter" means any matter, except uncombined water, which exists as a solid or liquid at standard conditions.
- (5) "Person" or "Persons" means any individual, public or private corporation, political subdivision, agency, board, department, or bureau of the state, municipality, partnership, association, firm, trust, estate or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

Stat. Auth.: ORS Ch. 468
Hist.:][DEQ 109, f. 3-15-76, ef. 3-25-76; DEQ 11-1982, f. & ef.
6-18-82, Repealed by DEQ]

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 28 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-540]

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-510]

Particulate Matter Size Standard

340-28-080 [No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon the real property of another person.

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-520]

Sulfur Dioxide Emission Limitations

340-28-085 [No person shall cause or permit emission of sulfur dioxide in excess of 1000 ppm from any air contamination source, except those persons burning fuel conforming to provisions of rules relating to the sulfur content of fuels. This rule is applicable to sources installed, constructed, or modified after October 1, 1970.

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 34030-530]

Odors

340-28-090 f

- (1) No person shall cause or permit the emission of odorous matter in such manner as to contribute to a condition of air pollution, or exceed:
 - (a) A scentometer No. 0 odor strength or equivalent dilution in residential and commercial areas.
 - (b) A scentometer No. 2 odor strength or equivalent dilution in all other land use areas.

Scentometer Readings: Scentometer No. and Concentration Range-No. of Thresholds, respectively:

0	 1 to 2
	1 60 2
1	 2 to 8
-	
2	 8 to 32
2	0 00 32
3	 32 to 128
_	72 60 120

(2) A violation of this rule shall have occurred when two measurements made within a period of one hour, separated by at least 15 minutes, off the property surrounding the air contaminant source exceeds the limitations of section (1).

Emission Standards - General

340-28-065 [Compliance with any specific emission standard in these rules does not preclude required compliance with any other applicable emission standard or requirement contained in any of the rules of the Department.

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 34030-490]

Visible Air Contaminant Standards

340-28-070 [No person owning, operating, or maintaining non-fuel burning equipment sources of emissions shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than thirty (30) seconds in any one hour which is equal to or greater than 20 percent opacity.

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 34030-500]

Particulate Matter Weight Standards 340-28-075 +

- (1) The maximum allowable emission of particulate matter from any fuel burning equipment shall:
 - (a) Be a function of maximum heat input and shall be determined from Figure 1, except from existing fuel burning equipment utilizing wood residue, it shall be 0.2 grain, and from new fuel burning equipment utilizing wood residue, it shall be 0.1 grain for each standard cubic foot of exhaust gas, calculated to 12 percent carbon dioxide;
 - (b) Not exceed Smoke Spot #2 for distillate fuel and #4 for residual fuel, measured by ASTM D2156-65, "Standard Method for Test for Smoke Density of the Flue Gases from Distillate Fuels"
- (2) The maximum allowable emission of particulate matter from any refuse burning equipment shall be a function of the maximum heat input from the refuse only and shall be determined from Figure 2.

{Publications: The publication(s) referred to or incorporated by reference in this rule is available from the office of the Secretary of State or Department of Environmental Quality.]

Storage and Handling of Petroleum Products 340-28-050 f

- (1) In volumes of greater than 40,000 gallons, gasoline or any volatile petroleum distillate or organic liquid having a vapor pressure of 1.5 p.s.i.a. or greater under actual storage conditions shall be stored in pressure tanks or reservoirs or shall be stored in containers equipped with a floating roof or vapor recovery system or other vapor emission control device.
- (2) Gasoline or petroleum distillate tank car or tank loading facilities handling 20,000 gallons per day or more shall be equipped with submersible filling devices or other vapor emission control systems.
- (3) Gasoline tanks with a capacity of 500 gallons or more, installed after January 1, 1970, shall be equipped with submersible filling device or other vapor emission control systems.

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-460]

Ships

340-28-055 [While in those portions of the Willamette River and Columbia River which pass through or adjacent to Clackamas, Columbia, and Multnomah Counties, each ship shall minimize emissions from soot blowing and shall be subject to the emission standards and rules for visible emissions and particulate matter size.

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-470]

Upset Condition

340-28-060 [Emission of air contaminants in excess of applicable standards as a result of equipment breakdown shall not be considered a violation of said standards provided the conditions of rule 340-21-075 are met.

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-480]

CHAPTER 340, DIVISION 28 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Concealment and Masking of Emissions 340-28-030 +

- (1) No person shall willfully cause or permit the installation or use of any device or use of any means such as dilution, which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminants which would otherwise violate rules of the Department.
- (2) No person shall cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which air contaminant causes or is likely to cause detriment to health, safety, or welfare of any person.

Stat. Auth.: ORS Ch.

Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-430]

Effective Capture of Air Contaminant Emissions

340-28-040 [Air contaminants which are, or may be, emitted to the atmosphere through doors, windows, or other openings in a structure or which are, or may be, emitted from any process not contained in a structure, shall be captured and transferred to air pollution control equipment using the most efficient and best practicable hooding, shrouding, or ducting equipment available. New sources shall comply at the time of installation.

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 340-30-440]

Odor Control Measures

340-28-045 f

- (1) Control apparatus and equipment, using the highest and best practicable treatment currently available, shall be installed and operated to reduce to a minimum odor-bearing gases or odor-bearing particulate matter emitted into the atmosphere.
- (2) Gas effluents from incineration operations and process after-burners shall be maintained at a temperature of 1,400 degrees Fahrenheit for at least 0.5 second or controlled in another manner determined by the Department to be equally or more effective.

Stat. Auth.: ORS Ch.
Hist.:][DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered to OAR 34030-450]

(3) Gasoline tanks with a capacity of 500 gallons or more, installed after January 1, 1970, shall be equipped with submersible filling device or other vapor emission control systems.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-050

Ships

340-[28-055]30-470 While in those portions of the Willamette River and Columbia River which pass through or adjacent to Clackamas, Columbia, and Multnomah Counties, each ship shall minimize emissions from soot blowing and shall be subject to the emission standards and rules for visible emissions and particulate matter size.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-055

Upset Condition

340-[28-060]30-480 Emission of air contaminants in excess of applicable standards as a result of equipment breakdown shall not be considered a violation of said standards provided the conditions of rule 340-21-075 are met be subject to OAR 340-20-350 through 340-20-380.

Stat. Auth.: ORS Ch. <u>468 & 468A</u> Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, <u>Renumbered from 340-28-</u> 060

Emission Standards - General

340-[28-065]30-490 Compliance with any specific emission standard in these rules this Division does not preclude required compliance with any other applicable emission standard or requirement contained in any of the rules of the Department OAR Chapter 340.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-065

Visible Air Contaminant Standards

340-[28-070]30-500 No person owning, operating, or maintaining non-fuel burning equipment sources of emissions shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than thirty (30) seconds in any one hour which is equal to or greater than 20 percent opacity.

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28070

Particulate Matter Weight Standards 340-[28-075]30-510

- (1) The maximum allowable emission of particulate matter from any fuel burning equipment shall:
 - (a) Be a function of maximum heat input and shall be determined from Figure 1, except from existing fuel burning equipment utilizing wood residue, it shall be 0.2 grain, and from new fuel burning equipment utilizing wood residue, it shall be 0.1 grain for each standard cubic foot of exhaust gas, calculated to 12 percent carbon dioxide;
 - (b) Not exceed Smoke Spot #2 for distillate fuel and #4 for residual fuel, measured by ASTM D2156-65, "Standard Method for Test for Smoke Density of the Flue Gases from Distillate Fuels"
- (2) The maximum allowable emission of particulate matter from any refuse burning equipment shall be a function of the maximum heat input from the refuse only and shall be determined from Figure 2.

[Publications: The publication(s) referred to or incorporated by reference in this rule is available from the office of the Secretary of State or Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-075

Particulate Matter Size Standard

340-[28-080]30-520 No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon the real property of another person.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-080

Sulfur Dioxide Emission [Limitations] Standard

340-[28-085]30-530 No person shall cause or permit emission of sulfur dioxide in excess of 1000 ppm from any air contamination source as measured in accordance with the Department's Source Test Manual, except those persons burning fuel conforming to provisions of rules relating to the sulfur content of fuels. This rule is applicable to sources installed, constructed, or modified after October 1, 1970.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-085

Odors

340-[28-090]30-540

- (1) No person shall cause or permit the emission of odorous matter in such manner as to contribute to a condition of air pollution, or exceed:
 - (a) A scentometer No. 0 odor strength or equivalent dilution in residential and commercial areas.
 - (b) A scentometer No. 2 odor strength or equivalent dilution in all other land use areas.

Scentometer Readings: Scentometer No. and Concentration Range-No. of Thresholds, respectively:

- 0 ----- 1 to 2 1 ----- 2 to 8 2 ----- 8 to 32 3 ----- 32 to 128
- (2) A violation of this rule shall have occurred when two measurements made within a period of one hour, separated by at least 15 minutes, off the property surrounding the air contaminant source exceeds the limitations of section (1).

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-090

SPECIFIC AIR POLLUTION CONTROL RULES FOR BENTON, LINN, MARION, POLK, AND YAMHILL COUNTIES

[Purposes and] Application

340-[29-001]30-600 [The rules in this Division]OAR 340-30-600 through 340-30-620 shall apply in Benton, Linn, Marion, Polk and Yamhill counties. [The purpose of these rules are to deal specifically with the air quality control needs of the five county area. These rules shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of these rules shall not, in any way, affect the applicability in the five county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.]

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 109, f. 3-15-76, ef. 3-25-76; DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-29-001

Odors

$340 - \frac{29 - 011}{30 - 610}$

- (1) Unless otherwise regulated by specific odor regulation or standard, no person shall cause or permit the emission of odorous matter:
 - in such a manner as to cause a public nuisance, or that occurs for sufficient duration or frequency so that two measurements made within a period of one (1) hour, separated by at least 15 minutes, off the property surrounding the emission point, that is equal to or greater than a Scentometer No. 0 or equivalent dilutions in areas used for residential, recreational, educational, institutional, hotel, retail sales or other similar purposes.
- (2) In all land use areas other than those specified in subsection (1)(b) of this rule, release of odorous matter shall be prohibited if equal to or greater than a Scentometer No. 2 odor strength, or equivalent dilutions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 30 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-29-011

[Emission Restrictions --- Large]Particulate Matter<u>Size</u> Standard

340-[29-030]30-620 No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon real property of another person.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-29-030

AIR POLLUTION CONTROL STANDARDS FOR AIR PURITY AND QUALITY

DIVISION 31

AMBIENT AIR QUALITY STANDARDS

[ED. NOTE: Administrative order DEQ 37 repealed previous rules 340-31-005 through 340-31-020 (DEQ 5 and 6).]

Definitions

340-31-005 As used in these rules, unless otherwise required by context OAR 340-31-005 through 340-31-055:

- (1) "Ambient air" means that portion of the atmosphere which surrounds the earth and is used for respiration by plants or animals including [man]people, but excluding the general volume of gases contained within any building or structure.
- (2) "Ambient air monitoring site criteria" means the general probe siting specifications as set forth in Appendix E of 40 CFR 58.
- (3) "Approved method" means an analytical method for measuring air contaminant concentrations which are described or referenced in 40 CFR 50 and Appendices. These methods are approved by the Department of Environmental Quality.
- (4) "CFR" means Code of Federal Regulations which is published annually and updated daily by issues of the Federal Register. The CFR contains general and permanent rules promulgated by the executive departments and agencies of the federal government. References to the CFR are preceded by a "Title number" and followed by a "Part and Section number." For example: "40 CFR 50.7." The CFR referenced interest rules OAR 340-31-005 through 340-31-055 are available for inspection at the Department of Environmental Quality.
- (5) "Oregon standard method" means any method of sampling and analyzing for an air contaminant approved by the Department of Environmental Quality. Oregon standard methods are kept on file by the Department of Environmental Quality.
- (6) "Ppm" means parts per million by volume. It is a dimensionless unit of measurement for gases which expresses the ratio of the volume of one component gas to the volume of the entire sample mixture of gases.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publication:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Purpose and Scope of Ambient Air Quality Standards 340-31-010

- (1) An ambient air quality standard is an established concentration, exposure time, and frequency of occurrence of an air contaminant or multiple contaminants in the ambient air which shall not be exceeded. The ambient air quality standards set forth in this division are designed to protect both public health and public welfare.
- Ambient air quality standards are not generally intended as (2) a means of determining the acceptability or unacceptability of emissions from specific sources of air contamination. More commonly, measured ambient air quality in comparison with ambient air quality standards is used as a criteria for determining the adequacy or effectiveness of emission standards for the aggregate of sources in a general area. However, in the case of a source or sources which are deemed to be singularly responsible for ambient air quality standards being exceeded in a particular locality, the violation of said standards shall be due cause for imposing emission standards more stringent than those generally applied to the class of sources involved. Similarly, proposed construction of new sources or expansions of existing sources, which may prevent or interfere with the attainment and maintenance of ambient air quality standards, shall be due cause for issuance of an order prohibiting such proposed construction, pursuant to ORS [449.712]468A.055 and [rule] OAR 340-20-030.
- (3) In adopting the ambient air quality standards in this division, the Environmental Quality Commission recognizes that one or more of the standards are currently being exceeded in certain parts of the state. It is hereby declared to be the policy of the Environmental Quality Commission to achieve, by application of a timely but orderly program of pollution abatement, full compliance with ambient air quality standards throughout the state at the earliest possible date[, but in no case later than July 1, 1975].

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72

Suspended Particulate Matter

340-31-015 Concentrations of suspended particulate matter in ambient air as measured by an approved method for total suspended particulate, (TSP), or by an approved method for the fraction of TSP which is equal to or less than 10 microns in aerodynamic diameter, (PM₁₀), shall not exceed:

aerodynamic diameter, (PM₁₀), shall not exceed:
(1) 60 micrograms of TSP per cubic meter of air as an annual geometric mean for any calendar year at any site.

(2) 150 micrograms of TSP per cubic meter of air as a 24 hour average concentration more than once per year at any site.

- (3) 50 micrograms of PM₁₀ per cubic meter of air as an annual arithmetic mean. This standard is attained when the expected annual arithmetic mean concentration, as determined in accordance with Appendix K of 40 CFR 50 is less than or equal to 50 micrograms per cubic meter at any site.
- (4) 150 micrograms of PM₁₀ per cubic meter of air as a 24-hour average concentration for any calendar day. This standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter as determined in accordance with Appendix K of 40 CFR 50 is equal to or less than one at any site.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publication: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 9, f. & ef. 11/13/91

Sulfur Dioxide

340-31-020 Concentrations of sulfur dioxide in ambient air as measured by an approved method shall not exceed:

- (1) 0.02 ppm as an annual arithmetic mean for any calendar year at any site.
- (2) 0.10 ppm as a 24-hour average concentration more than once per year at any site.
- (3) 0.50 ppm as a 3-hour average concentration more than once per year at any site.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 9, f. & ef. 11/13/91

Carbon Monoxide

340-31-025 For comparison to the standard, averaged ambient concentrations of carbon monoxide shall be rounded the nearest integer in parts per million (ppm). Fractional parts of 0.5 or greater shall be rounded up. Concentrations of carbon monoxide in ambient air as measured by an approved method, shall not exceed:

- (1) 9 ppm as an 8-hour average concentration more than once per year at any site.
- (2) 35 ppm as a 1-hour average concentration more than once per year at any site.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 9, f. & ef. 11/13/91

Ozone

340-31-030 Concentrations of ozone in ambient air as measured by an approved method shall not exceed 0.12 ppm as a 1-hour average concentration. This standard is attained when, at any site the expected number of days per calendar year with maximum hourly concentrations greater than 0.12 ppm is equal to or less than one as determined by the method of Appendix H, 40 CFR 50.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publication:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 15-1979, f. & ef. 6-22-79; DEQ 7-1980, f. & ef. 3-5-80; DEQ 4-1982, f. & ef. 1-29-82; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 9, f. & ef. 11/13/91

Hydrocarbons

340-31-035 [DEQ 37, f. 2-15-72, ef. 3-1-72; Repealed by DEQ 8-1988, f. & cert. ef. 5-19-88, (corrected 9-30-88)]

Nitrogen Dioxide

340-31-040 Concentrations of nitrogen dioxide in ambient air as measured by an approved method shall not exceed 0.053 ppm as an annual arithmetic mean at any site.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 9, f. & ef. 11/13/91

Particle Fallout

340-31-045 The particle fallout rate as measured by an Oregon standard method at a location approved by the Department of Environmental Quality shall not exceed:

- (1) 10 grams per square meter per month in an industrial area.
- (2) 5.0 grams per square meter per month in an industrial area if visual observations show a presence of wood waste or soot and the volatile fraction of the sample exceeds seventy percent (70%).
- (3) 5.0 grams per square meter per month in residential and commercial areas.
- (4) 3.5 grams per square meter per month in residential and commercial areas if visual observations show the presence of wood waste or soot and the volatile fraction of the sample exceeds seventy percent (70%).

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 31 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Calcium Oxide (Lime Dust) 340-31-050

- (1) Concentrations of calcium oxide present as total suspended particulate, TSP, as measured by an approved method at a location approved by the Department of Environmental Quality, shall not exceed 20 micrograms per cubic meter in residential and commercial areas.
- (2) Concentrations of calcium oxide present as particle fallout as measured by an Oregon standard method at a location approved by the Department of Environmental Quality, shall not exceed 0.35 grams per square meter per month in residential and commercial areas.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 37, f. 2-15-72, ef. 3-1-72; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88)

Ambient Air Quality Standard for Lead

340-31-055 The lead concentration in ambient air as measured by an approved method shall not exceed 1.5 micrograms per cubic meter as an arithmetic average concentration of all samples collected at any site during any one calendar quarter.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 <u>& 468A</u>
Hist.: DEQ 85, f. 1-29-75, ef. 2-25-75; DEQ 1-1983, f. & ef. 1-21-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 9, f. & ef. 11/13/91

Prevention of Significant Deterioration

General

340-31-100

(1) The purpose of these rules OAR 340-31-100 through 340-31-130 is to implement a program to prevent significant deterioration of air quality in the State of Oregon as required by the Federal Clean Air Act Amendments of 1977.

The Department will review the adequacy of the State Implementation Plan on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated. Any Plan revision resulting from the reviews will be subject to the opportunity for public hearing in accordance with procedures established in the Plan.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1979, f. & ef. 6-22-79

Definitions

340-31-105 For the purposes of these rules As used in OAR 340-31-100 through 340-31-130:

- (1) "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.
- (2) "Indian reservation" means any Federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
- (3) "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 25-1981, f. & ef. 9-8-81

Ambient Air Increments 340-31-110

- (1) This rule defines significant deterioration. In areas designated as class I, II or III, emissions from new or modified sources shall be limited such that increases in pollutant concentration over the baseline concentration shall be limited to those set out in Table 1.
- (2) For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1979, f. & ef. 6-22-79; DEQ 8-1988, f. & cert. ef. 5-19-88 (corrected 9-30-88); AQ 20, f. & ef. 3-30-92

Ambient Air Ceilings

340-31-115 No concentration of a pollutant shall exceed:

- (1) The concentration permitted under the national secondary ambient air quality standard; or
- (2) The concentration permitted under the national primary ambient air quality standard; or
- (3) The concentration permitted under the state ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1979, f. & ef. 6-22-79

Restrictions on Area Classifications 340-31-120

- (1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:
 - (a) Mt. Hood Wilderness;
 - (b) Eagle Cap Wilderness;
 - (c) Hells Canyon Wilderness;
 - (d) Mt. Jefferson Wilderness;
 - (e) Mt. Washington Wilderness;
 - (f) Three Sisters Wilderness;
 - (g) Strawberry Mountain Wilderness;
 - (h) Diamond Peak Wilderness;
 - (i) Crater Lake National Park;
 - (j) Kalmiopsis Wilderness;
 - (k) Mountain Lake Wilderness;
 - (1) Gearhart Mountain Wilderness.
- (2) All other areas, in Oregon are initially designated Class II, but may be redesignated as provided in this { section} rule.
- (3) The following areas may be redesignated only as Class I or II:
 - (a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
 - (b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 facreas in size.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1979, f. & ef. 6-22-79 Exclusions for Increment Consumption 340-31-125 [DEQ 18-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Redesignation

340-31-130

- (1) (a) All areas in Oregon, {(}except as otherwise provided under{ rule} OAR 340-31-120{})}, are designated Class II as of December 5, 1974.
 - (b) Redesignation, {(}except as otherwise precluded by the rule] OAR 340-31-120{}, may be proposed by the Department or Indian Governing Bodies, as provided below, subject to approval by the EPA Administrator as a revision to the State Implementation Plan.
- (2) The Department may submit to the EPA Administrator a proposal to redesignate areas of the State Class I or Class II provided that:
 - (a) At least one public hearing has been held in accordance with procedures established in the Plan;
 - (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;
 - (c) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;
 - (d) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the Department has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity, {() not in excess of 60 days {() } to confer with the Department respecting the redesignation and to submit written comments and

recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the Department shall have published a list of any inconsistency between such redesignation and such comments and recommendations {(}together with the reasons for making such redesignation against the recommendation of the Federal Land Manager{(})}; and

- (e) The Department has proposed the redesignation after consultation with the elected leadership of local [and other substate]general purpose governments in the area covered by the proposed redesignation.
- (3) Any area other than an area to which [rule] OAR 340-31-120 refers may be redesignated as Class III if:
 - (a) The redesignation would meet the requirements of section (2) of <u>rule</u> OAR 340-31-130;
 - (b) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session, {{}\text{-}\text{lunless}} State law provides that the redesignation must be specifically approved by State legislation{{}\text{-}\
 - (c) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any national ambient air quality standard; and
 - (d) Any permit application for any major stationary source or major modification, subject to review under section (1) of this rule, which could receive a permit under this section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.
- (4) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the EPA Administrator a proposal to redesignate areas Class I, Class II, or Class III: Provided, that:

- (a) The Indian Governing Body has followed procedures equivalent to those required of the Department under section (2) and subsections (3)(c) and (d) of this rule; and
- (b) Such redesignation is proposed after consultation with the state(s) in which the Indian Reservation is located and which border the Indian Reservation.
- (5) The EPA Administrator shall disapprove, within 90 days of submission, a proposed redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this paragraph or is inconsistent withfrulef OAR 340-31-120. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.
- (6) If the EPA Administrator disapproves any proposed redesignation, the Department or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the EPA Administrator.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 18-1979, f. & ef. 6-22-79

Stack Heights

340-31-135 [DEQ 18-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Review of Major Stationary Sources and Major Modifications-Source Applicability and General Exemptions

340-31-140 [DEQ 18-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Control Technology Review

340-31-145 [DEQ 18-1979; f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Exemptions from Impact Analyses

340-31-150 [DEQ 18-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Air Quality Review

340-31-155 [DEQ 18-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

Air Quality Models

340-31-160 [DEQ 18-1979, f. & ef. 6-22-79; Repealed by DEQ 25-1981, f. & ef. 9-8-81]

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Monitoring
      340-31-165 [DEQ 18-1979, f. & ef. 6-22-79;
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
Source Information
      340-31-170 [DEQ 18-1979, f. & ef. 6-22-79;
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
Additional Impact Analyses
      340-31-175 [DEQ 18-1979, f. & ef. 6-22-79;
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
Sources Impacting Federal Class I Areas - Additional
Requirements:
      340-31-180 [DEQ 18-1979, f. & ef. 6-22-79;
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
Public Participation
      340-31-185 [DEQ 18-1979, f. & ef. 6-22-79
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
Source Obligation
      340-31-190 [DEQ 18-1979, f. & ef. 6-22-79;
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
Stack Heights in Air Quality Modeling
      340-31-195 [DEQ 14-1979, f. & ef. 6-22-79;
      Repealed by DEQ 25-1981, f. & ef. 9-8-81]
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TABLE 1 (340-31-110) MAXIMUM ALLOWABLE INCREASE Micrograms per cubic meter

CLASS I

POLLUTANT	
Particulate matter:	
TSP, Annual geometric mean	5
TSP, 24-hour maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	
2.5	
1	
CLASS II	
Particulate matter:	•
TSP, Annual geometric mean	19
TSP, 24-hour maximum	37
Sulfur dioxide:	
Annual arithmetic mean24-hour maximum	20
24-hour maximum	91
3-hour maximum	
512	
Nitrogen dioxide:	
Annual arithmetic mean	25
CLASS III	
Descriptions 2 of the month and	
Particulate matter:	2.5
TSP, Annual geometric meanTSP, 24-hour maximum	75
Sulfur dioxide:	
Annual arithmetic mean	4.0
Annual arithmetic mean	40
3-hour maximum	
	/00
Nitrogen dioxide: Annual arithmetic mean	
Annual arithmetic mean	

DIVISION 33

LICENSING AND CERTIFICATION ASBESTOS REQUIREMENTS

Authority, Purpose, and Scope 340-33-010

- (1) Authority. These rules are This Division is promulgated in accordance with and under the authority of ORS 468 [.893] A.745.
- (2) Purpose. The purpose of { these rules} this Division is to provide reasonable standards for:
 - (a) Training and licensing of asbestos abatement project contractors;
 - (b) Training and certification of asbestos abatement project supervisors and workers;
 - (c) Accreditation of providers of training of asbestos contractors, supervisors, and workers;
 - (d) Administration and enforcement of these rules this Division by the Department.
- (3) Scope:
 - (a) [OAR 340-33-000 through 340-33-100] This Division is applicable to all work, including demolition, renovation, repair, construction, or maintenance activity of any public or private facility that involves the repair, enclosure, encapsulation, removal, salvage, handling, or disposal of any material which could potentially release asbestos fibers into the air; except as provided in subsections (b) and (c) of this section;
 - (b) {OAR 340-33-000 through 340-33-100 do]This Division does not apply to an asbestos abatement project which is exempt from OAR 340-25-466(1);
 - (c) [OAR 340-33-010 through 340-33-100 do] This Division does not apply to persons performing vehicle brake and clutch maintenance or repair;
 - (d) Full-scale asbestos abatement projects are differentiated from smaller projects. Small-scale asbestos abatement projects as defined by OAR 340-33-020(17) are limited by job size and include projects:
 - (A) Where the primary intent is to disturb the asbestos-containing material and prescribed work practices are used; and
 - (B) Where the primary intent is not to disturb the asbestos-containing material.

(e) [OAR 340-33-000 through 340-33-100] This Division provides training, licensing, and certification standards for implementation of OAR 340-25-465 through - [496]469, Emission Standards and Procedural Requirements for Asbestos.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 10-1988, f. 5-19-88, cert. ef. 5-19-88 (and corrected 6-3-88); AQ 13, f. & ef. 10-7-91

Definitions

(5)

340-33-020 As used in these rules this Division:

- "Accredited" means a provider of asbestos abatement (1) training courses is authorized by the Department to offer training courses that satisfy requirements for contractor licensing and worker training.
- "Agent" means an individual who works on an asbestos (2) abatement project for a contractor but is not an employee of the contractor.
- "Asbestos" means the asbestiform varieties of serpentine (3) (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite.
- "Asbestos abatement project" means any demolition, (4)renovation, repair, construction or maintenance activity of any public or private facility that involves the repair, enclosure, encapsulation, removal, salvage, handling or disposal of any asbestos-containing material with the potential of releasing asbestos fibers from asbestos containing material into the air. NOTE: Emergency fire fighting is not an asbestos abatement
 - project. "Asbestos-containing material" means any material
- containing more than one percent asbestos by weight, including particulate asbestos material. "Certified" means a worker has met the Department's (6)
- training, experience, and/or quality control requirements and has a current certification card.
- (7) "Contractor" means a person that undertakes for compensation an asbestos abatement project for another person. [As used in this subsection, "compensation" means wages, salaries, commissions and any other form of remuneration paid to a person for personal services.]
- "Commission" means the Environmental Quality Commission. (8)
- "Department" means the Department of Environmental Quality. (9)
- "Director" means the Director of the Department of (10)Environmental Quality.

- (11) "EPA" means the United States Environmental Protection Agency.
- (12) "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel, including but not limited to ships.
- (13) "Friable asbestos material" means any asbestos-containing material that hand pressure can crumble, pulverize or reduce to powder when dry.
- (14) "Full-scale asbestos abatement project" means any removal, renovation, encapsulation, repair or maintenance of any asbestos-containing material which could potentially release asbestos fibers into the air, and which is not classified as a small-scale project as defined by section (17) of this rule.
- (15) "Licensed" means a contracting entity has met the Department's training, experience, and/or quality control requirements to offer and perform asbestos abatement projects and has a current asbestos abatement contractor license. For purposes of this definition, a license is not a permit subject to Chapter 340 Division 14.
- (16 "Persons" means an individual, public or private corporation, nonprofit corporation, association, firm, partnership, joint venture, business trust, joint stock company, municipal corporation, political subdivision, the state and any agency of the state or any other entity, public or private, however organized.
- (17) "Small-scale asbestos abatement project" means small-scale, short-duration projects as defined by section (18) of this rule, and/or removal, renovation, encapsulation, repair, or maintenance procedures intended to prevent asbestos containing material from releasing fibers into the air and which:
 - (a) Remove, encapsulate, repair or maintain less than 40 linear feet or 80 square feet of asbestos-containing material;
 - (b) Do not subdivide an otherwise full-scale asbestos abatement project into smaller sized units in order to avoid the requirements of { these rules} this Division;
 - (c) Utilize all practical worker isolation techniques and other control measures; and
 - (d) Do not result in worker exposure to an airborne concentration of asbestos in excess of 0.1 fibers per cubic centimeter of air calculated as an eight (8) hour time weighted average.

- (18) "Small-scale, short-duration renovating and maintenance activity" means a task for which the removal of asbestos is not the primary objective of the job, including, but not limited to:
 - (a) Removal of quantities of asbestos-containing insulation on pipes;
 - (b) Removal of small quantities of asbestos-containing insulation on beams or above ceilings;
 - (c) Replacement of an asbestos-containing gasket on a valve;
 - (d) Installation or removal of a small section of drywall;
 - (e) Installation of electrical conduits through or proximate to asbestos-containing materials.

 Small-scale, activities shall be limited to no more than 40 linear feet or 80 square feet of asbestos containing material. An asbestos abatement activity that would otherwise qualify as a full-scale abatement project shall not be subdivided into smaller units in order to avoid the requirements off these rules this Division; or
 - (f) No such activity described above shall result in airborne asbestos concentrations above 0.1 fibers per cubic centimeter of air (calculated as an eight (8) hour time weighted average).
- (19) "Trained worker" means a person who has successfully completed specified training and can demonstrate knowledge of the health and safety aspects of working with asbestos.
- (20) "Worker" means an employee or agent of a contractor or facility owner or operator.

Stat. Auth.: ORS Ch. 468[.020] & 468[.893]A
Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88);
DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90); AQ 13,
f. & ef. 10-7-91

General Provisions 340-33-030

- (1) Persons engaged in the removal, encapsulation, repair, or enclosure of any asbestos-containing material which has the potential of releasing asbestos fibers into the air must be licensed or certified, unless exempted by OAR 340-33-010(3).
- (2) An owner or operator of a facility shall not allow any persons other than those employees of the facility owner or operator who are appropriately certified or a licensed asbestos abatement contractor to perform an asbestos

- abatement project in or on that facility. Facility owners and operators are not required to be licensed to perform asbestos abatement projects in or on their own facilities.
- (3) Any contractor engaged in a full-scale asbestos abatement project must be licensed by the Department under the provisions of OAR 340-33-040.
- (4) Any person acting as the supervisor of any full-scale asbestos abatement project must be certified by the Department as a Supervisor for Full-Scale Asbestos Abatement under the provisions of OAR 340-33-050.
- (5) Any worker engaged in or working on any full-scale asbestos abatement project must be certified by the Department as a Worker for Full-Scale Asbestos Abatement under the provisions of OAR 340-33-050, or as a Supervisor for Full-Scale Asbestos Abatement.
- (6) Any contractor or worker engaged in any small-scale asbestos abatement project but not licensed or certified to perform full-scale asbestos abatement projects, must be licensed or certified by the Department as a Small-Scale Asbestos Abatement Contractor or a Worker for Small-Scale Asbestos Abatement, respectively under the provisions of OAR 340-33-040 and 340-33-050.
- (7) Any provider of training which is intended to satisfy the licensing and certification training requirements of these rules this Division must be accredited by the Department under the provisions of OAR 340-33-060.
- (8) Any person licensed, certified, or accredited by the Department under the provisions of these rules this Division shall comply with the appropriate provisions of OAR 340-25-465 through 340-25-469 and through 340-33-100] this Division and maintain a current address on file with the Department, or be subject to suspension or revocation of license, or certification, or accreditation.
- (9) The Department may accept evidence of violations of these rules this Division from representatives of other federal, state, or local agencies.
- (10) A regional air pollution authority which has been delegated authority under OAR 340-25-460(7) may inspect for and enforce against violations of licensing and certification regulations. A regional air pollution authority may not approve, deny, suspend or revoke a training provider accreditation, contractor license, or worker certification, but may refer violations to the Department and recommend denials, suspensions, or revocations.

(11) Any person who conducts an asbestos abatement project shall insure accessibility for the Department to perform inspections.

Stat. Auth.: ORS Ch. 468[.020] & 468[.893]A
Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88);
DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90); AQ 13,
f. & ef. 10-7-91

Contractor Licensing 340-33-040

- (1) Contractors may be licensed to perform either of the following categories of asbestos abatement projects:
 - (a) Full-Scale Asbestos Abatement Contractors: All asbestos abatement projects, regardless of project size or duration; or
 - (b) Small-Scale Asbestos Abatement Con-tractor: Small-scale asbestos abatement projects.
- (2) Application for licenses shall be submitted on forms prescribed by the Department and shall be accompanied by:
 - (a) Documentation that the contractor, or contractor's employee representative, is certified at the appropriate level by the Department:
 - (A) Full-scale Asbestos Abatement Contractor license: Certified Supervisor for Full-Scale Asbestos Abatement;
 - (B) Small-Scale Asbestos Abatement Contractor: Certified Worker for Small-Scale Asbestos Abatement.
 - (b) Certification that the contractor has read and understands the applicable Oregon and federal rules and regulations on asbestos abatement and agrees to comply with the rules and regulations;
 - (c) A list of all certificates or licenses, issued to the contractor by any other jurisdiction, that have been suspended or revoked during the past one (1) year, and a list of any asbestos-related enforcement actions taken against the contractor during the past one (1) year;
 - (d) List any additional project supervisors for full-scale projects and their certification numbers as Supervisors for Full-Scale Asbestos Abatement;
 - (e) Summary of asbestos abatement projects conducted by the contractor during the past 12 months;
 - (f) A license application fee.

- (3) The Department will review the application for completeness. If the application is incomplete, the Department shall notify the applicant in writing of the deficiencies.
- (4) The Department shall deny, in writing, a license to a contractor who has not satisfied the license application requirements.
- (5) The Department shall issue a license to the applicant after the license is approved.
- (6) The Department shall grant a license for a period of 12 months. Licenses may be extended during Department review of a renewal application.
- (7) Renewals:
 - (a) License renewals must be applied for in the same manner as is required for an initial license;
 - (b) For renewal, the contractor or employee representative must have completed at least the appropriate annual refresher course;
 - (c) The complete renewal application shall be submitted no later than 60 days prior to the expiration date.
- (8) The Department may suspend or revoke a license if the licensee:
 - (a) Fraudulently obtains or attempts to obtain a license;
 - (b) Fails at any time to satisfy the qualifications for a license or comply with the rules adopted by the Commission;
 - (c) Fails to meet any applicable state or federal standard relating to asbestos abatement;
 - (d) Permits an untrained or uncertified worker to work on an asbestos abatement project;
 - (e) Employs a worker who fails to comply with applicable state or federal rules or regulations relating to asbestos abatement.
- (9) A contractor who has a license revoked may reapply for a license after demonstrating to the Department that the cause of the revocation has been resolved.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88)

Certification

340-33-050

- (1) Workers on asbestos abatement projects shall be certified at one or more of the following levels:
 - (a) Certified Supervisor for Full-Scale Asbestos Abatement;
 - (b) Certified Worker for Full-Scale Asbestos Abatement;
 - (c) Certified Worker for Small-Scale Asbestos Abatement.

- (2) Application for Certification-General Requirements:
 - (a) Applications shall be submitted to the provider of the accredited training course within thirty (30) days of completion of the course;
 - (b) Applications shall be submitted on forms prescribed by the Department and shall be accompanied by the certification fee.
- (3) Application to be a Certified Supervisor for Full-Scale Asbestos Abatement shall include:
 - (a) Documentation that the applicant has successfully completed the Supervisor for Full-Scale Asbestos Abatement level training and examination as specified in OAR 340-33-070 and the Department guidance document; and
 - (b) Documentation that the applicant has been certified as a Worker for Full-Scale Asbestos Abatement and has at least three (3) months of full-scale asbestos abatement experience, including time on powered air purifying respirators and experience on at least five (5) separate asbestos abatement projects; or certified as worker for Full-Scale asbestos abatement and six (6) months of general construction, environmental or maintenance supervisory experience demonstrating skills to independently plan, organize and direct personnel in asbestos abatement project. The conducting an Department shall have the authority to determine if any applicant's experience satisfies those requirements.
- (4) Application to be a Certified Worker for Asbestos Abatement shall include:
 - (a) Documentation that the applicant to be a Certified Worker for Full-Scale Asbestos Abatement has successfully completed the Worker for Full-Scale 1 Asbestos Abatement level training and examination as specified in OAR 340-33-070 and the Department guidance document;
 - (b) Documentation that the applicant to be a Certified Worker for Small Scale Asbestos Abatement has successfully completed the Worker for Small-Scale Asbestos Abatement level training and examination as specified in OAR 340-33-070 and the Department guidance document.
- (5) Training course providers shall issue certification to an applicant who has fulfilled the requirements of certification.
- (6) Certification at all levels is valid for a period of twenty-four (24) months after the date of issue.

(7) Renewals:

- (a) Certification renewals must be applied for in the same manner as application for original certification;
- (b) To gain renewal of certification, a Worker Full-Scale Asbestos Abatement and a Supervisor for Full-Scale Asbestos Abatement must complete appropriate annual refresher course no sooner than nine (9) months and no later than twelve (12) months after the issuance date of the certificate, and again no sooner than three (3) months prior to the expiration date of the certificate. A worker may apply in writing to the Department for taking refresher training at some other time than as specified by this paragraph for work requirements or hardship. Department shall accept or reject the application in writing;
- (c) To gain renewal of certification, a Worker for Small-Scale Asbestos Abatement must comply with the regulations on refresher training which are in effect at the time of renewal. Completion of an accredited asbestos abatement review class may be required if the Environmental Quality Commission determines that there is a need to update the workers' training in order to meet new or changed conditions.
- (8) The Department may suspend or revoke a worker's certificate for failure to comply with any state or federal asbestos abatement rule or regulation.
- (9) If a certification is revoked, the worker may reapply for another initial certification only after 12 months from the revocation date.
- (10) A current worker certification card shall be readily available for inspection by the Department at each asbestos abatement project site for each worker conducting asbestos abatement activities on the site.

Stat. Auth.: ORS Ch. 468[.020] & 468[.893]A Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88); DEQ 9-1989(Temp), f. & cert. ef. 6-7-89; DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90); AQ 13, f. & ef. 10-7-91

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Training Provider Accreditation 340-33-060

- (1) General:
 - (a) Asbestos training courses required for licensing or certification under these rules this Division may be provided by any person;
 - (b) Any training provider offering training in Oregon to satisfy these certification and licensing requirements must be accredited by the Department;
 - (c) Each of the different training courses which are to be used to fulfill training requirements shall be individually accredited by the Department;
 - (d) The training provider must satisfactorily demonstrate through application and submission of course agenda, faculty resumes, training manuals, examination materials, equipment inventory, and performance during on-site course audits by Department representatives that the provider meets the minimum requirements established by the Department;
 - (e) The training course sponsor shall limit each class to a maximum of thirty participants unless granted an exception in writing by the Department. The student to instructor ratio for hands-on training shall be equal to or less than ten to one (10:1). To apply for an exception allowing class size to exceed 30, the course sponsor must submit the following information in writing to the Department for evaluation and approval prior to expanding the class size:
 - (A) The new class size limit;
 - (B) The teaching methods and techniques for training the proposed larger class;
 - (C) The protocol for conducting the written examination; and
 - (D) Justification for a larger class size.
 - (f) Course instructors must have academic credentials, demonstrated knowledge, prior training, or field experience in their respective training roles;
 - (g) The Department may require any accredited training provider to use examinations developed by the Department in lieu of the examinations offered by the training provider;
 - (h) The Department may require accredited training providers to pay a fee equivalent to reasonable travel expenses for one Department representative to audit any

accredited course which is not offered in the State of Oregon for compliance with these regulations this Division. This condition shall be an addition to the standard accreditation application fee.

(2) Application for Accreditation:

- (a) Application for accreditation shall be submitted to the Department in writing on forms provided by the Department and attachments. Such applications shall, as a minimum, contain the following information:
 - (A) Name, address, telephone number of the firm, individual(s), or sponsors conducting the course, including the name under which the training provider intends to conduct the training;

(B) The type of course(s) for which approval is requested;

(C) A detailed course outline showing topics covered and the amount of time given to each topic, including the hands-on skill training;

(D) A copy of the course manual, including all printed material to be distributed in the course;

(E) A description of teaching methods to be employed, including description of audio-visual materials to be used. The Department may, at its discretion, request that copies of the materials be provided for review. Any audio-visual materials provided to the Department will be returned to the applicant;

(F) A description of the hands-on facility to be utilize including protocol for instruction, number of students to be accommodated, the number of instructors, and the amount of time for hands-on skill training;

(G) A description of the equipment that will be used during both classroom lectures and hands-on training;

(H) A list of all personnel involved in course preparation and presentation and a description of the background, special training and qualification of each, as well as the subject matter covered by each;

(I) A copy of each written examination to be given including the scoring methodology to be used in grading the examination; and a detailed statement about the development and validation of the examination;

- (J) A list of the tuition or other fees required;
- (K) A sample of the certificate of completion and certification card label;
- (L) A description of the procedures and policies for re-examination of students who do not success-fully complete the training course examination;
- (M) A list of any states or accrediting systems that approve the training course;
- (N) A description of student evaluation methods (other than written examination to be used) associated with the hands-on skill training, as applicable;
- (0) A description of course evaluation methods used by students;
- (P) Any restriction on attendance such as class size, language, affiliation, and/or target audience of class;
- (Q) A description of the procedure for issuing replacement certification cards to workers who were issued a certification card or certification card label by the training provider within the previous 12 months and whose cards have been lost or destroyed;
- (R) Any additional information or documentation as may be required by the Department to evaluate the adequacy of the application;
- (S) Accreditation application fee.
- (b) Application for initial training course accreditation and course materials shall be submitted to the Department at least 45 days prior to the requested approval date;
- (c) Upon approval of an initial or refresher asbestos training course, the Department will issue a certificate of accreditation. The certificate is valid for one (1) year from the date of issuance;
- for one (1) year from the date of issuance;
 (d) Application for renewal of accreditation must follow the procedures described for the initial accreditation. In addition, course instructors must demonstrate that they have maintained proficiency in their instructional specialty and adult training methods during the 12 months prior to renewal.
- (3) Denial, Suspension or Revocation of Certificate of Accreditation. The Director may deny, revoke or suspend an application or current accreditation upon finding of sufficient cause. Applicants and certificate holders shall also be advised of the duration of suspension or revocation

and any conditions that must be met before certificate reinstatement. Applicants shall have the right to appeal the Director's determination through an administrative hearing in accordance with the provisions of OAR Chapter 340 Division 11. The following may be considered grounds for denial, revocation or suspension:

- (a) False statements in the application, omission of required documentation or the omission of information;
- (b) Failure to provide or maintain the standards of training required by [these regulations] this Division;
- (c) Failure to provide minimum instruction required by these regulations thid Division;
- (d) Failure to report to the Department any change in staff or program which substantially deviates from the information contained in the application;
- (e) Failure to comply with the administrative tasks and any other requirement of these regulations this Division.
- (4) Training Provider Administrative Tasks. Accredited training providers shall perform the following as a condition of accreditation:
 - (a) Administer the training course examination only to those students who successfully complete the training course;
 - (b) Issue a numbered certificate to each students who successfully passes the training course examination. Each certificate shall include the name of the student, name of the course completed, the dates of the course and the examination, name of the training provider, a unique certificate number, and a statement that the student passed the examination;
 - (c) Issue a photo identification card to each student seeking initial or renewal certification who successfully completes the training course examination and meets all other requirements for certification. The photo identification card shall meet the Department specifications;
 - (d) Place a label on the back of the photo identification card of each student who successfully completes a refresher training course and examination as required to maintain certification. The label shall meet Department specifications;
 - (e) Provide to the Department within ten (10) calendar days of the conclusion of each course offering the name, address, telephone number, Social Security Number, course title and dates given, attendance record, exam scores, and course evaluation form of each student attending the course and the certification number,

- certification fee, and a photograph for each student certified. Record of the information shall be retained by the training provider for a period of three (3) years;
- (f) Obtain advance approval from the Department for any changes in the course instructional staff, content, training aids used, facility utilized or other matters which would alter the instruction from that described in the approval application;
- (g) Utilize and distribute as part of the course information or training aides furnished by the Department;
- (h) Provide the Department with a monthly class schedule at least one (1) week before the schedule begins. Notification shall include time and location of each course. Training providers shall notify the Department within three days whenever any unscheduled class is given;
- (i) Establish and maintain course records and documents relating to course accreditation application. Accredited training providers shall make records and documents available to the Department upon request. Training providers whose principle place of business is outside of the State of Oregon shall provide a copy of such records or documents within ten (10) business days of receipt of such a written request from the Department;
- (j) Notify the Department prior to issuing a replacement certification card;
- (k) Accredited training providers must have their current accreditation certificates at the location where they are conducting training.

Stat. Auth.: ORS Ch. 468[.020] & 468[.893]A
Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88);
DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90)

General Training Standards 340-33-070

(1) Courses of instruction required for certification shall be specific for each of the certificate categories and shall be in accordance with Department guidelines. The topics or subjects of instruction which a person must receive to meet the training requirements must be presented through a combination of lectures, demonstrations, and hands-on practice.

- (2) Courses requiring hands-on training must be presented in an environment suitable to permit participants to have actual experience performing tasks associated with asbestos abatement. Demonstrations not involving individual participation shall not substitute for hands-on training.
- (3) Persons seeking certification as a Supervisor for Full-Scale Asbestos Abatement shall successfully complete an accredited training course of at least four days as outlined in the DEQ Asbestos Training Guidance Document. The training course shall include lectures, demonstrations, at least six (6) hours of hands-on training, individual respirator fit testing, course review, and a written examination consisting of multiple choice questions. Successful completion of the training shall be demonstrated by achieving a passing score on the examination, course attendance, and full participation in the hands-on training.
- Any person seeking certification as a Worker for Full-Scale Asbestos Abatement shall successfully complete an accredited training course of at least three days duration as outlined in the DEQ Asbestos Training Guidance Document. The training course shall include lectures, demonstrations, at least six (6) hours of actual hands-on training, individual respirator fit testing, course review, and an examination of multiple choice questions. Successful completion of the course shall be demonstrated by achieving a passing score on the examination, course attendance, and full participation in the hands-on training. [The course shall adequately address the following topics:]
- [(a)](5) Any person seeking certification as a Worker for Small-Scale Asbestos Abatement shall complete at least a two day approved training course as outlined in the Asbestos Training Guidance DEO Document. small-scale asbestos abatement worker course shall include lectures, demonstrations, at least six (6) hours of hands-on training, individual respirator fit testing, course review, and an examination of multiple choice questions. Successful completion of the course shall be demonstrated by achieving a passing score on the examination, course attendance, and participation in the hands-on training [;].
- Refresher training shall be at least one day duration for Certified Supervisors and Workers for Full-Scale Asbestos Abatement and at least three (3) hours duration for Certified Workers for Small-Scale Asbestos Abatement. The refresher courses shall include a review of key areas of initial training, updates, and an examination of multiple choice questions as outlined in

the DEQ Asbestos Training Guidance Document. Successful completion of the course shall be demonstrated by achieving a passing score on the examination, course attendance, and full participation in any hands-on training [1].

[(c)](7)

One training day shall consist of at least (7) seven hours, of actual classroom instruction and hands-on practice.

Stat. Auth.: ORS Ch. 468[.020] & 468[.893]A
Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88);
DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90)

Prior Training

340-33-080 Successful completion of an initial training course accredited by a governmental agency other than the Department may be used to satisfy the training and examination requirements of OAR 340-33-050 and 340-33-060 provided that all of the following conditions are met.

- (1) The Department determines that the course and examination requirements are equivalent to or exceed the requirements of OAR 340-33-050 and 340-33-060 and the asbestos training guidance document, for the level of certification sought. State and local requirements may vary.
- (2) For an applicant to qualify for a refresher course and certification, prior training must have occurred within two years of the application to the Department. Applicants must be in good standing in all states where they are certified.
- (3) The applicant who has received recognition from the Department for alternate initial training successfully completes an Oregon accredited refresher course and refresher course examination for the level of certification sought.

Stat. Auth.: ORS Ch. $468\frac{\text{[.020]}}{\text{[.020]}}$ & $468\frac{\text{[.893]}}{\text{[.020]}}$ Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88); DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90)

Reciprocity

340-33-090 The Department may develop agreements with other jurisdictions for the purposes of establishing reciprocity in training, licensing, [and/] or certification if the Department finds that [the training, licensing and/or certification] such standards of the other jurisdiction are at least as stringent as those required by [these rules] this Division.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88)

Fees

340-33-100

- (1) Fees shall be assessed to provide revenues to operate the asbestos control program. Fees are assessed for the following:
 - (a) Contractor Licenses;
 - (b) Worker Certifications;
 - (c) Training Provider Accreditation;
 - (d) Asbestos Abatement Project Notifications.
- (2) Contractors shall pay a non-refundable license application fee of:
 - (a) \$300 for a one year Full-Scale Asbestos Abatement Contractor license;
 - (b) \$200 for a one year Small-Scale Asbestos Abatement Contractor license.
- (3) Workers shall pay a non-refundable certification fee of:
 - (a) \$100 for a two year certification as a certified Supervisor for Full-Scale Asbestos Abatement;
 - (b) \$80 for a two year certification as a Certified Worker for Full-Scale Asbestos Abatement;
 - (c) \$50 for a two year certification as a Certified Worker for Small-Scale Asbestos Abatement.
- (4) Training Providers shall pay a non-refundable accreditation application fee of:
 - (a) \$1000 for a one year accreditation to provide a course for training supervisors on Full-Scale projects;
 - (b) \$800 for a one year accreditation to provide a course for training workers on Full-Scale projects;
 - (c) \$500 for a one year accreditation to provide a course for training workers on Small-Scale projects;
 - (d) \$250 for a one year accreditation to provide a course for refresher training for any level of certification.
- (5) Requests for waiver of fees shall be made in writing to the Director, on a case-by-case basis, and be based upon financial hardship. Applicants for waivers must describe the reason for the request and certify financial hardship. The Director may waive part or all of a fee.

NOTE: The requirements and jurisdiction of the Department of Insurance and Finance, Oregon Occupational Safety and Health Division and any other state agency are not affected by these rules this Division.

Stat. Auth.: ORS Ch. 468[.020] & 468[.893]A
Hist.: DEQ 10-1988, f. & cert ef. 5-19-88 (and corrected 6-3-88);
DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90); AQ 13,
f. & ef. 10-7-91

DIVISION 34

RESIDENTIAL WOODHEATING

Purpose

340-34-001 [The Clean Air Act amendments of 1990 require that specific measures be undertaken in a nonattainment area to attain the national primary ambient air quality standard by the applicable attainment date.]The purpose of [these rules] this Division is to establish [control strategy and contingency measures for residential woodheating in PM nonattainment areas, and to address residential woodburning curtailment under the statewide emergency action plan] rules to control, reduce and prevent air pollution caused by residential woodheating emissions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Definitions

340-34-005 Unless otherwise required by context, as used in this Division:

- (1) "Accredited" means a woodstove testing laboratory holds a valid certificate of accreditation issued by the Department or the U.S. Environmental Protection Agency.
- (2) "Administrator" means the administrator of the Environmental Protection Agency or the administrator's authorized representative.
- (3) "Antique Woodstove" means a woodstove built before 1940 that has an ornate construction and a current market value substantially higher than a common woodstove manufactured in the same time period.
- (4) "Audit test" means a test conducted by the Department to verify a laboratory's certification test results.
- (5) "Commission" means the Environmental Quality Commission.
- (6) "Consumer" means any person who buys a woodstove for personal use.
- (7) "Cookstove" means an indoor woodburning appliance the design and primary purpose of which is to cook food.
- (8) "Curtailment" means a period during which woodburning is prohibited due to the existence of an air stagnation condition.

- (9) "Dealer" means any person engaged in selling woodstoves to retailers or other dealers for resale. A dealer which is also an Oregon retailer shall be considered to be only a retailer for purposes of these rules this Division.
- (10) "Destroy" means to demolish to a such an extent that restoration is impossible.
- (11) "Department" means the Oregon Department of Environmental Quality.
- (12) "Director" means the Director of the Department or the Director's authorized delegates.
- (13) "EPA" means the United States Environmental Protection Agency.
- (14) "Federal Regulations" means Volume 40 CFR Part 60, Subpart AAA, Sections 60.530 through 60.539b, dated July 1, 1990.
- (15) "Fireplace" means a framed opening made in a chimney to hold an open fire.
- (16) "Heat output" means the heat output (Btu/hour) of a woodstove during one test run, measured under test conditions prescribed by OAR 340-21-120.
- (17) "Manufacturer" means any person who imports a woodstove, constructs a woodstove or parts for woodstoves.
- (18) "New Woodstove" means any woodstove that has not been sold, bargained, exchanged, given away or has not had its ownership transferred from the person who first acquired the woodstove from the manufacturer's dealer or agency, and has not been so used to have become what is commonly known as "second hand" within the ordinary meaning of that term.
- (19) "Overall efficiency (%) over the range of heat outputs tested" means the weighted average combustion efficiency (%) multiplied by the weighted average heat transfer efficiency (%) measured under test conditions (range of heat outputs) and calculated according to specific procedures prescribed by OAR [340-21-120(1)]340-34-055(1). This definition is applicable to the Stack Loss Methodology. For the Calorimeter Room Method, the weighted average overall efficiency means the useful heat output released to the room, divided by the total heat potential of the fuel consumed.
- (20) "Pelletstove" means a woodburning heating appliance which uses wood pellets as its primary source of fuel.
- (21) "Retailer" means any person engaged in the sale of woodstoves directly to consumers.
- "Used Woodstove" means any woodstove that has been sold bargained, exchanged, given away, or has had its ownership transferred from a retailer, manufacturer's dealer or agent to a consumer.

- "Weighted average" means the weighted average of the test results to the distribution of home heating needs as prescribed in the [F]federal regulations, 40 CFR Part [40]60, Subpart AAA.
- (24) "Woodstove" [/] or "Woodheater" means an enclosed, woodburning appliance capable of and intended for space heating and domestic water heating that meets all of the following criteria:
 - (a) An air-to-fuel ratio in the combustion chamber averaging less than (35]30-to-1 as determined by the test procedure prescribed in federal regulations 40 CFR part 60, subpart AAA, §60.534 performed at an accredited laboratory;
 - (b) A usable firebox volume of less than 20 cubic feet,
 - (c) A minimum burn rate less than 5 kg/hr as determined by the test procedure prescribed in federal regulations 40 CFR part 60, subpart AAA, §60.534 performed at an accredited laboratory; and
 - (d) A maximum weight of 800 kg. In determining the weight of an appliance for these purposes, fixtures and devices that are normally sold separately, such as flue pipe, chimney, heat distribution ducting, and masonry components that are not an integral part of the appliance or heat distribution ducting, shall not be included.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Requirements for Sale of Woodstoves 340-34-010

- (1) [.] Requirements applicable to the sale of new woodstoves
 - (a) {On and after July 1, 1990 a]No person shall{ not} advertise to sell, offer to sell, or sell a new woodstove in Oregon unless:
 - (A) The woodstove has been tested, certified and labeled for emission performance in accordance with criteria, emission standards, and

- procedures specified in the federal regulations, 40 CFR Part 60, Subpart AAA; and
- (B) The woodstove has been tested for heating efficiency and certified by the Department in accordance with criteria and procedures in OAR 340-34-055; and
- (C) The woodstove is labelled for emission performance and heating efficiency as specified in OAR 340-34-070; provided, however, that section (1) of this rule shall not apply to any sale from any manufacturer or dealer; to any Oregon manufacturer or dealer; or to any out-of-state manufacturer, dealer or retailer; or to any offer or advertisement for such sale directed only to such a manufacturer, dealer or out-of-state retailer.
- (b) No manufacturer, dealer, retailer or individual shall alter the permanent certification label in any way from the label approved by the Administrator pursuant to [FF]federal Regulations, 40 CFR part 60, subpart AAA, § 60.53860.538
- (c) No manufacturer, dealer or retailer shall alter the removable label in any way from the label approved by the Department pursuant to OAR 340-34-080.

 (2)[.] Requirements applicable for the sale of used woodstoves. A person shall not advertise to sell,
 - offer to sell, or sell a used woodstove unless:

 (a) The woodstove was certified by the Department on or after July 1, 1986, in accordance with emission performance and heating efficiency criteria applicable at the time of certification;
 - (b) The woodstove has permanently attached an emission performance label authorized by the Department or the EPA.
- (3) Section (2) of this rule concerning used woodstoves that have not been certified shall not apply to the following:
 - (a) the selling by a consumer of tant used woodstove that has not been certified by the Department to a person in the business of reusing, reclaiming or recycling scrap metal to be destroyed or used as scrap metal;
 - (b) the remittance of <u>{an}a</u> used woodstove that has not been certified by the Department by a consumer to a retailer of certified woodstoves for the purpose of receiving a reduction in price on a new certified woodstove.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Exemptions

340-34-015

- (1) A pelletstove is exempt from the following requirements:
 - (a) OAR 340-34-050 through [340-34-110]340-34-115, woodstove certification, and OAR 340-34-010[(1)], requirements applicable to the sale of new woodstoves, provided the manufacturer holds a valid letter of exemption from the Department, or furnishes the Department with a valid letter of exemption from the Administrator, which verifies that the pelletstove exceeds an air to fuel ratio in the combustion chamber of greater than 35-to-1 as determined in accordance with criteria and procedures of EPA Method 28A as set forth in the federal regulations, 40 CFR Part 60, Subpart AAA;
 - (b) OAR 340-34-010(2), requirements applicable to the sale of used woodstoves;
 - (c) OAR 340-34-150 through 340-34-175, woodburning curtailment; and
 - (d) OAR 340-34-200 through 340-34-215, woodstove requirements applicable after December 31, 1994.
- An enclosed woodheating appliance capable of and intended for residential space heating or domestic water heating is exempt from OAR 340-34-010, requirements applicable to the sale of woodstoves, and OAR 340-34-050 through 340-34-115, woodstove certification, provided the manufacturer holds a valid letter of exemption from the Department, or furnishes the Department with a valid letter of exemption from the Administrator, which verifies that the appliance is not a woodstove or woodheater as defined in OAR 340-34-005(24).
- (3) {(2)} An antique stove is exempt from the requirements of:
 - (a) OAR 340-34-010(2), requirements applicable to the sale of used woodstoves; and
 - (b) OAR 340-34-200 through 340-34-215, woodstove requirements applicable after December 31, 1994.

(4) [(3)]	A cookstove is exempt from the requirements of
	Chapter 340, Division 34, except for OAR 340-34-150
	through 340-34-175, woodburning curtailment.

A woodburning fireplace, woodstove or appliance operated within a household classified to be at less than or equal to 125 percent of the federal poverty level is exempt from the requirement of OAR 340-34-150 through 340-34-175, woodburning curtailment. The federal poverty level is published in the Federal Register, Volume 56, Number 34, February 20, 1990, page 6859, Department of Health and Human Services.

A woodstove operated in a residence that is equipped solely with woodheat is exempt from the requirements of OAR 340-34-150 through 340-34-175, woodburning curtailment.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Civil Penalties

340-34-020 Violations of Chapter 340, Division 34 are subject to Chapter 340, Division 12, Enforcement Procedures and Civil Penalties.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Woodstove Certification Program

<u>Applicability</u>

340-34-045

(1) OAR 340-34-045 through 340-34-115 shall apply to any woodstove or woodheater.

(2) The following woodheating appliances are not subject to OAR 340-34-045 through 340-34-115:

- (a) Open masonary fireplaces;
- (b) Boilers;
- (c) Furnaces; and
- (d) Cookstoves.

Emissions Performance Standards and Certification 340-34-050

- (1) Unless exempted for not regulated as an affected facility under §60.530 of the federal regulation, 40 CFR Part 60, Subpart AAA]by the Department under 340-34-115, new woodstoves advertised for sale, offered for sale or sold in Oregon between July 1, 1990 and June 30, 1992 shall be certified by the Administrator pursuant to federal regulation as complying with the particulate matter emission limits specified in the federal regulations, 40 CFR Part 60, Subpart AAA, §60.532(a).
- Unless exempted for not regulated as an affected facility under §60.530 of the federal regulation, 40 CFR Part 60, Subpart AAA]by the Department under 340-34-015, new woodstoves advertised for sale, offered for sale, or sold in Oregon on or after July 1, 1992 shall be certified by the Administrator pursuant to federal regulation as complying with the particulate matter emission limits specified in the federal regulations, 40 CFR Part 40, Subpart AAA, §60.532(b).

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Efficiency Testing Criteria and Procedures 340-34-055

(1) To be considered eligible for certification, a woodstove must be tested for efficiency in strict conformance with criteria and procedures contained in the document Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves dated June 8, 1984, and incorporated

herein by reference and on file at the Department, or in strict conformance with criteria and procedures in federal regulations, 40 CFR 60, Appendix J, if found to be equivalent by the Department.

- (2) All testing for certification purposes, using the Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves, shall be conducted by a stove testing laboratory accredited in accordance with procedures specified in OAR 340-34-085.
- (3) The Department may permit minor changes in the testing criteria and procedures specified in section (2) of this rule which the Department believes does not affect its accuracy providing such changes are approved in writing by the Department prior to the actual conducting of such tests.
- (4) All testing for certification purposes using the federal regulation, 40 CFR 60, Appendix J, if found to be equivalent by the Department, shall be conducted by an accredited laboratory.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. $\frac{[183.341 \&]}{468}$ 468 $\frac{[.370] \& 468A}{[.370]}$ Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

General Certification Procedures 340-34-060

- (1) Any woodstove manufacturer, or dealer, wishing to obtain certification of a woodstove shall file an application with the Department.
- (2) An application for certification must include:
 - (a) One complete copy of the EPA application and attachments as specified in the federal regulations, 40 CFR Part 60, Subpart AAA, §60.533 (a,b,c,d);
 - (b) A copy of the valid Certificate of Compliance issued by the Administrator, pursuant to federal regulation, 40 CFR Part 60, Subpart AAA, §60.533;
 - (c) All test data and support documentation showing that the woodstove has been tested for efficiency in accordance with OAR 340-34-055;

- (d) A non-refundable certification fee, payable to the Department at the time the application is submitted to the Department, is required for each stove model seeking certification. The fee is \$500 for each model submitted by the manufacturer.
- (3) The Department will promptly review an application for certification and:
 - (a) Notify the applicant in writing within 30 days of receipt of the applications, of any deficiencies in the applications that cause the application to be incomplete;
 - (b) Notify the applicant within 60 days of receipt of a completed application whether certification is granted or denied pursuant to sections (4) and (7) of this rule.
- (4) When all the preceding requirements have been met, the Department will issue or deny a certification document to the manufacturer or dealer for the specified woodstove.
- (5) If the Department grants certification, the certification status shall be effective for no longer fthat]than five years unless extended or terminated by rule or order.
- (6) An application for a new document of certification shall be made by submitting a completed application including retests and fees at least 60 days prior to expiration of certification. The Department may waive the retest and fees if the applicant demonstrates the previous evidence used to certify the woodstove has not changed and remains reliable and applicable.
- (7) If the Department denies certification of a woodstove, the Department will notify the manufacturer or dealer in writing of the opportunity for a hearing pursuant to OAR Chapter 340, Division 11.

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. $\{183.341 \& \}468 \{1.370\} \& 468 \$ Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Changes in Woodstove Design

340-34-065 Certification of woodstoves shall be valid for only the specific model, design, plans and specifications which were originally submitted, tested and approved for certification. Any modification to the model, design, plans or specifications shall cause the certification to be ineffective and any so modified woodstoves to be uncertified, unless prior to making such modification the certification holder submits the proposed modification to the Administrator for approval, and the Administrator approves it.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Labelling Requirements

340-34-070 Woodstoves which must be labelled pursuant to OAR 340-34-010 shall have affixed to them:

- (1) A permanent label, in accordance with federal regulations, 40 CFR [60, Subpart AAA,]§60.536.
- (2) A point-of-sale removable label:
 - (a) [If the]For woodstoves [was]tested for efficiency in conformance with criteria and procedures described in 340-34-055 and contained in the document Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves, the label [must]shall be approved by the Department, verify certification and show the heating efficiency [range]of the appliance. The label shall be affixed to the appliance at the point-of-sale near the front and top of the stove and remain affixed until sold and delivered to the consumer;
 - (b) If the woodstove was tested for efficiency in conformance with criteria and procedures in federal regulations, 40 CFR Part 60, Appendix J, the point-of-sale label shall show the measured efficiency in accordance with the requirements in federal regulations, 40 CFR [60, Subpart AAA,] §60.536.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. <u>[183.341 &]</u>468<u>[.370] & 468A</u> Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Removable Label 340-34-075

- (1) For a woodstove with a heating efficiency measured in accordance with OAR 340-34-055, an additional point-of-sale removable label shall be affixed and shall contain the following information:
 - (a) "Oregon Tested Efficiency (Ave.) _____%", weighted average of tested values;
 - (b) Manufacturer of appliance;
 - (c) Model of appliance;
 - (d) Design number of model;
 - (e) A statement acknowledging EPA emission certification meets Oregon emission requirements;
 - (f) The statement "Performance may vary from test values depending on actual home operating conditions".
- (2) The label shall be visibly located on the appliance when the appliance is available for inspection by consumers.
- (3) This label may not be combined with any other label or with other information.
- (4) The label shall be attached to the appliance in such a way that it can be easily removed by the consumer upon purchase. For instance, the label may be attached by adhesive, wire, or string.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. <u>[183.341 &]</u>468<u>[.370] & 468A</u> Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Label Approval 340-34-080

- (1) Removable label:
 - (a) For a woodstove with a heating efficiency measured in accordance with OAR 340-34-055, the Department will provide the manufacturer or dealer, at the time of certification with:

- (A) A copy of the standardized printed removable label, with all printing specifications; and
- (B) The specific information that shall be printed in the spaces on the label by the manufacturer.
- (b) The manufacturer or dealer shall submit to the Department for review:
 - (A) A proof copy of the proposed label with the required information printed on the labels;
 - (B) The method of attaching the removable label to the woodstove;
 - (C) The name, telephone number, and address of the label printer.
- (c) Within 14 days of receipt of all the information required in subsection (b) of this section, the Department will approve or deny use of the proposed label.
- (2) The manufacturer shall submit to the Department three final printed permanent, and three final printed removable labels within one month of receiving the labels from the printer.

Stat. Auth.: ORS Ch. $\frac{[183.341 &]}{468}$ 468 $\frac{[.370] & 468A}{[.370]}$ Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Laboratory Accreditation Requirements

340-34-085 A laboratory submitting test data pursuant to requirements in this rule shall have a valid certificate of accreditation issued by the Department. A laboratory may initiate application for an accreditation certificate by submitting written documentation to the Department that accreditation criteria contained in OAR 340-34-090 are met. In addition, the laboratory must demonstrate stove testing proficiency pursuant to OAR 340-34-095, in order to qualify for accreditation.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; AQ 7, f. & ef. 11/13/91

Accreditation Criteria

340-34-090 All laboratories shall meet the following criteria and standards at the time of application and shall continue to meet these criteria as a condition of maintaining accreditation.

- (1) Hold a valid certificate of accreditation for emission testing issued by the Administrator.
- (2) Shall hold a valid certificate of efficiency accreditation issued by the Department. To be eligible for efficiency accreditation the laboratory must demonstrate to the Department:
 - (a) Conformance with the criteria and procedures contained in the document Standard Method for Measuring the Emission and Efficiency of Residential Woodstoves and maintain an efficiency computer program that produces results comparable to the Department's using a standard data set provided by the Department; or
 - (b) Conformance and proficiency with the criteria and procedures in federal regulation, 40 CFR 60, Appendix J, if found to be equivalent by the Department.
- (3) Shall meet all of the requirements as prescribed by federal regulation, 40 CFR Part 60, Subpart AAA, Section 60.535.
- (4) Neither the laboratory owners or business affiliates shall discriminate in management or business practices against any person or business because of race, creed, color, religion, sex, age, or national origin. In addition, neither the laboratory nor its owners or operators shall be certified by any association or members of any association that discriminates in management or business practices against any person or business because of race, creed, color, religion, sex, age, or national origin.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. $\{183.341 \& \}468\{.370\} \& 468 \$ Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Application for Laboratory Efficiency Accreditation 340-34-095

- (1) A laboratory applying for efficiency accreditation shall state in writing and demonstrate by providing documentation, that they comply with the criteria and standards in OAR 340-34-090 at the time of application, and how they will continue to meet the criteria and standards on an on-going basis.
- (2) The laboratory shall notify the Department in writing within 30 calendar days should it become unable to conform to any of the criteria and standards in OAR 340-34-090.
- Operation of the application will be identified by the Department in writing, and must be resolved by the laboratory before further processing occurs.
- (4) The application will not be considered complete forfurther processing Juntil the laboratory certifies in writing that the application deficiencies have been resolved. The application will be considered withdrawn if the applicant fails to fcertify resolution Jresolve to the Department's satisfaction the application by the Department.
- (5) When the <u>Department determines that the</u> application is <u>complete and</u> approvable, the Department <u>fwilljshall</u> inform the laboratory in writing and <u>may</u> schedule an on-site laboratory inspection.

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

On-Site Laboratory Inspection and Stove Testing Proficiency Demonstration

340-34-100

- (1) An on-site inspection may be conducted by a Department representative after all laboratory information required by OAR 340-34-090, has been provided by the laboratory, and reviewed and approved by the Department. The on-site visit may be conducted when a laboratory initially applies for accreditation [or], when the laboratory reapplies for a new certificate of accreditation or at such time as is deemed necessary by the Department.
- During the on-site inspection, the Department representative will:

- (a) Observe the Stove Testing Proficiency Demonstration specified in OAR 340-34-095;
- (b) Meet with management and supervisory personnel responsible for the testing activities for which the laboratory is seeking accreditation;
- (c) Review representative samples of laboratory records. To facilitate examination of personnel competency records, the laboratory should prepare a list of names of staff members who perform the tests;
- (d) Observe test demonstrations and talk with laboratory personnel to assure their understanding of the test procedures. Refer to OAR 340-34-055 and 340-34-095;
- (e) Physically examine selected equipment and apparatus;
- (f) At the conclusion of the on-site visit, the Department may discuss observations with responsible members of the laboratory management pointing out any deficiencies uncovered.
- (3) In order to be accredited and as a part of each on-site laboratory inspection, each laboratory may be required to demonstrate to the Department's representative its ability to successfully and proficiently conduct and report a woodstove emission and efficiency test. Each laboratory may:
 - (a) Be required to test one woodstove provided by the Department. Costs for all stove shipping, catalytic combustors, or other necessary parts will be paid by the laboratory;
 - (b) Be required to test the stove in accordance with testing criteria and procedures specified in OAR 340-34-155;
 - (c) Conduct the actual efficiency testing in the presence of a Department observer;
 - (d) Submit all test data, observations and test results to the Department for technical evaluations.

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

Accreditation Application Deficiency, Notification and Resolution 340-34-105

(1) Any deficiencies noted during the on-site inspection and/or in the test data and test results submitted from the stove

testing proficiency demonstration will be specifically identified in writing and mailed to the laboratory within 30 days of the on-site visit.

- (2) The laboratory must respond in writing within 30 days of the date of postmark of the notification by the Department and provide documentation that the specified deficiencies have been corrected. All deficiencies must be corrected prior to accreditation being granted.
- (3) Deficiencies noted for corrective action will be subject to thorough review and verification during subsequent on-site visits and technical evaluations.
- (4) Any deficiencies in the test data and/or results may result in subsequent proficiency tests being required at the laboratory with a Department representative present.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; AQ 7, f. & ef. 11/13/91

Final Department Administrative Review and Certificate of Accreditation

340-34-110

- (1) When all application material has been received, including the on-site inspection and the stove testing proficiency evaluation, and there has been time for all deficiencies to be resolved, the Department will grant or deny accreditation.
- (2) Accreditation can be denied for failure to comply with or fulfill any of the criteria in OAR 340-34-090, 340-34-095, and 340-34-100.
- (3) When accreditation is approved, a certificate of accreditation will be issued to the laboratory. Accreditation will be granted for a period of five years (60 months) subject to rule change or revocation for cause, pursuant to OAR 340, Division 11.
- (4) A certificate of accreditation is not renewable. A holder may obtain a new certificate of accreditation by completing the application procedure in OAR 340-34-095, and demonstrating compliance with OAR 340-34-090 and 340-34-100.
- (5) The Department may select and audit test one stove tested by the laboratory during the accreditation period to verify certification test results. Any discrepancies noted will be communicated to the laboratory by certified or registered

mail. The laboratory must respond in writing within 30 days of postmark of notification and provide documentation or certification by an authorized member of the laboratory management that the specified discrepancies have been corrected or the laboratory may be subject to civil penalties or revocation of accreditation.

(6) A laboratory may voluntarily terminate its accreditation by written request at any time. The certificate of accreditation must be returned with the request.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. [183.341 &]468[.370] & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; DEQ 5-1990, f. 3-7-90, cert. ef. 7-1-90; AQ 7, f. & ef. 11/13/91

[Civil Penalties,]Revocation, and Appeals 340-34-115

- (1) Violation of OAR 340-34-050 through OAR 340-34-110 shall constitute cause to revoke the manufacturer's woodstove certification or laboratory's certificate of laboratory accreditation.
- (2) Certification of a woodstove may be revoked if the woodstove was tested at a laboratory that was found to be in violation of accreditation criteria and rules at the time the woodstove was tested for certification.
- (3) When certification or accreditation has been revoked, the holder shall return the certification or accreditation document to the Department and cease to use mention of Department certification or accreditation of the stove model or laboratory on any of its test reports, correspondence or advertising.
- (4) <u>Appeal of the revocation of [S]s</u>tove certification and lab accreditation <u>frevocation</u>]shall be <u>fhandled as contested cases <u>fconducted</u> pursuant to OAR <u>fChapter </u>340f, <u>Division</u> <u>f-11-097 through 340-11-142</u>.</u>

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1984, f. & ef. 6-26-84; AQ 7, f. & ef. 11/13/91

WOODBURNING CURTAILMENT

Applicability

340-34-150 OAR 340-34-150 through 340-34-175 shall apply to any portion of the state:

- (1) Where the Department has determined that, under the requirements of the Clean Air Act, an enforceable woodburning curtailment program is required as an emission reduction control strategy for a PM₁₀ nonattainment area and the Department has determined that the local government or regional authority has failed to adopt or adequately implement the required woodburning curtailment program. In determining whether a local government or regional authority has failed to adequately adopt or implement a curtailment program, the Department shall determine if a local government or regional authority:
 - (a) has adopted an ordinance that requires the curtailment of residential wood heating at forecasted air pollution levels which are consistent with the curtailment conditions and requirements specified in OAR 340-34-155(1) and 340-34-160(1) and (2);
 - (b) is issuing on a daily basis curtailment advisories to the public consistent with OAR 340-34-165; and
 - (c) is conducting surveillance for compliance and is taking adequate enforcement actions consistent with OAR 340-34-170.
- (2) Where the Department has determined that, under the requirements of the Clean Air Act, an enforceable woodburning curtailment program is required as an emission abatement strategy to respond to an air pollution emergency.
- (3) That is classified as a nonattainment area for PM₁₀ that does not achieve attainment by December 31, 1994, and which does not have an enforceable curtailment program that satisfies the criteria in sections (1)(a), (b) and (c) above.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Determination of Air Stagnation Conditions

340-34-155 The Department shall utilize appropriate data and technology to develop methodology criteria for a curtailment program that:

- (1) For use as an emission reduction control strategy or contingency plan for PM₁₀ nonattainment areas:
 - (a) Calls a Stage I advisory when the PM₁₀ standard is being approached; and
 - (b) Calls a Stage II advisory, when an exceedance of the PM_{10} standard is forecasted to be imminent.
- (2) For use as an emission abatement strategy in order to respond to an air pollution emergency
 - (a) Calls an Alert when PM₁₀ alert levels have been reached and are forecasted to continued; and
 - (b) Calls a Warning when PM₁₀ warning levels have been reached and are forecasted to continue.
 - (c) Alert and Warning levels are specified in OAR Chapter 340, Division 27.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Prohibition on Woodburning During Periods of Air Stagnation. 340-34-160

- (1) During any designated Stage I Advisory, the operation of any uncertified woodstove, fireplace, or woodburning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.
- (2) During any designated Stage II Advisory, the operation of any woodstove, fireplace, or woodburning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.
- Ouring any designated PM₁₀ Alert, the operation of any uncertified woodstove, fireplace, or wood burning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.
- (4) During any designated PM₁₀ Warning, the operation of any woodstove, fireplace, or woodburning appliance shall be prohibited unless exempted under the provisions of OAR 340-34-015.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Public Information Program

340-34-165 The Department or its designated representative shall implement a public information program to disseminate the daily air pollution advisory to the local community. The public information program shall include but may not be limited to the utilization of applicable local media including television, radio, and newspapers.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Enforcement

340-34-170

- (1) The Department or its designated representative shall monitor the level of compliance with curtailment requirements during designated periods of air stagnation.
- (2) A rebuttable presumption of a violation shall arise if smoke is being emitted through a flue or chimney during a curtailment period unless the household from which smoke is being emitted has provided the Department or designated representative with information indicating that the household or its woodburning appliance is exempt from curtailment requirements in accordance with OAR 340-34-015.
- (3) Any person claiming an exemption to OAR 340-34-150 through 340-34-175 in accordance with OAR 340-34-015 in response to a Notice of Noncompliance shall provide the Department with documentation which establishes eligibility for the exemption. The Department shall review the documentation and make a determination regarding the exemption status of the household, or woodheating appliance. The following documentation shall be submitted to the Department for review in order to establish exemption status under the criteria of OAR 340-34-015:

- (a) For households desiring low income exemption status a copy of the previous year tax returns. The tax return should reflect the total combined household income for the past year;
- (b) A signed affidavit attesting to the sole source status of a home (see note);
- (c) A signed affidavit attesting to the certification status of the home heating appliance (see note).

Note: Affidavits for certified stove, low income, and sole source exemptions are available from the Woodheating Program, Air Quality Division, Department of Environmental Quality; 811 SW Sixth Avenue, Portland, Oregon 97204.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Suspension of Department Program 340-34-175

- (1) The Department shall suspend the operation and enforcement of OAR 340-34-150 through 340-34-170 in any area upon determination by the Department that the local government or regional air quality authority has adopted and is adequately implementing a woodburning curtailment program that is at least as stringent as the program outlined in OAR 340-34-150 through 340-34-170.
- (2) In making a determination concerning the adequacy of a local or regional woodburning curtailment program, the Department shall consider whether or not the local government or regional authority:
 - (a) Has adopted an ordinance that requires the curtailment of residential woodheating at forecasted air pollution levels which are consistent with curtailment conditions specified in OAR 340-34-155;
 - (b) Is issu[e]ing curtailment advisories to the public on a daily basis;
 - (c) Is conducting surveillance for compliance and is taking adequate enforcement actions;
 - (d) Any other information the Department determines is necessary to determine the adequacy of the curtailment program.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Woodstove Removal Contingency Program for PM_{10} Nonattainment Areas

Applicability

340-34-200 OAR $\frac{[340-34-205]}{340-34-200}$ through 340-34-215 shall apply to any area classified as a nonattainment area for PM₁₀ that does not achieve attainment $\frac{[buy]by}{[b]}$ December 31, 1994.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Removal and Destruction of Uncertified Stove Upon Sale of Home. 340-34-205 Except as provided for by OAR 340-34-015, any uncertified woodstove shall be removed and destroyed by the seller upon the sale of a home.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

Home Seller's Responsibility to Verify Stove Destruction 340-34-210 Any person selling a home which contains an uncertified woodstove shall provide to the Department prior to the sale of the home, a copy of a receipt from a scrap metal dealer verifying that the stove has been destroyed.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

OREGON ADMINISTRATIVE RULES CHAPTER 340, DIVISION 34 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Home Seller's Responsibility to Disclose

340-34-215 Any person selling a home in which an uncertified woodstove is present shall disclose to any potential buyer, buyer's agent or buyer's representative that the woodstove is uncertified, and must be removed and destroyed upon sale of the home.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: AQ 7, f. & ef. 11/13/91

NOTICE OF PROPOSED RULEMAKING HEARING

(Rulemaking Statements and Statement of Fiscal Impact must accompany this form.)

Department of Environmental Quality, Air Quality Division AGENCY:

The above named agency gives notice of hearing.

HEARING TO BE HELD:

DATE:

TIME:

LOCATION:

November 24, 1992 3:00 pm

Room 9A, DEQ Offices, 811 SW Sixth Avenue,

Portland

Hearings Officer:

Andy Ginsburg

Pursuant to the Statutory Authority of ORS 468.020, the following action is proposed:

ADOPT:

AMEND:

OAR Chapter 340, Divisions 13, 14, and 20 through 34

REPEAL:

☐ Prior Notice Given; Hearing Requested by Interested persons

☑ No Prior Notice Given

SUMMARY:

Proposed housekeeping amendments to DEQ air quality regulations. Amendments generally update statutory citations, remove passed compliance dates and outdated regulations, and correct typographical and grammatical errors.

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments received by 5:00 pm, November 25, 1992, will also be considered. Written comments should be sent to and copies of the proposed rulemaking may be obtained from:

AGENCY:

Department of Environmental Quality

ADDRESS:

Air Quality Division 811 S. W. 6th Avenue

Portland, Oregon 97204

ATTN:

Yone C. McNally

PHONE:

229-5143 or Toll Free 1-800-452-4011

Signature

Proposed Housekeeping Amendments to Air Quality Regulations, OAR Chapter 340, Division 13, 14, and 20 through 34

Date Issued:

October 21, 1992

Public Hearings:

November 24, 1992

Comments Due:

November 25, 1992

WHO IS AFFECTED:

Industrial and individual sources of air pollution and contamination in

Oregon.

WHAT IS PROPOSED:

Housekeeping amendments to the Department of Environmental Quality's

air quality regulations.

WHAT ARE THE HIGHLIGHTS:

•Updating statutory citations.

•Repealing outdated requirements and passed compliance dates.

•Correcting grammatical and typographical errors.

HOW TO COMMENT:

Public Hearings to provide information and receive public comment are scheduled as follows:

November 24, 1992

3:00 pm

Room 9A

DEQ Headquarters Offices

811 SW Sixth Avenue

Portland, OR

Written comments must be received by close of business on November 25, 1992, at the following address:

Department of Environmental Quality Air Quality Division 811 S. W. 6th Avenue Portland, Oregon, 97204

A copy of the Proposed Rule may be reviewed at the above address or a Regional or Branch office during regular business hours. Regional offices are located in Portland, Salem, Medford, Bend and Pendleton. Branch offices are located in Astoria, Roseburg, Coos Bay and Grants Pass. A copy may be obtained from the Department by calling the Yone C. McNally in the Air Quality Division at 229-5143 or calling toll free in Oregon 1-800-452-4011. Because of the extensive nature of the package, please specify the rule divisions of interest when requesting a copy.

WHAT IS THE NEXT STEP:

The Department will evaluate comments received and will make a recommendation to the Environmental Quality Commission. Interested parties can request to be notified of the date the Commission will consider the matter by writing to the Department at the above address.

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal for Housekeeping Amendments to Air Quality Regulations

Rulemaking Statements

Pursuant to ORS 183.335(7), this statement provides information about the Environmental Quality Commission's intended action to adopt a rule.

1. <u>Legal Authority</u>

This proposal amends various rules concerning air quality. The amendments are housekeeping in nature and the result of the Air Quality Division's periodic rule review as required under Oregon Revised Statutes (ORS) 183.505 through 183.550. The amendments are proposed under authority of ORS Chapters 183, 468 and 468A.

2. Need for the Rule

The proposed amendments are housekeeping amendments. They have resulted from public and internal review of the rules. These amendments do not have any affect on the substantive meaning of the rules. As housekeeping amendments, these amendments are designed to correct mistakes, clarify some rules and repeal out of date regulations.

3. Principal Documents Relied Upon in this Rulemaking

o The Oregon Administrative Procedures Act, ORS 183.505 through 183.550.

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal for Housekeeping Amendments to Air Quality Regulations

Fiscal and Economic Impact Statement

Introduction

The proposed rule amendments are housekeeping amendments which the Air Quality has identified as necessary through the periodic rule review required by Oregon Revised Statutes, Chapter 183. The changes were identified as a result of a review by Air Quality Division staff and the public. The amendments are housekeeping in nature. The goal of these amendments is help the Air Quality Division streamline some regulations and make them more understandable. Because these amendments are housekeeping in nature, there is no economic effect.

General Public

These rules amendments have no economic impact on the General Public as there are housekeeping in nature and place no new regulatory requirements on the general public.

Small Business

These rule amendments have no economic impact on small business as they are housekeeping in nature and place no new regulatory requirements on small business.

Large Business

These rule amendments have no economic impact on large business as they are housekeeping in nature and place no new regulatory requirements on large business.

Local Governments

These rule amendments have no economic impact on local governments in Oregon as they are housekeeping in nature and place no new regulatory requirements on local governments.

State Agencies

These rule amendments have no economic impact on DEQ. As they are housekeeping in nature, they require no additional FTE, no expenditure of DEQ funds, and will not produce any revenue for DEQ.

These rule amendments have no economic impact on other state agencies as they are housekeeping in nature and place no new regulatory requirements on other state agencies.

Assumptions

The basic assumption is that because these rule amendments are housekeeping in nature and create no new regulatory requirements, they have no economic effect whatsoever.

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal

for

Air Quality Housekeeping Amendments, Divisions 13, 14, and 20 through 34

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

The proposed changes are housekeeping amendments to the agency's air quality regulations. These changes repeal outdated requirements and passed compliance dates, update statutory citations, and correct typographical and grammatical errors.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes_x No___

a. If yes, identify existing program/rule/activity:

OAR Chapter 340, Divisions 14 and 20: Approval of Notice of Construction for Air Pollution Sources; Issuance of Air Contaminant Discharge Permit; Issuance of Indirect Source Construction Permit; Approval of Parking and Traffic Circulation Plan.

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes_x_ No___ (if no, explain):

c. If no, apply the following criteria to the proposed rules.

Staff should refer to Section III, subsection 2 of the SAC document in completing the evaluation form. Statewide Goal 6 - Air, Water and Land Resources is the primary goal that relates to DEQ authorities. However, other goals may apply such as Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources; Goal 11 - Public Facilities and Services; Goal 16 - Estuarine Resources; and Goal 19 - Ocean Resources. DEQ programs or rules that relate to statewide land use goals are considered land use programs if they are:

1. Specifically referenced in the statewide planning goals; or

- 2. Reasonably expected to have significant effects on
 - a. resources, objectives or areas identified in the statewide planning goals, or
 - b. present or future land uses identified in acknowledged comprehensive plans.

In applying criterion 2. above, two guidelines should be applied to assess land use significance:

- The land use responsibilities of a program/rule/action that involves more than one agency, are considered the responsibilities of the agency with primary authority.
- A determination of land use significance must consider the Department's mandate to protect public health and safety and the environment.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

3. If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not Applicable.

Division

Intergovernmental Coord.\

2

State of Oregon Department of Environmental Quality

Memorandum

Date: December 15, 1992

To:

Environmental Quality Commission

From:

Andrew Ginsburg

Subject:

Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time:

November 24, 1992, beginning at 3:00 p.m.

Hearing Location:

Room 9A, DEQ Offices, 811 SW Sixth Avenue,

Portland

Title of Proposal:

Proposed Housekeeping Amendments to Air Quality

Regulations, OAR Chapter 340, Divisions 13, 14, and 20

through 34.

The rulemaking hearing on the above titled proposal was convened at 3:15 p.m. No members of the public attended the hearing and, so, no oral or written testimony was received at the hearing. The hearing was closed at 3:45 p.m.

STOEL RIVES BOLEY IONES & GREY

AFRORNEYS ALLAW SUITE 2300 STANDARD INSURANCE CENTER 900 SW FIFTH AVENUE PORTLAND, OREGON 97204-1268

> Telephone (503) 224-3380 Telecopier (503) 220-2480 Cable Lawport Telex 703455 Writer's Direct Dial Number

> > (503) 294-9259

November 20, 1992

ATTACHMENT D

DECENTED

NOV 2 3 1992

Alk yükenir bir. 5.08 Dept. Environmental Quality

Mr. Andy Ginsburg Department of Environmental Quality 811 SW Sixth Ave. Portland, OR 97204

Re: Proposed Revisions to OAR 340 Divisions 13, 14, and 20 through 34

Dear Andy:

Thank you for the opportunity to comment on DEQ's proposed changes to its air quality rules. We recognize that these proposed revisions have required significant effort, and we appreciate the attempt to clarify certain provisions and correct internal inconsistencies. However, we have noticed a few provisions in the proposed amendments that go well beyond mere housekeeping changes and may create significant problems.

340-20-005 - The proposed revisions to this section would require "any air contaminant source not subject to the air contaminant discharge permit rules" to register with DEQ upon request. This change is a significant expansion of the existing rule which required registration in 1971 of certain categories of sources. It appears, that the section as it exists has outlived its usefulness. If so, it should simply be deleted. With respect to the proposed revision, we question the need for registration of sources that are not subject to permitting requirements. Given the extensive scope of DEQ's permitting rules, sources that are exempt from permitting should not be subjected to additional requirements. In any event, because a proposed change creates significantly new obligations, it should not be regarded as a housekeeping change and should not be made without adequate notice to the public.

340-21-005 - This amendment would add a definition for opacity and would measure it "in accordance with the Department's Source Sampling Manual." This change suggests that the Source Sampling Manual would be given the force and

PDX1-27595.1



Mr. Andy Ginsburg November 20, 1992 Page 2

effect of a regulation. However, the Source Sampling Manual has not been developed by the Department through appropriate rulemaking procedures. As written, it would appear that the Department could modify the Source Sampling Manual at any time, thereby significantly changing the proposed definition without public notice. If the definition of opacity is necessary, reference to the Department's Source Sampling Manual should be deleted or the manual should be subjected to proper rulemaking procedures.

Although we have noticed several other provisions that appear to make substantive changes in the rules, we have not analyzed their effect. In particular, we noticed that the changes to 340-24-325 would change the carbon monoxide and carbon dioxide test criteria for motor vehicles equipped with two air pumps. We also noticed that the changes to Section 340-23-030 will substantially undermine the exceptions to the definition of commercial waste for agricultural waste, construction waste and demolition waste. These changes would appear to be substantive in nature and their effect should be more fully explained in the public notice.

If you have any questions or would like to discuss these comments, please call me.

Very truly yours

. Mark Morford

JMM:v-q

DEPARTMENT'S EVALUATION OF PUBLIC COMMENTS

The Air Quality Division received one letter containing four comments during the public comment period. The commentor was Mark Morford of the law firm Stoel, Rives, Boley, Jones & Grey. Mr. Morford's comments are summarized below along with an agency response. Mr. Morford's letter is contained in Attachment D.

Comment 1

The proposed changes to the general registration rule (340-20-005) are substantive and represent an expansion of the existing rule. The rule has outlived its usefulness and should be repealed.

Response

340-20-055 was originally adopted in 1971 and lists sources which were required to register with the Department. At the time, this rule was used to help the Department determine what sources were operating and whether a source required an Air Contamination Discharge Permit. All of the sources listed by this rule are now required to have permits. However, this rule is still a useful tool for the Department. It allows the Department to gather information on the possible permitting needs of unregulated or unregistered sources which may be discovered.

The change proposed to the rule does not represent a substantive change. The amendment deletes the list of specific sources because those sources are covered under the permit regulations. The rule does retain the catchall for unpermitted sources which the Department may discover. This catchall language is not a new requirement.

Comment 2

340-21-005 contains a proposed definition of "opacity" which measures opacity in "accordance with the Department's Source Sampling Manual." This gives the manual the force of a rule without going through proper rulemaking. As such, this definition represents a substantive rule change.

Response

The Department's Source Sampling Manual went through the full rule making process between November 1991 and January 1992. It was released for public comment in November 1991, a hearing was conducted in December 1991, and it was adopted by the Environmental Quality Commission as part of the State Implementation under OAR 340-20-047 in January 1992.

Comment 3

340-23-325 would change the carbon monoxide standard considered acceptable for cars with two air pumps. This represents a substantive change in the standard.

Response

In the proposed amendment, in order to pass the test, carbon monoxide measurements from a car with one air pump cannot exceed 8%, while a car with two air pumps cannot exceed 6%. The current standard for all vehicles is 8%. The Department agrees that this does represent a substantive change in the standard. The Department has deleted this amendment from this package and will propose it again as part of a substantive rule making in 1993.

Comment 4

340-23-030 contains amendments to the definitions of agricultural, construction and demolition waste. These represent substantive changes as they would greatly expand the Department's authority to regulate these types of waste.

Response

In the proposed amendments, the definitions of agricultural, construction and demolition waste were changed to include language which would make such waste "commercial" waste if the waste were removed from the property of origin, consistent with the requirements for "domestic" waste. However, this would change the way the Department enforces its open burning rules concerning these types of waste. Because these changes do represent a substantive change, the Department has deleted these amendments from this package.

attach.e

Changes to Original Rulemaking Proposal

The following explains the changes proposed between the amendments presented for public hearing and the current amendments proposed for adoption. For each change, an explanation of the changes and the new regulatory language is included. For clarity, only the changes between rules as presented for public hearing and proposed for adoption are shown in this attachment. See Attachment A for the complete text of amendments proposed for adoption.

1. Note for SIP rules

One general change has been made throughout the rules. That change is to an editorial note proposed to appear after each rule that has been adopted by the EQC as part of the "State of Oregon Clean Air Act State Implementation Plan" (SIP) under OAR 340-20-047. This note was proposed to inform the public about which rules are part of the SIP as adopted by the EQC. The original note could create the impression that the Environmental Protection Agency had approved the latest version of any given rule. While EPA has approved the majority of the rules, this may not be the case for new amendments and newly adopted rules. Air Quality staff, in consultation with the Attorney General's office, have proposed changing the note as follows:

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan <u>as</u> adopted <u>by the Environmental Quality</u>

<u>Commission</u> under OAR 340-20-047].

2. OAR 340-20-110

On October 16, 1992, the Environmental Quality Commission adopted rules regulating oxygenated fuels. These rules went into effect on November 1, 1992. In that rulemaking, OAR 340-20-110, Definitions for Indirect Source regulations, was amended to include the definition for "Indirect Source Operating Permit." The section number for this definition has been changed from (29) to (17) and the other definitions have been renumbered so that the definitions will appear in alphabetical order.

Definitions

340-20-110

As used in OAR 340-20-100 through 340-20-135:

 $\frac{(29)}{(17)}$

"Indirect Source Operating Permit" means a written permit in letter form issued by the Department or Regional Authority having jurisdiction, bearing the signature of the Director or designee, which authorizes the permittee to operate an indirect source.

ATTACHMENT F

[(17)](18)	"Mobile Source" means self-propelled vehicles, powered by internal combustion engines including, but not limited to, automobiles, trucks, motorcycles, and aircraft.
[(18)](19)	"Off-street Area or Space" means any area or space not located on a public road dedicated for public use.
[(19)](20)	"Parking and Traffic Circulation Plan" means a plan developed by a city, county, or regional government or Regional Planning Agency, the implementation of which assures the attainment and maintenance of the state's ambient air quality standards.
[(20)] (21)	"Parking Facility" means any building, structure, lot, or portion thereof, designed and used primarily for the temporary storage of motor vehicles in designated parking spaces.
[(21)] (22)	"Parking Space" means any Off-Street Area of Space below, above, or at ground level, open or enclosed, that is used for parking one motor vehicle at a time.
[(22)] (23)	"Person" means individuals, corporations, associations, firms, partnerships, joint stock companies, public and municipal corporations, political subdivisions, the State and any agencies thereof, and the federal government and any agencies thereof.
[(23)](24)	"Population" means that population estimate most recently published by the Center for Population Research and Census, Portland State University, or any other population estimate approved by the Department.
[(24)](25)	"Regional Authority" means a regional air quality control authority established under the provisions of ORS 468A.105.
[(25)] (26)	"Regional Planning Agency" means any planning agency which has been recognized as a substate-clearinghouse for the purposes of conducting project review under the United States Office of Management and Budget Circular Number A-95, or other governmental agency having planning authority.
[(26)] (27)	"Reasonable Receptor and Exposure Sites" means locations where people might reasonably be expected to be exposed to air contaminants generated in whole or in part by the Indirect Source in question. Location of ambient air sampling sites and methods of sample collection shall conform to criteria on file with the Department of Environmental Quality.

"Sensitive Area" means locations which are actual or potential air quality non-attainment areas, as

determined by the Department.

"Vehicle Trip" means a single movement by a motor vehicle which originates or terminates at or uses an Indirect Source.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 81, f. 12-5-74, ef. 12-25-74; DEQ 86, f. 3-11-75, ef. 4-11-75; DEQ 110(Temp), f. & ef. 3-1-76 thru 7-14-76; DEQ 118, f. & ef. 8-11-76; DEQ 17-1990, f. & cert. ef. 5-25-90; AQ 22, f. 10-30-92, ef. 11-1-92

3. OAR 340-23-030

In the package presented for public hearing, it was proposed that agricultural, construction or demolition waste be defined as commercial waste upon removal from the property of origin. A comment received argued that this change was substantive and not housekeeping. The Department agrees with this comment and is removing the language from proposed rules.

Definitions

340-23-030 As used in this Division:

- (4) "Agricultural waste" means any waste material actually generated or used by an agricultural operation, excluding those materials described in OAR 340-23-042(2). {Once agricultural waste is removed from the agricultural operation of origin it becomes commercial waste.}
- (11) "Construction waste" means any waste material actually resulting from or produced by a building or construction project. Examples of construction waste are wood, lumber, paper, crating and packing materials used during construction, materials left after completion of construction and materials collected during cleanup of a construction site. [Once construction waste is removed from the site of origin it becomes commercial waste.]
- (13) "Demolition waste" means any material actually resulting from or produced by the complete or partial destruction or tearing down of any man-made structure or the clearing of any site for land improvement or cleanup excluding yard debris (domestic waste) and agricultural waste. [Once demolition waste is removed from the site of origin it becomes commercial waste.]

4. OAR 340-23-055

OAR 340-23-115 limits open burning in incorporated cities with populations over 5,000. Brookings is now a city with a population over 5,000. Air Quality staff have determined that Brookings is in fact subject to open burning limitations under 340-23-115, and therefore should be identified in 340-23-055 for clarity.

Baker, Clatsop, Crook, Curry, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Morrow, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco and Wheeler Counties

340-23-055 Open burning prohibitions for the counties of Baker, Clatsop, Crook, Curry, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Morrow, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco and Wheeler:

- (1) Industrial open burning is prohibited except as provided in OAR 340-23-100.
- (2) Agricultural open burning:
 - (a) In Baker, Crook, Deschutes, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco and Wheeler Counties, agricultural open burning is allowed under this Division subject to OAR 340-23-040(5).
 - (b) In Clatsop, Curry, Lincoln and Tillamook Counties agricultural open burning is allowed subject to OAR 340-23-040, 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal.
- (3) Commercial open burning is allowed subject to OAR 340-23-040, 340-23-042 and 340-23-043, and the requirements and prohibitions of local jurisdictions and the State Fire Marshal, except that, unless authorized pursuant to OAR 340-23-100, all commercial open burning is prohibited in or within three (3) miles of the corporate city limits of the following cities:
 - (a) In Baker County, the City of Baker.
 - (b) In Clatsop County, the Cities of Astoria and Seaside.
 - (c) In Crook County, the City of Prineville,
 - (d) In Curry County, the City of Brookings
 - f(d) f(e) In Deschutes County, the Cities of Bend and Redmond,
 - {(e)}(f) In Hood River County, the City of Hood River,
 - $\{(f)\}\{g\}$ In Klamath County, the City of Klamath Falls.
 - [(g)](h) In Lincoln County, the Cities of Lincoln City and Newport.
 - [(h)](i) In Malheur County, the City of Ontario.

- f(j) (k) In Union County, the City of La Grande.
- f(k) (1) In Wasco County, the City of The Dalles.
- (4) Construction and Demolition open burning is allowed subject to the requirements and prohibitions of local jurisdictions, the State Fire Marshal, OAR 340-23-040, 340-23-042 and 340-23-043, except that, unless authorized pursuant to OAR 340-23-100, Construction and Demolition open burning is prohibited in or within three (3) miles of the corporate city limits of the following cities:
 - (a) In Baker County, the City of Baker,
 - (b) In Clatsop County, the City of Astoria.
 - (c) In Crook County, the City of Prineville.
 - (d) In Curry County, the City of Brookings
 - f(d) f(e) In Deschutes County, the Cities of Bend and Redmond.
 - {(e)}(f) In Hood River County, the City of Hood River.
 - f(f) f(g) In Klamath County, the City of Klamath Falls.
 - f(g) (h) In Malheur County, the City of Ontario.
 - [(h)](i) In Umatilla County, the Cities of Hermiston, Milton-Freewater and Pendleton.
 - {(i)}(i) In Union County, the City of La Grande.
 - f(j) (k) In Wasco County, the City of The Dalles.
- (5) Domestic open burning is allowed subject to the requirements and prohibitions of local jurisdictions, the State Fire Marshal, and OAR 340-23-040, 340-23-042 and 340-23-043.

5. OAR 340-24-320(6) and (7)

During the review process for housekeeping amendments, the Vehicle Inspection Program clarified the model year to which specific standards applied. This clarification was to make the model cut-off consistent throughout the rules. However, in the proposed package, a typographical error occurred. This error is corrected to make this regulation consistent with other regulations.

- (6) If a vehicle older than the {1980}1981 model year is now equipped with other than the original engine and factory installed vehicles pollution control systems, the vehicle for the purposes of determining test standards, shall be classified by the vehicle's original model year classification and current fuel system.
- (7) A f1980 1981 and newer vehicle shall be classified by the model year and make of the vehicle as designated by the original chassis, engine, and its factory installed motor vehicle pollution control systems, or equivalent. This in no way prohibits the vehicle owner from upgrading the engine and emission control system to a more recent model year

category including a diesel (compression ignition) power plant providing that all of the new factory installed pollution control system is maintained.

OAR 340-24-325

A comment was received that a proposed housekeeping change in Heavy Duty Gasoline Motor Vehicle Emission Control Test Criteria establishing different standards for vehicles based on the number of air pumps was in fact substantive in nature. Even though the proposed change is actually a relaxation of the standard for vehicles with two air pumps, the Air Quality Division staff does agree that any change to a standard is substantive and should not be made as part of housekeeping changes. Therefore, the rule has been changed back to its original language.

Heavy Duty Gasoline Motor Vehicle Emission Control Test Criteria 340-24-325

- (1) No vehicle emission control test shall be considered valid if the vehicle exhaust system leaks in such a manner as to dilute the exhaust gas being sampled by the gas analytical system. For the purpose of emission control tests conducted at state facilities, tests will not be considered valid if the exhaust gas is diluted to such an extent that the sum of the carbon monoxide and carbon dioxide concentrations recorded for the idle speed reading from an exhaust outlet is [:] eight percent or less.
 - {(a) 8 percent or less for vehicles equipped with one air pump, or;
 - (b) less than 6 percent for vehicles equipped with two air pumps.]

7. Divisions 28 and 29

Divisions 28 and 29 contain air quality regulations which are specific to counties in the Portland Metropolitan area and the Salem Metropolitan area. In November 1991, Division 30 was expanded from containing solely air quality regulations for Medford and Grants Pass to containing air quality regulations for areas with special air quality needs. Because of this change to Division 30 and the Air Quality Division's need to have room to reorganize and expand its rules, it is proposed that the rules contained in Divisions 28 and 29 be renumbered and made part of Division 30. Air Quality staff believes this is necessary to provide a better structure for the rules and room for new rules required under the Clean Air Act Amendments of 1990.

With two exceptions, the rules in Divisions 28 and 29 are proposed to be moved to Division 30 exactly as they appeared in the proposal presented for public hearing. The first exception is a change in the purpose and application rules (340-28-001 and 340-29-001). The purpose and stringency language was combined with 340-30-005 which applies to all of Division 30, and the application language was revised to show the range of rules in Division 30 that correspond to the old Division 28 and 29 rules. The second exception is that definitions from Division 28 and 29 were combined with definitions in 340-30-010. Three definitions from Division 29 were deleted because they essentially duplicate existing definitions in Division 30 ("Emission," "Particulate Matter" and "Person"). The remaining three definitions from Divisions 28 and 29 were added to Division 30 ("Air Contaminant," "Fuel Burning Equipment" and "Odor"). The definition of "Air Contaminant" was modified slightly to match the statutory definition in ORS 468A.005(2). The definitions of "Odor" Divisions 28 and 29 differ slightly, and the version from Division 29 was used. These minor changes in definitions do not have any substantive effect.

DIVISION 30

SPECIFIC AIR POLLUTION CONTROL RULES FOR AREAS WITH UNIQUE AIR QUALITY CONTROL NEEDS

Purpose and Application

340-30-005 The purpose of this Division is to deal specifically with the unique air quality control needs of areas of the state specified in OAR 340-30-012, and OAR 340-30-200, OAR 340-30-400 and OAR 340-30-600. This Division shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of this Division shall not, in any way, affect the applicability in the specified areas of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent conflict, the most stringent rule shall apply.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

Definitions

340-30-010 As used in this Division:

- (1) "Air contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter, or any combination thereof.
- "Air Conveying System" means an air moving device, such as a fan or blower, associated ductwork, and a cyclone or other collection device, the purpose of which is to move material from one point to another by entrainment in a moving airstream.
- "Average Operating Opacity" means the opacity of emissions determined using EPA Method 9 on any three days within a 12-month period which are separated from each other by at least 30 days; a violation of the average operating opacity limitation is judged to have occurred if the opacity of emissions on each of the three days is greater than the specified average operating opacity limitation.
- "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.
- "Collection Efficiency" means the overall performance of the air cleaning device in terms of ratio of weight of material collected to total weight of input to the collector.
- (5)](6) "Department" means Department of Environmental
 Quality.
- "Design Criteria" means the numerical as well as verbal description of the basis of design, including but not necessarily limited to design flow rates, temperatures, humidities, contaminant descriptions in terms of types and chemical species, mass emission rates, concentrations, and specification of desired results in terms of final emission rates and concentrations, and scopes of vendor supplies and owner-supplied equipment and utilities, and a description of any operational controls.
- "Domestic Waste" means combustible household waste, other than wet garbage, such as paper, cardboard, leaves, yard clippings, wood, or similar materials generated in a dwelling housing four (4) families or less, or on the real property on which the dwelling is situated.
- (8) 1(9) "Dry Standard Cubic Foot" means the amount of gas that would occupy a volume of one cubic foot, if the gas were free of uncombined water at standard conditions.
- (10) (11) "EPA Method 9" means the method for Visual
 Determination of the Opacity of Emissions From

Stationary Sources as promulgated by the U.S. Environmental Protection Agency in Title 40 of the Code of Federal Regulations, Part 60, Appendix A, Method 9.

- [(11)](12) "Facility" means an identifiable piece of process
 equipment. A stationary source may be comprised of
 one or more pollutant-emitting facilities.
- (13) "Fuel Burning Equipment" means a device which burns a solid, liquid, or gaseous fuel, the principal purpose of which is to produce heat, except marine installations and internal combustion engines that are not stationary gas turbines.
- [(12)](14) "Fuel Moisture Content By Weight Greater Than 20 Percent" means bark, hogged wood waste, or other wood with an average moisture content of more than 20 percent by weight on a wet basis as used for fuel in the normal operation of a wood-fired veneer dryer as measured by ASTM D4442-84 during compliance source testing.
- "Fuel Moisture Content By Weight Less Than 20 Percent"
 means pulverized ply trim, sanderdust, or other wood
 with an average moisture content of 20 percent or less
 by weight on a wet basis as used for fuel in the
 normal operation of a wood-fired veneer dryer as
 measured by ASTM D4442-84 during compliance source
 testing.
- "Fugitive Emissions" means dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof not easily given to measurement, collection and treatment by conventional pollution control methods.
- "General Arrangement", in the context of the compliance schedule requirements in section 340-32-045(2), means drawings or reproductions which show as a minimum the size and location of the control equipment on a source plot plan, the location of equipment served by the emission-control system, and the location, diameter, and elevation above grade of the ultimate point of discharging contaminants to the atmosphere.
- "Grants Pass Urban Growth Area" and "Grants Pass Area" means the area within the Grants Pass Urban Growth Boundary as shown on the Plan and Zoning Maps for the City of Grants Pass as of 1 February 1988.
- ### "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.
- [(18)](20) "La Grande Urban Growth Area" means the area within
 the La Grande Urban Growth Boundary as shown on the
 Plan and Zoning Maps for the City of La Grande as of 1
 October 1991.

- [(19)](21) "Lowest Achievable Emission Rate" or "LAER" is defined
 by section 340-20-225
- [(20)](22) "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).
- {(21)}(23) "Medford-Ashland Air Quality Maintenance Area" and "Medford-Ashland AQMA" is defined as beginning at a point approximately one mile NE of the town of Eagle Point, Jackson County, Oregon, at the NE corner of Section 36, T35S, R1W; thence south along the Willamette Meridian to the SE corner of Section 25, T37S, R1W; thence SE along a line to the SE corner of Section 9, T39S, R2E; thence SSE to the corner of Section 22, T39S, R2E; thence south to the SE corner of Section 27, T39S, R2E; thence SW to the SE corner of Section 33, T39S, R2E; thence NW to the NW corner of Section 36, T39S, R1E; thence west to the SW corner of Section 26, T39S, T1E; thence west to the SW corner of Section 12, T39S, R1W; thence NW along a line to the SW corner of Section 20, T38S, R1W; thence west to the SW corner of Section 24, T38S, R2W; thence NW along a line to the SW corner of Section 4, T38S, R2W; thence west to the SW corner of Section 5, T38S, R2W; thence NW along a line to the SW corner of Section 31, T37S, R2W; thence north along a line to the Rogue River, thence north and east along the Rogue River to the north boundary of Section 32, T35S, R1W; thence east along a line to the point of beginning.
- [(22)](24) "Modified Source" means any source with a "major modification" as defined in OAR 340-20-225.
- [(23)](25) "New Source" means any source not in existence prior to April 7, 1978 or any source not having an Air Contaminant Discharge Permit as of April 7, 1978.
- (26) "Odor" means that property of an air contaminant that affects the sense of smell.
- $\frac{(24)}{(27)}$ "Offset" is defined by OAR 340-20-225.
- "Opacity" means the degree to which an emission reduces transmission of light and obscures the view of an object in the background as measured in accordance with the Department's Source Sampling Manual.
- (26)}(29) "Open Burning" means burning conducted in such a
 manner that combustion air and combustion products may
 not be effectively controlled including, but not
 limited to, burning conducted in open outdoor fires,
 burn barrels, and backyard incinerators.
- [(28)](31) "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured in accordance with the

Department Source Sampling Manual. Particulate matter emission determinations shall consist of the average of three separate consecutive runs. For sources tested using DEQ Method 5 or DEQ Method 7, each run shall have a minimum sampling time of one hour, a maximum sampling time of eight hours, and a minimum sampling volume of 31.8 dscf. For sources tested using DEQ Method 8, each run shall have a minimum sampling time of 15 minutes and shall collect a minimum particulate sample of 100 mg. Wood waste boilers and charcoal producing plants shall be tested with DEQ Method 5; veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8.

- "Rebuilt Boiler" means a physical change after April
 29, 1988, to a wood-waste boiler or its aircontaminant emission control system which is not
 considered a "modified source" and for which the
 fixed, depreciable capital cost of added or
 replacement components equals or exceeds fifty percent
 of the fixed depreciable cost of a new component which
 has the same productive capacity.
- "Source" means any structure, building, facility, equipment, installation or operation, or combination thereof, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person, or by persons under common control.
- [(32)](35) "Standard Conditions" means a temperature of 60 degrees Fahrenheit (15.6 degrees Celsius) and a pressure of 14.7 pounds per square inch absolute (1.03 Kilograms per square centimeter).
- [(34)](37) "Veneer Dryer" means equipment in which veneer is dried.
- "Wood-fired Veneer Dryer" means a veneer dryer which
 is directly heated by the products of combustion of
 wood fuel in addition to or exclusive of steam or
 natural gas or propane combustion.
- [(36)](39) "Wigwam Waste Burner" means a burner which consists of a single combustion chamber, has the general features of a truncated cone, and is used for the incineration

of wastes.

"Wood Waste Boiler" means equipment which uses
indirect heat transfer from the products of combustion
of wood waste to provide heat or power.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 4-1978, f. & ef. 4-7-78; DEQ 9-1979, f. & ef. 5-3-79; DEQ 3-1980, f. & ef. 1-28-80; DEQ 14-1981, f. & ef. 5-6-81; DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 8, f. & ef. 11/13/91

SPECIFIC AIR POLLUTION CONTROL RULES FOR CLACKAMAS, COLUMBIA, MULTNOMAH, AND WASHINGTON COUNTIES

fPurpose and | Application

340-[28-001]30-400 [This division]OAR 340-30-400 through 340-30-540 shall apply in Clackamas, Columbia, Multnomah, and Washington Counties. [The purpose of this Division is to deal specifically with the air quality control needs of the four county area. This Division shall apply in addition to all other rules of the Environmental Quality Commission. The adoption of this Division shall not, in any way, affect the applicability in the four county area of all other rules of the Environmental Quality Commission and the latter shall remain in full force and effect, except as expressly provided otherwise. In cases of apparent duplication, the most stringent rule shall apply.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-001

Exclusions

340-[28-003]30-410 The requirements contained in [this division]OAR 340-30-400 through 340-30-540 shall apply to all activities conducted in Clackamas, Columbia, Multnomah, and Washington Counties, other than those for which specific industrial standards have been adopted (Division 25), except for the reduction of animal matter, sections 340-25-055(1) and (2).

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-003

Incinerators and Refuse Burning Equipment 340-[28-025]30-420

- (1) No person shall cause, permit, or maintain any emission from any refuse burning equipment which does not comply with the emission limitations of this rules.
- (2) Refuse Burning Hours:
 - (a) No person shall cause, permit, or maintain the operation of refuse burning equipment at any time other than one-half hour before sunrise to one-half hour after sunset, except with prior approval of the Department.
 - (b) Approval of the Department for the operation of such equipment may be granted upon the submission of a written request stating:
 - (A) Name and address of the applicant;
 - (B) Location of the refuse burning equipment;
 - (C) Description of refuse burning equipment and its control apparatus;
 - (D) Type and quantity of refuse;
 - (E) Good cause for issuance of such approval;
 - (F) Hours during which the applicant seeks to operate the equipment;
 - (G) Time duration for which approval is sought.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-025

Concealment and Masking of Emissions 340-[28-030]30-430

- (1) No person shall willfully cause or permit the installation or use of any device or use of any means such as dilution, which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminants which would otherwise violate OAR Chapter 340.
- (2) No person shall cause or permit the installation or use of any device or use of any means designed to mask the emission of an air contaminant, which air contaminant causes or is likely to cause detriment to health, safety, or welfare of any person.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-030

Effective Capture of Air Contaminant Emissions

340-[28-040]30-440 Air contaminants which are, or may be, emitted to the atmosphere through doors, windows, or other openings in a structure or which are, or may be, emitted from any

process not contained in a structure, shall be captured and transferred to air pollution control equipment using the most efficient and best practicable hooding, shrouding, or ducting equipment available. New sources shall comply at the time of installation.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-040

Odor Control Measures 340-[28-045]30-450

- (1) Control apparatus and equipment, using the highest and best practicable treatment currently available, shall be installed and operated to reduce to a minimum odor-bearing gases or odor-bearing particulate matter emitted into the atmosphere.
- (2) Gas effluents from incineration operations and process after-burners shall be maintained at a temperature of 1,400 degrees Fahrenheit for at least a 0.5 second residence time, or controlled in another manner determined by the Department to be equally or more effective.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-045

Storage and Handling of Petroleum Products 340-[28-050]30-460

- (1) In volumes of greater than 40,000 gallons, gasoline or any volatile petroleum distillate or organic liquid having a vapor pressure of 1.5 p.s.i.a. or greater under actual storage conditions shall be stored in pressure tanks or reservoirs or shall be stored in containers equipped with a floating roof or vapor recovery system or other vapor emission control device.
- (2) Gasoline or petroleum distillate tank car or tank loading facilities handling 20,000 gallons per day or more shall be equipped with submersible filling devices or other vapor emission control systems.
- (3) Gasoline tanks with a capacity of 500 gallons or more, installed after January 1, 1970, shall be equipped with submersible filling device or other vapor emission control systems.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-050 Ships

340-[28-055]30-470 While in those portions of the Willamette River and Columbia River which pass through or adjacent to Clackamas, Columbia, and Multnomah Counties, each ship shall minimize emissions from soot blowing and shall be subject to the emission standards and rules for visible emissions and particulate matter size.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-055

Upset Condition

340-[28-060]30-480 Emission of air contaminants in excess of applicable standards as a result of equipment breakdown shall be subject to OAR 340-20-350 through 340-20-380.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-060

Emission Standards - General

340-[28-065]30-490 Compliance with any specific emission standard in this Division does not preclude required compliance with any other applicable emission standard or requirement contained in OAR Chapter 340.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-065

Visible Air Contaminant Standards

340-[28-070]30-500 No person owning, operating, or maintaining non-fuel burning equipment sources of emissions shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than thirty (30) seconds in any one hour (which is equal to or greater than 20 percent opacity.

Stat. Auth.: ORS Ch. 468 & 468A - 100 - 10

Particulate Matter Weight Standards 340-[28-075]30-510

- (1) The maximum allowable emission of particulate matter from any fuel burning equipment shall:
 - (a) Be a function of maximum heat input and shall be determined from Figure 1, except from existing fuel burning equipment utilizing wood residue, it shall be

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- 0.2 grain, and from new fuel burning equipment utilizing wood residue, it shall be 0.1 grain for each standard cubic foot of exhaust gas, calculated to 12 percent carbon dioxide;
- (b) Not exceed Smoke Spot #2 for distillate fuel and #4 for residual fuel, measured by ASTM D2156-65, "Standard Method for Test for Smoke Density of the Flue Gases from Distillate Fuels"
- (2) The maximum allowable emission of particulate matter from any refuse burning equipment shall be a function of the maximum heat input from the refuse only and shall be determined from Figure 2.

[Publications: The publication(s) referred to or incorporated by reference in this rule is available from the office of the Secretary of State or Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-075

Particulate Matter Size Standard

340-[28-080]30-520 No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon the real property of another person.

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-080

Sulfur Dioxide Emission Standard

340-[28-085]30-530 No person shall cause or permit emission of sulfur dioxide in excess of 1000 ppm from any air contamination source as measured in accordance with the Department's Source Test Manual, except those persons burning fuel conforming to provisions of rules relating to the sulfur content of fuels. This rule is applicable to sources installed, constructed, or modified after october 1, 1970.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-085 Æσ.

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Odors

340-[28-090]30-540

- (1) No person shall cause or permit the emission of odorous matter in such manner as to contribute to a condition of air pollution, or exceed:
 - (a) A scentometer No. 0 odor strength or equivalent dilution in residential and commercial areas.
 - (b) A scentometer No. 2 odor strength or equivalent dilution in all other land use areas. Scentometer Readings: Scentometer No. and Concentration Range-No. of Thresholds, respectively:

0 ----- 1 to 2 1 ----- 2 to 8 2 ----- 8 to 32 3 ----- 32 to 128

(2) A violation of this rule shall have occurred when two measurements made within a period of one hour, separated by at least 15 minutes, off the property surrounding the air contaminant source exceeds the limitations of section (1).

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 61, f. 12-5-73, ef. 12-25-73, Renumbered from 340-28-090

SPECIFIC AIR POLLUTION CONTROL RULES FOR BENTON, LINN, MARION, POLK, AND YAMHILL COUNTIES

[Purposes and]Application

340-[29-001]30-600 [This Division]OAR 340-30-600 through
340-30-620 shall apply in Benton, Linn, Marion, Polk and Yamhill
counties.[The purpose of this Division is to deal specifically,
with the air quality control needs of the five county drea. This
Division shall apply in addition to all other rules of the
Environmental Quality Commission. The adoption of this Division
shall not, in any way, affect the applicability in the five
county area of all other rules of the Environmental Quality
Commission and the latter shall remain in full force and effect,
except as expressly provided otherwise. In cases of apparent
duplication, the most stringent rule shall apply.]

[NOTE: This rule is included in the State of Oregon Clean. Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 109, f. 3-15-76, ef. 3-25-76; DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-29-001

Odors

340-[29-011]30-610

- (1) Unless otherwise regulated by specific odor regulation or standard, no person shall cause or permit the emission of odorous matter:
 - (a) in such a manner as to cause a public nuisance, or
 - (b) that occurs for sufficient duration or frequency so that two measurements made within a period of one (1) hour, separated by at least 15 minutes, off the property surrounding the emission point, that is equal to or greater than a Scentometer No. 0 or equivalent dilutions in areas used for residential, recreational, educational, institutional, hotel, retail sales or other similar purposes.
- (2) In all land use areas other than those specified in subsection (1)(b) of this rule, release of odorous matter shall be prohibited if equal to or greater than a Scentometer No. 2 odor strength, or equivalent dilutions.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-29-013

Particulate Matter Size Standard

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340-[29-030]30-620 No person shall cause or permit the emission of any particulate matter which is larger than 250 microns in size provided such particulate matter does or will deposit upon real property of another person.

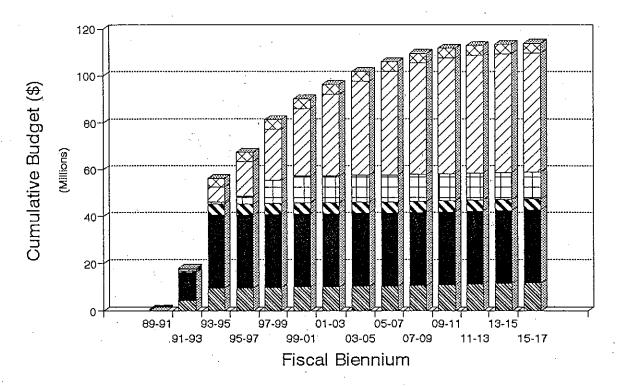
[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-647.]

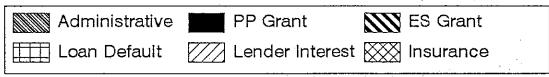
Stat. Auth.: ORS Ch. 468 & 468A Hist.: DEQ 11-1982, f. & ef. 6-18-82, Renumbered from 340-29-030

ALC: 1 18 2 11-1930; Fig. 1

Bar Chart 1







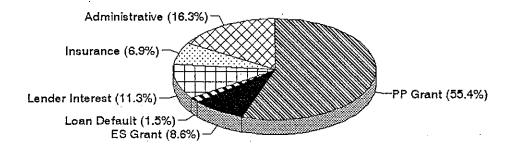
PP = Pollution Prevention Grant (50%) ES = Essential Services Grant (85%)

> UST FINANCIAL ASSISTANCE BUDGET FORECAST September, 1989 to September, 2017 Forecast Prepared: 5-13-92

Compiled By: Larry D. Frost DEQ, 1-26-93

Pie Chart 1





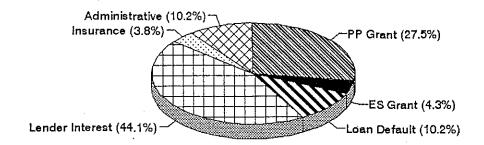
UST FINANCIAL ASSISTANCE BUDGET FORECAST September, 1989 to June, 1995

Forecast Prepared: 5-13-92

EXPENDITURES		
Pollution Prevention (PP) Grants	\$31,569,728	55.4%
Essential Services (ES) Grants	\$4,887,500	8.6%
Loan Defaults	\$876,000	1.5%
Interest Payments to Lenders	\$6,427,861	11.3%
Insurance Premium Copayments	\$3,908,000	6.9%
Administrative Costs	\$9,307,072	16.3%
TOTAL EXPENDITURES	\$56,976,161	100.0%

Pie Chart 2





UST FINANCIAL ASSISTANCE BUDGET FORECAST September, 1989 to June, 2017

Forecast Prepared: 5-13-92

EXPENDITURES		,
Pollution Prevention (PP) Grants	\$31,569,728	27.5%
Essential Services (ES) Grants	\$4,887,500	4.3%
Loan Defaults	\$11,748,000	10.2%
Interest Payments to Lenders	\$50,701,380	44.1%
Insurance Premium Copayments	\$4,341,400	3.8%
Administrative Costs	\$11,702,760	10.2%
	,	
TOTAL EXPENDITURES	\$114,950,768	100.0%

Boise Cascade Corporation

4435 North Channel Avenue Portland, Oregon 97217 503/286-7460 Richard H. Nachbar Western Region Manager Environmental Affairs

January 27, 1993

HAND DELIVERED

Mr. William W. Wessinger, Chair Environmental Quality Commission 121 S.W. Salmon Street, Suite 1100 Portland, Oregon 97204

Re: Columbia River United's Petition for Rulemaking

Dear Mr. Wessinger:

Columbia River United (CRU) has petitioned the Commission to initiate a rulemaking proceeding that would establish discharge limits for chlorinated organic compounds from pulp mills, based on the Commission's determination of "best available technology economically achievable" (BAT). CRU's petition is an effort to circumvent two other ongoing administrative proceedings, one before the Commission and one before the U.S. Environmental Protection Agency (EPA), that are comprehensively considering the same issue. There is no reason to initiate yet a third process that will add nothing to the first two.

CRU's petition does not contend that there is any threat to the environment that would warrant its proposed rule. Rather, its petition is based solely on the Clean Water Act's requirement that industries install BAT to control effluent discharges.

EPA, however, is approaching the end of a lengthy rulemaking proceeding that is considering BAT limits for discharges of chlorinated organic compounds from pulp mills. EPA will issue a proposed rule setting national BAT limits for pulp mills in October of this year.

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Mr. William W. Wessinger January 27, 1993 Page 2

In addition, CRU is a party to the pulp mill contested cases currently before the Commission. In those contested cases, the Commission is considering, among other issues related to chlorinated organic compounds, mill-specific BAT limits on discharges of chlorinated organic compounds from James River II, Inc.'s Wauna Mill and Boise Cascade Corporation's St. Helens Mill. The Commission will very likely complete its consideration of these issues, with the benefit of operational data from each mill, by the end of this year.

CRU's petition offers no persuasive reason for an additional proceeding that would, at best, merely duplicate the current efforts of EPA and the Commission. Moreover, the information that it offers in support of its petition is neither particularly new nor relevant to the establishment of BAT limits for Oregon pulp mills. Only a handful of the mills listed in the petition as "totally chlorine free" are bleached kraft mills, and only one is in the United CRU's petition makes no effort to demonstrate how these mills are comparable to Oregon mills with respect to the factors relevant to a BAT determination, and none of the identified mills is capable of producing pulp of the same quality as the Oregon bleached kraft mills. The more expensive, less bright, and often weaker pulp produced by these mills serves a different and much smaller market that does not warrant the enormous expenditures required to produce "totally chlorine free" pulp. U.S. bleached kraft mill that intends to produce pulp without chlorine, the Louisiana Pacific mill in Samoa, California, is not yet producing without chlorine and admits that it does not yet have a market for the lower-grade pulp that it intends produce without chlorine. In addition, as CRU's exhibit shows, the mill agreed to produce without chlorine in order to avoid installing an expensive biological treatment system, which virtually all U.S. mills, including Oregon mills, have long used.)

Mr. William W. Wessinger January 27, 1993 Page 3

Boise Cascade urges the Commission to adhere to its current process for considering pulp mill BAT issues and to deny the petition for rulemaking. Thank you.

Sincerely,

Richard H. Nachbar

Richard H. Nachbar

Western Region Environmental Manager Boise Cascade Corporation

cc: Environmental Quality Commission Members

Hon. Arno H. Denecke

Mr. Fred Hansen

Mr. Michael Huston

Mr. Larry Edelman

Mr. John Bonine

Mr. Curtis Fisher

Mr. Peter M. Linden

Mr. Richard H. Williams

Mr. Jay T. Waldron

Mr. William C. Carpenter

Ms. Linda Williams

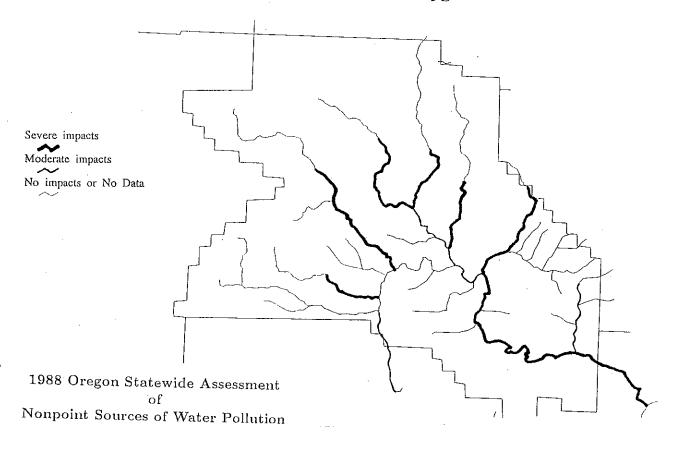
Columbia River Inter-Tribal Fish Commission

Oregon Trout

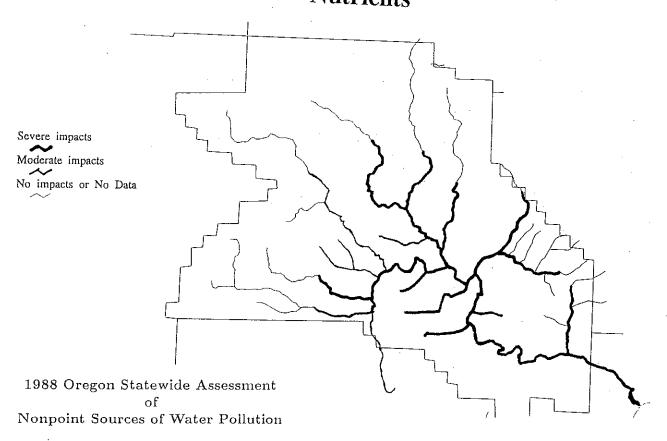
Oregon Salmon Commission

Oregon Rivers Council

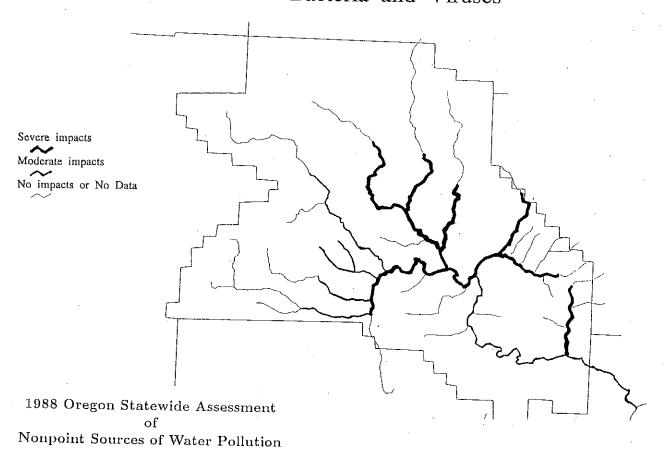
Nonpoint Source Problems - Tualatin Basin Dissolved Oxygen



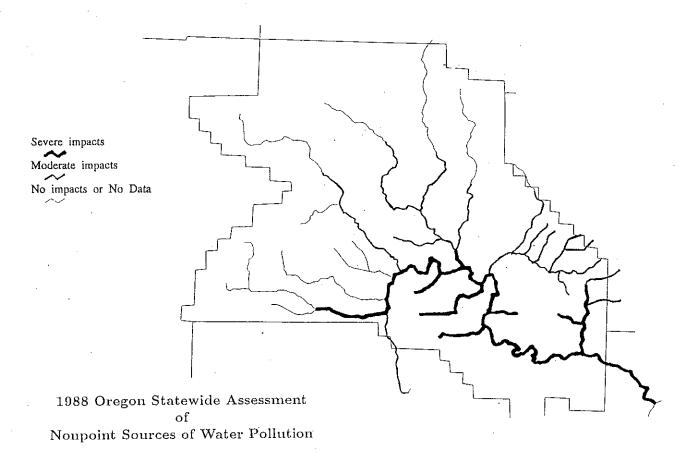
Nonpoint Source Problems - Tualatin Basin Nutrients



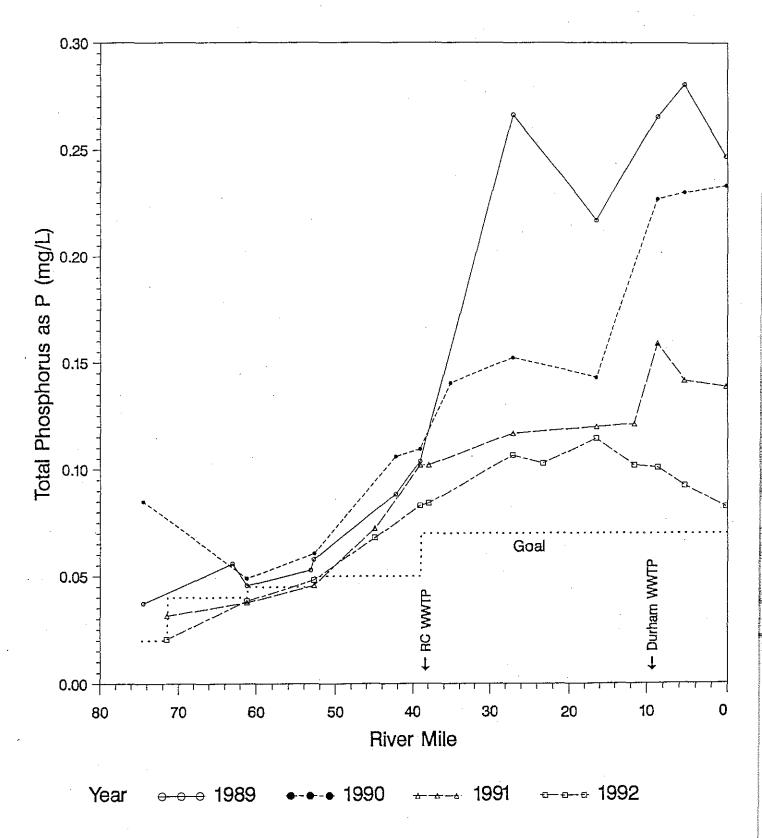
Nonpoint Source Problems - Tualatin Basin Bacteria and Viruses



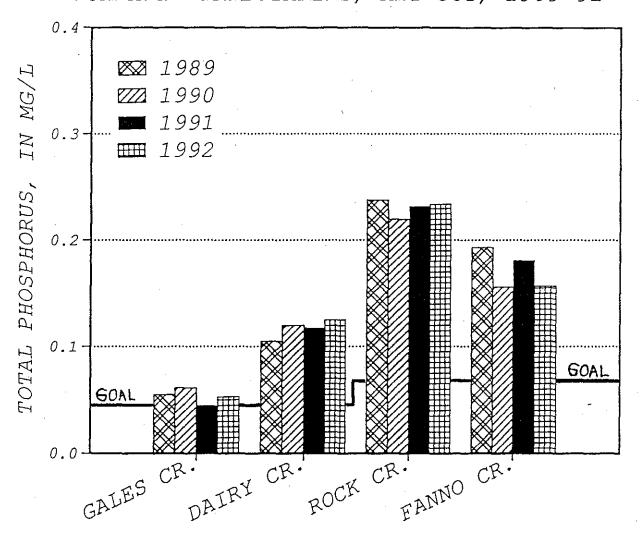
Nonpoint Source Problems - Tualatin Basin Sedimentation



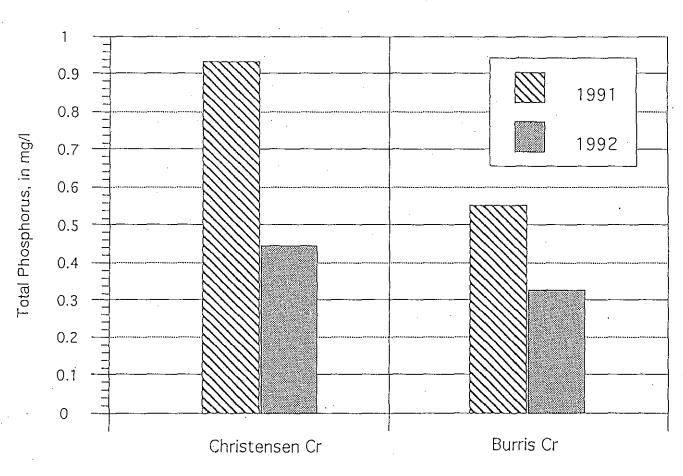
Total Phosphorus Mean Concentrations May - October



PHOSPHORUS CONCENTRATION IN FOUR TUALATIN TRIBUTARIES, MAY-OCT, 1989-92

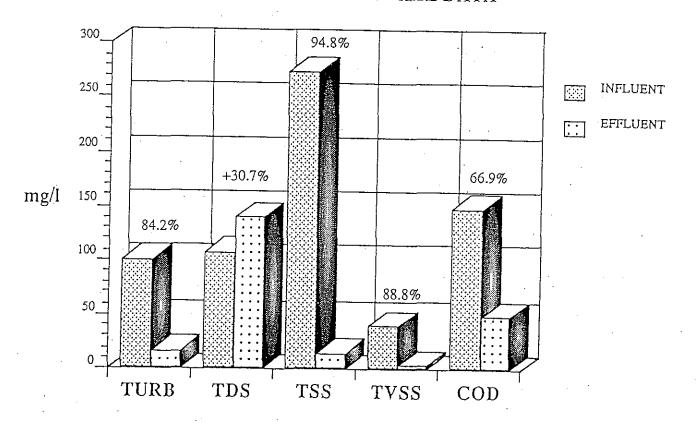


Phosphorus Concentration in Two Tualatin River Agricultural Tributaries, May-Oct, 1991-1992

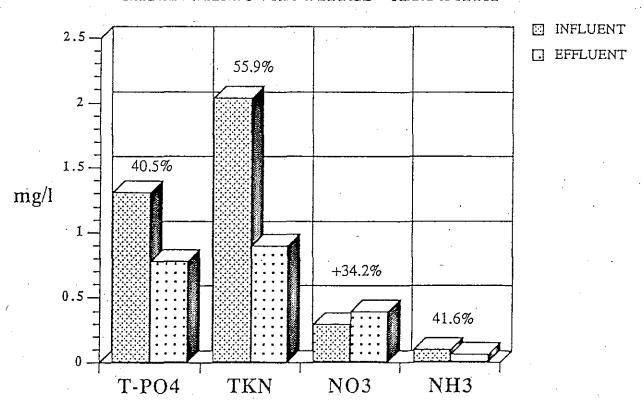


COMPOST STORM WATER TREATMENT SYSTEM

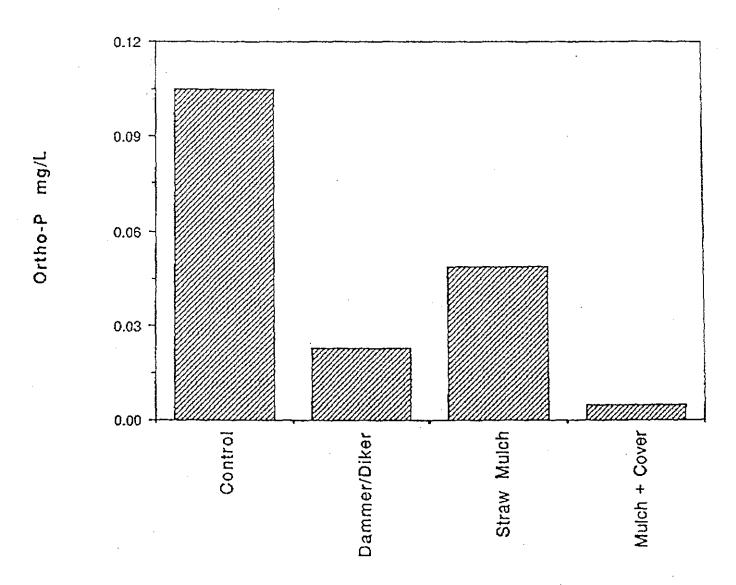
MEAN REMOVAL RATES - ALL DATA



MEAN REMOVAL RATES - ALL DATA



P solution concentrations in runoff traps.



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SOURCE TYPE	POLLUTION SOURCE	CONTROL MEASURE	RESPONSIBILITY /	AUTHORITY	PROGRAM	FUNDING Source	ENFORCEMENT MECHANISM	
on Point Sources					<u> </u>	:		
Urban	Stormwater Discharge	Stormwater Controls	USA/City/County	Yes	Mandatory	SWM Dist. Fees	NPDES	
	On-Site Facilities (new)	BMPs	USA/City/County	Yes	Mandatory	SWM Dist. Fees	Ordinance	
USA (Washington County)	Erosion	Erosion Controls	USA/City/County	Yes	Mandatory	SWM Dist. Fees	Ordinance	
Clackamas County	Development	Onsite Controls	USA/City/County	Yes	Mandatory	SWM Dist. Fees	Ordinance	
Multnomah County	Stream Banks	Rehabilitations	USA/City/County	Yes	Voluntary	SWM Dist. Fees	N/A	
City of Portland	Ditches (incl roads)	Convert to Grasslined	USA/City/County	Yes	Voluntary	SWM Dist. Fees	N/A	
City of Lake Oswego	Urban Activities	Source Controls	USA/City/County	Yes	Voluntary	SWM Dist. Fees	N/A	
City of West Linn	Lawn Fertilizers	No P a Application	USA/City/County	Yes	Voluntary	SWM Dist. Fees	N/A	
	Streets @ Parking Lots	Sweeping	USA/City/County	Yes	Voluntary	SWM Dist. Fees	N/A	
Agriculture	cafo	No Discharge	ODA	Yes	Vol then Mandat	Permit Fees	WPCF	
OR Dept of Agriculture	Container Nurseries	No Discharge	ODA	Yes	Vol then Mandat	Fees/GF	NPDES	
	Erosion	Erosion Controls	ODA	No	Voluntary	ASCS/Cost Share	N/A	
•	Uplands	Terracing, Filters, et	c ODA	No	Voluntary	ASCS/Cost Share	N/A	
	Ditches (inc roads)	Grasslined	ODA	No	Voluntary	ASCS/Cost Share	N/A	•
	Stream Banks	Rehabilitations	ODA	No	Voluntary	ASCS/Cost Share	N/A	-
	Fertilization	Agronomic Rates	ODA	No	Voluntary	ASCS/Cost Share	N/A	
	Irrigation	Agronomic Rates	ODA	No	Voluntary	ASCS/Cost Share	N/A	
Forestry	Erosion	Erosion Controls	ODF	Yes	Mandatory	Fees/GF	-FPA	
OR Dept of Forestry	Harvest Sites	Harvesting, roading mi	n ODF	Yes	Mandatory	Fees/GF	FPA	
	Ditches (incl. roads)	Grasslined	ODF	Yes	Mandatory	Fees/GF	FPA .	
	Stream Banks	Rehabilitation	OD F	Yes	Mandatory	Fees/GF	FPA	
	Fertilization	Agronomic Rates	OD F	Yes	Mandatory	Fees/GF	FPA	
Point Sources		*===					******	
JSA Sewage Treatmt Plants		Alum Treatment/Irrigation	n USA	Yes	Mandatory	Sewer Fees	NPDES	

TIMDL PROCESS

- Identify Water Quality Limited Streams.
- Evaluate Data.
- Establish Preliminary TMDLs.
- Conduct Detailed Water Quality Assessment Tier I, II, or III.
- Evaluate Data.
- Establish Final TMDLs.
- Submit to EPA for Approval.

Implement TMDLS

- Use TMDL in Permit Process.
- Use TMDL for NPS Program Plans.

Tier I: 18 Months to 2 Years

Example: Tualatin River — Ammonia

Tier II: 3 Years

Example: Coquille River — Dissolved Oxygen

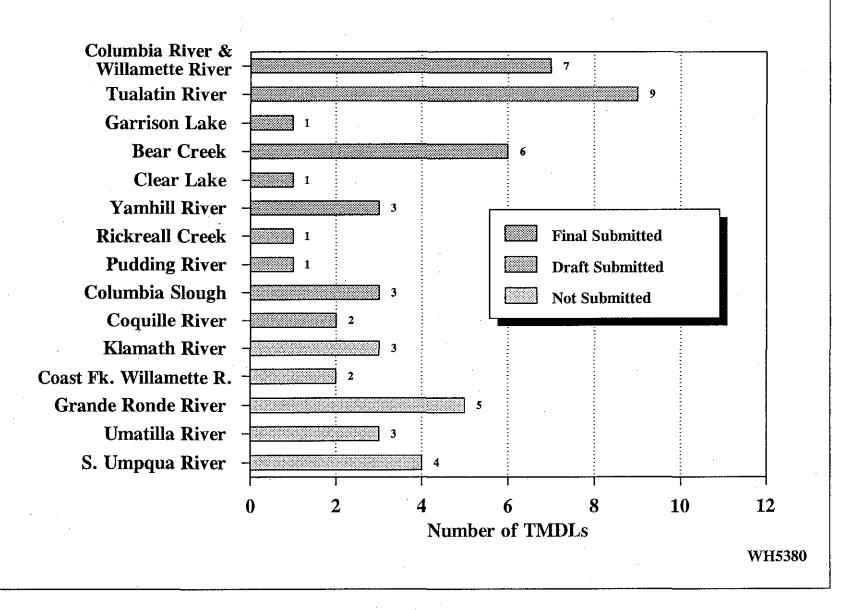
Tier III:

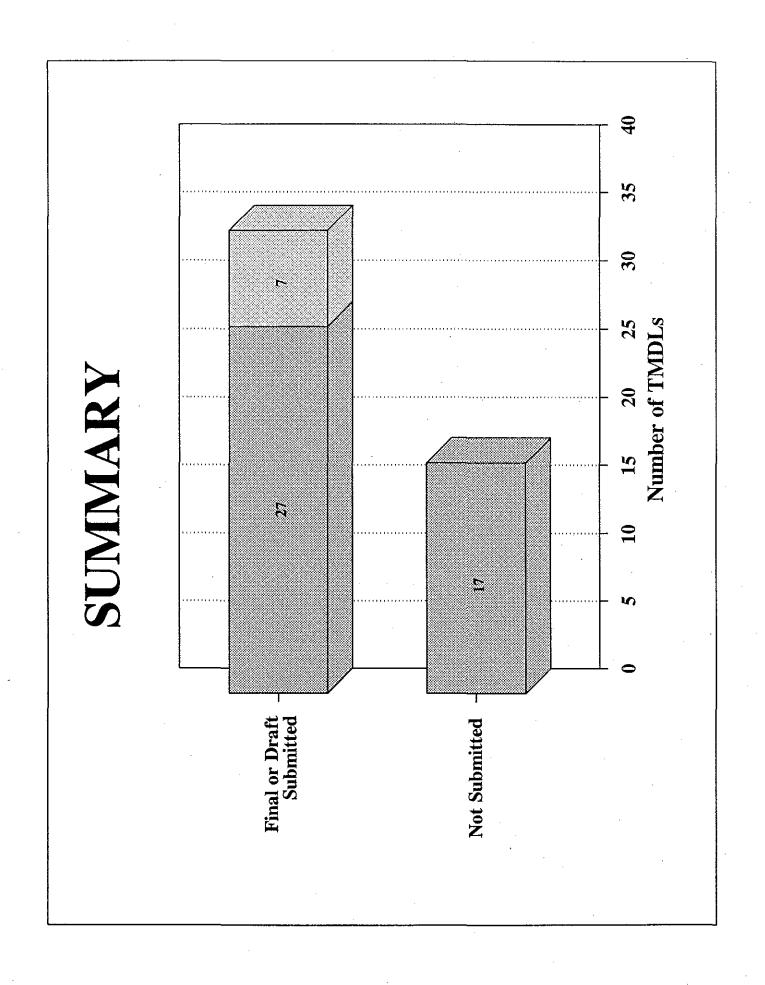
4 to 6 Years

Bacteria / Nu-Example: Columbia Slough —

trients / Toxics

TMDL PROGRAM STATUS





TMDL PROGRAM

Waterbody (Segments)	TMDL Parameter	Number of Segments Per Parameter	Submitted to EPA
Tualatin River (8)	Phosphorus	8	Yes
Tuatathi Kivei (0)	Ammonia	1	Yes
Garrison Lake (1)	Phosphorus	1	Yes
	Ammonia	2	Yes
Bear Creek (2)	BOD	2	Yes
	Phosphorus	2	Yes
Clear Lake (1)	Phosphorus	1	Yes
Yamhill River (3)	Phosphorus	3	Yes
Rickreall Creek (1)	BOD	1	Yes — Draft
Pudding River (1)	BOD	1	Yes — Draft
	Bacteria	. 1	Yes — Draft
Columbia Slough (1)	Phosphorus	1	Yes — Draft
	Toxics	1	Yes — Draft
Coquille River (2)	BOD	2	Yes — Draft
Viamath Discon (1)	BOD	1	No
Klamath River (1)	Ammonia	2	No
Coast Fork	BOD	1	No
Willamette River (1)	Phosphorus	1	No
Columbia River & Willamette River (7)	Dioxin*	7	Yes
Grande Ronde (5)	Phosphorus	5	No
Umatilla River (3)	Phosphorus	3	No
South IImpara Di (2)	Phosphorus	3	No
South Umpqua River (3)	Ammonia	1	No
* 2,3,7,8-	TCDD — TMDL	established by EPA	Λ.

TMDL SEGMENTS

	Required by Consent Decree	
1	Garrison Lake	Phosphorus
2	Coquille River — RM 0-39	BOD
3	S. Umpqua River — RM 0-15	Ammonia
4	S. Umpqua River — RM 0-15	Phosphorus
5	S. Umpqua River — RM 15-47	Phosphorus
6	S. Umpqua River — RM 47-75	Phosphorus
7	Bear Creek — RM 0-27	BOD
8	Ashland Creek — RM 0-9	BOD
9	Bear Creek — RM 0-27	Ammonia
10	Ashland Creek — RM 0-9	Ammonia
11	Bear Creek — RM 0-27	Phosphorus
12	Ashland Creek — RM 0-9	Phosphorus
13	Yamhill River — RM 0-11	Phosphorus
14	Pudding River — RM 0-30	BOD
15	Tualatin River — RM 0-39	Ammonia
16	Tualatin River — RM 0-39	Phosphorus
17	Tualatin River — RM 39-45	Phosphorus
18	Tualatin River — RM 45-63	Phosphorus
19	McKay Creek — RM 0-12	Phosphorus
20	Dairy Creek — RM 0-11	Phosphorus
21	Beaverton Creek — RM 0-11	Phosphorus
22	Rock Creek — RM 0-13	Phosphorus
23	Fanno Creek — RM 0-14	Phosphorus
24	Umatilla River — RM 0-35	Phosphorus
25	Umatilla River — RM 35-57	Phosphorus
26	Umatilla River — RM 57-79	Phosphorus
27	Grande Ronde River — RM 82-160	Phosphorus
28	Grande Ronde River — RM 160-179	Phosphorus
29	Klamath River — RM 250-255	BOD
30	Klamath River — RM 250-255	Ammonia
31	Link River — RM 0-5	Ammonia

TMDL SEGMENTS

(Continued)

	Segments Added Per Section 5(C) of Consent	Decree
32	Coast Fork Willamette River — RM 0-29	BOD
33	Coast Fork Willamette River — RM 0-29	Phosphorus
34	South Yamhill River — RM 0-5	Phosphorus
35	South Yamhill River — RM 5-25	Phosphorus
36	Columbia Slough — RM 0-15	Bacteria
37	Columbia Slough — RM 0-15	Phosphorus
38	Columbia Slough — RM 0-15	Toxics

	Segments Added Per 305(b) Reports	
39	Clear Lake	Phosphorus
40	North Fork Coquille — RM 0-10	BOD
41	Rickreall Creek	BOD
42	Willamette River — RM 0-147	2,3,7,8-TCDD
43	Columbia River — RM 0-86	2,3,7,8-TCDD
44	Columbia River — RM 86-120	2,3,7,8-TCDD
45	Columbia River — RM 120-203	2,3,7,8-TCDD
46	Columbia River — RM 203-218	2,3,7,8-TCDD
47	Columbia River — RM 218-247	2,3,7,8-TCDD
48	Columbia River — RM 247-309	2,3,7,8-TCDD
49	Grande Ronde State Ditch — RM 0-4	Phosphorus
50	Catherine Creek — RM 0-19	Phosphorus
51	Spring Creek	Phosphorus

SA\WH5383.5

TMDLs/WLAs/LAs Have Been Established During Permit Renewals for:

Site	Parameters with WLAs	No Discharge
McMinnville	CBOD ₅ , TSS, NH ₃ , Total-P, Chlorine	
Lafayette	Total-P	·
Elgin	Chlorine (Winter)	Summer
Athena	Chlorine (Winter)	Summer
Heppner	BOD ₅ , (Summer), Chlorine (Winter)	
Ontario	Chlorine (Winter)	Summer
Adair Village	Chlorine (Winter)	Summer
Prineville	Chlorine (Winter)	Summer
Stanfield	Chlorine (Winter)	Summer
Carlton	Chlorine (Winter)	Summer
Port Orford		Annual
Bay City	Fecal Coliform (Shellfish Area)	
Fossil		Annual
USA (Rock Creek & Durham)	NH ₃ , Total-P	
Sweet Home	Chlorine	
James River	Dissolved Oxygen	

SA\WH5384.5

DRAFT

Preliminary

TMDL Development Status for Oregon's §303(d) Waters

Water Qual	ity Limited	Segment	Pollutants	Loading Capacity	TMDL Established	Submit to EPA	EPA Appro.
North Coast Basin	Columbia River (RM 0 - 86)		2,3,7,8-TCDD		06/90	EPA TMDL	02/91
Mid Coast Basin	Clear Lake		Phosphorus		12/90	08/91	03/92
	Gar	rison Lake	Phosphorus	02/88	6/88	09/88	9/88
South Coast Basin		uille River M 0 - 39)	BOD	02/88	12/91	Winter 92/93*	
		. Coquille River M 0 - 10)	BOD	02/88	12/91	Winter 92/93*	
		Jmpqua River M 0 - 15)	Ammonia	11/87			
Umpqua Basin		Jmpqua River M 0 - 15)	Phosphorus	11/87			
		Umpqua River M 15 - 47)	Phosphorus	11/87			
	South 1 (RI	Umpqua River M 47 - 75)	Phosphorus	11/87			
		ear Creek M 0 - 27)	BOD	11/87	07/89	08/91	03/92
		land Creek LM 0 - 9)	BOD	11/87	07/89	08/91	03/92
Rogue Basin (Bear Creek	t .	ear Creek M 0 - 27)	Ammonia	11/87	07/89	08/91	03/92
Drainage)		land Creek LM 0 - 9)	Ammonia	11/87	07/89	08/91	03/92
		ear Creek M 0 - 27)	Phosphorus	. 11/87	07/89	08/91	03/92
		land Creek LM 0 - 9)	Phosphorus	11/87	07/89	08/91	03/92
,		illamette River M 0 - 29)	BOD	08/88	Preliminary		
		illamette River M 0 - 29)	Phosphorus	08/88	Preliminary		
		mette River M 0 - 147)	2,3,7,8-TCDD		06/90	EPA TMDL	02/91
;	Rick	reall Creek	BOD				
Willamette Basin		Yamhill River (RM 0 - 11)	Phosphorus	08/87	06/89	08/91	03/92
	Yamhill Drainage	S. Yamhill River (RM 0 - 5)	Phosphorus	08/87	06/89	08/91	03/92
		S. Yamhill River (RM 5 - 25)	Phosphorus	08/87	06/89	08/91	03/92
	Pudding (RM 0 - 30)		BOD	08/87	12/91	Winter 92/93*	

^{*} Scheduled for 06/92 — delayed to place in new format and decide on policy issues.

Preliminary

TMDL Development Status for Oregon's §303(d) Waters

Water Qua	dity Limited	Segment	Pollutants	Loading Capacity	TMDL Established	Submit to EPA	EPA Appro.
		Tualatin River (RM 0 - 39)	Ammonia	04/87	04/88	09/88	09/88
	,	Tualatin River (RM 0 - 39)	Phosphorus	04/87	04/88	09/88	
		Tualatin River (RM 39 - 45)	Phosphorus	04/87	04/88	09/88	
		Tualatin River (RM 45 - 63)	Phosphorus _.	04/87	04/88	09/88	
	Tualatin Drainage	McKay Creek (RM 0 - 12)	Phosphorus	04/87	04/88	09/88	
		Dairy Creek (RM 0 - 11)	Phosphorus	04/87	04/88	09/88	
Willamette Basin (Continued)		Beaverton Creek (RM 0 - 11)	Phosphorus	04/87	04/88	09/88	
		Rock Creek (RM 0 - 13)	Phosphorus	04/87	04/88	09/88	
		Fanno Creek (RM 0 - 14)	Phosphorus	04/87	04/88	09/88	
	(R	mbia Slough M 0 - 15)	Bacteria	08/88	12/91	Spring 93	
		mbia Slough M 0 - 15)	Phosphorus	08/88	12/91	Spring 93	
		mbia Slough M 0 - 15)	Toxics	08/88	12/91	Spring 93	
	Columbia River (RM 86 - 120)		2,3,7,8-TCDD		06/90	EPA TMDL	02/91
Sandy Basin	Columbia River (RM 120 - 203)		2,3,7,8-TCDD		06/90	EPA TMDL	02/91
Deschutes Basin	1	ımbia River [203 - 218)	2,3,7,8-TCDD		06/90	EPA TMDL	02/91
John Day Basin		ımbia River I 218 - 247)	2,3,7,8-TCDD	•	06/90	EPA TMDL	02/91
	Umatilla River (RM 0 - 35)		Phosphorus	04/88			·
Umatilla Basin		atilla River M 35 - 57)	Phosphorus	04/88			
		atilla River M 57 - 79)	Phosphorus	04/88			
		ımbia River [247 - 309)	2,3,7,8-TCDD		06/90	EPA TMDL	02/91
	(RA	e Ronde River 1 82 - 160)	Phosphorus	06/88	Summer 93	Winter 93/94	
Grande Ronde	(RM	e Ronde River I 160 - 179)	Phosphorus	06/88	Summer 93	Winter 93/94	
Basin	(F	State Ditch VM 0 - 4)	Phosphorus		Summer 93	Winter 93/94	
		erine Creek M 0 - 19)	Phosphorus		Summer 93	Winter 93/94	
		ring Creek	Phosphorus		Summer 93	Winter 93/94	
	Klamath River (RM 250 - 255)		BOD	04/88			
Klamath Basin	Klamath River (RM 250 - 255)		Ammonia	04/88			
		ink River RM 0 - 5)	Ammonia	04/88			

\$A\WH5260.5 (1/93)

Environmental Quality Commission

☐ Rule Adoption Item	•	K
☐ Action Item		Agenda Item <u>M</u>
■ Information Item		January 29, 1992 Meeting
Title: Report to the Legislature: Program (Section 62 of S	Status of Underground Stora B 1215)	ge Tank Financial Assistance
Summary:		
financial assistance progra motor fuel for resale. Fo	our forms of financial assistanc	derground storage tanks holding
December 13, 1991 and f documents for owners/ope	ary administrative rules to implicate rules on June 1, 1992. A erators, commercial lenders, pen developed and have been dis	pplication forms and guidance ublic accountants and
up by an Oregon Supreme Court issued an appellate the Highway Trust Fund. 1.1 cent assessment was r fee was established effects subsequent legal challenge review, and a lack of new	e Court review of the new fee. judgement that found the fee of With the Court's determination repealed and the authority to coive October 1, 1991. It is posse to the petroleum loading fee. It is revenue into the Fund, only	constitutionally dedicated to on, the authority to collect the ollect a \$65 petroleum loading ssible that there may be a . Because of the Court
service. The Department obligations as each new p	nion that the fund can meet its has developed a forecasting m roject is approved. The Departure for all approved projects	nodel and can estimate future rtment will not approve new
Department Recommendation	on;	
_	ribution to the 67th Legislative	Assembly
Kicherd KEITER Report Author	Atyphanie Helloch Division Administrator	Director Director

January 12, 1993

[†]A large print copy of this report is available upon request.



DEPARTMENT OF
ENVIRONMENTAL
QUALITY

REPORT TO 67TH OREGON LEGISLATIVE ASSEMBLY on CHAPTER 863, OREGON LAWS 1991 (SB 1215)

Department of Environmental Quality January, 1993

REPORT REQUIRED:

Chapter 863, Oregon Laws 1991, Section 62 (it is found compiled after ORS 466.835) requires beginning January 1, 1993, and biennially thereafter, the Department of Environmental Quality (DEQ) to report on implementation of the underground storage tank (UST) financial assistance program. Specifically, DEQ is to report on:

- I. Status of the financial assistance program
- II. Any substantive changes in the federal underground storage tank program
- III. Oregon's proposed response to the substantive changes
- IV. The financial capacity of the UST Compliance and Corrective Action Fund to meet its obligations and debt service to applicants and commercial lenders.

BACKGROUND:

In 1984, Congress passed a national program to prevent and abate groundwater contamination and public health and safety problems caused by leaks of petroleum and hazardous substances from underground storage tanks (UST). Congress provided authority for the national tank program to be administered at the state level.

In late 1988 (technical and state program approval) and early 1989 (financial responsibility), the Environmental Protection Agency (EPA) adopted rules to implement the national tank program. Compliance deadlines ranging from one to ten years were established for various parts of the program.

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The insurance deadlines for smaller businesses have been moved several times in response to the lack of affordable insurance.

In its regulatory impact statement, EPA estimated that as many as 50 percent of existing businesses would have to close because of the marginal nature of their business and the relative high cost to upgrade, buy new equipment or clean up petroleum contaminated soil and groundwater. In Oregon, DEQ estimated that the impact would fall heavier on smaller businesses in rural areas of the state and that as many as 1,000 small retailers would close.

1989 LEGISLATIVE RESPONSE:

CHAPTER 1071, OREGON LAWS 1989 (HB 3080)

Concerned about the probable lack of fuel at a reasonable price in large parts of rural Oregon, the 1989 Legislative Assembly established via HB 3080 a financial assistance program to help pay the cost of site assessments, equipment to upgrade or replace tanks and to clean up petroleum contaminated soil. The program consisted of:

- 1. A 50%, but not to exceed \$3,000, site assessment reimbursement grant
- 2. An 80%, but not to exceed \$64,000, loan guarantee program
- 3. A 7.5% fixed interest rate on a commercial loan, with the lender getting the difference between the 7.5% fixed rate and a commercial lending rate in the form of an Oregon Tax Credit.

Based on anticipated revenue, DEQ estimated 1050 site assessment grants at \$3,000 each and 200 loan guarantee and interest rate subsidy projects could be funded. Table 1 is a summary of the financial assistance disbursed to HB 3080 projects through October, 1991. Appendix 1-1 is a list of site assessment grant projects. Appendix 1-2 is a list of projects that received a loan guarantee and interest rate subsidy. Appendix 1-3 is a list of projects receiving only an interest rate subsidy.

TABLE 1 - Summary of disbursements through October, 1991				
Type of Assistance	Number of Projects	Amount of Financial Assistance		
Site assessment grants	63	\$167,356		
Loan guarantees	33	\$1,573,488 (amount guaranteed)		
Loan default reserve	33	\$268,969		
Loan defaults	0	\$0		
Interest rate subsidies	46	- \$308 (amount paid to date) - \$881,815 (estimated yet to be disbursed to these projects)		

SB 1215 Legislative Report January, 1993 Page 3

In testimony to the 1991 Legislative Assembly, DEQ reported that the level of financial assistance was insufficient to encourage lenders to determine that applicants had the creditworthiness to repay large loans, even with the subsidy of 7.5%. In addition, many potential applicants were reluctant to spend money on site assessments; they preferred to wait and invest that money in tank removals and do the site assessment at the time of tank removal. The 1991 Legislative Assembly responded by enacting SB 1215 as described in detail later in this report.

HB 3080 PROGRAM FUNDING

HB 3080 raised funds for the program by establishing a \$10 UST regulatory fee (commonly called a "petroleum loading fee") on each load of petroleum withdrawn from a terminal. Table 2 is a summary of the fund as of October, 1991 which was the sunset date for HB 3080 and the start date for SB 1215.

TABLE 2 - Summary of the Fund as of October, 1991				
Activity	Amount			
Revenue	\$4,221,056			
Program expenditures	\$167,664			
Administrative expenses	\$916,586			
Balance forward to SB 1215 program	\$3,136,806 (1)			
(1)Projected obligations reserved within the Fund				
Loan default reserve	\$268,969			
Interest rate subsidy reserve	\$881,815			

1991 LEGISLATIVE RESPONSE:

CHAPTER 863, OREGON LAWS 1991 (SB 1215)

Because HB 3080 was not providing sufficient financial assistance to owners/operators of USTs, insufficient incentives to commercial lenders and because of continued concern about fuel availability at reasonable prices throughout the state, the 1991 Legislative Assembly amended HB 3080 with the passage of SB 1215. The SB 1215 financial assistance program consisted of:

1. An 80%, but not to exceed \$80,000, loan guarantee program.

(NOTE: THE FOLLOWING THREE FORMS OF ASSISTANCE VARY DEPENDING ON NUMBER OF TANKS, FINANCIAL NEED AND LOCATION.)

2. A 7.5, 5.0, 3.0 or 1.5% fixed interest rate commercial loan, with the lender getting the difference between the fixed rate and a commercial lending rate, payable quarterly to the lender.

- 3. A 50%, not to exceed \$50,000, pollution prevention grant or an 85%, not to exceed \$85,000, essential services grant.
- 4. A 50, 75 or 90% co-payment on the annual premium for environmental impairment liability insurance.

Based on anticipated revenue, DEQ estimated that 1,800 projects could receive some level of financial assistance. Table 3 is a summary of the financial assistance disbursed to all HB 3080 and SB 1215 projects through November, 1992. Appendix 2-1 is a list of the <u>additional</u> site assessment grant projects that received financial assistance since October, 1991. Appendix 2-2 is an additional project with a loan guarantee and interest rate subsidy. Appendices 2-3 and 2-4 are the projects that received essential service grants and insurance premium co-payment assistance.

TABLE 3 - S	TABLE 3 - Summary of disbursements through November, 1992				
Type of Assistance	Number of Projects	Amount of Financial Assistance			
Site assessment grants	85	\$227,508			
Loan guarantees	34	\$1,574,370 (amount guaranteed)			
Loan default reserve	34	\$314,874			
Loan defaults	0	\$0			
Interest rate subsidies	47	- \$58,237 (disbursed to date) - \$815,822 (estimated yet to			
		be disbursed to these projects)			
Essential Service grants	5	- \$256,015 (disbursed to date) - \$134,558 (estimated yet to be disbursed to these projects)			
Insurance premium co- payments	5	- \$2,615 (disbursed to date) - \$33,037 (estimated yet to be disbursed to these projects)			

SB 1215 PROGRAM FUNDING

SB 1215 was intended to raise funds for the program by establishing a new 1.1 cent per gallon UST assessment on motor fuel going into underground storage tank for resale. No revenue was collected, however, as explained in the next section. Table 4 is a current summary of the fund from inception through November, 1992 based upon revenue received from the \$10 loading fee collected under HB 3080 from September 1, 1989 through September 30, 1991.

TABLE 4 - Summary of the Fund through November, 1992					
Activity	Amount				
Revenue	\$4,921,568				
Program expenditures	\$545,067				
Administrative expenses	\$1,992,726				
Fund balance as of September, 1992	\$2,383,775 (1)				
(1)Projected obligations reserved within the Fund					
Loan default reserve	\$314,874				
Interest rate subsidy reserve	\$815,822				
Essential services grants	\$134,558				
Insurance premium co-payments	\$33,037				

1.1 CENT PER GALLON UST ASSESSMENT

Effective October 1, 1991, a 1.1 cent per gallon UST assessment replaced the \$10 UST regulatory fee collected under HB 3080. On October 4, 1991 the Automobile Club of Oregon and A & B Automotive and Towing Service, Inc. petitioned the Oregon Supreme Court for a review of the 1.1 cent per gallon UST Assessment vis-a-vis Article IX, Section 3a of the Oregon Constitution (dedication of motor fuel taxes to the Highway Trust Fund). The filing of a petition stayed the collection of any additional revenue for the program. On October 29, 1992 the Oregon Supreme Court filed their opinion that the UST assessment was a tax and the proposed uses are constitutionally impermissible. The opinion became effective on December 18, 1992.

On December 18, 1992, by operation of SB 1215, the authority to collect the 1.1 cent UST assessment was repealed and in its place, authority to collect a \$65 UST regulatory fee (commonly referred to as petroleum loading fee) was established. The date of obligation for the UST regulatory fee was October 1, 1991.

On December 3, 1992 the Oregon Petroleum Marketers Association, a non-profit trade association of petroleum distributors and retailers filed a letter request with the Department of Revenue (DOR) to:

- 1. Establish a \$5 UST regulatory fee for the period October 1, 1991 to January 31, 1993.
- 2. From February 1, 1993 forward, establish a two-tiered UST regulatory fee \$32.50 for loads less than 3,999 and \$65 for loads greater than \$4,000

As of the date this report was being prepared, the DOR, DEQ and the Attorney General's office were studying the authority within SB 1215 for administratively adjusting the \$65 petroleum loading fee. Final conclusions were not available as this report was completed.

On December 30, 1992, a second petition was filed with the DOR requesting:

- 1. A refund of all petroleum loading fees paid by petitioners since the inception of the fees established in 1989 under the authorities in HB 3080 (\$10 UST regulatory fee), HB 3515 (\$10 petroleum loading fee) and SB 1215 (\$65 UST regulatory fee).
- 2. A petition for a declaratory ruling on the constitutionality of the various loading fees established under HB 3080, HB 3515 and SB 1215.
- 3. A request for a stay of assessment of taxes, and
- 4. A request for a stipulated order for and expedited review.

The petitioners names are confidential according to the statutes applicable to DOR. As this report was being prepared, a response to this petition was also pending an evaluation by the DOR and the Attorney General's Office.

PROGRAM IMPLEMENTATION

Even though a petition was filed on October 4, 1991, DEQ proceeded to develop the program's basic rules and policies anticipating an expedited review of the case by the Oregon Supreme Court. With the rules and policies developed, program implementation would be able to proceed immediately upon a Court determination based either on the primary revenue source (1.1 cent per gallon on gasoline delivered to an underground storage tank) or the backup fee (\$65 petroleum loading fee on all loads of petroleum withdrawn from a storage terminal).

SB 1215 required potential applicants for financial assistance to submit a "Letter of Intent" by April 1, 1992. DEQ received 1,677 by the deadline and an additional 13 after the deadline. SB 1215 also required potential applicants to file a "Consent Agreement" by October 1, 1992. DEQ received 1,269 by the deadline and 18 after the deadline. Appendix 3 is a list of all facilities submitting a Letter of intent listed statewide by zip code. The far right three columns list the date DEQ received the Letter of Intent (LOI), Consent Agreement (CA) and the application (APP) for financial assistance. Most facilities have not submitted an application pending notification from DEQ that a revenue source is available to fund the program.

There are several reasons for 413 fewer Consent Agreements being received than Letter of Intents, including: not being an eligible facility, not meeting the financial needs test, a business decision to permanently close, and in some cases just forgetting to send the consent agreement in. DEQ is continuing to clarify the status with these 413 sites.

DEQ has also received 80 applications for financial assistance. Based on limited available funds carried forward from HB 3080, DEQ has approved construction of five essential service grant projects (see Appendix 2-3) that are in various stages of construction. DEQ has also certified, but not yet approved, construction of another four grant projects that plan to start construction in the spring when the weather improves. Their final approval is also dependent on money being available in the fund.

As required by SB 1215, DEQ appointed the following persons to a Financial Assistance Advisory Committee to assist DEQ in adopting rules and developing the administrative details of the program:

^{*} Public and Chair - Harvey Rogers, Preston, Thorgrimson, Shidler, Gates and Ellis

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- * Public Joe Gilliam, National Federation of Independent Business
- * Petroleum marketers David Harris, Harris Transportation
- * Petroleum suppliers Brian Doherty, Miller, Nash, Wiener, Hager and Carlsen
- * Gasoline Dealers Peggy Manning, Environmental Consultant
- * Agricultural cooperatives Rick Jacobsen, Wilco Coop
- * Commercial lenders Terry Tracy, Key Bank
- * Service Provider Craig Spainhower, CJ Excavating
- * Equipment manufacturer Greg Miller, Northwest Pump

The Committee met monthly and helped write the financial assistance rules and assisted in developing the financial assistance application and its guidance documents.

On June 1, 1992, the Environmental Quality Commission adopted final rules to administer the financial assistance program. In addition, DEQ developed the following documents to implement the program:

- * a general overview of the financial assistance program
- * the application form
- * a help manual for filing out the application form
- * an accountant's guide for calculating financial need
- * a lender's guide for the loan guarantee and interest rate subsidy programs
- * an insurer's guide for the insurance premium co-payment program
- * two fact sheets how to select a contractor and how to select an environmental consultant.

DEQ installed a 1-800-742-7878 UST HELPLINE (a message recorder with 24 hour response) to receive requests for printed material or technical assistance by phone. Since its implementation DEQ has mailed 10,591 copies of rules, application forms, newsletter and technical bulletins including specifically:

Publication or Document	Number Sent
HB 3080 grant application	14
UST tax credit application	27
SB 1215 financial assistance application	1,395
Technical rules	403
Cleanup rules	284
HB 3080 financial assistance rules	178
UST contractor/supervisor rules	203
SB 1215 financial assistance rules	100
UST contractor license applications	391
UST supervisor exam packets	467
Decommissioning packets	819
Heating oil decommissioning packets	133

PROGRAM STAFFING

Because of the Oregon Supreme Court review of the 1.1 cent UST assessment, DEQ filled only 12 of the 37 financial assistance positions approved by the 1989 and 1991 legislature. These positions were used to write the rules, develop the application and related materials, operate the HELPLINE, implement the Letter of Intent and Consent Agreement requirements, review applications, and oversee construction of the HB 3080 and SB 1215 projects.

1993 LEGISLATIVE REPORT:

I. STATUS OF FINANCIAL ASSISTANCE PROGRAM UNDER SB 1215

See Discussion under 1991 LEGISLATIVE RESPONSE

II. ANY SUBSTANTIVE CHANGES IN THE FEDERAL UST PROGRAM

During this biennium, EPA made only one substantive change to the federal UST program. On December 16, 1991 EPA extended the financial responsibility (i.e. environmental liability insurance) deadline for owners/operators of 1 to 12 tanks from October 1, 1991 to December 31, 1993. In this same rulemaking, EPA announced its intent to develop a self insurance test for local government and publish the rules for local government by December 31, 1993. The impact in Oregon was to delay when Oregon's smaller businesses and local government would have to comply with the financial responsibility requirements.

III. OREGON'S RESPONSE TO SUBSTANTIVE FEDERAL CHANGES

To date, Oregon has not adopted financial responsibility rules for owners/operators with 1 to 12 tanks or for local government. It is DEQ's intent to adopt equivalent financial responsibility rules in December, 1993 unless EPA again adjusts these compliance deadlines.

IV. FINANCIAL CAPACITY OF THE UST COMPLIANCE AND CORRECTIVE ACTION FUND TO MEET ITS OBLIGATIONS AND DEBT SERVICE

To date, the only revenues placed into the UST Compliance and Corrective Action Fund were receipts from the HB 3080 \$10 loading fee between September 1, 1989 and September 30, 1991 and interest earnings on any current balance in the fund. Table 4 above is a summary of the Fund's status as of December 1, 1992. DEQ has developed a forecast model to predict future interest rate obligations to commercial lenders. That obligation is currently estimated at \$815,822. DEQ has created a loan default reserve assuming a 20 percent business failure rate which is the maximum failure rate experienced by the Small Business Administration for SBA guaranteed loans to the service station industry. Although no defaults have been reported to date, the current loan default reserve is \$314,874. Lastly, DEQ estimates \$134,558 still to be paid in the form of grants and \$33,037 in insurance premium co-payments on UST projects currently approved for construction.

DEQ estimates its administrative cost at \$385,000 from December 1, 1992 through June 30, 1993.

With a current fund balance of \$2,809,224 on December 1, 1992 and monthly interest earnings of

SB 1215 Legislative Report January, 1993 Page 9

about \$13,000, it's DEQ's opinion that the Fund can meet all its outstanding obligations and debt service. In addition, DEQ can maintain a minimal staff to insure an immediate startup to the program when revenue becomes available.

RECOMMENDATIONS FOR LEGISLATIVE CHANGES:

Because the program was delayed by over a year pending a decision by the Oregon Supreme Court on the Automobile Club of Oregon petition, DEQ recommends the following amendments to Chapter 863, Oregon Laws 1991:

- 1. Reopen the Letter of Intent/Consent Agreement window of opportunity to apply for financial assistance until December 31, 1993 to give potential eligible owners/operators one final opportunity to state their intent.
- 2. Extend the construction work deadline from December 31, 1994 to September 30, 1996.
- 3. Extend the insurance premium co-payment program for Tier 2 projects until December 31, 1995; Tier 3 projects until December 31, 1996 and Tier 4 projects to December 31, 1998
- 4. Allow local government agencies and municipalities such as Port Districts, Airport Districts or Fire Districts that retailed motor fuels prior to January 1, 1993 to be eligible for financial assistance without having to meet the financial needs test.
- 5. Clarify the requirement for an essential services grant applicant entering into a mortgage lien agreement when the applicant is not the property owner.

APPENDIX 1 - 1

	• ;				
FACILITY					
ID	FACILITY NAME	FACILITY ADDRESS 480 S.W. 4TH 1841 MAIN (P.O. BOX 430) 1215 S. HOLLADAY DR. 75719 ROCK CREST ST. 75754 ROCK CREST ST. 585 NEWMARK STREET 480 LAMONIA ROAD 550 W. THIRD ST. PRINEVILLE AIRPORT 19745 BAKER ROAD 516 S.W. 5TH 612 S. FIFTH ST. 847 S. 6TH ST. 530 CASCADE P.O. BOX 8000 912 S.E. STEPHENS ST. 100 E. MAIN ST. HIGHWAY 20 1995 12TH ST. 348 N. RIVERSIDE 705 STEWART AVE. 8380 HWY 62 1100 BARNETT 107 MAIN, W. 324 N.E. "E" ST. 780 UNION AVENUE 109 GALICE ROAD, HWY 70 & 2ND ST. HWY 97 N & 422 S E. FRONT STREET/P.O. BOX 552 32959 VAN DUYN RD. 544 WEST 7TH 1395 HWY. 99 N. 6085 WEST 11TH AVE. 2585 RIVER ROAD 66 N. MILL 514 HWY. 101 SOUTH 85039 HWY. 101 SOUTH 85039 HWY. 101 SOUTH 85039 HWY. 58 1517 N. COAST HIGHWAY 235 SOUTH OLD SALEM HWY / I-5 EXIT 211 2ND STREET 211 2ND STREET 212 ND STREET 213 NAKET STREET N.E. 3510 RIVER ROAD N.E. 686 N. 2ND ST. 104 W STARR	CITY	ZIP	COUNTY
0177	CORVALLE EVVON	790 C U 770	CODYALLTO	07770	BENTON
01// E2//	DIDENOUS OF CO. THE	19/1 UAIN (D.O. HOY (70)	CURVALLIS	A1330	RENION
J204 4017	CUEVOON OIL CO., INC.	1041 MAIN (P.O. BOX 450)	PHILUMAIN	97370	RENION
1013	CHEVRON U.S.A., INC 95545	1215 S. HOLLADAY DR.	SEASIDE	97138	CLATSOP
6109	RAINIER BP	75719 ROCK CREST ST.	RAINIER	97048	COLUMBIA
6319	RAINIER TEXACO	75754 ROCK CREST ST.	RAINIER	97048	COLUMBIA
6135	PRIDE OF OREGON SERVICE STATIONS	585 NEWMARK STREET	COOS BAY	97420	COOS
8930	OVERALL PETROLEUM CO.	480 LAMONTA ROAD	PRINEVILLE	97754	CROOK
6800	THIRD STREET SHELL	550 W. THIRD ST.	PRINEVILLE	97754	CROOK
228	CROOK COUNTY PRINEVILLE AIRPORT	PRINEVILLE AIRPORT	PRINEVILLE .	97754	CROOK
3637	DESCHUTES COUNTRY STORE, INC.	19745 BAKER ROAD	BEND	97702	DESCHUTES
2467	BYRAMS CHEVRON, INC.	516 S.W. 5TH	REDMOND	97756	DESCRUTES
6810	PLUM' FIERCE	612 S. FIFTH ST.	REDMOND	97756	DESCHUTES
6696	CENTRAL OREGON IRRIGATION DISTRICT	847 S. 6TH ST.	REDMOND	97756	DESCRUTES
5332	SISTERS GENERAL STORE	530 CASCADE	SISTERS	97759	DESCRUTES
4253	BLACK BUTTE RANCH CORPORATION .	P.O. BOX 8000	BLACK BUTTE RANC	97759	DESCRUTES
147	MCCULLUM'S TEXACO SERVICE, INC.	912 S.E. STEPHENS ST.	ROSEBURG	97470	DOUGLAS
7184	MAINSTOP MINI MARKET & TEXACO INC.	100 E. MAIN STC	JOHN DAY	97845	GRANT
6933	RILEY STORE & GARAGE	HIGHWAY 20	RILEY	97758	KARNEY
3522	HOOD RIVER SUPPLY ASSOC.	1995 12TH ST.	HOOD RIVER	97031	HOOD RIVER
6523	PANOCO, INC	348 N. RIVERSIDE '	MEDFORD	97501	JACKSON
5241	STEWART AVE. TEXACO	705 STEWART AVE.	MEDFORD	97501	JACKSON
2556	NORTHROP, EARL	8380 HWY 62	WHITE CITY	97503	JACKSON
10083	DAVE'S MOBIL	1100 BARNETT	MEDFORD	97504	JACKSON
8831	EAGLE POINT CHEVRON	107 MAIN, W.	EAGLE POINT	97524	JACKSON
6267	ASTRO #219	324 N.E. "E" ST.	GRANTS PASS	97526	JOSEPHINE
9187	FAIRGROUNDS TEXACO	780 UNION AVENUE	GRANTS PASS	97527	JOSEPHINE
8842	C & D MARKET	109 GALICE ROAD	MERLIN	97532	JOSEPHINE
9909	BONANZA MINI MART & SHELL	HWY 70 & 2ND ST.	BONANZA	97623	KLAMATH
1174	CLOUGH OIL CO CARDLOCK	HWY 97 N & 422 S	CHILOQUIN	97624	KLAMATH
6120	FRANKO #44	E. FRONT STREET/P.O. BOX 552	MERRILL	97633	KLAMATH
9208	COBURG TEXACO	32959 VAN DUYN RD.	EUGENE	97401	LANE
3092	CITY CENTER CAR WASH, INC.	544 WEST 7TH	EUGENE	97401	LANE
6444	MERRITT TRUAX, INC.	1395 HWY. 99 N.	EUGENE	97402	LANE
318	GREENHILL ARCO	6085 WEST 11TH AVE.	EUGENE	97402	LANE
5996	SANTA CLARA ARCO	2585 RIVER ROAD	EUGENE	97404	LANE
2135	CRESWELL COMMERCIAL SERVICE. INC.	66 N. MILL	CRESWELL	97426	LANE
6136	FLORENCE ARCO	514 HWY. 101 SOUTH	FLORENCE	97439	LANE
4089	K-G'S ONE STOP MARKET	85039 HWY. 101 SOUTH	FLORENCE	97439	LANE
6542	PANOCO, INC	3484 GATEWAY	SPRINGFIELD	97477	LANE
6437	PLEASANT HILL TEXACO	35310 HWY. 58	SPRINGFIELD	97477	LANE
9582	RON'S MOBIL CAR WASH	1517 N. COAST HIGHWAY	NEWPORT	97365	LINCOLN
8504	MID-STATE PETROLEUM CARDLOCK	235 SOUTH OLD SALEM HWY / I-5 EXIT	ALBANY	97321	LINN
6960	MID STATE PETROLEUM	211 2ND STREET.	HALSEY	97348	LINN
5870	ONTARIO MUNICIPAL AIRPORT	581 S.W. 33RD 4	ONTARIO	97914	MALHEUR
6108	C.A.R.S.	2795 MARKET STREET N.E.	SALEM	97301	MARION
3619	MERRITT TRUAX #1, INC.	3510 RIVER ROAD N.E.	SALEM	97303	MARION
3611	TRUAX TIRE STORES	686 N. 2ND ST.	JEFFERSON	97352	MARION
9754	FAST STOP GAS/BP	104 W STARR	SUBLIMITY	97385	MARION
3493	WILHELM TRUCKING CO.	3250 N.W. ST. HELENS RD.	PORTLAND	97210	MULTHOMAH
	J & H BP SERVICE	6215 N.W. ST. HELENS RD.	PORTLAND		MULTNOMAH
	ASTRO #203	420 S.E. 122ND	PORTLAND		MULTNOMAH
	BARBUR BLVD. EQUIPMENT RENTALS	8205 SW BARBUR BLVD.	PORTLAND		MULTNOMAH
	UNOCAL 5958	8510 S.W. TERWILLIGER	PORTLAND		MULTNOMAH
	ASTRO #215	11010 s.E. MCLOUGHLIN	MILWAUKIE	97222	MULTNOMAH

FACILITY		:			
ID	FACILITY NAME	FACILITY ADDRESS	CITY	ZIP COUNTY	
5724	PRIESTLEY OIL & CHEMICAL CO.	2429 N. BORTHWICK AVE.	PORTLAND	97227 MULTNOMAK	
	ASTRO QUIK MART #206	1111 N.W. 21ST	PORTLAND	97228 MULTNOMAH	
144	OATS, RICHARD	595 E. MAIN	MONMOUTH	97361 POLK	
	TRAPP'S	2702 EAST 2ND	THE DALLES	97058 WASCO	
9081	THE DALLES YACHT CLUB	BOAT BASIN	THE DALLES	97058 WASCO	
4295	FARMINGTON TEXACO	13660 s.w. FARMINGTON RD.	BEAVERTON	97005 WASHINGTON	
3164	WEYERHAEUSER SECONDARY FIBER	5505 SW WESTERN AVENUE	BEAVERTON	97075 WASHINGTON	
1605	REGGIE'S SHELL	150 N. YAMHILL	CARLTON	97111 YAMHILL	
5663	FORT HILL TEXACO	25715 HIGHWAY 22 & 18	WILLAMINA	97396 YAMHILL	

63 rows selected.

Loan Guarantees With Interest Rate Subsidy Payments

FACILITY					
ID	FACILITY NAME	FACILITY ADDRESS	CITY	ZIP	COUNTY
186	BAKER VALLEY CHEVRON		BAKER		BAKER
1146	GILES. DON	496 CAMPBELL ST.	BAKER	97814	
2712	C.J.'S ALPINE SERVICES INC.	93770 E. HWY 26	GOVERNMENT CAMP	97028	CLACKAMAS
9249	DICKEY PRAIRIE STORE	16560 S. RAMSBY RD.	MOLALLA		
1919	FOSTER MOBIL	9138 S.E. FOSTER AVENUE	MOLALLA PORTLAND	97266	CLACKAMAS
2832	CLATSKANIE MINI MART	260 COLUMBIA RIVER HWY	CLATSKANIE	97016	COLUMBIA
5648	MINI MART OF VERNONIA	260 COLUMBIA RIVER HWY 490 BRIDGE ST.	VERNONIA	97064	COLUMBIA
9324	DAVEY JONES LOCKER	5092 BOAT BASIN DRIVE	CHARLESTON	97420	COOS
257	HOWARD'S SHELL SERVICE	260 COLUMBIA RIVER HWY 490 BRIDGE ST. 5092 BOAT BASIN DRIVE 1025 SOUTH ELLENSBURG 516 S.W. 5TH FIR & CASCADE ST. 203 S.W. 4TH EXIT 86 I-5 23873 N. UMPQUA HWY. 596 N. BROADWAY 425 WA,NA,PA ST. 3398 ODELL HWY. 301 N CENTRAL AVE 705 STEWART AVE. 936 S. CENTRAL 1765 SISKIYOU BLVD. 2035 SW BRIDGE STREET 66 N. MILL 85039 HWY. 101 SOUTH	GOLD BEACH	97444	CURRY
2467	BYRAMS CHEVRON, INC.	516 s.w. 5TH	REDMOND	97756	DESCHUTES
808	SISTERS OIL CO.	FIR & CASCADE ST.	SISTERS	97759	DESCHUTES
1051	CANYON TEXACO	203 s.w. 4TH	CANYONVILLE	97417	DOUGLAS
570	QUINES CREEK TEXACO	EXIT 86 I-5	GLENDALE	97442	DOUGLAS
1234	IDLEYLD TRADING POST	23873 N. UMPQUA HWY.	IDLEYLD PARK	97447	DOUGLAS
10049	SAM'S SERVICE	596 N. BROADWAY	BURNS	97720	HARNEY
8171	CASCADE LOCKS SHELL	425 WA,NA,PA ST.	CASCADE LOCKS	97014	HOOD RIVER
241	CLEM'S COUNTRY STORE	3398 ODELL HWY.	ODELL	97044	HOOD RIVER
6295	DOWNTOWN TEXACO	301 N CENTRAL AVE	MEDFORD	97501	JACKSON
5241	STEWART AVE. TEXACO	705 STEWART AVE.	MEDFORD	97501	JACKSON
1713	MEDFORD FUEL	936 S. CENTRAL	MEDFORD	97501	JACKSON
2435	GUIHMILLER'S EXXON #9291	1765 SISKIYOU BLVD.	ASHLAND	97520	JACKSON
8603	JENKINS MARKET	5033 SM RKIDGE SIKEEL	GRANIS PASS	97320	JUSEPHINE
2133 7080	CRESWELL COMMERCIAL SERVICE, INC.	OO N. MILL OEAZO DIV 101 CONTU	CKESWELL	07/70	LANE
4009	K-0.2 ONE SION MARKET	17700 UIV 74	CIT CCHOME	07/90	LANE
0/47	CARDINEDIC LEVENDO CLODE	A28/O MCKENZIE NICHWAY	EVELIDE PATONIC	07/80	LANE
9582	DON'S MORTE CAD MASH	1517 N COAST HIGHWAY	NEUDORG .	07365	LINCOLN
9754	FAST STOD CAS/RD	104 U STARR	SURI IMITY	97385	MARION
1017	POLIFII RP	5727 S F POWELL RIVIN	PORTI AND	97206	MIII THOMAH
1921	82ND AVE BP	9 S.F. 82ND AVENUE	PORTLAND	97215	MULTNOMAH
5198	EMERY'S TEXACO	66 N. MILL 85039 HWY. 101 SOUTH 13298 HWY. 36 42840 MCKENZIE HIGHWAY 1517 N. COAST HIGHWAY 104 W STARR 5727 S.E. POWELL BLVD. 9 S.E. 82ND AVENUE 363 N. MAIN STREET RT. 1, BOX 285-A 7200 SW BEAVERTON-HILLSDALE HWY.	TINION	07883	LINTON
1908	STALEY'S JUNCTION FOOD & FUEL	RT. 1. BOX 285-A	BANKS	97106	WASHINGTON
10537	B. P. OIL SERVICE STATION	7200 SW BEAVERTON-HILLSDALE HWY.	PORTLAND	97225	WASHINGTON

33 rows selected.

APPF DIX 1 - 3

Tue Jan 12

Reduced Interest Rate Payments Only

 ILITY ID	FACILITY NAME	FACILITY	ADDRESS	CITY	ZIP	COUNTY
 642 3637 6810 3465 9208 6437 9778 6960 9339 5724 1499	THIRD STREET SHELL RED CARPET CAR WASH DESCHUTES COUNTRY STORE, INC. PLUM' FIERCE BP SERVICE STATION COBURG TEXACO PLEASANT HILL TEXACO HIGHWAY 20 CARDLOCK MID STATE PETROLEUM BARBUR BLYD. EQUIPMENT RENTALS PRIESTLEY OIL & CHEMICAL CO. TRAPP'S FORT HILL TEXACO	550 W. THIRD ST. 1144 N.E. 3RD 19745 BAKER ROAD 612 S. FIFTH ST. 1847 DIAMOND LAKE 32959 VAN DUYN RD 35310 HWY. 58 4195 SANTIAM HWY 211 2ND STREET 8205 SW BARBUR BLY 2429 N. BORTHWICK 2702 EAST 2ND 25715 HIGHWAY 22:8	BLVD. · VD. AVE.	BEND BEND REDMOND ROSEBURG EUGENE SPRINGFIELD ALBANY HALSEY PORTLAND PORTLAND THE DALLES	97701 97702 97756 97470 97401 97477 97321 97348 97219 97227 97058	LANE LINN

13 rows selected.

Tue Jan 12

Site Assessment Grants Approved November 1991 Through November 1992

FACILITY	FACILITY NAME	FACILITY ADDRESS	CITY	ZIP	COUNTY
2107	CITY LIMITS COUNTRY STORE	5800 N.W. HYW. 99W	CORVALLIS	97330	BENTON
6023	FRANKO #9	646 SIXTH STREET	COOS BAY	97420	COOS
1829	BEND OIL CO./SOUTH PACIFIC PRIDE	612 S.E. THIRD	BEND	97701	DESCHUTES
196	PILOT BUTTE EXXON	764 N.E. GREENWOOD	BEND	97701	DESCHUTES
4959	DESCHUTES COUNTY PUBLIC WORKS DEPT.	61150 SE 27TH STREET	BEND	97702	DESCHUTES
9008	SPEEDE MART	61396 S. HWY 97	BEND	97702	DESCHUTES
6118	FRANKO #40	411 FRONTAGE ROAD	SUTHERLIN	97479	DOUGLAS
	MEDFORD FUEL	936 S. CENTRAL	MEDFORD	97501	JACKSON
	JEFFERSON COUNTY	715 S.E. GRIZZLY ROAD	MADRAS	97741	JEFFERSON
	FRANKO #10	1701 WEST 11TH AVENUE		97402	
	FRANKO #11	376 HWY 99 NORTH		97402	
	FRANKO #48	2795 WILLAMETTE STREET		97405	
	FRANKO #15	87614 MCVAY HWY.		97405	
	SPRINGFIELD ARCO	3650 EAST MAIN		97477	
	LINCOLN CITY PRIDE	906 HWY_ 101 SOUTH			LINCOLN
		10425 S.E. 42ND			MULTNOMAH
	SKYLINE'S GERMANTOWN STORE	8250 N.W. SKYLINE			MULTNOMAH
					MULTNOMAH
	JOE'S MARKET	373 N MAIN		97344	
	FRANKO #21	1235 N. FIRST			UMATILLA
	EMERY'S TEXACO				UNION
1718	TIGARD BP	13970 S.W. PACIFIC HWY	TIGARD	71223	WASHINGTON

22 rows selected.

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APPI DIX 2 - 2

Tue Jan 12

Loan Guarantees With Interest Rate Subsidy Payments

FACILITY ID	FACILITY NAME	FACILITY ADDRESS	CITY	ZIP COUNTY	
9112 FO	RT ROCK GENERAL STORE	R. ROADS 510 - 512	FORT ROCK	97735 LAKE	-
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APPENDIX 2 - 3

Tue Jan

Pollution Control and Essential Services Grants

FACILITY ID	FACILITY NAME	FACILITY ADDRESS	CITY	ZIP	COUNTY
9754 F/ 2611 JO 673 SI	AST STOP GAS/BP DE'S MARKET	7-1 11 -711111	SUBLIMITY FALLS CITY WESTON	97344	MARION POLK UMATILLA

Insurance Premium Copayments

FACILITY ID	FACILITY NAME	FACILITY ADDRESS	CITY	ZIP	COUNTY
9754 FAS 2611 JOE 673 SUZ	T ROCK GENERAL STORE T STOP GAS/BP S MARKET S HANDY MART M COUNTRY STORE	R. ROADS 510 - 512 104 W STARR 373 N MAIN 211 N. WATER ST. 10102 N. MCALISTER ROAD	FORT ROCK SUBLIMITY FALLS CITY WESTON ISLAND CITY	97344	MARION POLK UMATILLA

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page

APPENDIX 3

Tue Jan 12

Statewide Summary Report - Zip Code Order

FAC ID REG FAC NAME **ADDRESS** CITY ZIP CONTACT PHONE APP LOI CA 10081 ER HUTTS MINI MART HWY 95 - MCDERMITT MCDERMITT 89421 Lorraine Huttman (702) 532-8292 17-JAN-92 14-SEP-92 8201 WVR GENERAL AVIATION SERVICES 23123 AIRPORT ROAD N.E. (503) 692-4370 AURORA 97002 Marlo Treit 27-MAR-92 17~SEP-92 97002 Jon Isberg 4072 WVR ISBERG PARK 21690 DOLORES WAY N.E. **AURORA** (503) 678-2646 27-MAR-92 97002 Brent Leathers 4274 WVR LEATHERS OIL CO. 21687 HIGHWAY 99E AURORA (503) 661-1244 10-JAN-92 25-AUG-92 30-JAN-92 12334 EHLEN RD. N.E. 4272 WVR LEATHERS OIL CO. 97002 Brent Leathers AURORA (503) 661-1244 10-JAN-92 25-AUG-92 28-JAN-92 1153 WVR PORTLAND 76 AUTO/TRUCK PL 21856 BENTS RD., N.E. **AURORA** 97002 Joel Garretson (708) 330-5994 01-APR-92 22-JUN-92 669 NWR MAVERICKS COUNTRY STORE 25760 S. BEAVERCREEK RD. BEAVERCREEK 97004 Richard MacKenzje (503) 632-3068 30-MAR-92 8275 NWR BEAVERTON AUTO SERVICE IN 4655 S.W. HALL BLVD. BEAVERTON 97005 Phat Hotan (503) 644-7963 25-MAR-92 22-SEP-92 9286 NWR CARSON OIL COMPANY. 3790 S.W. 114TH 97005 Sandra Gaylord (503) 224-8500 BEAVERTON 23-JAN-92 1902 NWR CEDAR HILLS BLVD BP 3520 S.W. CEDAR HILLS BLV BEAVERTON 97005 Ron Cain (503) 357-9711 09-JAN-92 30-SEP-92 4295 NWR FARMINGTON TEXACO 13660 S.W. FARMINGTON RD. BEAVERTON 97005 David Carrie (503) 289-4598 07-JAN-92 28-MAY-92 6227 NWR FRED MEYER - A-1 OIL COMP 10190 S.W. BEAVERTON HILL BEAVERTON 97005 Dana Satterlee (503) 232-8844 30-MAR-92 11520 S.W. CANYON RD. 6270 NWR FRED MEYER - CHEVRON BEAVERTON 97005 Dana Satterlee (503) 232-8844 30-MAR-92 9348 NWR HANNA 916 10270 SW CANYON (503) 659-0361 BEAVERTON 97005 Jim Lyons 24-FEB-92 30-SEP-92 1801 NWR HAZELDALE STORE 20955 S.W. FARMINGTON RD. BEAVERTON 97005 Kenneth Norman (503) 649-4964 27-MAR-92 01-OCT-92 7542 NWR MURRAY ROAD TEXACO 14495 S.W. TUALATIN VALLE BEAVERTON 97005 Dwight Estby (503) 681-0308 06-FEB-92 18-SEP-92 10664 NWR PACIFIC PRIDE/SUNSET FUEL 13275 SW HENRY 97005 BARBARA RILEY BEAVERTON (503) 234-0611 27-FEB-92 28-SEP-92 8223 NWR PANOCO INC #59 8715 HALL BLVD. BEAVERTON 97005 Richard Wright (503) 286-9621 06-FEB-92 06-AUG-92 9877 NWR PANOCO, INC 3570 SW CEDAR HILLS BLVD BEAVERTON 97005 Richard Wright (503) 286-9621 06-FEB-92 06-AUG-92 1341 NWR PROGRESS BP 8710 S.W. HALL BLVD. BEAVERTON 97005 Ron Cain (503) 357-9711 09-JAN-92 30-SEP-92 7539 NWR SHELL STATION #55 6660 S.W. SCHOLLS FERRY R BEAVERTON 97005 Richard Wright (503) 286-9621 06-FEB-92 06-AUG-92 1373 NWR TEXACO SERVICE STATION 6055 S.W. HALL BLVD. 97005 Dale Andert (503) 225-4257 09-MAR-92 BEAVERTON 1382 NWR TEXACO SERVICE STATION 11850 S.W. CANYON RD. 97005 Dale Andert BEAVERTON (503) 225-4257 09-MAR-92 1348 NWR TEXACO STATION 17396 S.W. FARMINGTON RD. BEAVERTON 97005 Dale Andert (503) 225-4257 · 09-MAR-92 7166 NWR ALOHA ARCO 17455 S.W. T.V. HIGHWAY ALOHA 97006 David Harris 1-800-288-4201 15-JAN-92 25-SEP-92 18560 S.W. TUALATIN VALLE ALOHA 1899 NWR ALOHA MOBIL 97006 Ron Cain (503) 357-9711 09-JAN-92 30-SEP-92 06-MAR-92 7547 NWR PANOCO INC #62 18135 S.W. TUALATIN VALLE ALOHA 97006 Richard Wright (503) 286-9621 06-FEB-92 06-AUG-92 1350 NWR TEXACO STATION #631830100 19165 S.W. TUALATIN VALLE ALOHA 97006 Dale Andert (503) 225-4257 09-MAR-92 3093 NWR COOK, THOMAS D 17020 S.W. FARMINGTON ROA BEAVERTON 97007 Thomas D. Cook (503) 649-9928 24-MAR-92 9739 NWR ANTHONY'S GAZZODELI 27960 S.E. HWY. 212/P.O.B BORING (503) 663-0383 19-MAR-92 29-SEP-92 97009 James D. Valberg 6198 NWR ASTRO WESTERN #503 13230 S.E. ORIENT DR. 97009 John Phimister (503) 243-7899 BORING 09-JAN-92 22-SEP-92 9916 NWR BARTON STORE 24802 S.E. HWY 224 BORING 97009 L.D. Ferguson (503) 637-3069 07-JAN-92 01-JUN-92 1168 NWR CHEVRON - ASHLEY'S SWISS 31251 S.E. HWY 26 BORING 97009 Frank F. Hartner (503) 669-7748 11-FEB-92 28-JUL-92 9884 NWR MCGEE, DON 32700 SE LEEWOOD BORING 97009 Don McGee (503) 668-4443 15-JAN-92 7963 NWR CANBY SERVICE 262 S.E. 1ST ST. CANBY 97013 Susan Stein (503) 656-0375 09-MAR-92 21-SEP-92 2495 NWR LAN DAVIS CO. 891 S.E. 1ST CANBY 97013 Ray Hellhake (503) 678-1352 01-APR-92 01-OCT-92 97013 Lloyd D. Hobart (503) 829-2122 31-MAR-92 30-SEP-92 1207 NWR LLOYD D. HOBART CANBY SHE 293 S.W. 1ST AVE. CANBY 97013 A. Wayne Scott 7606 NWR LONE ELDER STORE 25995 S. HWY 170 CANBY (503) 266-4898 10-FEB-92 01-OCT-92 97013 Lee Powell Jr. 6066 NWR POWELL DISTRIB. CO., INC. 729 HIGHWAY 99 E. CANBY (503) 289-5558 28-FEB-92 10026 NWR POWELL DISTRIBUTING CO, I 991 S.W. 1ST CANBY 97013 Jason Powell (503) 289-5558 28-FEB-92 16-SEP-92 97013 Thomas E. Smith (503) 845-2257 10-FEB-92 01-OCT-92 8334 NWR WILCO FARMERS 896 S. IVY CANBY 3842 CR CASCADE LOCKS CHEVRON 437 WA-NA-PA CASCADE LOCK 97014 Nate E. Arthur 27-MAR-92 25-AUG-92 425 WA, NA, PA ST. CASCADE LOCK 97014 Todd Hillyard (503) 296-4600 24-MAR-92 01-OCT-92 8171 CR CASCADE LOCKS SHELL 101 SE WANAPA CASCADE LOCK 97014 Brenda Cramblett (503) 374-8336 31-MAR-92 29-SEP-92 9660 CR CASCADE LOCKS TEXACO 3469 NWR CARSON OIL CO, INC. 9911 S.E. ELON ST. CLACKAMAS 97015 Sandra Gaylord (503) 224-8500 23-JAN-92 11-SEP-92 971 NWR CHEVRON U.S.A., INC. - 96 15901 S.E. 82ND DR. CLACKAMAS 97015 J. Eugene Rohrs (503) 633-2368 31-MAR-92 7972 NWR CLACKAMAS SERVICE 10560 S.E. HWY 212 CLACKAMAS 97015 R.L. Stein (503) 656-0375 09-MAR-92 21-SEP-92 7583 NWR PANOCO INC 16010 S.E. 82ND DR. CLACKAMAS 97015 Richard Wright (503) 286-9621 06-FEB-92 06-AUG-92 HWY 212 & 102ND AVE (503) 656-0375 10010 NWR STEIN OIL COMPANY CLACKAMAS 97015 R.L. Stein 09-MAR-92 21-SEP-92 1380 NWR TEXACO SERVICE STATION 16002 S.E. 82ND DR CLACKAMAS 97015 Dale Andert (503) 225-4257 09-MAR-92

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FAC I	D REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE	LOI	CA	APP
292 283	5 NWR 2 NWR 4 NWR	CLATSKANIE CHEVRON CLATSKANIE MINI MART	25 WEST COLUMBIA RIVER HW 260 COLUMBIA RIVER HWY 45 COLUMBIA RIVER HWY	CLATSKANIE CLATSKANIE	97016 97016	Gary Mellema Garold L. Settje Ernest J. Strasser Clayton Johnson John R. Martin Ron Hahn Michael Morrisey Steve Wilcox Clyde Musty Dave Wilcox Suzanne McCarthy Richard N. Cerruti John T/ Karmen K Bresko Mabel F. Hobart Brent Leathers W.C. Felker Therese M. Greenup T. E. Olson John E. Shepanek Richard Wright R.L. Stein Clifford A. Burbank John Kohnstamm Jeff Kohnstamm Ricky Powell W. O. Conn Darrell C. Fleming Darrell C. Fleming John Hanson Harold Pliska John E. Shepanek Jim Lyons Brent Leathers Brent Leathers Brent Leathers Brent Leathers Danny G. Cranford Richard Wright Terry Pyle Paul Fischer Jim Pliska Dale Andert Dale Andert Gary Dent John Phimister Jack L. Booth Don Reinig Sandra Gaylord William P. Harper	(206) 423-330 (503) 728-323	0 19-MAR-92 25-FEB-92 2 10-JAN-92	23-SEP-92 28-SEP-92 11-SEP-92	
28	8 NWR	JOHNSON OIL OF CLATSKANIE	280 E. COLUMBIA RIVER HWY	CLATSKANIE	97016	Clayton Johnson	(503) 325-664	1 19-MAR-92	21-AUG-92	
1010	1 NWR	RUNYON'S	11126 HWY 202	BIRKENFELD	97016	Ron Hahn	(503) 755-090	07-JAN-92	01-061-92	
653 589	6 NWR 2 NWR	WESTMART FOODSTORE WILCOX & FLEGEL-CARDLOCK	COLUMBIA RIVER HIGHWAY 30 HIGHWAY 30 AND SWEDE TOWN	WESTPORT CLATSKANIE	97016 97016	Michael Morrisey Steve Wilcox	(503) 455-225 1-800-438-965	3 U7-JAN-92 S	17-SEP-92 23-SEP-92	24-MAR-92
22 136	9 NWR	CLYDE'S UNION SERVICE	19668 S. HWY 211	COLTON	97017	Clyde Musty	(503) 824-259 (503) 824-511	2 13-JAN-92 3 20-MAR-92	15-SEP-92	
64	3 NWR	CORBETT COUNTRY MARKET	36801 NE CROWN PT HWY	CORBETT	97019	Suzanne McCarthy	(503) 695-223	4 25-MAR-92	17-SEP-92	
929	o nwr O nwr	ESTACADA OIL COMPANY	502 S.E. CURRIN	ESTACADA	97019 97023	John T/ Karmen K Bresko	(503) 695-255 (503) 630-416	3 17-JAN-92	01-001-92 13-AUG-92	
634 428	9 NWR 1 NWR	ESTACADA SHELL SERVICE LEATHERS OIL CO.	486 E. MAIN 604 W. WADE	ESTACADA ESTACADA	97023 97023	Mabel F. Hobart Brent Leathers	(503) 829-212 (503) 661-124	2 31-MAR-92 4 10-JAN-92	30-SEP-92 25-AUG-92	30-JAN-92
31 964	O NWR	MT. HOOD OIL CO. ESTACADA	7453 SW 2ND ST.	ESTACADA	97023	W.C. Felker Therese M. Greenup	(503) 665-218 (503) 630-283	8 04-MAR-92	16-SEP-92	
809	2 NWR	ARMSTRONG BUICK, INC.	20000 MCLOUGHLIN BLVD.	GLADSTONE	97027	T. E. Olson	(503) 656-292	4 30-MAR-92	01-0CT-92	
753 753	2 NWR	SHELL STATION #48	655 E. ARLINGTON	GLADSTONE	97027	Richard Wright	(503) 286-962	1 06-FEB-92	06-AUG-92	
795	4 NWR 0 NWR	STEIN OIL CO, INC	19855 MCLOUGHLIN	GLADSTONE GLADSTONE	97027 97027	R.L. Stein R.L. Stein	(503) 656-037 (503) 656-037	5 09-MAR-92 5 09-MAR-92	21-SEP-92 21-SEP-92	
271 133	2 NWR 8 NWR	C.J.'S ALPINE SERVICES IN SUMMIT BP	93770 E. HWY 26 GOVERNMENT CAMP LOOP	GOVERNMENT C	97028 97028	Clifford A. Burbank John Kohnstamm	(503) 337-227 (503) 272-331	7 07-JAN-92 1 13-JAN-92	13-MAY-92 26-OCT-92	17-MAR-92
890 981	1 NWR	SUMMIT CHEVRON GRASS VALLEY STATION	90149 E. GOVERNMENT CAMP	GOVERNMENT C	97028	Jeff Kohnstamm	(503) 272-331 (503) 333-233	1 13-JAN-92	20-MAY-92	
772	8 CR	MID COLUMBIA PRODUCERS, I	CORNER OF 216 HIGHWAY & H	GRASS VALLEY	97029	W. O. Conn	(503) 565-373	7 21-JAN-92	30-SEP-92	
692	3 NWR	ARCO SERVICE	16431 SE FOSTER RD.	GRESHAM	97030	Darrell C. Fleming		14-FEB-92	26-MAY-92	
276 724	2 NWR 9 NWR	GILES FUELS INC. H.J.P., INC.	21415 S.E. STARK 1011 N. MAIN	GRESHAM GRESHAM	97030 97030	John Hanson Harold Pliska	(503) 665-569	03-FEB-92 3 17-JAN-92	10-SEP-92	
934 935	4 NWR กมพร	HANNA 906 HANNA 907	1725 E. POWELL BLVD. 80 F. BURNSIDE	GRESHAM GRESHAM	97030 97030	John E. Shepanek	(503) 265-927 (503) 659-036	4 01-APR-92 1 24-FEB-92	30-SEP-92	
427	6 NWR	LEATHERS OIL CO.	1225 S.E. ORIENT DR.	GRESHAM	97030	Brent Leathers	(503) 661-124 (503) 661-124	4 10-JAN-92	25-AUG-92	28-JAN-92 30-JAN-92
737	9 NWR	ORIENT COUNTRY STORE	29822 ORIENT DRIVE	GRESHAM	97030	Danny G. Cranford	(505) 001 1E4	21-JAN-92	06 400 03	50 0/111 /2
758	o nwr 9 nwr	PANOCO INC #32 PANOCO, INC	1755 E. BURNSIDE	GRESHAM GRESHAM	97030	Richard Wright	(503) 286-962	1 06-FEB-92	06-AUG-92	
707 956	1 NWR 3 NWR	PLAID PANTRY #80 POWELL VALLEY MARKET	1055 N.E. KANE 4836 E POWELL BLVD	GRESHAM GRESHAM	97030 97030	Terry Pyle Paul Fischer	(503) 646-424 (503) 666-357	5 16-MAR-92 9 01-APR-92	30-SEP-92	
142 140	8 NWR	SPACE AGE FUEL	2815 E. POWELL VALLEY RD.	GRESHAM GRESHAM	97030	Jim Pliska Bale Andert	(503) 665-569 (503) 225-425	3 01-APR-92 7 09-MAR-92	10-SEP-92	
134	3 NWR	TEXACO STATION	45 W. BURNSIDE	GRESHAM	97030	Dale Andert	(503) 225-425	7 09-MAR-92		
543	4 CR	ASTRO/EXXON #266	FRONT & STATE STREETS	HOOD RIVER	97031	John Phimister	(503) 243-789	9 09-JAN-92	21-SEP-92	
423 715	2 CR	CENTRAL SALES, INC.	1330 TUCKER RD.	HOOD RIVER	97031	Don Reinig	(503) 386-348	3 30-MAR-92	70-3EY-YZ	
940 940	7 CR 6 CR	HANEL LUMBER COMPANY HANEL LUMBER COMPANY (NEA	4865 HWY 35 3289 NEAL MILL ROAD	HOOD RIVER	97031 97031	Sandra Gaylord Sandra Gaylord	(503) 224-850 (503) 224-850	D 23-JAN-92 D 23-JAN-92	30-SEP-92 30-SEP-92	
412	9 CR	PLAID PANTRY #80 POWELL VALLEY MARKET SPACE AGE FUEL TEXACO STATION UNOCAL 6139 ASTRO/EXXON #266 BOOTH, JACK L. CENTRAL SALES, INC. HANEL LUMBER COMPANY HANEL LUMBER COMPANY (NEA	2100 COUNTRY CLUB RD.	HOOD RIVER	97031	William P. Harper	(503) 386-175	4 20-NOV-92	20-NOV-92	

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1915 CR HARVEY'S TEXACO 3450 CASCADE DRIVE HOOD RIVER 97031 Doug Hattenhauer 18-FEB-92 28-AUG-	2
וסחת ובתון אח בובל אווי אוני אוני אוני אוני אוני אוני אוני	
3522 CR HOOD RIVER SUPPLY ASSOC. 1995 12TH ST. HOOD RIVER 97031 Pat Mc Allister (503) 386-2757 07-FEB-92 20-AUG-	2
8936 CR KRAMER, JEROLD 403 OAK HOOD RIVER 97031 Jerold Kramer (503) 386-3266 04-MAR-92 17-SEP-	2
9261 CR NOBI'S 1380 TUCKER ROAD HOOD RIVER 97031 Mrs. Nobi Akiyama (503) 386-2687 06-MAR-92 11-SEP-	2
2088 CR PETROLANE 1413 12TH STREET HOOD RIVER 97031 R. L. Fries (209) 486-2770 09-MAR-92	
4783 CR PINE GROVE TEXACO 2385 HWY 35. HOOD RIVER 97031 Doug Hattenhauer 18-FEB-92 29-SEP-	2
1826 CR PORT OF HOOD RIVER MARINA PORT MARINA PARK HOOD RIVER 97031 Stewart Edwards (503) 386-1645 07-JAN-92	
10624 CR RIVERS EDGE B.P. 101 N. 2ND ST. HOOD RIVER 97031 Devin Hobbs (503) 386-6944 02-MAR-92	_
232 CR THE BOYS PINE GROVE GROCE 2375 HWY. 35 HOOD RIVER 97031 Steve Sparks (503) 386-4632 13-JAN-92 10-AUG-	22
9104 CR VILLAGE SHELL I-84 & HWY 35 HOOD RIVER 97031 A. C. Riley. (503) 386-5233 25-MAR-92 30-SEP-	22
7167 CR WINDMASTER MARKET 1650 TUCKER RD. HOOD RIVER 97031 David L. Taylor (503) 386-4499 23-MAR-92 15-SEP- 9330 WVR HUBBARD MOBIL 3325 PACIFIC HWY HUBBARD 97032 Thomas McCain (503) 981-6074 07-JAN-92	'2
9330 WVR HUBBARD MOBIL 3325 PACIFIC HWY HUBBARD 97032 Thomas McCain (503) 981-60/4 U/-JAN-92	
6029 WVR POWELL DISTRIBUTING CO., HIGHWAY 99 E. & G STREET HUBBARD 97032 Jason Powell (503) 289-5558 28-FEB-92 16-SEP-	2
1610 WVR WAMBAUGH, FRED A. 18537 HWY. 99E N.E. HUBBARD 97032 Fred A. Wambaugh (503) 982-9695 30-MAR-92 29-SEP-	2
7518 WVR WHISKEY HILL STORE 5804 S. WHISKEY HILL RD. HUBBARD 97032 Michael L. Johnson (503) 651-2191 24-MAR-92 21-SEP-	4
7925 CR WATKINS AUTO SERVICE —PO BOX 372 - HWY 97 KENT 97033 Louie Rivas (503) 333-2183 18-FEB-92	0E 0CT 03
9405 NWR DAVE'S PALISADES CHEVRON 1680 SOUTH SHORE BLVD. LAKE OSWEGO 97034 David Roche 31-MAR-92	05-0CT-92
7982 NWR LAKE GROVE SERVICE 17895 S.W. BOONES FERRY R LAKE OSWEGO 97034 Susan Stein (503) 656-0375 09-MAR-92 21-SEP-	2
4924 NWR LAKE OSWEGO ARCO 608 N. STATE ST. LAKE OSWEGO 97034 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-	2
7221 NWR LAKE OSWEGO SHELL 504 N. STATE LAKE OSWEGO 97034 Robert MacLean (503) 636-2338 21-JAN-92 01-001-	2
1753 NWR MOBIL SERVICE STATION 1631 S. SHORE BLVD. LAKE OSWEGO 97034 Jeffery D. Grimm (503) 636-3623 19-MAR-92 23-SEP- 7535 NWR PANOCO INC #52 16000 LOWER BOONES FERRY LAKE OSWEGO 97034 Richard Wright (503) 286-9621 06-FEB-92 06-AUG-	ב יי
1370 NWR TEXACO SERVICE STATION 16211 S.W. BOONES FERRY LAKE OSWEGO 97034 RICHARD WITGHT (503) 225-4257 09-MAR-92	4
838 NWR TEXACO STATION 14951 S.W. BANGY LANE LAKE OSWEGO 97034 Date Andert (503) 225-4257 09-MAR-92	
OSO NWE IEARGU STRITUN 14751 S.W. DANGE LANE LANE USWEED 77034 Pale Albert (503) 225-4237 07-486-72	
1335 NWR TEXACO STATION 209 A ST. LAKE OSWEGO 97034 Dale Andert (503) 225-4257 09-MAR-92 1079 NWR UNOCAL 5721 15650 S.W. UPPER BOONES F LAKE OSWEGO 97034 Lee Pentecost (503) 638-3702 01-APR-92 25-SEP-	12
198 CR BARNETT TEXACO SERVICE 450 DESCHUTES MAUPIN 97037 Herbert Snodgrass (503) 395-2523 31-JAN-92 15-SEP-	2
4081 CR OASIS RESORT U.S. HIGHWAY 197 S MAUPIN 97037 Gloria & Michael McLucas (503) 395-2611 24-JAN-92 28-SEP-	2
644 CR PINE GROVE MERCANTILE RT. 1, BOX 326 MAUPIN 97037 Eugene Walters (503) 328-6238 29-JAN-92	44
3457 CR RICHMOND'S SERVICE 511 DESCHUTES AVE MAUPIN 97037 R. M. Richmond (503) 395-2638 01-APR-92	
7998 CR TROUTMAN ENTERPRISES, INC HIGHWAY 197 & BAKEOVEN RO MAUPIN 97037 Albert Troutman (503) 395-2261 27-MAR-92	
4138 CR WALTERS, EUGENE H. ROUTE 1, BOX 26 - WALTERS MAUPIN 97037 Eugene Walters (503) 328-6238 29-JAN-92	
1282 NWR BLACKMAN'S 4-WAY GROCERY 12704 S HWY 211-JCT 213 MOLALLA 97038 Arties Blackman (503) 829-9290 14-JAN-92 11-SEP-	2
7817 NWR CEDARDALE STORE 18215 S. HIGHWAY 211 MOLALLA 97038 Randy L. Griffin (503) 829-8348 23-JAN-92 10-SEP-	2
9249 NWR DICKEY PRAIRIE STORE 16560 S. RAMSBY RD. MOLALLA 97038 Cheryl F. Borths (503) 829-7654 30-MAR-92 24-AUG-	$\bar{2}$
1433 NWR HOBART, LLOYD D. 112 DIXON AVE. MOLALLA 97038 Lloyd D. Hobart (503) 829-2122 31-MAR-92 30-SEP-	2
9603 NWR HOBART, LLOYD D. 126 DIXON AVE MOLALLA 97038 Lloyd D. Hobart (503) 829-2122 31-MAR-92 30-SEP-	2
7282 NWR MOLALLA CHEVRON 204 E. MAIN ST. MOLALLA 97038 Ed Stafford (503) 829-5441 24-MAR-92 30-SEP-	2
6024 NWR MOLALLA KWIK GAS 307 SOUTH MAIN MOLALLA 97038 Jason Powell (503) 289-5558 28-FEB-92 16-SEP-	2
670 NWR REASONER'S SHELL SERVICE 202 W. MAIN MOLALLA 97038 Richard E. Reasoner (503) 829-2502 24-MAR-92	
7279 NWR STAFFORD OIL CO., INC. 603 W. MAIN ST. MOLALLA 97038 Ed Stafford (503) 829-5441 24-MAR-92 30-SEP-	2
1225 NWR Y-MARKET 901 E. MAIN MOLALLA 97038 Ronald A. Shapland Jr. (503) 829-8481 15-JAN-92	05-0CT-92
7725 CR MID COLUMBIA PRODUCERS, I 2003 FIRST AVENUE MORO 97039 W. O. Conn (503) 565-3737 21-JAN-92 30-SEP-	2
The Color Reg Fax Marker STEWAGO 3650 CASCAMBE BRIVE 1000 RIVER 79731 Journal 19-FEB-92 22-AuG-8025 CR KRAMER, JEROLD 403 OAK 4000 RIVER 79731 Jerold Kramer (503) 306-2276 07-FEB-92 22-AuG-8025 CR KRAMER, JEROLD 403 OAK 4000 RIVER 79731 Jerold Kramer (503) 306-2276 07-FEB-92 22-AuG-8025 CR KRAMER, JEROLD 403 OAK 4000 RIVER 79731 Jerold Kramer (503) 306-2276 07-FEB-92 22-AuG-8025 CR FEB-92 20-AuG-8025 CR FEB-92 20-Aug-8025 CR FEB-92 20-Aug-8025 CR FEB-92 20-Aug-8025 CR FEB-92 CARAB-92 TI-SEP-2003 C	2
7920 CR JIM'S MARKET 6065 DEE HUGHWAY PARKDALE 97041 Jim & Cleo Weseman (503) 352-7101 23-MAR-92 28-0CT-	2
10996 CR MT HOOD COUNTRY STORE 6545 COOPER SPUR ROAD MT HOOD 97041 John Bartlett (503) 352-6827 27-MAR-92 09-SEP-	2
322 CR MT. HOOD SHELL 6520 HIGHWAY 35 MOUNT HOOD 97041 William J. Frost (503) 352-6988 10-JAN-92	.~
1942 CR PARKDALE CHEVRON SECOND & BASELINE DR. PARKDALE 97041 Christine Taylor (503) 386-4669 11-FEB-92 25-SEP-	2
10017 CR UPPER VALLEY AUTOMOTIVE 4946 BASELINE RD. P.O. B PARKDALE 97041 D. Scott Baumer (503) 692-3354 31-MAR-92	
1450 NWR DON COX PROPANE 27980 S. HWY. 213 MULINO 97042 Donald Cox (503) 829-5560 19-MAR-92	

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FAC ID REG	FAC NAME	ADDRESS 3398 ODELL HWY. 3387 ODELL HWY. HIGHWAY 282 123 OREGON CITY SHOPPING 20990 S. FISCHER MILL RD. 860 MOLALLA 13927 S. HOLCOMB BLVD. 1780 1/2 WASHINGTON ST. 1780 WASHINGTON STREET 1002 MOLALLA AVE. 18150 S. REDLAND RD. 1033 SOUTH END ROAD 1701 CLACKAMETTE DR. 1511 MOLALLA AVE 1321 MAIN ST. 1224 MCLAUGHLIN 2539 ALSTON RD. W. THIRD AND B ST. 75719 ROCK CREST ST. 207 B. WEST 75754 ROCK CREST ST. 207 B. WEST 75754 ROCK CREST ST. 207 B. WEST 33144 PITTSBURG RD. 373 S. COLUMBIA HWY. 745 S. HWY. 30 325 NORTH HIGHWAY 30 1050 OLD PORTLAND ROAD 175 S. HWY 58144 OLD PORTLAND ROAD 175 S. HWY 58144 OLD PORTLAND ROAD 115 N. HWY 30 134 RIVER ST./P.O. BOX 10 31490 CANAAN RD. 64561 COLUMBIA RIVER HWY 23424 SE COUNTRY SQUIRE R 38422 PROCTER BLVD. 399021 PROCTER BLVD. 399191 PROCTOR BLVD. 37396 RUBEN LANE	CITY	ZIP	CONTACT	£	PHONE		LOI	CA	APP
241 CR	CLEM'S COUNTRY STORE	3398 ODELL HWY.	ODELL	97044	Cynthia Davis		(503) 354-	1296	27-MAR-92	29-SEP-92	07-DEC-92
1241 CR	GEHRIG'S CHEVRON	3387 ODELL HWY.	ODELL	97044	Rudy Fred Gehrig Jr	٠.	(503) 354-	1202	31-MAR-92	30-SEP-92	
1935 CR	KEYLOCK	HIGHWAY 282	ODELL	97044	W.D. Hillyard		(503) 386-	3456	04-MAR-92	01-oct-92	
1322 NWR	FIRESTONE STORE #3555/FUL	123 OREGON CITY SHOPPING	OREGON CITY	97045	Steven Burg		(503) 223-	2108	04-FEB-92		
7269 NWR	FISCHER MILL SUPPLY, INC.	20990 S. FISCHER MILL RD.	OREGON CITY	97045	Eugene G. Fischer		(503) 631-	3411	16-JAN-92		
3819 NWR	HILLTOP CHEVRON	860 MOLALLA	OREGON CITY	97045	Ronald Carter		(503) 255-	5565	28-JAN-92	28-MAY-92	
295 NWR	JEN-CHRIS INCSTEVES MAR	13927 S. HOLCOMB BLVD.	OREGON CITY	97045	Victor H. Overturf		(503) 656-	4022	13-JAN-92		
7956 NWR	KELLY FIELD CARDLOCK	1780 1/2 WASHINGTON ST.	OREGON CITY	97045	R.L. Stein		(503) 656-	0375	09-MAR-92	21-SEP-92	
7985 NWR	KELLY FIELD SERVICE	1780 WASHINGTON STREET	OREGON CITY	97045	R.L. Stein		(503) 656-	0375	09-MAR-92	21-SEP-92	
4273 NWR	LEATHERS OIL CO.	1002 MOLALLA AVE.	OREGON CITY	97045	Brent Leathers		(503) 661-	1244	10-JAN-92	25-AUG-92	28-JAN-92
5178 NWR	REDLAND GARAGE	18150 S. REDLAND RD.	OREGON CITY	97045	Daniel Bauer		(503) 631-	3434	10-FEB-92	24-SEP-92	
181 NWR	SOUTH END GROCERY	1033 SOUTH END ROAD	OREGON CITY	97045	Kim Hawcroft				10-JAN-92	70 00	
9155 NWR	SPORTCRAFT LANDING PUBLIC	1701 CLACKAMETTE DR.	OREGON CITY	9/045	Larry Bigbee		(503) 656-	6484 '	19-FEB-92	30~SEP-92	
7980 NWR	SIEIN OIL CO INC	1511 MOLALLA AVE	OREGON CITY	97045	R.L. Stein		(503) 656-	U3/3	U9-MAR-92	21-SEP-92	
ARR RRK	UNUCAL 4487	1321 MAIN SI.	OREGON CITY	97045	Lee Pentecost	er North	(503) 638~	3702	01-APR-92	25-SEP-92	
9655 NWR	WEILER MOIOR CO	_1224 MCLAUGHLIN	OREGON CITY	97045	Janice Newby Kenned	įγ	(206) 693-	920 <i>1</i>	01-APR-92	74 00	
000 NWK	ALSIUN LUUNIKI SIUKE	2009 ALSTON RD.	RAINIER	97048	Russell Andrews		(503) 556-	7007 700	20-MAK-92	31-305-35	
1192 NWK	DAINIED DO	75710 DOOM CREET OF	KAINIEK 'DAINIED	070/0	dary Mettema		(200) 423-	201E	16 - 14H-07	29-5EP-92	
1507 NWK	RAINIEK DE DAINIER CHEUDON	207 B LIECT	.KAINIEK	070/0	Comit Halloma		(202) 002	7700 1002	10-1AN-92	37-cep-03	
1202 NWR	RAINIER LHEVRUN	ZUI B. WEST	RAINIER	07040	n i polobio		(200) 423* (E03) 735-	2200	1/- 1/1-02	73-SED-03	
11025 NWA	TIG TAG MIN STORE .	70171 E ULIV 24	ZIC ZAC	07040	Soim Boichlain		2021 327	2202	14-JAN-72 01-ADD-02	03-355-35	
1,023 NWA	1 & 4 MINT MAPT	501 C F FIRST	DITFLIC	07050	lim Uallace		(503) 730-	2887	30-MAD-92		
ANS NUR	A & C'S YANKTON STORE	33144 PITTERING RD	ST HELFNS	97051	Henry & Francis		(503) 397-	5900	23-MAR-92	23-SEP-92	
6105 NUR	RILL'S KUIK MART	373 S. COLIMBIA HUY.	ST. HELENS	97051	Herb & Susan Thomps	inn .	(503) 738-	5639	23-MAR-92	28-SEP-92	
7577 NUR	RP MORILE ONE STOP	745 S. HWY. 30	ST. HELENS	97051	Jeff Simpson	,,,,	(503) 397-	2807	30-MAR-92	01-0CT-92	
5697 NUR	FRANC'S CARDLOCK	325 NORTH HIGHWAY 30	ST. HELENS	97051	Gary Mellema		(206) 423-	3300	19-MAR-92	23-SEP-92	
9850 NWR	HANEY'S GROCERY	1050 OLD PORTLAND ROAD	ST. HELENS	97051	Gary Schwirse		(503) 397-	0770	18-MAR-92		
662 NWR	HULSOPPLE, HAROLD J.	175 S. HWY	ST. HELENS	97051	Harold J. Hulsopple	<u> </u>	(503) 397-	0223	18-FEB-92	17-SEP-92	
5471 NWR	PACIFIC WESTERN FOREST IN	58144 OLD PORTLAND ROAD	ST. HELENS	97051	James C. York				24-MAR-92	21-AUG-92	
1355 NWR	ST. HELEN CHEVRON	115 N. HWY 30	ST. HELENS	97051	Gary Mellema		(206) 423-	3300	19-MAR-92	23-SEP-92	
734 NWR	ST. HELENS MARINA, INC.	134 RIVER ST./P.O. BOX 10	ST. HELENS	97051	James D. Calnon		(503) 397-	4162	19-MAR-92		
659 NWR	CANAAN STORE	31490 CANAAN RD.	DEER ISLAND	97054	Dale L. Clark		(503) 397-	2016	21-JAN-92	29-SEP-92	
9895 NWR	H&W INC. DBA DEER ISLAND	64561 COLUMBIA RIVER HWY	DEER ISLAND	97054	Vanessa Robinson		(503) 543-	3445	31-MAR-92	28-SEP-92	
8800 NWR	COUNTRY SQUIRE AIRPARK	23424 SE COUNTRY SQUIRE R	SANDY	97055	Arthur F. Skipper		(503) 668-	808	23-MAR-92	17-SEP-92	
4255 NWR	LEATHERS OIL CO.	38422 PROCTER BLVD.	SANDY	97055	Brent Leathers		(503) 661-	1244	10-JAN-92	25-AUG-92	
4257 NWR	LEATHERS OIL CO.	39021 PROCTER BLVD.	SANDY	97055	Brent Leathers		(503) 661-	1244	10-JAN-92	25-AUG-92	30~JAN-92
141 NWR	R. S. SMITH MOTOR CO	39191 PROCTOR BLVD. P.O.	SANDY	97055	Donald R. Smith		(503) 668-	4388	13-FEB-92	17-AUG-92	
7443 NWR	SANDY BP SERVICE	39535 PROCTOR BLVD.	SANDY	9/055	James O. & Dorothy	C. Bates	(503) 668-	5828 3400	24-FEB-92	02-SEP-92	
9910 NWR	SANDY KEYLOCK SHORTY'S CORNER .	3/396 RUBEN LANE	SANDY	97055	W.C. Felker		(503) 665-	2188	04-MAR-92	16-SEP-92	
1941 NWK	SHORTY'S CORNER .	42000 S.E. HWI. 20	SANDY	97055	Gate Meier		(202) 000-	4144	Olalawah	01-101-72	
		3900U E HWY ZO	SANDY	97000	nomas rarrett				10-JAN-92		
	B & B MARKET & SUPPLY	32284 SCAPPOOSE VERNONIA	SCAPPOOSE	97056	Robert Buschka				24-MAR-92		
	LARRY'S SHELL	52413 S. COLUMBIA RIVER H	SCAPPOOSE	97054	Larry K. Engstrom				20-MAR-92		28-141-02
		50654 COLUMBIA RIVER HWY	SCAPPOOSE	7/006	brent Leathers		(202) 001°	1444 5052	10-JAN-92 18-MAR-92	25-AUG-92	TO-DWW-AT
		52023 COLUMBIA RIVER HWY 2914 W. 6TH	THE DAILER	97050	nona Widiloti		(503) 343*	7800	09-JAN-92	21-SED-02	
1341 GK	ACTED/EVVON #24/	2100 W. 6TH	THE DALLES	97059	John Phimister		(503) 243-	7890	09-JAN-92	21-SEP-92	
2170 CK	ASTRO #261 ASTRO/EXXON #264 DENNIS BOTTS	1200 W. OIR	THE DALLES	97058	Rotte Dennie				10-FEB-92		
8744 CD	DOWNTOWN TEXACO	2914 W. 6TH 2100 W. 6TH 1200 KELLY 3RD & LINCOLN	THE DALLES	97058	James O. & Dorothy W.C. Felker Gale Meier Thomas Farrell Robert Duschka Larry R. Engstrom Brent Leathers Doug Migliori John Phimister John Phimister Botts Dennis Doug Hattenhauer		1000 200		18-FEB-92		
J177 OK		The second									

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FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	Michelle Wilson Robert Green Todd Hillyard Milt Tumilson Dee Smiley Doug Hattenhauer Sally Temple William Gord Anna L. Trapp William Van Nuys Todd Hillyard Doug Hattenhauer L Kirk French G.D. Brawley Gerald Branley John T. Smith Donald W. Rognon Ivan D. Handy Chester T. Morrow Richard N. Cerruti Dale Andert Dale Andert Garry & Katherine LaPoint Duane Stroupe Richard Hanegan Dale Andert ROB FOREST Frank Marquez Eugene Walters Garold L. Settje Thomas & Judith Budge Doug Hattenhauer Eugene Tsubota Arel D. Middleton H. C. Sanderson W. O. Conn Philip O'Meara Douglas Rhinehart Steven Burg Richard Wright R.L. Stein Dale Andert Harvey A. Hains L Kirk French Lee Pentecost ROB FOREST David Harris Annette Sway Robert E. Sprague Ron Halter	PHONE	LOI	CA	APP
8619	CR	DUFUR TEXACO	190 MAIN STREET 1206 W. SECOND 703 EAST 2ND 206 W 3RD STREET 3838 W. 6TH ST. 353 AND US HWY 197E 1025 W. 8TH PLACE	DUFUR	97058	Michelle Wilson	(503) 467-2622	06-MAR-92	28-SEP-92	
170	CR	GREEN, ROBERT L.	1206 W. SECOND	THE DALLES	97058	Robert Green	(503) 296-4651	31-JAN-92	15-SEP-92	
1936	CR	HILCO FOOD MART	703 EAST 2ND	THE DALLES	97058	Todd Hillyard	(503) 296-4600	04-MAR-92	01-OCT-92	
8560	CR	MILT'S BP	206 W 3RD STREET	THE DALLES	97058	Milt Tumilson	(503) 296-6389	03-FEB-92	01-0CT-92	
7648	CR	MUNCHIES MINI MART	3838 W. 6TH ST.	THE DALLES	97058	Dee Smiley	(503) 298-4703	24-MAR-92	29-SEP-92	
1824	CR	RINGERS TEXACO	353 AND US HWY 197E	THE DALLES	97058	Doug Hattenhauer		18-FEB-92	28-AUG-92	
439	CR	SPARKLE CAR WASH	353 AND US HWY 197E 1025 W. 8TH PLACE BOAT BASIN 2702 EAST 2ND 335 US HWY 197 1433 WEST SECOND 3902 WEST 6TH	THE DALLES	97058	Sally Temple	(503) 296-3905	21-FEB-92	01-0CT-92	
9081	UK	THE DALLES YACHT CLUB	BOAT BASIN	THE DALLES	97058	William Gord	(503) 296-1436	30-MAR-92	29-SEP-92	
1499	CR	TRAPP'S	2702 EAST 2ND	THE DALLES	97058	Anna L. Trapp	(503) 296-4308	30-MAR-92	23-SEP-92	
1766	CR	TRAPP'S VAN NUYS, WILLIAM	335 US HWY 197	THE DALLES	97058	William Van Nuys	(503) 296-8975	04-MAR-92	01-0CT-92	
8414	CR	WEST SECOND FOOD MART	1433 WEST SECOND	THE DALLES	97058	Todd Hillyard	(503) 296-4600	04-MAR-92	01-0CT-92	
1497	CR	WESTSIDE TEXACO	3902 WEST 6TH	THE DALLES	97058	Doug Hattenhauer		18-FEB-92	28-AUG-92	
		BURNS BROTHERS	790 NW FRONTAGE ROAD	TROUTDALE	97060	L Kirk French	(503) 238-7393	20-MAR-92		
1064	NWR	CHEVRON U.S.A., INC 95	1260 N.W. FRONTAGE RD.	TROUTDALE	97060	G.D. Brawley	(503) 666-1182	01-APR-92		
		CHEVRON U.S.A., INC 98	2555 N.E. 238TH	TROUTDALE	97060	Gerald Branley ,	(503) 282-5497	10-JAN-92		
		FAIRVIEW BP	_1605 N.E. 223 AVE.	TROUTDALE	97060	John T. Smith	(503) 666-3893	01-APR-92	23-SEP-92	
			400 N.W. FRONTAGE RD	TROUTDALE	97060	Donald W. Rognon	(801) 734-6400	28-FEB-92		
			146 W. COLUMBIA	TROUTDALE	97060	Ivan D. Handy	(503) 665-4752	14-JAN-92		
		MORROW'S FAIRVIEW SHELL	22231 N.E. SANDY BLVD.	TROUTDALE	97060	Chester T. Morrow	(503) 666-7228	07-JAN-92		
4769	NWR	POUNDER OIL SERVICE, INC.	901 W. COLUMBIA	TROUTDALE	97060	Richard N. Cerruti	(503) 695-2555	09-MAR-92	01-0CT-92	
1328	NWR	TEXACO STATION	25737 SE STARK	TROUTDALE TROUTDALE	97060	Dale Andert	(503) 225-4257	09-MAR-92		
1314	NWR	TEXACO STATION	2222 N.E. 238TH	TROUTDALE	97060	Dale Andert	(503) 225-4257	09-MAR-92		
9898	NWR	ARCO AM/PM MINI MART	7004 SW NYBERG ROAD	TUALATIN	97062	Garry & Katherine LaPoint		10-JAN-92	20-AUG-92	
9250	NWR	TEXACO STATION TEXACO STATION ARCO AM/PM MINI MART DUANE STROUPE HANEGAN'S SERVICE TEXACO STATION TUALATIN BP	20200 S.W. STAFFORD	TUALATIN	97062	Duane Stroupe	(503) 638-3134	21-JAN-92		24 227 22
188	NWR	HANEGAN'S SERVICE	18970 S.W. BOONES FERRY R	TUALATIN	97062	Richard Hanegan	(503) 692-4120	11-MAR-92	01-001-92	01-001-92
1397	NWR	TEXACO STATION	7090 S.W. NYBERG ROAD	TUALATIN	97062	Dale Andert	(503) 225-4257	U9-MAR-92	70 000 03	
6580	NWR	TUALATIN BP	7035 S.W. NYBERG RD.	TUALATIN	97062	RUB FOREST	(503) 682-3865	15-JAN-92	30-SEP-92	
10411	LK	LINE MOLLOM TAYESINE KERN	34 N. MARIPOSA DR.	WAMIC	97063	Frank Marquez	(503) 544-22/1	12-MAR-92	14-SEP-92	
		TYEE KEY LOCK	ROUTE 1, FAIRGROUNDS RD.	TYGH VALLEY	97063	Eugene Walters	(503) 328-6238	29-JAN-92	30 050 03	
			490 BRIDGE ST.	VERNONIA	97064	Garold L. Settle.	(507) (20 /2/5	25-168-92	28-SEP-92	
			58360 NEHALEM HWY S.	VEKNUNTA	97004	Inomas & Judith Budge	(303) 429-4203	31-MAK-92	24-SEP-92	
		BIGG'S TEXACO, HATTENHAUE	BIGG'S JUNCTION	KUFUS	97000	Doug Hattenhauer	(EDZ) 770, 7531	10-155-92	ZY-SEP-92	
			STAR ROUTE, BOX 144	MASCO	07045	Apol D. Middleton	(503) 739-2321	Z4*MAK-92	30-255-35	
		CHEVRON U.S.A., INC 98	BIGGS JUNCTION	MASCO	97065	W C Candorson	(503) 739-0291	01-MAR-92	20-3EF-72	
			820 HIGHWAY 206	LIACEO	97065	U O Copp	(503) 739-2407	21 - IAN - 02	ZU-3EL 12	
10078	CD	DIMENDA DUTITO	CLARK & DAVIS	SHEDMAN	97065	Philip O/Meara	(503) 442-5477	30-MAR-92	JU 3L: 7L	
1118	CR		HWY 97 & I-84 N.	BIGGS JUNCTI	97065	Douglas Rhinehart	(503) 739-2242	27-MAR-92	30-SEP-92	
1121	NWR	UNDCAL 6223	HWY 26 & WELCHES RD.	WEI CHES	97067	Steven Burg	(503) 223-2108	25-MAR-92	30 02. 72	
7531	NWR	ASTRO #301	22250 WILLAMETTE DR	WEST LINN	97068	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
8565	NWR	HAYWARD'S SERVICE	1590 SW 7TH STREET	WEST LINN	97068	R.L. Stein	(503) 656-0375	09-MAR-92	21-SEP-92	
1321	NWR	TEXACO STATION	22355 WILLAMETTE DRIVE	WEST LINN	97068	Dale Andert	(503) 225-4257	09-MAR-92		
9073	NWR	WEST LINN SERVICE	19120 WILLAMETTE DRIVE	WEST LINN	97068	Harvey A. Hains	(503) 636-6826	07-JAN-92	09-SEP-92	
		BURNS BROS. TRUCK STOP	8600 S.W. ELLIGSEN RD.	WILSONVILLE	97070	L Kirk French	(503) 238-7393	20-MAR-92		
		UNOCAL 4580	30085 SW PARKWAY	WILSONVILLE	97070	Lee Pentecost	(503) 638-3702	01-APR-92	25-SEP-92	
2591	NWR	WILSONVILLE CARD LOCK	30100 S. W. PARKWAY	WILSONVILLE	97070	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
		WILSONVILLE SHELL	9225 WILSONVILLE ROAD	WILSONVILLE	97070	David Harris	1-800-288-4201	15-JAN-92	25-SEP-92	
		BILL SCHAFFER'S TEXACO, I	173 GRANT STREET	WOODBURN	97071	Annette Sway	(805) 322-0887	14-JAN-92	02-JUL-92	
			17004 ARBOR GROVE RD NE	WOODBURN	97071	Robert E. Sprague	(503) 981-1200	19-FEB-92		
		HALTER OIL CO	2221 N PACIFIC HWY	WOODBURN	97071	Ron Halter	(503) 981-8931	10-FEB-92		

		FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE		LOI	CA	APP
154	WVR	LONERGAN OIL CO. SILVERFLEET SYSTEMS WILCO FARMERS WOODBURN CARDLOCK WOODBURN EXXON WOODBURN SHELL 469 ONE STOP ASTORIA ASTORIA - CARDLOCK BOOR BERG IMPORT AUTO CENT	1580 N. PACIFIC HWY.	WOODBURN	97071	Barry Naone Ron Halter Thomas E. Smith Marc H. Nelson Timothy R. Brown ROB FOREST Clayton Johnson ROB FOREST Clayton Johnson Paulina M. Cockrum Robert A. Kankkonen Alice N. Codd Thomas J. Carmichael David Pfund Klyde Thompson			30-MAR-92	01-0CT-92	33333333
8377	WVR	SILVERFLEET SYSTEMS	1385 INDUSTRIAL AVE.	WOODBURN	97071	Ron Halter	(503)	981-8931	10-FEB-92	22-MAY~92	
2355	₩VR	WILCO FARMERS	490 S. PACIFIC HYWAY	WOODBURN	97071	Thomas E. Smith	(503)	845~2257	10-FEB-92	01-0CT-92	
5546	WVR	WOODBURN CARDLOCK	293 N. PACIFIC HIGHWAY	WOODBURN	97071	Marc H. Nelson			30-JAN-92	10-SEP-92	
5384	WVR	WOODBURN EXXON	2515 NEWBERG HWY	WOODBURN	97071	Timothy R. Brown	(503)	981-0401	30-JAN-92		
7552	WVR	WOODBURN SHELL	2995 NEWBURG ROAD	WOODBURN	97071	ROB FOREST	(503)	682-3865	15-JAN-92	30-SEP-92	
1270	NWR	469 ONE STOP	469 W. MARINE DR.	ASTORIA	97103	Clayton Johnson	(503)	325-6641	22-JAN-92	21-AUG-92	
5094	NVR	ASTORIA	1701 MARINE DRIVE	ASTORIA	97103	ROB FOREST	(503)	682-3865	15-JAN-92 19-MAR-92	30-SEP-92	
1157	NWR	ASTORIA - CARDLOCK	620 ALT. HWY 101	ASTORIA	97103	Clayton Johnson	(503)	325-6641	19-MAR-92	21-AUG-92	
1072	WHI.	DOD DEKO THI OK! MOTO CENT	ON HIGHWAL TO LYELEKHALE	ASTORIA	97103	Paulina M. Cockrum	(503)	738-5789	30-MAR-92		
		BOB'S TEXACO		ASTORIA	97103	Robert A. Kankkonen			20-MAR-92		
		BURNS-JOHNSON BULK PLANT		ASTORIA	97103	Alice N. Codd			17-MAR-92		
		CARMICHAEL-COLUMBIA OIL I		ASTORIA	97103	Thomas J. Carmichael			16-MAR-92		
			RT 6, BOX 240-HWY 30 & KO	ASTORIA	9/103	David Pfund			18-MAR-92		
3/4	NWK	DEL'S OK RUBBER WELDER, I	65 RWY 101	ASTORIA	97103	Klyde Inompson			01-APR-92		
6894	NWK	GEORGE'S BP SERVICE	632 MARINE DRIVE	ASTORIA	97103	Cary Bechtolt			17-MAR-92		
6897	NWR	HIWAY SERVICE	_31UB MARINE DRIVE	ASTORIA	97103	Cary Bechtolt			17-MAR-92		
7/44 7/07	NWK	JURN DAI MINI MAKI	RT 5 BOX 49A	ASTORIA	97103	Pat McGee			21-JAN-92		
7401	NWK	LAMBURUDIC	KI O BUX 029	KNAPPA	07107				19-MAR-92		
7471	NWK	JOHN DAY MINI MART KNAPPA MARKET LANDWEHR'S LUM & UTTI MINI MART FOODSTORES	1435 EVOUNDE STORET	ASTORIA	07103	Alice N. Lodd	(503)	323-1972	17-MAR-92	01-001-92	
1311	NWK	WINI MART FOORSTORES	OS II MADINE DOINE	ASTORIA ASTORIA					31-MAR-92		
3003	MINIC	MINI MAKI FOODSTORES	ROUTE 1, BOX 813	ASTORIA		Donald Patterson William & Beatrice French			28-FEB-92 31-JAN-92		
4370 4312	NILID		-	ASTORIA	07103	P Delphia			14-JAN-92		
		TIDE POINT		ASTORIA	97103	R. L. Delphia Ivan F. Larsen Thomas E. Utti			30-MAR-92		
7/27	LII ID	TOYOTA OF ACTORIA	/00 noun	ASTORIA	97103	Thomas F Utti			31-MAR-92	11 01.1 71	
7684	NUR	WILD WILLIE'S ASTORIA CAR	75 W. MARINE DRIVE 221 S. MAIN ST. RT. 1, BOX 285-A 182 N. MAIN ST. 8335 HWY 101 N. 24485 HWY 101 S. 280 N. HEMLOCK	ASTORIA	97103	William A. & Jere Lou Mooney				17-AUG-92	
302	NWR	COP'S GARAGE	221 S. MAIN ST.	BANKS	97106	David Cop			09-MAR-92		
1908	NWR	STALEY'S JUNCTION FOOD &	RT. 1. BOX 285-A	BANKS	97106	Ron Cain			09-JAN-92		
5491	NWR	TEXACO	182 N. MAIN ST.	BANKS	97106	John Linn			10-JAN-92		
8940	NWR	BAY CITY DELI MART	8335 HWY 101 N.	BAY CITY	97107	LEE HEFFEL			13-JAN-92		
1506	NWR	BEAVER TEXACO	24485 HWY 101 S.	BEAVER	97108	Stan Sheldon	(503)	842-2172	26-FEB-92	22-OCT-92	
319	NWR	GARY'S CANNON BEACH SERVI	280 N. HEMLOCK	CANNON BEACH	97110	Gary Moon	(503)	436-2280	14-JAN-92	29-SEP-92	
10038	NWR	R.V. RESORT AT CANNON BEA	345 ELK CREEK RD. P.O. B	CANNON BEACH	97110	Steve Martin	(503)	436-1197	10-JAN-92		
8941	NWR		308 3RD	CANNON BEACH	97110	Dollie Sage		`. —	25-MAR-92		
			150 N. YAMHILL	CARLTON	97111	Quentin & Lola Probst			15-JAN-92		
		UNION SERVICE STATION	305 WEST MAIN	CARLTON	97111	Bob Mason			18-MAR-92		
4632	NWR	R & R CHEVRON	P.O. BOX 125, 34310 HWY 1	CLOVERDALE	97112	Richard Fleming			19-MAR-92	21-SEP-92	
		RIVERSIDE DELI-MART	34390 HWY. 101 S.	CLOVERDALE	97112	Kenneth & Linda Seal			01-APR-92	24 4112 22	
		SANDLAKE BP	2096U SANDLAKE RD.	CLOVERDALE	97112	Daymon Weaver			07-JAN-92	26-AUG-92	
		DRIVE-IN SERVICES, INC.	34390 HWY. 101 S. 20960 SANDLAKE RD. 952 N. ADAIR 1021 BASELINE	CORNELIUS	9/113	Paul D. Tornblad			30-MAR-92	10 000 00	
			1021 BASELINE	COKNEL 102	07114	DWIGHT ESTDY			13-MAR-92		
		GONZALES SERVICE	216 FERRY ST	DINDEE	7/114	Charles Torny			13-JAN-92 21-JAN-92		
100/	AH ID	CONTEST CHOVE DD	925 HWY. 99W, P.O. BOX 3	NOWNEE	07112	Pon Coin			09-JAN-92		04-MAD-02
1074	NWK	FOREST GROVE BP	2339 PACIFIC AVE.	FOREST CROVE	07114	NOT CONCET			16-JAN-92		OU-MAR-32
1907	NWK	FOREST GROVE CARD LUCK	2705 PACIFIC AVE. 2705 PACIFIC AVE. 2134 19TH AVE. STAR ROUTE, BOX 625 3510 PACIFIC AVE.	FOREST CROVE	07114	Pon Coin			09-JAN-92		
1070	MMK	LOVEST GROAF LETING . W.	CLVD DUSIE BUA YOU	FUNES! GROVE	07114	Pon Cein			09-JAN-92		20-NOV-02
7140	NWK	UADDIC ENTEDDDICEC 190	ZEAR ROUTE, BUA 023	FOREST GROVE	07114	DOD EUDECT			15-JAN-92		FO MOA-35
1010	AWN.	L. P. BUSCH, INC.	2624 PACIFIC AVE.	TOVEST GROVE	07116	William A. & Jere Lou Mooney David Cop Ron Cain John Linn LEE HEFFEL Stan Sheldon Gary Moon Steve Martin Dollie Sage Quentin & Lola Probst Bob Mason Richard Fleming Kenneth & Linda Seal Daymon Weaver Paul D. Tornblad Dwight Estby Elizabeth Foster Charles Terry Ron Cain ROB FOREST Ron Cain ROB FOREST Ron Cain			09-JAN-92		
1710	ЛИП	La la DUSCH, INC.	TOTA LUMILLO MATE	CONTRA GROVE	71 110	KOII OUIII	(202)	221 7111	47 U/M /C	SU ULI /L	





FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	Gerald & Marie LaMar Charles Anderson Larry Jackson Tim Pearson Peggy Brown Ben Brantingham Stan Sheldon Robert A. Pillar Ralph Etheridge George L & Jo Adams Harold C. Hendriksen Rosalie Rogers Clayton Johnson Sharon Douglas John Phimister Andy Bretthauer Dwight Estby ROB FOREST Ron Cain Charles P. Swarts Dwight Estby Matthew B. Petrich Lloyd Williamson Dale Andert Robert Stark Richard Duyck Ralph Martin David E. Williams Dwight Sturn ROB FOREST Jere Laughlin ROB FOREST Janine Barrett Charles E. Laughlin Sue Gentry Jere Laughlin Dale Andert Melvin D. Jansen Clayton Johnson Stan Sheldon David Fox Brent Leathers Archie & Mary Morris Jere Laughlin Robert W. Alexander Sue Gentry Marlene Carter Bernard Nelson David May	PHONE		LOI	CA	APP
7335	NWR	GALES CREEK COUNTRY STORE	INTERSECTION HWY 8/OLD WI	GALES CREEK	97117	Gerald & Marie LaMar	(503)	357-3942	23-JAN-92	16-SEP-92	
8/94	NWR	BARVIEW JETTY COUNTY PARK	TILLAMOOK COUNTY PARKS	GARIBALDI	97118	Charles Anderson	(503)	322-3477	25-FEB-92	2/ AAT 52	
8062	NWR	DAN'S UNOCAL SERVICE	511 GARIBALDI SI.	GARIBALDI	9/118	Larry Jackson	(503)	738-5833	08-JAN-92	26-001-92	
861	NWK	G & G MINI MAK!	203 GARIBALDI AVE. E.	GARIBALDI	97118	IIM Pearson	/E07\	722 0007	43-MAR-92	17-AUG-92	
7207	NWK	GARIBALDI SEAFOUD AND CHA	240 C TUERD CT	GARIBALDI	97118	Peggy Brown	(503)	322-0007	10-MAK-92		
1293	NWK	OLD MILL MAKINA KESOKI, I	ZIU S. INIKU SI.	CADIDALDI	07110	Ston Shaldon	(503)	9/2-2172	24-EED-02	22-0CT-02	
907/	NWK	SUCTORN'S LEXACO WAS MOLL	AND DIAM AVENUE /D O DOV 5	CARIBALDI	07110	Stan Sheldon	(503)	777-0777	1/_EED-94	04-0CT-92	
97/4	MILID	TRIAD EIGHEDY	KO1 A COMMEDCIAL /ROAT RAS	CARIBALDI	97118	Palph Etheridge	(503)	322-0333	20-M4D-02	15-SED-Q2	
7411	NUR	CORKEY'S	1180 PACIFIC DR.	HAMMOND	97121	George I & Jo Adams	(503)	861-2668	28-JAN-92	22-SEP-92	
625	NWR	HENDRIKSEN DOCKS, INC.	HAMMOND BOAT BASIN	HAMMOND	97121	Harold C. Hendriksen	(503)	325-5701	13-JAN-92	21-SEP-92	
10003	NWR	ROGERS. ROSALIE	918 PACIFIC	HAMMOND	97121	Rosalie Rogers	(503)	861-1211	31-MAR-92	22-SEP-92	
1165	NUR	TANSEY PT. FUEL DOCK	N.W. 14TH ST.	HAMMOND	97121	Clayton Johnson	(503)	325-6641	19-MAR-92		
3930	NWR	ARCO SS #815	105 W. BASELINE	HILLSBORO	97123	Sharon Douglas	(310)	407-2603	01-OCT-92	01-0CT-92	
6272	NWR	ASTRO #218	373 S.E. BASELINE	HILLSBORO	97123	John Phimister	(503)	243-7899	09-JAN-92	21-SEP-92	
5822	NWR	BRETTHAUER OIL COMPANY	453 WEST WASHINGTON	HILLSBORO	97123	Andy Bretthauer			17-MAR-92	23-SEP-92	
7551	NWR	ESTBY ENTERPRISES CORP.	1729 N.E. CORNELL ROAD	KILLSBORO	97123	Dwight Estby	(503)	681-0308	13-MAR-92	18-SEP-92	
6710	NWR	HARRIS ENTERPRISES, INC.	118 E. OAK ST.	HILLSBORO	97123	ROB FOREST	(503)	682-3865	15-JAN-92	25-SEP-92	
1905	NWR	HILLSBORO MOBIL CAR WASH	833 E. BASELINE	HILLSBORO	97123	Ron Cain	(503)	357-9711	09-JAN-92	30-SEP-92	06-MAR-92
7819	NWR	LAUREL VALLEY STORE	14025 SW CAMPBELL RD.	HILLSBORO	97123	Charles P. Swarts	(503)	628-2060	31-JAN-92	01-0CT-92	
8203	NWR	PEAVEY OIL CO	874 BASELINE	HILLSBORO	97123	Dwight Estby	(503)	681-0308	05-FEB-92	18-SEP-92	
7655	NWR	PETRICH GENERAL STORE	23915 S.W. SCHOLLS-FERRY	HILLSBORÖ	97123	Matthew B. Petrich	(503)	628-1626	19-MAR-92		
3084	NWR	STANTON CUDAHY LBR CO.	3010 S.E. TV HWY	HILLSBORO	97123	Lloyd Williamson	(503)	648-0831	23-MAR-92	29-SEP-92	
1342	NWR	TEXACO STATION	1259 S.E. TUALATIN VALLEY	HILLSBORO	97123	Dale Andert	(503)	225-4257	09-MAR-92		
8907	NUR	TWIN OAKS AIRPARK	12405 SW RIVER ROAD	HILLSBORO	97123	Robert Stark	(503)	628-2817	30-MAR-92		
8286	NWR	WASHINGTON COUNTY FIRE DI	15200 SW MIDWAY ROAD	KILLSBORO	9/123	Richard Duyck	(503)	648-6728	25-MAR-92	30-SEP-92	
8592	NWK	RALPH MARIIN	9900 NW GLENCOE RD.	NORTH PLAINS	9/124	Raiph Martin	(503)	647-2248	15-JAN-92	15-MAY-92	
2202	MAK	DAVE'S SHELL	640 E TUIDD CTREET	MCMINNVILLE	07120	David E. Williams	(202)	4/2-49/4	24-FEB-92	15 1191 02	
7100	HVK	DWIGHT, 2 MOIO SEKAICE	1720 UTCULAY OO LECT	MCMINNVILLE	07128	DWIGHT STUFF	(503)	4/2"2934	45-14M-02	15-JUN-92	
71/5	LIVD	I AHOU IN CHADIES F	1020 HIGHWAL FF WEST	MCMINNAILE	97128	lere laughlin	(503)	/72-7215	13-JAN-92 13-JAN-02	21-SEP-92	
6662	LIVE	INSTEIN COLLEGE	ONG S RAYER ST	MCMINNVILLE	97128	POR FOREST	(503)	682-3865	27-MAR-92	25-SEP-92	
4899	UVR	MCMINNVILLE GILL #421	1249 SOUTH BAKER ST.	MCMINNVILLE	97128	Janine Rarrett	(206)	624-5900	30-MAR-92	01-0CT-92	
9094	WVR	OASIS SHELL	2151 THREE MILE LANE	MCMINNVILLE	97128	Charles E. Laughlin	(503)	472-7215	13-JAN-92		
8496	WVR	PEAVEY OIL CO.	101 N. HWY. 99W	MCMINNVILLE	97128	Sue Gentry	(503)	472-6138	05-FEB-92	24-SEP-92	
4964	WVR	PEAVEY OIL SOUTH MAC	2005 S.W. HWY. 99W	MCMINNVILLE	97128	Sue Gentry	(503)	472-6138	05-FEB-92	24-SEP-92	
349	WVR	ROADRUNNER SHELL	1347 N. BAKER	MCMINNVILLE	97128	Jere Laughlin	(503)	472-7215	30-MAR-92	21-SEP-92	
1340	WVR	TEXACO STATION	1048 N. HWY. 99 & MCDONAL	MCMINNVILLE	97128	Dale Andert	(503)	225-4257	09-MAR-92		
2301	WVR	WEST VALLEY FARMERS	2741 N. 99W	MCMINNVILLE	97128	Melvin D. Jansen	(503)	472-6154	19-FEB-92	25-AUG-92	
1228	NWR	JOHNSON OIL OF MANZANITA	848 HWY 101	MANZANITA	97130	Clayton Johnson	(503)	325-6641	19-MAR-92	21-AUG-92	
1511	NWR	BAYSIDE GARDENS TEXACO AN	36453 HWY 101	NEHALEM	97131	Stan Sheldon	(503)	842-2172	26-FEB-92	22-0CT-92	
10086	WVR	FOX TOWING & GAS	1902 PORTLAND RD.	NEWBERG	97132	David Fox	(503)	538-4525	02-MAR-92	20-JUL-92	
4259	WVR	LEATHERS OIL CO.	203 E 1ST ST.	NEWBERG	97132	Brent Leathers	(503)	661-1244	10-JAN-92	25-AUG-92	28-JAN-92
9867	WVR	MORRIS TEXACO	101 E 1ST STREET	NEWBERG	97132	Archie & Mary Morris	(503)	538-0512	10-JAN-92	15-SEP-92	
7147	WVR	NEWBERG ARCO	1400 PORTLAND RD.	NEWBERG	9/132	Jere Laughlin	(503)	4/2-7215	15-JAN-92	21-SEP-92	
7340	WVR	PACIFIC PRIDE	2600 E. HANCOCK ST.	NEWBERG	97132	Robert W. Alexander	(503)	558-2515	23-MAR-92	10-JUN-92	
2199	WVR	PEAVEY DIL CO., NEWBERG	204 S.W. HWY. 99W	NEWBERG	9/132	Sue Gentry	(503)	4/2-0138 045-4770	02-158-74 02-158-74	28-5EF-92	
10058	NWK	KIWANDA FISH CO.	33143 WEBB PARK KU.	PACIFIC CITY	9/135	Martene Larter	(503)	202-2042 0160-604	ZU- 1411-02	40-3EF-74 11-6ED-03	
9/29 222	NWK	NESTUCCA COUNTRY	34030 BROUTEN RUAD	DUCAYANA	07174	Devid Mey	(503) (50%)	355-2668	10-14N-92	17-SEP-92	
222	MIK	DVAT MAI CUTAKON	140 H. HWI TOT	KOCKAMAI	71 130	David Nay	(202)	322 ETTO		,, ,,,	

FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE	roi	CA	APP
9235	NUP	SHOREWOOD TRAVEL TRAILER	17600 OCEAN RIVO		07136	W. V. Thurman	(503) 591-8970	10- 144-02		
		SNUGGERUD, K.L.		ROCKAWAY	97136		(503) 355-3173		23-SED-02	
		WILCO FARMERS		ST. PAUL	97137	Thomas E Smith	(503) 845-2257			
		B.P. OF SEASIDE	620 S. HOLLADAY	SEASIDE	07138	Alica N. Codd	(503) 325-1972			
			PACIFIC WAY & COTTAGE ST.	CEADUADT	07138	Ion & Blissett	(503) 738-7383		01 001 72	
1013	NUR	CHEVRON U.S.A., INC 95	1215 S HOLLANAY DR	SEASIDE	07138	Delhert Folk	(503) 738-3656		17-4116-02	
184	NUR	DON'S UNION SERVICE	1616 S. HOLLADAY	SEASIDE	97138	Dan Holt	(503) 738-9917			
6323	NWR	GEARHART TEXACO	GEARHART JUNCTION	GEARHART	97138	Pete & Gavnelle Bourikas	(503) 738-5333	01-APR-92	03-SEP-92	
6572	NWR	GEARHART TEXACO H & S THOMPSON ENT. MAGILL'S	1575 S. HOLLADAY - PO BOX	SEASIDE	97138	Fred E. Nelson	(503) 738-3233		00 01. 71	
5098	NWR	MAGILL'S	2323 S. HOLLADAY	SEASIDE	97138	ROB FOREST	(503) 682-3865	15-JAN-92	30-SEP-92	
		MORGAN MART, INC. (ELDERB		SEASIDE	97138	David L. Morgan	(503) 755-2739	04-FEB-92		
		SEASIDE ARCO		SEASIDE	97138	Clayton Johnson	(503) 325-6641	25-MAR-92	21-AUG-92	
4891	NWR	SEASIDE GULL #411	1883 S. HOLLADAY	SEASIDE	97138	Janine Barrett	(206) 624-5900			
				SEASIDE	97138	Teresa Morrisey	(503) 738-3587			
		HARRIS ENTERPRISES, INC.	120 N. PINE	SHERWOOD	97140	ROB FOREST	(503) 682-3865			
		15 MAIN TEXACO	-15 MAIN AVE.	TILLAMOOK	97141	Stan Sheldon	(503) 842-2172			
407	NWR	B.P. STATION NORTH	3760 HWY 101 N.	TILLAMOOK	97141	Kathleen Brennan	(907) 276-1607			
1456	NWR	BEGEAL, WILLIAM K.	48400 WILSON RIVER HWY: (TILLAMOOK	97141	Linda K. Begeal	(503) 842-8766	06-FEB-92		
3455	NWR	BOB WIRTH MOTORS, INC.	502 MAIN AVE.	TILLAMOOK	97141	Bob Wirth	(503) 842-4459	19-MAR-92		
403	NUR	BRENNAN'S B.P. STATION		TILLAMOOK	97141	John R. Brennan	(503) 842-6355			
		BRENNAN/NELSON	2901 1/2 3RD	TILLAMOOK	97141	Richard Mikesell	(503) 928-3385		07-AUG-92	
		DON'S ARCO	OTH & LIVEN	TILLAMOOK	97141	Robert Nelson	(503) 842-2834			
		DON'S ARCO ERSKINE OIL, INC		TILLAMOOK	97141	Pete & Gaynelle Bourikas Fred E. Nelson ROB FOREST David L. Morgan Clayton Johnson Janine Barrett Teresa Morrisey ROB FOREST Stan Sheldon Kathleen Brennan Linda K. Begeal Bob Wirth John R. Brennan Richard Mikesell Robert Nelson Jayne Sheppard	(503) 842-4721		01-0CT-92	
		GARY & BOB'S CAR CONNECTI		TILLAMOOK	97141	Robert C. Wester	(503) 842-2324			
		KWIK GAS & MART		TILLAMOOK	97141			07-FEB-92		
		LIL RICHEY'S MARKET	16980 WILSON RIVER HWY.	TILLAMOOK	97141	Robert Richey	(503) 842-8820		23-JUL-92	
3567	NWR	RUSSELL CHEVROLET CO., IN	1 MAIN AVE.	TILLAMOOK	97141	Paul Keen	(503) 842-2542			
9137	NWR	SHILO DELI MART SOUTH PRARIE STORE SUNSET SERVICE TILLAMOOK TRASKVIEW STORE VANWEST OIL CO.	2525 N MAIN	TILLAMOOK	97141	David Harris	1-800-288-4201	01-APR-92		
9527	NWR	SOUTH PRARIE STORE	6730 SOUTH PRAIRIE RD.	TILLAMOOK	97141	David Wilks		14-FEB-92	24-SEP-92	
40/ FOOE	NWK	SUNSE! SERVICE	403 PACIFIC AVE.	TILLAMOOK	9/141	Don Averill	(503) 842-5189		70 055 03	
2092 1520	NWK	TOLONAL CTORE	303 PACIFIC	TILLAMOOK	97141	ROB FOREST	(503) 682-3865			
1320	NWK	MANUFET OF CO	26905 TRASK RIVER RD.	TILLAMOOK	9/141	margaret M. Johnson	(503) 842-6035		27-AUG-92	
1004	NWK	VANWEST OIL CO.	2903 3RD ST.	TILLAMOOK	071/7	David Harris	1-800-288-4201		19-3110-02	
		NETARTS GROCERY AND TEXAC DEL & DAVE BODIE CHEVRON		NETARTS WARRENTON	07174	Terrance Joseph Riverman	(503) 842-4621 (503) 325-2282			
		HARTLEY, W C		WARRENTON	071/4	Marold C Handrikean	(503) 325-5701			
7476	NUR	WARRENTON MOBIL SERVICE		WARRENTON	97146	Cary Rechtolt	(503) 325-1972			
		WHEELER MARINA	278 MARINE DRIVE	WHEELER	97147	James W. Neilson	(503) 368-5780			
		MOORES YAMHILL CORNER MAR		YAMHILL	97148	Ronald A. Moore	(503) 662-4403			29-SEP-92
		SENZ AUTO SERVICE	210 S. MAPLE	YAMHILL	97148	Wanda Senz	(503) 662-4770			
		AL-ATTRASH TRADING CO	1967 S.W. FOURTH	PORTLAND	97201	Ed Attrash	(503) 224-5353			
3100	NWR	GREYHOUND LINES INC	2521 SW WATER AVENUE	PORTLAND	97201	Tom Portele	(214) 698-4675			
		HANNA CAR WASH	6869 N LOMBARD	PORTLAND	97201	John E. Shepanek	(503) 265-9274			
		SUNSET FUEL COMPANY, MACA		PORTLAND	97201	BARBARA RILEY	(503) 234-0611		28-SEP-92	
7937	NWR	UNIVERSITY CENTER PARKING	1851 S.W. 5TH AVENUE	PORTLAND	97201	Richard P. Buono	(503) 624-6300			
				PORTLAND	97201	Sterling Griffiths	(503) 224-8618			
		UNOCAL 5664	110 S.W. ARTHUR ST.	PORTLAND	97201	Susan J. Spicer		01-APR-92		
		ANDY'S AUTO SUPPLY, INC	2150 SE POWELL	PORTLAND	97202	Chuck Greenough		21-JAN-92	01-007-92	
		ASTRO #238	4027 S.E. 39TH	PORTLAND	97202		(503) 243-7899		21-SEP-92	
6203	NWR	ASTRO 201	3911 S.E. POWELL	PORTLAND	97202	John Phimister	(503) 243-7899	09-JAN-92	21-SEP-92	



FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	Jim Lyons William Banach John E. Shepanek Virginia L. Montag BARBARA RILEY Victor Seger David C. Ax ROB FOREST Joseph B Kent Terry Pyle David Herman Robert B. Sutherland Howard Carver Jim Pliska ROB FOREST John R. Ellis Dick West Joel Meyer Donald H. Hartvig Brent Leathers Trung Luong Richard Wallace Ron Cain Rodney Lee Dale Andert Richard Wright James E. Thompson Michael A. Fitz ROB FOREST Bob Shores Sandra Gaylord Robert Rash Barbara Johnstone Curtis McCracken Michael A. Fitz ROB FOREST Hal Boyd David L. Morris Rodger W. Jenkins Linda Sevier Michael A. Fitz Michael A. Fitz Michael A. Fitz Tuan Anh Nguyen ROB FOREST Marla J. Gardner Linda Sevier BARBARA RILEY Dale Andert	PHONE		LOI	CA	APP
9353	NUR	HANNA 914		PORTLAND	97202	Jim Lyons	(503)	659-0361	24-FEB-92	30-SEP-92	
301	NWR	HETTERVIG, PAUL A.	7223 S.E. 39TH	PORTLAND	97202	William Banach	(503)	771-5457	22-JAN-92	30-SEP-92	
9345	NWR	J.E.S. & SONS	2920 SE 10TH AVENUE	PORTLAND	97202	John E. Shepanek	(503) 2	265-9274	01-APR-92	14-SEP-92	
297	NWR	MONTAG OIL, INC.	2528 S.E. HOLGATE BLVD.	PORTLAND	97202	Virginia L. Montag	$(503)^{-2}$	234-4301	01-APR-92		
8115	NWR	SUNSET FUEL COMPANY, BURC	2944 S.E. POWELL BLVD.	PORTLAND	97202	BARBARA RILEY	(503)	234-0611	27-FEB-92	28-SEP-92	
			8101 SE 17TH	PORTLAND	97202	Victor Seger	(503)	636-6149	26-FEB-92	17-AUG-92	
8104	NWR	BARNES AUTO UNLOADING FAC	10822 N SWIFT COURT	PORTLAND	97203	David C. Ax	(313)	952-2169	01-APR-92		
- 6/09	NWR	FESSENDEN BP	682U N. FESSENDEN	PORTLAND	97203	ROB FOREST	(503) (582-3865	15-JAN-92	25-SEP-92	
7212	NWK	LUMBARD BY	O101 NODIU LONBARD	PORTLAND	97203	Joseph B Kent	(503)	286-43U3	15-JAN-92	30-SEP-92	
4700 5580	NMK	DODE SERVICE CO	0125 N SDANFORN	PORTLAND PORTLAND	97203	David Horman	(503) (040-4440 086-8721	10-MAK-92	06-0CT-92	
27%	MMIL	FESSENDEN BP LOMBARD BP PLAID PANTRY #83 PORT SERVICE CO. ST. JOHN'S TEXACO UNOCAL 3911 SPACE AGE FUEL MADISON RACK BUG WORKS	ORTS NODTH LONDARD CT	PORTLAND	ファンクス	Pohert P. Sutherland	(503)	257.77/1	14-JAN-92	00-001-92	
062	NUR	INOCAL 3011	7227 N PHILADELPHIA	PORTLAND	97203	Howard Carver	(503) /	5/5-8 321	21-FFR-02	07-0C1-72	
8492	NWR	SPACE AGE FUEL	11214 S.F. POWELL BLVD.	PORTLAND	97204	Jim Pliska	(503) (565-5693	01-APR-92	10-SEP-92	
6600	NWR	MADISON RACK	1717 S.W. MADISON	PORTLAND	97205	ROB FOREST	(503)	682-3865	15-JAN-92	25-SEP-92	
10875	NWR	BUG WORKS -	-5909 SE 72ND	PORTLAND	97206	John R. Ellis	(503)	591-8757	31-MAR-92		
5503	NWR	DICK WEST AUTO & MARINE	6013 SE 82ND	PORTLAND	97206	Dick West	(503)	774-4930	22-JAN-92	28-SEP-92	
9120	NWR	FOSTER RENTALS	5100 SE FOSTER	PORTLAND	97206	Joel Meyer	(805)	492-9195	30-MAR-92		
6110	NWR	FRANKO #94	7474 S.E. 72ND	PORTLAND	97206	Donald H. Hartvig	(503) 2	295-2668	01-APR-92		
4254	NWR	LEATHERS OIL CO.	1717 S.W. MADISON 5909 SE 72ND 6013 SE 82ND 5100 SE FOSTER 7474 S.E. 72ND 5434 S.E. 72ND 7210 S.E. FLAVEL ST. 6503 SE 52ND 5727 S.E. POWELL BLVD. 5301 S.E. 52ND 4228 S.E. WOODSTOCK 1909 W. BURNSIDE 1613 N.W. KEARNEY 1703 N.W. 16TH 3037 N.W. 29TH AVE. 2110 NW LOVEJOY ST. 2169 N.W. THURMAN ST. 3125 N.W. 35TH AVE. 6215 N.W. 35TH AVE. 6215 N.W. 29TH 3147 N.W. FRONT ST.	PORTLAND	97206	Brent Leathers	(503)	661-1244	10-JAN-92	25-AUG-92	30-JAN-92
7841	NWR	LUONG'S TEXACO SERVICE	7210 S.E. FLAVEL ST.	PORTLAND	97206	Trung Luong	(503)	774-5705	23-MAR-92	22-DEC-92	
9132	NWR	NICK'S TEXACO	6503 SE 52ND	PORTLAND	97206	Richard Wallace			12-FEB-92	09-JUN-92	
1917	NWR	POWELL BP	5727 S.E. POWELL BLVD.	PORTLAND	97206	Ron Cain	(503)	357-9711	09-JAN-92	30-SEP-92	21-FEB-92
684	NWR	SHO'S AUTO REPAIR	5301 S.E. 52ND	PORTLAND	97206	Rodney Lee	(503)	774-2115	23-MAR-92		
1330	NWR	TEXACO STATION	4228 S.E. WOODSTOCK	PORTLAND	97206	Dale Andert	(503) 7	225-4257	09-MAR-92	06 4110 00	
7540 E177	NWK	DADIO CAR CO	1909 W. BURNSIDE	PORTLAND	97209	Kichard Wright	(503) (280-9021 224 2710	06-FEB-92	06-AUG-92	
2000	NWK	ETANY P HORRIS CO	1013 N.W. KEAKNET	PORTLAND	97209	James E. Inompson	(503)	220-7319 202-1254	27-MAK-92	01001-02	
7617	JWN	STARK & NORRIS CO	3037 N U 20TH AVE	PORTLAND DODTI AND	97210	DOD FORCET	(503) (203-1230 482-3845	21-3AN-92	01-051-92	
4550	NUR	ROR SHORES RP	2110 NU LOVEJOY ST.	PORTLAND	97210	Rob Shares	(,0,0,)	3002	14-14N-92	22-SED-02	
5103	NUR	CARSON OIL CO. INC.	2169 N.W. THURMAN ST.	PORTLAND .	97210	Sandra Gaylord	(503)	224-8500	23-JAN-92	01-0CT-92	
3066	NUR	CARSON DIL COMPANY	3125 N.W. 35TH AVE.	PORTLAND	97210	Sandra Gaylord	(503)	224-8500	23-JAN-92	11-SEP-92	
3494	NUR	J & H BP SERVICE	6215 N.W. ST. HELENS RD.	PORTLAND	97210	Robert Rash	(503)	845-2261	23-MAR-92	18-JUN-92	
1572	NWR	L & J HYDRAULICS CO.	2150 N.W. 29TH	PORTLAND	97210	Barbara Johnstone	(503) 2	248-0228	31-MAR-92		
8085	NWR	MCCRACKEN MOTOR FREIGHT,	3147 N.W. FRONT ST.	PORTLAND	97210	Curtis McCracken	(503) 2	222-4291	31-MAR-92		
1050	NWR	SPECIAL ASPHALT PRODUCTS.	3537 N.W. ST. HELENS RD.	PORTLAND	97210	Michael A. Fitz	(503) 2	283-1256	21-JAN-92	01-0CT-92	
6630	NWR	JARRETT	5829 N.E. UNION AVE. 2500 N.E. COLUMBIA BLVD. 1241 N.E. MARINE DR.	PORTLAND	97211	ROB FOREST	(503)	682-3865	15-JAN-92	30-SEP-92	
7463	NWR	LARSEN OIL COMPANY	2500 N.E. COLUMBIA BLVD.	PORTLAND	97211	Hal Boyd	(503) (287-8310	14-JAN-92	12-JUN-92	
7669	NWR	PORTLAND YACHT CLUB	1241 N.E. MARINE DR.	PORTLAND	9/211	David L. Morris	(503) 2	285-1922	23-MAR-92		
7183	NWR	RODGERS MARINE ELECTRONIC	3417 N.E. MARINE DRIVE	PORTLAND	97211	Rodger W. Jenkins	(503) 2	287-1101	20-MAR-92	20 050 02	
7038	NWK	SEVIER'S SERVICE	TIUI NE ALBERTA	PORTLAND	97211	Linda Sevier	(503) 4	20/-U202 207 1254	23-MAK-92	28-3EP-92	
20/1	NWR	STAR UIL CO.	/501 SE 17TH	PORTLAND	07211	Michael A. Fitz	(503)	203-1230 207-1354	21-JAN-92	01-001-92	
2491	NWK	STAR OIL CO.	1101 NE ALBERTA 2357 S.E. 50TH 4501 SE 17TH 12301 N. FORCE 1405 N.E. KILLINGSWORTH 8100 N.E. UNION	PORTLAND	07211	Michael A. Fitz	(503)	203-1254	21-JAN-92	01-061-92	
02U/ 8517	NWK	THAN AUTO CEDVICE	1630) N. PUKUE	PORTLAND	07211	Tuen Ash Norman	(503)	203 - 1430 288 - 3 027	24-MVD-03	22-444-02	
6540	NWK	INTON AVE CAPRIOCK	8100 N.E. NILLINGSWUKIN	PORTLAND	07211	POR FOREST	(503) 4	582-3767 582-3765	16- IAN-02	25-SED-02	
5630	אאא	MESTERN CONTAINED TRANSDO	1050 NE COLUMBIA BLVD (11	PORTLAND	07211	Macla 1 Gardner	(208)	377-0024	01-APR-92	24-SEP-92	
		SEVIER #2		PORTLAND	97212	Linda Sevier	(503)	287-0262	23-MAR-92	28-SEP-92	
		SUNSET FUEL COMPANY, AMER	16 N.E. SHAVER	PORTLAND	97212	BARBARA RILEY	(503)	234-0611	27-FEB-92	28-SEP-92	
		TEXACO STATION		PORTLAND	97212	Dale Andert	(503)	225-4257	09-MAR-92		

		FAC NAME		CITY	ZIP	CONTACT	PHONE	LOI	CA	APP
8435 3931	NWR NWR	A-1 OIL CO. ARCO SS #873 BP MART ERVIN R. ROBERSON	1013 N.E. 62ND AVE. 5710 N.E. FREMONT	PORTLAND PORTLAND	97213 97213	Robert F. & Clara Epley Sharon Douglas John Kim Ervin R. Roberson George Bradish Dale Andert ROB FOREST L Kirk French James Caputo Sandra Gaylord Richard Morelli Jerome A. Groth Jason Powell Robert Vincent Jim Pliska William B. Frank Dale Andert Ron Cain Tuyen Tran Garry Small John Phimister Garry Small John Phimister Garry Small Barry J. Desbiens Richard Wright Richard Wright Richard Wright Marla J. Gardner John Phimister Ira Nies Frank Gillespie Joseph Dennis Richard Wright Fred Jubitz Thomas McKinney ROB FOREST Richard Wright Jason Powell Joseph Rak Lisa Lombard Carol Luckeroth Michael A. Fitz Eddie L. Hendrikson D. James Bao Randall Thomas ROB FOREST Jason Powell Dwight Estby ROB FOREST Susan E. Brown Richard Brinkley	(206) 835-3528 (310) 407-2603	10-FEB-92 01-OCT-92	01-OCT-92	
10414	NWR	BP MART	6007 NE GLISAN	PORTLAND	97213	John Kim	(503) 232-7415	16-JAN-92	21-SEP-92	
7597	NWR	ERVIN R. ROBERSON	5820 N.E. GLISAN ST.	PORTLAND	97213	Ervin R. Roberson	(503) 234-2581	06-FEB-92	29-SEP-92	
9346	NWK	PACIFICORP CREDIT INC	8104 NE GLISAN	PORTLAND	97213	George Bradish	(503) 274-6433	01-APR-92	29-SEP-92	
		TEXACO STATION		PORTLAND	97213	Dale Andert	(503) 225-4257	09-MAR-92	25 050 02	
7055	NWR	7TH & ALDER CARDLOCK	635 S.E. 7TH	PORTLAND	97214	ROB FORESI	(503) 682-3865	16-JAN-92	25-SEP-92	
8083	NWK	BURNS BROS, INC. CAPUTO SHELL SERVICE CARSON OIL CO, INC. MORELLI'S TEXACO MR CAR WASH	621 S.E. UNION AVE.	PORTLAND PORTLAND	07214	L Kirk French	(503) 230-7393	20"MAK"92	0/-650-03	
3475	NWK	CAPOLO SUELL SEKAILE	1208 S E RIU ST	PORTLAND	0721/	Sandra Gaviord	(503) 771-7609	23-JAN-92	11-SEP-92	
414	NUR	MORELLI'S TEXACO	3966 S.E. HAWTHORNE BLVD.	PORTLAND	97214	Richard Morelli	(503) 234-8363	23-JAN-92	14-SEP-92	
9354	NUR	MR CAR WASH	510 SE GRAND AVENUE	PORTLAND	97214	Jerome A Groth	(503) 235-9740	24-MAR-92	25-SEP-92	
6049	NWR	POWELL DISTRIBUTING CO	734 S.E. MORRISON	PORTLAND	97214	Jason Powell	(503) 289-5558	28-FEB-92	16-SEP-92	
8895	NWR	RACE CENTRAL. INC	2304 SE BELMONT	PORTLAND	97214	Robert Vincent	(503) 234-2525	01-APR-92	22-SEP-92	
8011	NWR	SPACE AGE FUEL	1237 S.E. HAWTHORNE BLVD.	PORTLAND	97214	Jim Pliska	(503) 665-5693	17-JAN-92	30-SEP-92	
3995	NWR	STAR OIL CO.	6410 N.E. SANDY BLVD.	PORTLAND	97214	William B. Frank	(503) 287-5910	23-MAR-92		
4881	NWR	TEXACO STATION	3840 S.E. STARK ST.	PORTLAND	97214	Dale Andert	(503) 225-4257	09-MAR-92		
1921	NWR	82ND AVE BP	9 S.E. 82ND AVENUE	PORTLAND	97215	Ron Cain	(503) 357-9711	09-JAN-92	30-SEP-92	21-FEB-92
8082	NWR	TRAN'S AUTO SERVICE	4810 S.E. BELMONT	PORTLAND	97215	Tuyen Tran	(503) 232-6354	31-MAR-92		
5826	NWR	POWELL DISTRIBUTING CO., RACE CENTRAL, INC SPACE AGE FUEL STAR OIL CO. TEXACO STATION 82ND AVE BP TRAN'S AUTO SERVICE VOLVO SERVICE CENTER ASTRO #203	5/10 E. BURNSIDE	PORTLAND	9/215	Garry Small	(503) 7/1-7222	31-MAR-92	24 050 02	
6208	NWR	ASTRO #203 GARRY SMALL MAX MART & DELI PANOCO INC #31 SHELL STATION #44 ASTRO #253 ASTRO QUIK MART #204	420 S.E. 122ND 1940 S.E. 82ND	PORTLAND	9/216	John Phimister	(503) 243-7899	09-JAN-92	21-SEP-92	
7638	NWK	MAY MADE & DELY	1940 S.E. 82NU	PURILAND	97216	Garry Small	(503) //1-/222	31-MAK-92	17_ccn_02	
9001	NWK	DANGED THE #71	1017/ e e etabl etbeet	- PORTLAND	07214	Barry J. Desotens	(503) 000-9024	10-14M-77	17-9EP-92	
7570	NWK	CHCII CLVILUM #\\	ADD C E ROND AVE	PORTLAND	07216	Pichard Wright	(503) 200-9021 (503) 286-0621	00-LEB-35	06-AUG-92	
5665	MUR	ASTRO #253	2809 N PORTIANO RIVO	PORTLAND	97217	Maria I Gardner	(208) 377-0024	01-APR-92	20-SEP-02	
6211	NUR	ASTRO GLIK MART #204	7510 N. INTERSTATE	PORTLAND	97217	John Phimister	(503) 243-7899	09-JAN-92	21-SEP-92	
6691	NWR	COLUMBIA RIVER YACHT CLUB	201 N.E. TOMAHAWK ISLAND	PORTLAND	97217	Ira Nies	(503) 289-6561	14-FEB-92	30-SEP-92	
		GILLESPIE, FRANK	5429 N. INTERSTATE	PORTLAND	97217	Frank Gillespie	(503) 289-3877	09-MAR-92	24-SEP-92	
		INTERSTATÉ RENTALS, INC.		PORTLAND	97217	Joseph Dennis	(503) 285-6683	21-JAN-92	25-AUG-92	
		JANTZEN BEACH SHELL		PORTLAND	97217	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
		JUBITZ TRUCK STOP	10210 NORTH VANCOUVER WAY	PORTLAND	97217	Fred Jubitz		23-MAR-92	29-SEP-92	
		MCKINNEY'S SERVICE STATIO		PORTLAND	97217	Thomas McKinney	(503) 286-0051	19-MAR-92		
		METROFUELING, INC.		PORTLAND	97217	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
				PORTLAND	97217	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
6063	NWR	POWELL DISTRIB. CO., INC.	8419 N. DENVER AVENUE	PORTLAND	97217	Jason Powell	(503) 289-5558	28-FEB-92	16-SEP-92	
		POWELL DISTRIB. CO., JUNC RAK AUTOMOTIVE		PORTLAND	9/21/	Jason Powell	(503) 28Y-3338	70-LEB-A7	10-255-AS	
3/27	NWK	RAK AUTOMOTIVE RYDER TRUCK RENTAL, INC.		PORTLAND	07217	lisa Lombard	(305) 200-2029	04-FEB-92	01-001-92	
230	NUR	SKOLETELD FUEL CO	2103 UTILIS RIVO	PORTLAND	97217	Carol Luckeroth	(503) 639-3063	26-MAR-92	01 001 72	
7854	NUR	SKOLFIELD FUEL CO. STAR OIL CO.	8445 N. KERBY	PORTLAND	97217	Michael A. Fitz	(503) 283-1256	21-JAN-92	01-0CT-92	•
10753	NUR	WINMAR OF JANTZEN BEACH	700 N HAYDEN ISLAND DR	PORTLAND	97217	Eddie L. Hendrikson	(503) 223-4500	01-APR-92		
8835	NUR	BP STATION MART		PORTLAND	97218	D. James Bao	(503) 281-3179	18-MAR-92	13-MAY-92	
2596	NWR	COLLINS OIL CO DBA SEAPOR		PORTLAND	97218	Randall Thomas	(206) 682-1264	10-MAR-92	01-OCT-92	
6634	NWR	KILLINGSWORTH	4205 N.E. KILLINGSWORTH	PORTLAND	97218	ROB FOREST	(503) 682-3865	15-JAN-92	30-SEP-92	
6061	NUR	POWELL DISTRIBUTING CO.,		PORTLAND	97218	Jason Powell	(503) 289-5558	28-FEB-92	16-SEP-92	
3901	NWR	BARBER TEXACO	8604 S.W. BARBUR	PORTLAND	97219	Dwight Estby	(503) 681-0308	13-MAR-92	18-SEP-92	
8424	NWR	CAPITAL & BARBUR CARDLOCK	10000 S.W. BARBUR BLVD.	PORTLAND	97219	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
922	NWR	HANDY ANDY'S AUTO REPAIR	7991 S.W. CAPITOL HWY.	PORTLAND	97219	Susan E. Brown	(503) 246-8497	09-MAR-92	01-OCT-92	
2426	NWR	IMPORT WELCOME	4480 S.W. GARDEN HOME ROA	PORTLAND	97219	Richard Brinkley	(503) 644-1786	30-MAR-92		



_	FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT Lee Powell Jr. Richard Wright Jeffrey S. Jennings Dale Andert Dale Andert Lindy Cerar Michael A. Fitz Sandra Gaylord Odette A. Robertson Richard Wright ROB FOREST Brent Leathers Michael McCarter Stephen J. Reid ROB FOREST Dale Andert Dale Andert Richard Wright Richard Wright Richard Wright Terry Pyle John Phimister Gordon Olson Donald W. Rognon Donald W. Rognon Donald H. Hartvig John E. Shepanek ROB FOREST Gerald G. Stutzman Jim Arendell Barry Naone Allen L. Olson Richard Wright Richard Wright Richard Wright Richard Wright Dale Andert	PHONE		LOI	CA	APP
	10066	NWR	KAADY CARWASH SHELL STATION #36 STAFF JENNINGS INC TEXACO STATION TEXACO STATION	7392 S.W. BARBUR BLVD	PORTLAND	97219	Lee Powell Jr.	(503)	289-5558	28-FEB-92		
	7537	NWR	SHELL STATION #36	10060 S.W. BARBUR BLVD.	PORTLAND	97219	Richard Wright	(503)	286-9621	06-FEB-92	06-AUG-92	
	3105	NWR	STAFF JENNINGS INC	8240 SW MACADAM AVENUE	PORTLAND	97219	Jeffrey S. Jennings	(503)	244-7505	25-MAR-92	31-AUG-92	
	859	NWR	TEXACO STATION	4419 S.W. MULTNOMAH BLVD.	PORTLAND	97219	Dale Andert	(503)	225-4257	09-MAR-92		
	851	NWR	TEXACO STATION		PORTLAND	97219	Dale Andert	(503)	225-4257	09-MAR-92		
			ALAMO RENT A CAR # 166	6935 NE 82ND AVE	PORTLAND	97220	Lindy Cerar	(305)	522-0000	21-FEB-92		
			BOB BROWN TIRE CENTER		PORTLAND	97220	Michael A. Fitz	(503)	283-1256	21-JAN-92	01-0CT-92	
	6371	NWR	CARSON OIL CO	9920 N.E. SANDY	PORTLAND	97220	Sandra Gaylord	(503)	224-8500	23-JAN-92	11-SEP-92	
	1089	NWR	CHEVRON U.S.A., INC 95	10215 N.E. HALSEY	PORTLAND	97220	Odette A. Robertson	(503)	227-0683	26-MAR-92		
	7600	NWK	FRESHNER, CECIL	1327 N.E. 82ND AVENUE	PORTLAND	97220	Richard Wright	(503)	286-9621	06-158-92	06-AUG-92	
	(207	NWK	HARRIS ENTERPRISES, INC.	10202 NE 0440Y	PORTLAND	97220	ROB FOREST	(503)	682-3865	15-JAN-92	25-SEP-92	70 03
	4274	NWK	LEATHERS UIL CU.	LOCAL NE SANDI	PORTLAND	97440	Brent Leatners	(503)	001-1244	10-JAN-92	25-AUG-92	30-JAN-92
	4/10	NWK	DIONEED ON	0070 N.E. JUZNU	PORTLAND	07220	Michael McLarter	(505)	252-0234	23-JAN-92	24-2EF-92	
	4410	NWK	STANDA BIND CABDIOCA	11/24 N.C. CANDY DIAM	PORTLAND	07220	non concer	(503)	401 70/F	19-MAK-92	05-JUN-92	
	9621	NWR	TEVACO STATION	11450 M.E. SANDI BEAD.	PORTLAND	07220	NOD FURES!	(503)	2017 / 2017	10-JAN-92	23-25P-92	
	1350	NWK	TEVACO STATION	10131 N E CANDY DIVID	DODTI AND	07720	Date Andert	(202)	225-1257	09-MAK-92		
	7538	NUR	CUCHDAN CEDAID E	5215 S U REAVERTON-HILLS	DODTI AND	07221	Dichard Unight	(503)	284-0421	05-MAK-32	06-4110-02	
	7536	NUR	CAPIRALDI ALREPT	3520 S U PATTON	DORTLAND	07221	Pichard Uright	(503)	284-0621	UY-EEB-03	06-AUG-92	
	4763	NUD	DIATE PANTRY #162	1817 SU SEVETUE BLVD	DODTI AND	07221	Tarry Dyla	(503)	666-6266	16-MAD-02	30-000-92	
	6277	NUR	ASTRO #215	11010 S.E. MCLOUGHLIN	MILMALIKIE	97222	John Phimister	(503)	2/3-7800	10 MAK 72	21-SEP-02	
	6237	NUR	ASTRO #239	12479 S.F. 82ND	MITWAUKTE	97222	John Phimister	(503)	243-7899	09 JAN 92	21-SEP-92	
	3451	NWR	DBA OLSON BROS. MILWAUKIE	10700 S.E. MCLOUGHLIN BLV	MILWAUKIE	97222	Gordon Olson	(503)	659-5141	21- IAN-92	18-AUG-92	
	1747	NWR	FLYING J TRAVEL PLAZA	1327 N.E. 82ND AVENUE 3442 N.E. 82ND 10202 NE SANDY 4505 N.E. 102ND 9270 N.E. GLISAN 11426 N.E. SANDY BLVD	MILWAUKIE	97222	Donald W. Rognon	(801)	734-6400	28-FEB-92		
	6008	NWR	FRANKO #53	10425 S.E. 42ND	MILWAUKIE	97222	Donald H. Hartvig	(503)	295-2668	01-APR-92		
	9355	NWR	HANNA 905	3063 SE HARRISON	MILWAUKIE	97222	John E. Shepanek	(503)	265-9274	01-APR-92		
	6547	NWR	HARRIS ENTERPRISES, INC.		MILWAUKIE	97222	ROB FOREST	(503)	682-3865	15-JAN-92	25-SEP-92	
	678	NWR	JERRY'S MILWAUKIE BP	6140 S.E. KING RD.	MILWAUKIE	97222	Gerald G. Stutzman			27-JAN-92	02-SEP-92	
	635	NWR	JIM ARENDELL'S ARCO SERVI	4140 S.E. HARRISON	MILWAUKIE	97222	Jim Arendell	(503)	659-9821	05-MAR-92	16-JUL-92	
	4773	NWR	MINIT-LUBE #1117	14790 S.E. MCLOUGHLIN BLV 14115 MCLOUGHLIN BLVD.	MILWAUKIE	97222	Barry Naone	(503)	731-6487	30-MAR-92	01-0CT-92	
	4375	NWR	OLSON BROTHERS TEXACO	14115 MCLOUGHLIN BLVD.	MILWAUKIE	97222	Allen L. Olson	(503)	659-5141	21-JAN-92	18-AUG-92	
	7593	NWR	PANOCO INC #51	13780 S.E WEBSTER ROAD	MILWAUKIE	97222	Richard Wright	(503)	286-9621	06-FEB-92	06-AUG-92	
	5053	NWR	PANOCO, INC	13780 S.E WEBSTER ROAD 14811 S.E. MCLOUGHLIN BLV	MILWAUKIE	97222	Richard Wright	(503)	286-9621	06-FEB-92	06-AUG-92	
	1374	NWR	TEXACO SERVICE STATION	515 N.E. 82ND	PORTLAND	97222	Dale Andert	(503)	225-4257	09-MAR-92		
	1339	NWR	TEXACO STATION	10550 S.E. 42ND ST. 18122 S.E. MCLOUGHLIN BLV 16650 S.W. 72ND AVE. 12885 S.W. PACIFIC HWY. 11440 S.W. PACIFIC HWY.	MILWAUKIE	97222	Dale Andert	(503)	225-4257	09-MAR-92		
	6521	NWR	TEXACO STATION	18122 S.E. MCLOUGHLIN BLV	MILWAUKIE	9/222	Dale Andert	(503)	225-4257	09-MAR-92		
	3605	NWK	72ND AVE CARDLOCK	1005U S.W. /ZND AVE.	TUALATIN	97223	ROB FORES!	(503)	682-3865	16-JAN-92	30-SEP-92	
	61/6	NWK	ASIKU #225	12885 S.W. PACIFIC RWY.	LIGARD	97223	John Phimister	(503)	243-7899	09-JAN-92	21-SEP-92	
	405	NWK	FULLERS MUBIL	1144U S.W. PACIFIC HWT.	PUKILAND	97222	Jerry Futter	/E073	207 4254	07-JAN-92	22-5EP-92	
			KNEZ BUILDING MATERIAL CO		TIGARD	91443	Michael A. Fitz	(503)	470 (E10	21-JAN-92	01-061-92	
			NINE-T-NINE TOWING, INC.		TIGARD	07227	Ray Hottarber	(503)	039-0340	2/-MAK-92	29-3EP-92	
	7/20	NWK	PANOCO, INC #60		PORTLAND	07227	kichard wright	(202)	200-7021	00-768-72	00-AUG-92	
	3447	NWK	KIDER INUCK KENIAL, INC.	18045 S.W. LOWER BOONES F	TICADD	07227	Dolo Andont	(507)	JY3-3470	01-828-92	01-061-92	
				11290 S.W. BULL MOUNTAIN	TICADO	71223	Dala Andert	(202)	225~/257	OO-MAR-YZ		
	1324	NWK	TEVACO STATION	11834 S.W. PACIFIC HWY.	TICADO	07227	Dale Andert	(203)	225-4631	07-MAD-02		
	040 0751	NWK	TEVACO STATION	8725 S LI WALL BLVD	TICARD	07223	Dale Andert	(503)	225-4257	07-14K-72		
	2771	AH.IA GLIIA	TICADA ADEA	12675 C U MAIN CIDEST	TIGADO	07223	Dennie Thompson	(503)	620-2184	07-14N-92	24-AHG-92	
	101R	MUD	TIGARD RP	17997 S.W. LOWER BOONES F 8725 S.W. HALL BLVD. 12475 S.W. MAIN STREET 13970 S.W. PACIFIC HWY	TIGARD	97223	Ron Cain	(503)	357-9711	07 JAN-92	30-SEP-92	06-MAR-92
	6574	NUR	TIGARD PACIFIC HIGHWAY CA	13295 S.W. PACIFIC HIGHWA	TIGARD	97223	ROB FOREST	(503)	682-3865	16-JAN-92	25-SEP-92	
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FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	Gary Dent Gary Dent Richard Wright John & Marietta Smets Dale Andert Ron Cain ROB FOREST Dwight Estby William E. Hayes, S. J. Richard Wright Richard P. Buono Richard Wright Dale Andert Dale Andert David Muta Richard P. Buono Chris Jansen John Phimister Dale Andert Milton Brown Emmett Wesley Nancy Scheewe Ron Cain Richard Wright Howard Carver	PHONE		roi	CA	APP
1124	NWR	UNOCAL #6386	8740 S.W. HALL BLVD.	PORTLAND	97223	Gary Dent	(503) 5	24-9201	01-APR-92		
9864	NWR	UNOCAL 4889	14030 SW PACIFIC HWY	TIGARD	97223	Gary Dent	(503) 5	24-9201	01-APR-92		
			16200 SW PACIFIC HWY SUIT	TIGARD	97224	Richard Wright	(503) 2	86-9621	06-FEB-92	06-AUG-92	
9795	NWR	SMETCO	6830 S.W. BONITA ROAD	PORTLAND/TIG	97224	John & Marietta Smets	(503) 6	20-1604	30-MAR-92		
1325	NWR	TEXACO STATION	11465 S.W. PACIFIC AVE.	TIGARD	97224	Dale Andert	(503) 2	25-4257	09-MAR-92		
10537	NWR	B. P. OIL SERVICE STATION	7200 SW BEAVERTON-HILLSDA	PORTLAND	97225	Ron Cain	(503) 3	57-9711	09-JAN-92	30-SEP-92	24-FEB-92
7165	NWR	HARRIS ENTERPRISES, INC.	10415 S.W. PARKWAY	PORTLAND	97225	ROB FOREST	(503) 6	82-3865	15-JAN-92		
		HILLSDALE TEXACO	6361 SW CAPITAL HWY	PORTLAND	97225	Dwight Estby	(503) 6	81-0308	13-MAR-92	18-SEP-92	
		HILLSDALE TEXACO JESUIT HIGH SCHOOL PANOCO INC #57	9100 SW BEAVERTON HILLSDA	BEAVERTON	97225	William E. Hayes, S. J.	(503) 2	92-7894	30-MAR-92		
7541	NWR	PANOCO INC #57	10275 S.W PARKWAY	PORTLAND	97225	Richard Wright	(503) 2	86-9621	06-FEB-92	06-AUG-92	
		RALEIGH HILLS FLYING 'A'	7550 BEAVERTON HILLSDALE	PORTLAND	97225	Richard P. Buono	(503) 6	24-6300	30-MAR-92		
		SHELL STATION #64	9085 S.W. BEAVERTON-HILLS	PORTLAND	97225	Richard Wright	(503) 2	86-9621	06-FEB-92	06-AUG-92	
			9775 S.W. WILSHIRE	PORTLAND	9/225	Dale Andert	(503) 2	25-4257	09-MAR-92		
			12805 N.W. CORNELL ROAD	PORTLAND	97225	Dale Andert	(503) 2	25-4257	09-MAR-92		
		THE LITTLE STORE	8998 S.W. LEAHY RD.	PORTLAND	97225	David Muta	(503) 2	92-0203	30-MAR-92		
			.5065 S.W. SCHOLLS FERRY	PORTLAND	97225	Richard P. Buono	(503) 6	24-6300	30-MAR-92		
		PRIESTLEY OIL & CHEMICAL	2429 N. BORTHWICK AVE.	PORTLAND	97227	Chris Jansen	(503) 2	88-5294	26-MAR-92		20-MAY-92
			1111 N.W. 21ST	PORTLAND	9/228	John Phimister	(503) 2	43-7899	09-JAN-92	21-SEP-92	
		TEXACO STATION	7455 S.W. GARDEN HOME RD.	PORTLAND	97228	Date Andert	(503) 2	25-4257	09-MAR-92		
3197	NWK	AL TAYLOR'S TIRE FACTORY,	301 N.W. MURRAY RUAD	PORTLAND	97229	Milton Brown	(503) 6	43-5/56	01-APR-92		
7902	NWK	CHEVRON U.S.A., INC 94	10400 M.H. CORNELL RD.	PORTLAND	97229	Emmett Wesley	(503) 6	43-2174	10-JAN-92	34 655 03	
		CORNELL SHELL MURRAY ROAD BP	10690 N.W. CORNELL	PORTLAND	97229	Nancy Scheewe	(203) 6	40-294U	18-MAR-92 09-JAN-92		10 101 03
			120 N.W. MURRAY RD. 905 N.W. MURRAY ROAD	PORTLAND DODELAND	07220	Ron Calli Biobood Unight	(202) 3	21-7111 94-0431	06-FEB-92		12-JUN-92
		SKYLINE'S GERMANTOWN STOR	9250 N II CEVITHE	PORTLAND PORTLAND	07220	Valland Comics	(503) 2	/5-9021	13-JAN-92		00_ccp_02
			18031 S.E. STARK	PORTLAND	07220	Dala Andert			09-MAR-92	14-800-72	U9-3EF-94
47/0	kis ara	TEVACO OTATION	2/00 H H 405TH	PORTLAND	07220	Dale Andert			09-MAR-92		
4354	MILID		16531 N.E. SANDY BLVD	PORTLAND	07230	Pohont B. Cuthorland			19-MAR-92	01-007-02	
2175	MUD	STACO IEXAGO	16211 N.E. GLISAN ST.	PORTLAND	97230	Dhil & Fugenie Keene			01-APR-92		
2000	NUR	FRANKO #58	11130 N.W. ST. HELENS	PORTLAND	07231	Donald W Hartvin			01-APR-92	01 001 72	
2320	NUR	LARSON'S MODRAGE	14426 NW LARSON RD.	PORTLAND	07231	lanet ! Hirech			23-MAR-92	20-050-02	
7512	NUR	LINNTON RP SERVICE STATIO	11330 N.W. ST. HELENS RD.	PORTLAND	07231	locanh & Vant	(503) 2	86-4303	15-JAN-92	30-SED-02	
		ALBINA FUEL CO.	3246 N.E. BROADWAY	PORTLAND	97232	Cliff Arntson			19-MAR-92	30 02, 72	
			3940 NE SANDY BLVD.	PORTLAND	97232	Marty & Patty Peets			13-JAN-92	28-SEP-92	
			1525 N.E. UNION AVE.	PORTLAND	97232	Richard Wright	(503) 2	86-9621	06-FEB-92	06-AUG-92	
		PANOCO INC #43	1231 N.E. BROADWAY	PORTLAND	97232	Richard Wright	(503) 2	86-9621	06-FEB-92	06-AUG-92	
2336	NWR		226 NE GRAND	PORTLAND	97232	Vince O. Powell	(503) 2	33-4889	25-MAR-92		
375	NWR	SPACE AGE FUELS	7908 N.E. UNION AVE.	PORTLAND	97232	Jim Pliska			01-APR-92	10-SEP-92	
1377	NWR	TEXACO SERVICE STATION	15 N.E. BROADWAY	PORTLAND	97232	Dale Andert			09-MAR-92		
1320	NWR	TEXACO STATION	7433 N. INTERSTATE	PORTLAND	97232	Dale Andert	(503) 2	25-4257	09-MAR-92		
		TEXACO STATION	519 N.E. BROADWAY	PORTLAND	97232	Dale Andert			09-MAR-92		
1066	NWR	UNOCAL 5451	15 N.E. UNION	PORTLAND	97232	George Faddoul			01-APR-92		
4302	NWR	LEATHERS OIL CO.	18145 S.E. DIVISION	PORTLAND	97233	Brent Leathers	(503) 6	61-1244	10-JAN-92	25-AUG-92	28-JAN-92
7571	NWR	SHELL STATION #45	16222 S.E. STARK ST.	PORTLAND	97233		(503) 2		06-FEB-92		
5057	NWR	SPACE AGE FUEL	12990 S.E. STARK	PORTLAND	97233	Ronald Gustafson	(503) 2		01-APR-92		
		STARK STREET BP	16150 S.E. STARK	PORTLAND	97233	Barry J. Desbiens			16-JAN-92	28-SEP-92	
		TEXACO STATION	2450 S.E. 122ND	PORTLAND	97233	Dale Andert			09-MAR-92		
		TEXACO STATION	13018 S.E. STARK	PORTLAND	97233	Dale Andert			09-MAR-92		
		THRIFTY AUTO	605 S.E. 122 AVE.	PORTLAND	97233	ROB FOREST			16-JAN-92		70 1411 00
4260	NWR	LEATHERS OIL CO.	16331 S.E. POWELL	PORTLAND	97236	Brent Leathers	(503) 6	61-1244	10-JAN-92	25-AUG-92	20-14M-75
		The second secon									

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APP CONTACT PRICE LOI	FAC 1D	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE	LOI	CA	APP
8379 NAM SPACE AGE FUEL 1379 NAM SPACE AGE FUEL 1370 NAM SPACE AGE FUEL 1371 NAM SPACE AGE FUEL 1372 NAM SPACE AGE FUEL 1373 NAM SPACE AGE FUEL 1374 NAM SPACE AGE FUEL 1374 NAM SPACE AGE FUEL 1375 NAM SPACE AGE FUEL 1375 NAM SPACE AGE FUEL 1376 NAM SPACE AGE FUEL 1377 NAM SPACE 1377 NAM SPACE AGE FUEL 1377 NAM SPACE AGE FUEL 1377 NAM SPACE 1377 NAM SPACE AGE FUEL 1377 NAM SPACE 1377 NAM SPACE AGE FUEL 1377 NAM SPACE 137	2481	NWR	NICK'S TEXACO	12220 SE FOSTER ROAD	PORTLAND	97236	Nick Khoury	(503) 760-6030	06-MAR-92	01-0CT-92	
1379 NAR TEXACO SERVICE STATION 3515 S.E. 122MD PORTLAND 77256 Dale Andert (503) 225-4257 09-MAR-02	8379	NWR	SPACE AGE FUEL	5840 S.E. 17TH	PORTLAND	97236	Jim Pliska	(503) 665-5693	17-JAN-92	10-SEP-92	
4675 MAR 2200 & LIEBE CABOLOCK 4860 S.E. 2200 PORTLAND 97266 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 4677 MAR ASTRO M271 MAR 1870 M271 M114 S.E. DIVISION PORTLAND 97266 John Phinister (503) 225-4277 09-JAN-92 21-SEP-92 99-JAN-92 19-SEP-92 19-SEP-92 19-JAN-92 19-SEP-92 19-JAN-92 19-SEP-92 19-JAN-92 19-SEP-92 19-JAN-92 19-JAN-92 19-JAN-92 19-JAN-92 19-JAN-92 1	1379	NWR	TEXACO SERVICE STATION	3515 S.E. 122ND	PORTLAND	97236	Dale Andert	(503) 225-4257	09-MAR-92		
## APT NAM PRIDA & POWELL E & M	9779	NWR	82ND & LIEBE CARDLOCK	4860 S.E. 82ND	PORTLAND	97266	ROB FOREST	(503) 682-3865	15-JAN-92	25-SEP-92	
4275 NAR ASTRO #217 11214 S.E. DIVISION PORTLAND PORTLAND 97266 Joinght Estry C503 (243-7899 90-3A4-92 21-SEP-92 1919 NAR FOSTER #0811 9133 S.E. FOSTER AVENUE PORTLAND 97266 boright Estry (503) (81-5038 13-MAR-92 30-SEP-92 21-FEB-92 21-				9215 S.E POWELL	PORTLAND	97266	Dale Andert	(503) 225-4257	09-MAR-92		
3903 NAME ESTEY, DUTCHIT 9808 S.E. DIVISION PORTLAND 97266 build testby 6726 border	6275	NWR	ASTRO #217	11214 S.E. DIVISION	PORTLAND	97266	John Phimister	(503) 243-7899	09-JAN-92	21-SEP-92	
1979 NUR FÖSTER MOBIL 9138 S.E. FOSTER AVENUE PORTLAND 97266 FORT 1040 SEP-92 21-FEB-92 2058 1040 SEP-92 2058 2058 2059 SEP-92 2058 SEP-92 2	3903	NWR	ESTBY, DWIGHT	9808 S.E. DIVISION	PORTLAND	97266	Dwight Estby	(503) 681-0308	13-MAR-92	18-SEP-92	
961 NWR FOSTER MADD ARCO 12160 SE FOSTER RD PORTLAND 97266 Donald H. Hartvig (503 292-5268 D1-APR-92 01-OCT-92 10922 NWR FRED NETER - SOUTHEAST 523 SE SEXUD PORTLAND 97266 Darry Name (503 771-0647 30-ARR-92 01-OCT-92 939 NWR REAN SYR SEXUD PORTLAND 97266 SET NAME (503 259-5268 D1-APR-92 30-SEP-92 10-OCT-92 939 NWR LEATHERS OIL CO. 1427 S.E. POWELL 100 NWR PRED NETER - SOUTHEAST 100 NWR PRED NETER - S	1919	NWR	FOSTER MOBIL	9138 S.E. FOSTER AVENUE	PORTLAND	97266	Ron Cain	(503) 357-9711	09-JAN-92	30-SEP-92	21-FEB-92
10020 NAME FRAME PART SOUTHEAST 100402 S.E. BULGATE PORT LAND 10072 S.E.	9681	NWK	FOSTER RUAD ARCU	1216U SE FOSTER RD	PORTLAND	97266	Donald Jackson	(503) 761-4221	14-JAN-92	03~SEP-92	
OFFI NUMBER HANNE SEPT SUPPLY SEPT SE	1005	NWK	FRANKU #2/	FOR SE SOUD	PORTLAND	97266	Donald H. Hartvig	(503) 295-2668	01-APR-92	04 007 03	
10.00 10.0	0754	NWK	UANNA 027	2222 2E 82ND	PORTLAND	97266	Barry Naone	(503) /31-648/	3U-MAK-92	70 000 00	
227 MAR LEATHERS OIL CO. 1421 S.E. POWELL PORTLAND 7726 Gair PLISTAN (2003) 661-1244 10-JAN-92 25-AUG-92 28-AUG-92 38-AUG-92 3	7051 3054	NWK	HOUSE MADMEDS FIEL CO	RARO & E DIVISION STREET	PORTLAND DODTI AND	07244	JIM LYONS	(202) 029-0301	24-FEB-92	30-3EP-92	
## SPACE AGE FUEL INC	4287	HILL	LEATHERS OIL CO	11/21 C E DOUBLE	PORTLAND	07266	Propt Loothore	(200) 3//-UU24 (E03) 461-13//	10-14H-02	26-8EP-92	
## SUMSET FUEL COMPANY, MARK-BTS2 S.E. DIVISION PORTLAND 9258 MAR TEXACOR FITHING & MARKETT 5524 S.E. E200 CAT FOSTER PORTLAND 9258 WAR TEXACOR STATION 1373 WAR TEXACOR STATION 12153 S.E. E200 CAT FOSTER D. 9726 DATE AND PORTLAND 9726 DATE	4201	MILID	SDACE ACE FIRE THE	RAIN C E COCTED DOAN	DODT! AND	07266	lim Plicks	(202) 801-1244	10-JAN-92	10-CED 02	
9855 WR TEXACO RETINING MARKETI 5525 S.E. 82MD (AT FOSTER PORTIAND 97246 Dale Andert (503) 225-4257 (9-MAR-92 2 5882 WR TEXACO STATION 10725 S.E. 28MD PORTLAND 97246 Dale Andert (503) 225-4257 (9-MAR-92 2 5882 WR TEXACO STATION 12155 S.E. FOSTER RD. PORTLAND 97246 Dale Andert (503) 225-4257 (9-MAR-92 2 5937 WR TEXACO STATION 12155 S.E. FOSTER RD. PORTLAND 97246 Dale Andert (503) 225-4257 (9-MAR-92 2 5937 WR TEXACO STATION 12155 S.E. FOSTER RD. PORTLAND 97246 Dale Andert (503) 225-4257 (9-MAR-92 2 5937 WR TEXACO STATION 12155 S.E. FOSTER RD. PORTLAND 97246 Dale Andert (503) 225-4257 (9-MAR-92 2 5937 WR TEXACO STATION 12155 S.E. SALEM 97246 DALE AND PORTLAND PORTLAN	8112	NUR	SINGET FUEL COMPANY MARK.	8752 S F DIVISION	PORTLAND PORTLAND	07244	DADDADA DIIEV	(503) 803-3693	27_EED-02	38-CED-03	
Seaze Num Texaco Station 10725 S.E. 220	9855	NUR	TEYACO RETUING & MARKETI	TSOA S F ROWN (AT FOSTER	DODT! AND	07266	Dale Andert	(503) 234-0011	71-LEP. 35	20.3E1-92	
1331 NUR TEXACO STATION 12155 S.E. FOSTER RD. PORTLAND 97246 Dale Andert (503) 225-4257 09-MAR-92 9347 NUR HANNA C-3 14373 SE NCLOGRILIN BLVD. MILMAUKIE 97267 John E. Shepanek (503) 225-4257 09-MAR-92 9347 NUR HANNA C-3 14373 SE NCLOGRILIN BLVD. MILMAUKIE 97267 John E. Shepanek (503) 265-9274 01-APR-92 9558 NUR BENSON BROTHERS, INC 8220 N IVANHOE PORTLAND 97283 James Seculty (619) 443-0549 20-MAR-92 21-SEP-92 9558 NUR BENSON BROTHERS, INC 8220 N IVANHOE PORTLAND 97283 James Seculty (619) 443-0549 20-MAR-92 25-SEP-92 27-SEP-92 27-SEP	5882	NUR	TEXACO STATION	10725 S.F. 82ND	PORTI AND	97266	Dale Andert	(503) 225-4257	09-MAR-92		
1333 MAR TEXACO STATION 9218 S.E. DIVISION PORTLAND 97266 Dale Andert (503) 225-4257 09-MAR-92 9370 MIR MANNA C-3 14373 SE MCLOUGHLIN BLVD. MILMAUKIE 97267 SUSAN SENSON BROTHERS, INC 8220 N IVANHOE PORTLAND 97283 James Scully (619) 443-0549 20-MAR-92 21-SEP-92 9658 MAR BENSON BROTHERS, INC 8220 N IVANHOE PORTLAND 97283 James Scully (619) 443-0549 20-MAR-92 25-SEP-92 1789 WAR CENTER ST. CARDLOCK 680 CENTER ST. N.E. SALEM 97301 ROBERT (503) 682-3865 16-JAN-92 1780 WAR CENTER ST. CARDLOCK 680 CENTER ST. N.E. SALEM 97301 NOR FOREST (503) 682-3865 16-JAN-92 1780 WAR FRANKO #12 1720 STATE ST. S.E. SALEM 97301 Donald H. Hartvig (503) 390-2275 15-JAN-92 1780 WAR IVE SHELL SERVICE 1500 HAMTHORNE AVE. N.E. SALEM 97301 WALL IVIE (503) 390-2275 06-MAR-92 24-SEP-92 2365 WAR MARKED STREET EX.D. T. S.E. SALEM 97301 WALL IVIE (503) 390-2275 06-MAR-92 24-SEP-92 2365 WAR PACIFIC PETROLEUM CORP 1370 WARKET STREET N.E. SALEM 97301 WALL IVIE (503) 390-2275 06-MAR-92 24-SEP-92 3270 WAR MARKET STREET N.E. SALEM 97301 WALL IVIE (503) 390-2275 06-MAR-92 24-SEP-92 3270 WAR MARKET STREET N.E. SALEM 97301 ROBERT N.E. SALEM 97302 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 14-SEP-92	831	NVR	TEXACO STATION	12155 S.F. FOSTER RD.	PORTI AND	97266	Dale Andert	(503) 225-4257	09-MAR-92		
9347 NUR HANNA C-3 14373 SE MCLOUGHLIN BLVD. MILHAUKIE 97267 John E. Shepanek 97367 Susan Stein 97368	1333	NWR	TEXACO STATION	9218 S.E. DIVISION	PORTLAND	97266	Dale Andert	(503) 225-4257	09-MAR-92		
7976 NUR OAKGROVE CHEVRON 13939 MCLOGHLIN BLVD. MILWAUKE 97267 Susan Stein (503) 656-0375 (9-MAR-92 21-SEP-92 6108 WVR C.A.R.S. 2795 MARKET STREET N.E. SALEM 97301 Phil Murray (503) 588-0455 (5-JAN-92 14-AUG-92 1789 WVR CENTER ST. CARDLOCK 680 CENTER ST. N.E. SALEM 97301 ROB FOREST (503) 682-3865 (6-JAN-92 30-SEP-92 220 WVR 1-2 PROPERTIES 810 LANCASTER DR. S.E. SALEM 97301 Danald H. Hartvig (503) 390-2275 (6-MAR-92 24-SEP-92 10437 WVR IVIE SWELL SERVICE 1500 MAJTHORNE AVE. N.E. SALEM 97301 WAIT LIVIE (503) 390-2275 (6-MAR-92 24-SEP-92 3270 WVR MARKET STREET EXXON 7-11 398 MARKET STREET N.E. SALEM 97301 S G HINKLE, Jr (503) 581-4466 31-JAN-92 32-SEP-92 3270 WVR MARKET STREET EXXON 7-11 3286 WVR PACIFIC PETROLEUM CORP 102 LANCASTER DRIVE, N.E. SALEM 97301 ROBERT Nebburn (503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 1940 LANCASTER DRIVE, N.E. SALEM 97301 ROBERT Nebburn (503) 683-4433 10-FEB-92 14-SEP-92 1208 WVR CHUCKY'S TEXACO 2438 MISSION, S.E. SALEM 97301 Dale Andert (503) 683-6443 10-FEB-92 14-SEP-92 1208 WVR CHUCKY'S TEXACO 2438 MISSION, S.E. SALEM 97301 Dale Andert (503) 683-6443 10-FEB-92 14-SEP-92 1208 WVR CHUCKY'S TEXACO 2438 MISSION, S.E. SALEM 97302 Deeph P Reding 503/363-4895 16-JAN-92 15-JAN-92 03-AUG-92 10-285 WVR CHUCKY'S TEXACO 2438 MISSION, S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10-285 WVR LOUGEROVE AUTO BODY 3794 COMMERCIAL ST.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10-285 WVR LOUGEROVE AUTO BODY 3794 COMMERCIAL ST.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10-TOT-92 10-TO	9347	NWR	HANNA C-3	14373 SE MCLOUGHLIN BLVD.	MILWAUKIE	97267	John E. Shepanek	(503) 265-9274	01-APR-92		
9658 NUR BENSON BROTHERS, INC	7976	NWR	OAKGROVE CHEVRON	13939 MCLOUGHLIN BLVD.	MILWAUKIE	97267	Susan Stein	(503) 656-0375	09-MAR-92	21-SEP-92	
6108 WVR CENTER ST. CARDLOCK 680 CENTER ST. N.E. 5ALEM 97301 ROB FOREST (503) 588-0455 15-JAN-92 30-SEP-92 5774 WVR FRANKO #12 1720 STATE ST. N.E. 5ALEM 97301 Donald H. Hartvig (503) 295-2668 01-APR-92 220 WVR 1-Z PROPERTIES 810 LANCASTER DR. S.E. 8ALEM 97301 Donald H. Hartvig (503) 390-2275 06-MAR-92 24-SEP-92 2385 WVR MARION CAR RENTAL CO./MAR 195 COMMERCIAL ST. S.E. 3270 WVR HARRET STREET EX.ON 3270 WVR MARKET STREET N.E. 3286 WVR MARION CAR RENTAL CO./MAR 195 COMMERCIAL ST. S.E. 3266 WVR PACIFIC PETROLEUM CORP 102 LANCASTER DR.VE, N.E. 3266 WVR PACIFIC PETROLEUM CORP 1354 WVR TEXACO STATION 1368 WVR CHUCK'S TEXACO 2408 MISSION, S.E. 341EM 97301 ROBERT Newburn 1503) 390-2275 06-MAR-92 24-SEP-92 1356 WVR MARKET STREET N.E. 341EM 97301 Wolert Newburn 1503) 581-4466 31-JAN-92 10-CT-92 3266 WVR PACIFIC PETROLEUM CORP 102 LANCASTER DR.VE, N.E. 3ALEM 97301 Robert Newburn 1503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 1503 683-4333 10-FEB-92 14-SEP-92 1208 WVR CHUCK'S TEXACO 2408 MISSION, S.E. 3ALEM 97301 PAIL WILLER CARDLOCK 970 13TH S.E. 3ALEM 97301 Robert Newburn 1503 683-4333 10-FEB-92 14-SEP-92 1208 WVR CHUCK'S TEXACO 2408 MISSION, S.E. 3ALEM 97302 PORTOLEUM CORP 1643 WVR CHUCK'S TEXACO 2408 MISSION, S.E. 3ALEM 97302 PORTOLEUM CORP 1643 WVR FIRERDUSE 5 CAR MASH 1212 MISSION ST. S.E. 3ALEM 97302 PORTOLEUM CORP 1643 WVR FIRERDUSE 5 CAR MASH 1212 MISSION ST. S.E. 3ALEM 97302 PORTOLEUM CORP 1643 WVR FIRERDUSE 5 CAR MASH 1212 MISSION ST. S.E. 3ALEM 97302 PORTOLEUM CORP 1643 WVR FIRERDUSE 5 CAR MASH 1740 MVR FIRERDUSE 5 CAR MASH 1741 MVR FORD ST. S.E. 3ALEM 97302 PORTOLEUM CORP 1643 WVR FIRERDUSE 5 CAR MASH 1740 MVR FIRER	9658	NWR	BENSON BROTHERS, INC	8220 N IVANHOE	PORTLAND	97283	James Scully	(619) 443-0549	20-MAR-92	25-SEP-92	
1789 WVR CENTER ST. CARDLOCK 680 CENTER ST. N.E. SALEM 97301 ROB FOREST (503) 682-3865 16-JAN-92 30-SEP-92 20 WVR FRANKO #12 1720 STATE ST. S.E. SALEM 97301 Donald H. Hartvig (503) 295-2668 6-1-APR-92 24-SEP-92 10437 WVR TYLE SHELL SERVICE 1500 HANTHORNE AVE. N.E. SALEM 97301 Walt Ivie (503) 390-2275 06-MAR-92 24-SEP-92 2355 WVR MARION CAR RENTAL CO./MAR 795 COMMERCIAL ST. S.E. SALEM 97301 S G Hinkle, Jr (503) 581-4466 31-JAN-92 01-OCT-92 3270 WVR MARKET STREET EXXON 7-11 3398 MARKET STREET N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 1491 LANCASTER DR., S.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 3618 WVR GIBERT N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 3618 WVR GIBERT N.E. SALEM 97302 ROB FOREST (503) 682-3865 16-JAN-92 01-OCT-92 3618 WVR GIBERT N.E. SALEM 97302 ROB FOREST (503) 682-3865 16-JAN-92 02-SES-SEP-92 3618 WVR GIBERT N.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 639 WVR LIBERTY ROD S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR LIBERTY RD. TEXACO 3220 LIBERTY ROD S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-SEP-92 10090 WVR BINGG FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 ROBERST (503) 682-3865 15-JAN-92 10-OCT-92 18963 WVR ELERRY SHELL STATED ALEM NO STREET N.E. SALEM 97303 ROBERST (503) 682-3865 15-JAN-92 10-OCT-92 1045 WVR FRONT STATION 3794 COMMERCIAL STREET S. SALEM 97303 ROBERST (503) 682-3865 15-JAN-92 25-SEP-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET N.E. SALEM 97303 ROBERST (503) 682-3865 15-JAN-92 25-SEP-92 1045 WVR FRONT STATION 3794 COMMERCIAL STREET N.E. SALEM 97303 ROBERST (503) 682-3865 15-JAN-92 25-SEP-92 1045 WVR FRONT STATION 1000 WVR DIAMOND PACIFIC MILLING & 200	6108	WVR	C.A.R.S.	2795 MARKET STREET N.E.	SALEM	97301	Phil Murray	(503) 588-0455	15-JAN-92	14-AUG-92	
5774 WWR FRANKO #12 1720 STATE ST. S.E. SALEM 97301 Donald H. Hartvig (503) 295-2668 01-APR-92 24-SEP-92 10437 WWR I-VIPE SHELL SERVICE 1500 HAWTHORNE AVE. N.E. SALEM 97301 Walt Ivie (503) 390-2275 06-MAR-92 24-SEP-92 2385 WWR MARION CAR RENTAL CO./MAR 195 COMMERCIAL ST. S.E. SALEM 97301 % Individed (503) 581-4466 31-JAM-92 01-OCT-92 3270 WWR MARKET STREET EXXON 7-11 3398 MARKET STREET IN.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 1354 WWR TEXAGO STATION 1491 LANCASTER DR., S.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 1364 WWR CHUCK'S TEXAGO 970 13TH S.E. SALEM 97302 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 1028 WWR CHUCK'S TEXAGO 4292 LIBERTY ROAD S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10285 WWR LIBERTY RD. SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR LIDERTY RD. SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR LIDERTY RD. SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR LIDERTY RD. SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR LIDERTY RD. SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR LIDERTY RD. SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR EXAGO STATION 429 ROBAKAKE ROAD, N.E. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WWR DELYBER SHELL 4495 RIVER ROAD NORTH SALEM 97303 ROB FOREST (503) 393-3530 18-MAR-92 03-AUG-92 10415 WWR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 ROB FOREST (503) 363-3685 16-JAN-92 25-SEP-92 10090 WWR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 ROB FOREST (503) 363-3685 16-JAN-92 25-SEP-92 10415 WWR FERD FAIRGROUND B.P. 2365 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 10415 WWR FERD FAIRGROUND B.P. 2365 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 10415 WWR FERD FAIRGROUND B.P. 2365 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 10415 WWR FROM TST. CARROLLOK AND ROAD N.E	1789	WVR	CENTER ST. CARDLOCK	680 CENTER ST. N.E.	SALEM	97301	ROB FOREST	(503) 682-3865	16-JAN-92	30-SEP-92	
220 WVR I-7- PROPERTIES 810 LANCASTER DR. S.E. SALEM 97301 Walt Ivie (503) 390-2275 06-MAR-92 24-SEP-92 2385 WVR MARION CAR RENTAL CO./MAR 195 COMMERCIAL ST. S.E. SALEM 97301 S G Hinkle, Jr 3266 WVR PACIFIC PETROLEUM CORP 13266 WVR PACIFIC PETROLEUM CORP 1354 WVR TEXACO STATION 1491 LANCASTER DRIVE, N.E. SALEM 97301 Robert Newburn 1208 WVR CHEVRON U.S.A., INC 93 3514 COMMERCIAL ST. S.E. SALEM 97301 Dale Andert 97302 Joseph P Reding 97302 Joseph P Reding 97302 Phil Murray 1208 WVR CHEVRON U.S.A., INC 93 3514 COMMERCIAL S.E. SALEM 97302 Joseph P Reding 1208 WVR FIREHOUSE 5 CAR WASH 1212 MISSION, S.E. SALEM 97302 Thomas McEwen 1208 WVR FIREHOUSE 5 CAR WASH 1212 MISSION ST. S.E. SALEM 97302 Thomas McEwen 1208 WVR LOVERGOVE AUTO BODDY 1245 HOYT SE 3407 WVR MERRITT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST 1208 WVR TEXACO STATION 1214 MISSION ST. S.E. SALEM 97302 Thomas McEwen 1208 WVR CURTYN STEAM 1212 MISSION ST. S.E. SALEM 97302 Thomas McEwen 1208 WVR ENERTIT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 WVR TEXACO STATION 1245 HOYT SE 1246 MVR TEXACO STATION 1245 HOYT SE 125 SALEM 97302 ROB FOREST 126 STATEM ST	5774	WVR	FRANKO #12	1720 STATE ST. S.E.	SALEM	97301	Donald H. Hartvig	(503) 295-2668	01-APR-92		
10437 WVR IVIE SHELL SERVICE 1500 HAWTHORNE AVE. N.E. SALEM 97301 Nalt IVIE (503) 390-2275 00-MAR-92 24-SEP-92 3270 WVR MARKON CAR RENTAL CO./MAR 195 COMMERCIAL ST. S.E. SALEM 97301 ROBERT Newburn (503) 683-4433 10-FEB-92 10-EB-92 10-	220	WVR	I-Z PROPERTIES	810 LANCASTER DR. S.E.	SALEM	97301	Walt Ivie	(503) 390-2275	06-MAR-92	24-SEP-92	
2385 WVR MARION CAR RENTAL CO./MAR 195 COMMERCIAL ST. S.E. SALEM 97301 Robert Newburn (503) 683-4466 31-JAN-92 01-0CT-92 3266 WVR PACIFIC PETROLEUM CORP 102 LANCASTER DRIVE, N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 1491 LANCASTER DRIVE, N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 270 1371 S.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 14	10437	₩VR	IVIE SHELL SERVICE	1500 HAWTHORNE AVE. N.E.	SALEM	97301	Walt Ivie	(503) 390-2275	06-MAR-92	24-SEP-92	
3270 WVR MARKET STREET EXXON 7-11 3398 MARKET STREET N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 1041 LANCASTER DRIVE, N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 1354 WVR TEXACO STATION 1491 LANCASTER DRIVE, N.E. SALEM 97301 Dale Andert (503) 682-3865 16-JAN-92 1208 WVR CHEVRON U.S.A., INC 93 3514 COMMERCIAL S.E. SALEM 97302 ROB FOREST (503) 682-3865 16-JAN-92 15-JAN-92					SALEM	97301	S G Hinkle, Jr	(503) 581-4466	31-JAN-92	01-0CT-92	
3266 WVR PACIFIC PETROLEUM CORP 102 LANCASTER DRIVE, N.E. SALEM 97301 Robert Newburn (503) 683-4433 10-FEB-92 14-SEP-92 3618 WVR TAXCO STATION 1491 LANCASTER DR., S.E. SALEM 97301 Dale Andert (503) 225-4257 09-MAR-92 1208 WVR CHEVRON U.S.A., INC 93 3514 COMMERCIAL S.E. SALEM 97302 ROB FOREST (503) 682-3865 16-JAN-92 55-SEP-92 1208 WVR CHUCK'S TEXACO 2483 MISSION, S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 639 WVR FIREHOUSE 5 CAR WASH 1212 MISSION ST. S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR FIREHOUSE 5 CAR WASH 1212 MISSION ST. S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR CURT'S TEXACO 3220 LIBERTY RO. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR CURT'S TEXACO 3220 LIBERTY RO. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 Ken Lovegrove 27-JAN-92 3607 WVR MERRITT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-SEP-92 1612 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Barl Cook (503) 225-4257 09-MAR-92 1612 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Madim Yaqoub (503) 393-3530 18-MAR-92 01-OCT-92 1612 WVR BODG'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 100415 WVR FROD TANGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10415 WVR FROD TANGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 3614 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 3614 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 3614 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB F	3270	WVR	MARKET STREET EXXON 7-11	3398 MARKET STREET N.E.	SALEM	97301	Robert Newburn	(503) 683-4433	10-FEB-92		
1354 WWR TEXACO STATION 1491 LANCASTER DR., S.E. SALEM 97301 Date Andert (503) 225-4257 09-MAR-92 25-SEP-92 1208 WWR CHEVRON U.S.A., INC 93 3514 COMMERCIAL S.E. SALEM 97302 Joseph P Reding 503/363-4895 16-JAN-92 25-SEP-92 6443 WWR CHUCK'S TEXACO 2483 MISSION, S.E. SALEM 97302 Phil Murray 503/363-4895 16-JAN-92 03-AUG-92 0	3266	WVR	PACIFIC PETROLEUM CORP	102 LANCASTER DRIVE, N.E.	SALEM	97301	Robert Newburn	(503) 683-4433	10-FEB-92	14-SEP-92	
1208 WWR CHEVRON U.S.A., INC 93 3514 COMMERCIAL S.E. SALEM 97302 Joseph P Reding 503/363-4895 16-JAN-92 26443 WVR CHUCK'S TEXACO 2483 MISSION, S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR CURI'S TEXACO 4292 LIBERTY ROAD S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR LIBERTY RD. TEXACO 3220 LIBERTY RD. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR LIBERTY RD. TEXACO 3220 LIBERTY RD. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 6439 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 Ken Lovegrove 15-JAN-92 03-AUG-92 6439 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3855 16-JAN-92 03-AUG-92 6439 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3855 15-JAN-92 03-AUG-92 6439 WVR ERRITIT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3855 15-JAN-92 10-05-92 6439 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 10-05-92 6430 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Barl Cook (503) 393-3530 18-MAR-92 10-05-92 6436 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10434 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10434 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 14-5EP-92 14-5EP-9			TEXACO STATION		SALEM	97301	Dale Andert	(503) 225-4257	09-MAR-92		
1205 WVR CHEVRON U.S.A., INC 93 3514 LOMMERCIAL S.E. SALEM 97302 Joseph P Reding 503/363-4895 16-JAN-92 03-AUG-92 8491 WVR CHURK'S TEXACO 4292 LIBERTY ROAD S.E. SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 639 WVR FIREHOUSE 5 CAR WASH 1212 MISSION ST. S.E. SALEM 97302 Thomas McEwen (503) 585-4728 06-FEB-92 01-OCT-92 6439 WVR LIBERTY RD. TEXACO 3220 LIBERTY RD. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 03-AUG-92 10285 WVR TEXACO STATION 3794 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-92 10285 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97302 Dale Andert (503) 225-4257 09-MAR-92 1612 WVR BOBY'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 1612 WVR BOBY'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 10-OCT-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10090 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10436 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10-000 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10-000 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10-000 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 RABRADAD PILEY (503) 233-001 12-FER-92 25-SEP-92 10-000 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 RABRADAD PILEY (503) 233-001 12-FER-92 25-SEP-92 10-000 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 RABRADAD PILEY (503) 233-001 12-FER-92 25-SEP-92 10-000 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB F					SALEM	97302	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
8491 WVR CURT'S TEXACO	1208	WVK	CHEVRUN U.S.A., INC 93	3314 COMMERCIAL S.E.	SALEM	97302	Joseph P Reding	503/363-4895	16-JAN-92	07 1110 03	
639 WWR FIREHOUSE 5 CAR WASH 1212 MISSION ST. S.E. SALEM 97302 Thomas McEwen (503) 585-4728 06-FEB-92 01-OCT-92 6439 WVR LIBERTY RD. TEXACO 3220 LIBERTY RD. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-92 3607 WVR MERRITT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-92 4895 WVR TEXACO STATION 3794 COMMERCIAL ST. SE SALEM 97302 Dale Andert (503) 225-4257 09-MAR-92 4210 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 1612 WVR BOB'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 11-OCT-92 8863 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 1434 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 28-SEP-92 28-SE	8401	UN/D	CUDT/S TEVACO	/202 [DEDTY DOAD & C	SALEM	97302	Phil Murray		15-JAN-92	03-AUG-92	
6439 WVR LIBERTY RD. TEXACO 3220 LIBERTY RD. SE SALEM 97302 Phil Murray 15-JAN-92 03-AUG-92 10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 Ken Lovegrove 27-JAN-92 30-SEP-92 3607 WVR MERRITT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-92 4895 WVR TEXACO STATION 3794 COMMERCIAL ST. SE SALEM 97302 Dale Andert (503) 225-4257 09-MAR-92 4210 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 1612 WVR BOB'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 01-OCT-92 8963 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 1434 DVR HOME FILE OU CO. 1710 COMMERCIAL ST. NE. SALEM 97303 RABRADA BILEY (503) 274-0611 27-FER-92 28-SEP-92 1434 DVR HOME FILE OU CO. 1710 COMMERCIAL ST. NE. SALEM 97303 RABRADA BILEY (503) 274-0611 27-FER-92 28-SEP-92 1434 DVR HOME FILE OU CO. 1710 COMMERCIAL ST. NE. SALEM 97303 RABRADA BILEY (503) 274-0611 27-FER-92 28-SEP-92	630	UVP	EIREHOUSE 5 CAR WASH	1212 MISSION ST S F	SALEM	97302	Thomas McFuen	/503\ 585-/72R	12-14W-A5	03-AUG-92	
10285 WVR LOVEGROVE AUTO BODY 1245 HOYT SE SALEM 97302 Ken Lovegrove 27-JAN-92 30-SEP-92 3607 WVR MERRITT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-92 4895 WVR TEXACO STATION 3794 COMMERCIAL ST. SE SALEM 97302 Dale Andert (503) 225-4257 09-MAR-92 4210 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 1612 WVR BOB'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 01-OCT-92 8963 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 Terry L. Hancock (503) 370-9963 11-MAY-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 ROB FOREST (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 28-SEP-92 28-SE	6439	UVR	I IRERTY RD TEXACO	3220 LIRERTY PO SE	SALEM	97302	Phil Murray	(303) 303 4120	15-JAN-92	07-4HG-02	
3607 WVR MERRITT TRUAX, INC. 4395 COMMERCIAL STREET S. SALEM 97302 ROB FOREST (503) 682-3865 15-JAN-92 30-SEP-92 4895 WVR TEXACO STATION 3794 COMMERCIAL ST. SE SALEM 97302 Dale Andert (503) 225-4257 09-MAR-92 4210 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 1612 WVR BOB'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 01-OCT-92 8963 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 Terry L. Hancock (503) 370-9963 11-MAY-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 7160 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 WVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 274-0611 27-FER-92 28-SEP-92 1434 WVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 274-0611 27-FER-92 28-SEP-92 28-SE	10285	UVR	LOVEGROVE AUTO BODY	1245 HOYT SE	SALEM	97302	Ken Lovegrove		27-JAN-92	05 NOG 72	
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4210 WVR BINGO FUEL STOP 4220 BROOKLAKE ROAD, N.E. SALEM 97303 Earl Cook (503) 271-5219 21-JAN-92 1612 WVR BOB'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 01-OCT-92 8963 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 Terry L. Hancock (503) 370-9963 11-MAY-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 7160 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 274-0611 27-FER-92 28-SEP-92	4895	WVR	TEXACO STATION	3794 COMMERCIAL ST. SE	SALEM	97302	Dale Andert	(503) 225-4257	09-MAR-92		
1612 WVR BOB'S KEIZER SHELL 4495 RIVER ROAD NORTH SALEM 97303 Nadim Yaqoub (503) 393-3530 18-MAR-92 01-OCT-92 8963 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 Terry L. Hancock (503) 370-9963 11-MAY-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 1434 DVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 12-JAN-92 25-SEP-92 1434 DVR HOME FUEL DVR HOME FUEL DVR HOME FUEL DVR HOM	4210	WVR	BINGO FUEL STOP	4220 BROOKLAKE ROAD, N.E.	SALEM	97303	Earl Cook	(503) 271-5219	21-JAN-92		
8963 WVR DEL WEB CARD LOCK 1190 SALEM INDUSTRIAL WAY SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 Terry L. Hancock (503) 370-9963 11-MAY-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 14-SEP-92 1	1612	WVR	BOB'S KEIZER SHELL	4495 RIVER ROAD NORTH	SALEM	97303	Nadim Yaqoub	(503) 393-3530	18-MAR-92	01-0CT-92	
10090 WVR DIAMOND PACIFIC MILLING & 2001 16TH STREET NE SALEM 97303 Terry L. Hancock (503) 370-9963 11-MAY-92 10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 7160 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1434 WVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. NE. SALEM 97303 ROB FOREST (503) 274-0611 27-FER-92 28-SEP-92	8963	WVR	DEL WEB CARD LOCK	1190 SALEM INDUSTRIAL WAY	SALEM	97303	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
10415 WVR FRED FAIRGROUND B.P. 2385 FAIRGROUND RD. SALEM 97303 Fred Ovchinnikoff (503) 363-0832 10-FEB-92 14-SEP-92 3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 7160 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 14-34 DVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. NE. SALEM 97303 RABRADA PLIFY (503) 234-0611 27-FER-92 28-SEP-92	,,,,,	** * * * * * * * * * * * * * * * * * * *	Parallelle (International Control of Control		SALEM	97303	Terry L. Hancock	(503) 370-9963	11-MAY-92		
3613 WVR FRONT ST. CARDLOCK 205 COLUMBIA ST. N.E. SALEM 97303 ROB FOREST (503) 682-3865 16-JAN-92 25-SEP-92 7160 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92 1636 MVR HAME FUEL OIL CO. 1710 COMMERCIAL ST. NE. SALEM 97303 RARRADA RILEY (503) 274-0611 27-FER-92 28-SEP-92	10415	WVR	FRED FAIRGROUND B.P.	2385 FAIRGROUND RD.	SALEM	97303	Fred Ovchinnikoff	(503) 363-0832	10-FEB-92	14-SEP-92	
7160 WVR HARRIS ENTERPRISES, INC. 4180 PORTLAND ROAD, N.E. SALEM 97303 ROB FOREST (503) 682-3865 15-JAN-92 25-SEP-92	3613	WVR	FRONT ST. CARDLOCK	205 COLUMBIA ST. N.E.	SALEM	97303	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
1434 LVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. NE. SALEM 97303 RADRADA DILEY (503) 23/-0611 27-FER-02 28-SED-02	7160	WVR	HARRIS ENTERPRISES, INC.	4180 PORTLAND ROAD, N.E.	SALEM	97303	ROB FOREST	(503) 682-3865	15-JAN-92	25-SEP-92	
1757 BIN NOTE TOLD OF DOS 1110 CONSTRUCTOR OF HE SALES 71500 DANDARA RELLI (2007 E27 COLL 21 LED 72 20 SEC 72	1434	WVR	HOME FUEL OIL CO.	1710 COMMERCIAL ST. NE	SALEM	97303	BARBARA RILEY	(503) 234-0611	27-FEB-92	28-SEP-92	
1434 WVR HOME FUEL OIL CO. 1710 COMMERCIAL ST. NE SALEM 97303 BARBARA RILEY (503) 234-0611 27-FEB-92 28-SEP-92 617 WVR KAR KLEEN, INC. 280 PINE ST. N.E. SALEM 97303 Michael Ovchinnikoff (503) 362-3687 30-JAN-92 18-AUG-92	617	WVR	KAR KLEEN, INC.	280 PINE ST. N.E.	SALEM	97303	Michael Ovchinnikoft	(503) 362-3687	30-JAN-92	18-AUG-92	

FAC ID REG FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE	LOI	CA	APP
5902 WVR KEIZER EXXON	4795 RIVER ROAD, N.E.	KÉIZER	97303	Dennis L. Stoll	(503) 362-5558	31-MAR-92	23-SFP-92	~
631 WVR KEIZER TEXACO	6160 RIVER RD. N.	SALEM		Duane Van Cleave	(503) 390-2850	17-JAN-92		
9197 WVR M&M MART #3	3401 RIVER ROAD	KEIZER		Richard Mikesell	(503) 928-3385		07-AUG-92	
6438 WVR MARKET STREET	3411 MARKET ST., N.E.	SALEM		ROB FOREST	(503) 682-3865	15-JAN-92	25-SEP-92	
3623 WVR MERRITT 1, STATION #2	5195 RIVER ROAD N	KEIZER		Dean Henderson	(503) 588-0455		25-SEP-92	
3619 WVR MERRITT TRUAX #1, INC.	3510 RIVER ROAD N.E.	SALEM		Dean Henderson	(503) 588-0455	15-JAN-92		
3627 WVR MERRITT TRUAX, INC./METRO		SALEM		Marc Nelson	(503) 363-7676			
3703 WVR SERVICE OIL COMPANY	1295 JOHNSON STREET, N.E.	SALEM	97303	Dennis L. Stoll	(503) 362-5558	23-MAR-92	23-SEP-92	
1351 WVR TEXACO STATION	3502 PORTLAND RD., N.E.	SALEM	97303	Dale Andert	(503) 225-4257			
7664 WVR AG WEST SUPPLY	5082 SALEM DALLAS HIGHWAY	SALEM	97304	Larry Crook		28-JAN-92	19-AUG-92	01-0CT-92
4827 WVR ERNIE'S PAYLESS	5322 DALLAS HIGHWAY NW	SALEM	97304	Gina Boe	(503) 588-1766	27-JAN-92		
679 WVR HOPEWELL GENERAL STORE	22460 HOPEWELL RD.	SALEM	97304	Richard Brown	(503) 868-7247	10-JAN-92	28-SEP-92	
619 WVR LINCOLN STORE	5925 WALLACE RD. N.W.	SALEM	97304	Rachel Byers	(503) 364-2293	17-JAN-92	18-SEP-92	
306 WVR RITCHIE CHEVRON	1115 WALLACE ROAD, N.W.	SALEM	97304	Melinda Nielsen	(503) 364-4903	27-FEB-92	01-0CT-92	
9219 WVR WEST SALEM EXXON	545 WALLACE RD. NW	SALEM	97304	Dennis L. Stoll	(503) 362-5558	23-MAR-92	23-SEP-92	
6440 WVR WEST SALEM TEXACO.	_585 WALLACE RD., N.W.	SALEM	97304	Phil Murray		16-JAN-92		
	4005 SILVERTON ROAD NE	SALEM	97305	Dean Henderson	(503) 588-0455	16-MAR-92	25-SEP-92	
3606 WVR SQUIRREL HILL TEXACO	7832 SQUIRREL HILL ROAD,	SALEM	97306	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
3565 WVR 99 & FULTON ST. TEXACO	2525 E. PACIFIC BLVD.	ALBANY	97321	Mark Younger	(503) 926-4289	23-MAR-92		06-OCT-92
5799 WVR ALBANY BP	· ·	ALBANY	97321	Stephen E. Backer	(503) 926-7666	04-MAR-92		
3616 WVR ALBANY CARDLOCK	236 1ST AVE. E.	ALBANY		ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
3258 WVR BEACON T&R TRUCK STOP #51		ALBANY		Randall K. Stephenson	(209) 583-3324	19-MAR-92		
775 WVR COURTESY CORNER/ALBANY HE		ALBANY		Ronald Smith	(503) 928-8264	06-FEB-92		
5266 WVR CUMMINGS TRANSFER CO.	740 29TH S.W.	ALBANY		Richard Mikesell	(503) 928-3385		07-AUG-92	
6226 WVR FRED MEYER - BEACON OIL	2500 SANTIAM HWY.	ALBANY		Barry Naone	(503) 731-6487	30-MAR-92		
7158 WVR HARRIS ENTERPRISES, INC.		ALBANY		ROB FOREST	(503) 682-3865	15-JAN-92		
9778 WVR HIGHWAY 20 CARDLOCK	4195 SANTIAM HWY	ALBANY		Don Wilson	(503) 926-1817		30-SEP-92	21-SEP-92
7068 WVR 15 & HWY 20 TEXACO	3135 SANTIAM HWY	ALBANY		Mark Younger	(503) 926-4289	23-MAR-92		06-0CT-92
5267 WVR JACK'S TRUCK STOP	4196 SANTIAM SE	ALBANY		Richard Mikesell	(503) 928-3385	23-JAN-92		
1609 WVR JAME'S GARAGE	1810 GRAND PRAIRIE RD.	ALBANY		Dennis L. Stoll	(503) 362-5558	23-MAR-92	23-SEP-92	
5326 WVR JOHN NIX, JR. TRUCKING	335 WEST QUEEN AVENUE, S.			John Nix Jr	(503) 926-7796	23-MAR-92		20 /411 02
4297 WVR LEATHERS OIL CO.	33385 HIGHWAY 34, S.E.	ALBANY		Brent Leathers	(503) 661-1244		25-AUG-92	
4296 WVR LEATHERS OIL COMPANY	3105 S. SANTIAM HIGHWAY	ALBANY		Brent Leathers	(503) 661-1244	10-JAN-92		30-JAN-92
3448 WVR M & M MART 1	501 PACIFIC BLVD., SOUTH	ALBANY		Richard Mikesell	(503) 928-3385 (503) 926-4289	23-JAN-92 23-MAR-92	07-A0G-92	06-OCT-92
3579 WVR MARK'S TEXACO 8504 WVR MID-STATE PETROLEUM CARDL	33380 HWY 34 SE			Mark Younger Brad Wilson	(503) 926-1817	24-MAR-92	01-OCT-92	00 OC: 72
4226 WVR QUICK STOP FOOD MART	33651 HOEFER RD. N.E.	ALBANY		Chris Wheeler	(206) 743-5634			
9207 WVR RIDENOUR SHELL #6	3170 S.E. HWY 34	ALBANY		Robert Ridenour	(503) 929-3562			
4201 WVR STOELTING, CHESTER R	1645 QUEEN AVENUE, S.W.	ALBANY		Chester R. Stoelting	(503) 965-3783	18-FEB-92		
5127 WVR TOUPS, LYNN R	520 ELSWORTH S.W.	ALBANY		Lynn Roley Toups	(813) 584-2065	07-FEB-92	2	
3555 WVR WEST ALBANY TEXACO	522 PACIFIC BLVD., S.W.	ALBANY		Mark Younger	(503) 926-4289	23-MAR-92		06-OCT-92
813 WVR WHETSTONS BP MART	3167 S.E. HIGHWAY 34	ALBANY		Richard Mikesell	(503) 928-3385	23-JAN-92	07-AUG-92	
1469 WVR ALSEA GARAGE	215 E. MAIN ST.	ALSEA		Donald J. Peterson		07-JAN-92		05-OCT-92
5100 WVR AUMSVILLE EXXON	1075 MAIN STREET	AUMSVILLE		Dennis L. Stoll	(503) 362-5558	23-MAR-92	23-SEP-92	03 00. 72
621 WVR DON PRIDDY'S AUTO REPAIR		AUMSVILLE		Don Priddy	(503) 749-2700	18-MAR-92	30-SEP-92	
9199 WVR TOM'S COUNTRY BOY GAS	810 MAIN STREET	AUMSVILLE		Richard Mikesell	(503) 928-3385	23-JAN-92		
568 WVR BURNT WOODS STORE	30358 HWY. 20	BLODGETT		Randy Quetschke	(503) 453-4641	12-MAR-92		
8925 WVR VOSBERG'S GENERAL STORE	21412 HWY 20	BLODGETT		Floyd & Joanne Vosberg	(503) 453-4225	10-JAN-92		
6887 WVR BROWNSVILLE SHELL	105 BISHOP WAY			Donald J. Nealon Jr.	(503) 466-5239	07-JAN-92		
7143 WVR JERRY'S AUTO SERVICE	P.O. BOX 274/ 203 BISHOP				(503) 466-5565			
					,		·-	





FAC ID F	EG FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE		LOI	CA	APP .
	WR ATKINSON, WALTER J.	2075 N.W. CIRCLE BLVD.	CORVALLIS	97330	Walter Atkinson	(503)	753-9011	30-MAR-92	23-SEP-92	
	IVR CHEVRON U.S.A., INC 96		CORVALLIS	97330	Paul Franklin			31-MAR-92		
2107 N	VR CITY LIMITS COUNTRY STORE	5800 N.W. HYW. 99W	CORVALLIS	97330	Paul Franklin Richard Washburn Dennis L. Stoll Janine Barrett Mark Younger Ben Purvis Fred Price Richard Mikesell Rich Lindsey Tom Madden R. C. Wilson William R. Upton ROB FOREST	(503)	745-7194	06-JAN-92	18-AUG-92	
8177 L	VR CORVALLIS EXXON	480 S.W. 4TH	CORVALLIS	97330	Dennis L. Stoll	(503)	362-5558	23-MAR-92	23-SEP-92	
4906 N	VR CORVALLIS GULL #417	2635 N.W. 9TH ST.	CORVALLIS	97330	Janine Barrett			30-MAR-92	01-0CT-92	
3559 N	IVR CORVALLIS TEXACO	1450 N.W. 9TH ST.	CORVALLIS	97330	Mark Younger	(503)		23-MAR-92		06-0CT - 92
1595 V	IVR FAMILY CAR WASH	1334 N.W. 9TH ST.	CORVALLIS	97330	Ben Purvis	(503)	758-9274	23-JAN-92	26-AUG-92	
8870 N	IVR FRED PRICE FUEL COMPANY	842 N.W. BUCHANON STREET	CORVALLIS	97330	Fred Price	(503)	752-1555	17-JAN-92		
	IVR M & M MART # 2	2415 HWY. 20 N.E.	CORVALLIS	97330	Richard Mikesell			23-JAN-92	07-AUG-92	
	/VR RICHARD E. LINDSEY'S EXXO		CORVALLIS	97330	Rich Lindsey			23-MAR-92		
	VR TOWNE PUMP CC#27	2108 N.W. 9TH	CORVALLIS	97330	Tom Madden			25-MAR-92		
	NR WILSON MOTORS	1105 N.W. 5TH ST.	CORVALLIS	97330	R. C. Wilson			13-JAN-92		
	VR CORVALLIS RENTAL	1245 S.E. 3RD ST.	CORVALLIS	97333	William R. Upton			14-JAN-92		
	VR HARRIS ENTERPRISES, INC.		CORVALLIS	97333	ROB FOREST				25-SEP-92	
	NR OBERSON OIL, INC.	1260 S.W. 3RD ST.	CORVALLIS	41333	hark operson			10-FEB-92	28-SEP-92	
		29TH & GRANT	CORVALLIS		Myrna C. Roisen			31-MAR-92		
		-325 ORCHARD DR.	DALLAS		Betty M. Card			27-MAR-92		
	IVR DALLAS RENTALS	244 E ELLENDALE	DALLAS		Marc H. Nelson	(503)	363-7676	30-JAN-92		
	IVR DALLAS TEXACO		DALLAS		Phil Murray			15-JAN-92		
	IVR GRUBBS & PETERS SERVICE C	430 N. MAIN ST.	DALLAS		Clarence Peters			19-MAR-92	30-SEP-92	
	IVR HIGASHI, ART JR.	15800 HWY. 22	DALLAS	97338	Betty M. Card Marc H. Nelson Phil Murray Clarence Peters Art Higashi Jr. Pickard Mikecell			30-MAR-92		
	NR JIM'S AUTO SERVICE	119 S.E. WASHINGTON	DALLAS	97338	Kichala Hikesett			23-JAN-92		
	IVR WALLYS CHEVRON STATION	995 MAIN ST	DALLAS	97338	Judith Courtemanche	(503)	228-6224	19-MAR-92	01-0CT-92	
	IVR WRIGHT, LEE W.		DALLAS					21-JAN-92		
	NR DEPOE BAY SPORT FISHING		DEPOE BAY	97341	L J Schlesser			01-APR-92		
	NR LIBERTY DELI MARKET	466 N.E. HWY 101	DEPOE BAY	97341	Dan G. Katcher				01-OCT-92	
	NR WHISTLE STOP INC	20 SE SCHOOL HOUSE STREET	DEPOE BAY	97341	Dan G. Hatcher Kenneth Wells Donalea Frishman			16-MAR-92	23-SEP-92	
	VR DETROIT MOBIL	HWY 22 & USFS RD 46	DETROIT	97342	Donalea Frishman			26-MAR-92		
	IVR KANES HIDEAWAY MARINA, IN		DEIROII	71345	riichael & celeste Lamont	(503)	854-3362	20-MAR-92		
	VR JOE'S MARKET	373 N MAIN	FALLS CITY	97344	Joe Huff				01-JUL-92	01-JUL-92
	IVR ASTRO WESTERN #500	28600 SALMON RIVER ROAD	GRAND RONDE	97347	John Phimister			09-JAN-92		
	WR SPIRIT MOUNTAIN STORE	48480 SW HEBO ROAD	GRANDE RONDE	97347	John Phimister Edward E. Larsen James K. Kirk Donald Wilson			01-APR-92		
	IVR KIRK'S BP STATION	HIWAY 99E & J. ST.	HALSEY	97348	James K. Kirk			16-JAN-92		24 252 22
	VR MID STATE PETROLEUM	211 2ND STREET	HALSEY	97348	Donald Wilson				30-SEP-92	21-SEP-92
	VR TEXACO STATION	I-5 & HWY. 228	HALSET	97340	Date Andert		225-4257		22 650 02	
	IVR IDANHA KEYLOCK	HIGHWAY 22	INDEDENDENCE	07751	John Phimister Edward E. Larsen James K. Kirk Donald Wilson Dale Andert Leo G. Hance David Vanderzanden Marc H. Nelson Steve Pfaff Mark Oberson Dean Henderson	(505)	769-6208	10-FEB-92 16-JAN-92		
	VVR GEORGE SHONES VVR INDY 76	1082 MONMOUTH STREET 175 MONMOUTH ST.	INDEPENDENCE	07751	Vano U Nalam	/F071	363-7676	30-JAN-92	10-cep-02	
		179 MONMONTH CT	INDEPENDENCE	07351	Stove Dieff			01-APR-92		
	IVR PFAFF, STEVE IVR A. LALTON & J. MONTHANY	178 MONMOUTH ST.	INDEPENDENCE	りょうしょ	Mark Obsesse			07-JAN-92		
	VVR TRUAX TIRE STORES	137 OLD PACIFIC HWY 686 N. 2ND ST.	JEEEEDOON	07352	Dean Handarson			16-MAR-92		
		805 PARK STREET	LEBANON	07355	Richard Mikesell			23-JAN-92		
	VR COUNTRY BOY GAS	DOS LYNY SINEET	LEBANON	71333	KICHAIU MIKESELL				25-AUG-92	28-181-02
	VVR LEATHERS OIL CO.	N. MAIN & HIGHWAY 20	LEBANON					23-MAR-92	23-Y00-35	06-0CT-92
	VVR LEBANON TEXACO	643 PARK ST.	LEBANON	07755	Pichard Mikagal				07-AUC-02	00-001-72
	IVR M & M MART #4	1550 S. MAIN	LEBANON		Richard Mikesell			23-JAN-92 28-FEB-92		
	VVR POOR RICHARDS MINI MART	3510 S. SANTIAM HWY	LEBANON					10-JAN-92		
	VVR TOWNSEND OIL COMPANY	41494 LACOMB DRIVE	LEBANON					04-FEB-92		
	VVR UNION STATION	10TH & MAIN	LYONS						28-SEP-92	
	VVR MILL CITY CHEVRON SERVICE		MILL CITY		Courtney Jones	(202)	2777-72	15-JAN-92		
3000 1	VR MILL CITY TEXACO	382 N. SANTIAM HWY	MILL CITY	71300	Phil Murray			IJ-UMN-72	03 - A0G - 74	

		FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE		LOI	CA	APP
144	WVR	OATS, RICHARD SCREEN PLANT OIL PRODUCTS, INC. SCHMIDT BP WILCO CARDLOCK #3 CLARKS TEXACO	595 E. MAIN	HTUOMMOM	97361	Richard Oates Donald Works Robert Rash Ronald Schmidt Thomas E. Smith Mark Younger Rhonda & Clyde Hamstreet Richard Mikesell Craig James Kelson M. R. Wood M. R. Wood Maureen Miller Richard Mikesell Roland Kiepke Harvey L. Baumgarden Richard Mikesell A.M. Hatton Phil Murray Robert Shaffer Don J. Thompson Dennis L. Stoll Donald H. Hartvig John R. Robben M. E. Lematta R. James Clarke Brad Wilson Robert Ridenour Denny Nusbaum Larry Crook Alton Greenwade Jeff Barth Gary R. & Denise S. Clevenger Phil Murray	(503) 8	838-4094	19-FEB-92	30-JUN-92	
456	W VR	SCREEN PLANT	29910 CAMP ADAIR ROAD	HTUOMKOM	97361	Donald Works	(503)	745-5649	23-MAR-92		
3708	WVR	OIL PRODUCTS, INC.	140 PALMER ST.	MOUNT ANGEL	97362	Robert Rash	(503) 8	845-2261	21-JAN-92	18~JUN-92	
5071	WVR	SCHMIDT BP	220 NORTH MAIN STREET	MOUNT ANGEL	97362	Ronald Schmidt			10-JAN-92	18-JUN-92	
275	WVR	WILCO CARDLOCK #3	105 S. GARFIELD ST.	MOUNT ANGEL	97362	Thomas E. Smith	(503) 8	845-2257	10-FEB-92	01-OCT-92	
2381	WVR	CLARKS TEXACO	610 N. COAST HWY.	NEWPORT	97365	Mark Younger	(503) 9	926-4289	23-MAR-92	44 00	06-0CT-92
1424	WVR	EMBARCADERO DOCK OREGON,	1000 S.E. BAY BLVD.	NEWPORT	97365	Rhonda & Clyde Hamstreet	(503) 2	265-5435	30-JAN-92	14-MAY-92	
		HOCKEMA COAST OIL	250 N.W. 3RD	NEWPORT	9/365	Richard Mikesell	(503) 9	728-3385 777 2074	23-JAN-92	07-AUG-92	
		KJELDSENS DELI - MARKET	960 SW COAST HIGHWAY	NEWPORT	9/302	uraig James Kelson	(503) 3	330-ZU/ I	17-MAK-92	33-660-03	
0243	WVK	M.R. WOOD EXXON MINI MART	22 N. CUASI RWI.	NEWPORT	7/303	M. K. WOOD	(503) 4	20072412 345-3/13	26-MAD-02	22-SEP-92	
0040	WYK		835 NORTH COAST HIGHWAY MARINE SCIENCE DRIVE	NEWPORT	07745	Mauroon Millon	(503) 2	265-2758	07_EED_02	1/-MAV-02	
5160	WVK	DODE DOCK MADINA	BAY BLVD.	NEWPORT	07365	Pichard Mikecall	(503) 2	203-7730	23-14N-02	07-ALIG=92	
0582	WVK	RON'S MOBIL CAR WASH	1517 M COAST MICHUAY	MEMPORT	07365	Poland Vienke	(503)	265-5803	24-MAP-02	22-SED-02	
		SAV-ON-GAS TEXACO CAR WAS	OAT OU COAST BIGRAAT	NEWFORT	07365	Harvey I Raimgarden	(503) 2	265-8035	23-MAD-02	15-SED-02	
			_143 S.W. COAST HWY.	NENFORT	07365	Dichard Mikesell	(503) 2	228-3385	23 - JAN - 92	07-ALIG-92	
4525	LN/D	SOUTH BAY MADKET	-HWY 101	MEMPORT	97366	A M Hatton	(503)	004-0115	10-JAN-92	29-SEP-92	
070	UV/D	BAY ADEA TEYACO & MINI MA	5128 SE HIGHUAY 101	LINCOLN CITY	97367	Phil Murray	(503) 5	588-0455	16-MAR-92	24-DEC-92	
2347	UVD	CHEVRON CAR DASH	5128 SE HIGHWAY 101 2320 N.E. HWY 101 2424 N.E. HWY 101	LINCOLN CITY	97367	Robert Shaffer	(503) 9	994-8448	07-JAN-92	11-MAY-92	04-SEP-92
405	LIVD	DUN'S SHELL SERVICE	2424 N F HUY 101	TINCOLN CITY	97367	Don J Thompson	(503)	994-2416	05-FFR-92	21-SEP-92	0. 02. 72
3264	U/D	GARRISON FUEL	1410 S.E. HWY 101	TINCOLN CITY	97367	Dennis I Stoll	(503) 3	362-5558	23-MAR-92	23-SEP-92	
315	UVR	LINCOLN CITY PRIDE	906 HWY 101 SOUTH	LINCOLN CITY	97367	Donald H. Hartvig	(503) 2	295-2668	01-APR-92	22 02. 72	
4937	UVR	ROBBEN, INC. DBA NORTH LIN	3232 N.E. HIGHWAY 101	LINCOLN CITY	97367	John R. Robben	(503)	994-5530	19-MAR-92	30-JUL-92	
			HWY 18 & OLD HWY 101	OTIS	97368	M. E. Lematta			30-JAN-92	24-SEP-92	
			4077 SALMON RIVER HWY	OTIS	97368	R. James Clarke	(503) 9	994-2415	30-MAR-92	29-SEP-92	
9018	WVR	NATIONAL CARDLOCK NETWORK	7TH & APPLEGATE	PHILOMATH	97370	Brad Wilson	(503) 9	926-1817	24-MAR-92		
5264	WVR	RIDENOUR OIL CO., INC.	1841 MAIN (P.O. BOX 430)	PHILOMATH	97370	Robert Ridenour	(503) 9	929-3562	05-MAR-92	17-SEP-92	
		SERVICE GARAGE	1414 MAIN STREET	PHILOMATH	97370	Denny Nusbaum	(503) 9	929~3054	08-JAN-92	11-SEP-92	
		POLK COUNTY FARMERS' COOP	8870 RICKREALL ROAD	RICKREALL	97371	Larry Crook			28-JAN-92		
1425	WVR	RICKREALL FARM SUPPLY, INC	130 MAIN ST.	RICKREALL	97371	Alton Greenwade	(503) (623-2365	14-JAN-92	04-SEP-92	
320	WVR	CLAYTON AUTOMOTIVE INC. D	39011 HWY. 226	SCIO	97374	Jeff Barth	(503)	394-3380	22-JAN-92	15-JUN-92	
8506	WVR	THE MECHANIC SHERIDAN TEXACO	38955 HWY 226	SCIO	97374	Gary R. & Denise S. Clevenger	(503) 3	394-3302	15-JAN-92	04-SEP-92	
				SHERIDAN	97378	Phil Murray	(503)	588-0455	15-JAN-92	14-AUG-92	
190	WVR	T.J.'S SUPER SERVICE	107 W. MAIN ST.	SHERIDAN	97378	Wesley Windle Glick	(505) (350/	02 FED 02	20 CED 03	
10024	WVR	SILEIZ WORLE	214 GAITHER	SILETZ	97380	Larry D. Weaver	203444°	-42U4 045-0/10	03"FEB"92	73-2ED-03	
7412	WVK	SILEIZ SIAIIUN	315 GAITHER	SILETZ SILVERTON	07781	M. K. WOOD	(505) 4	203~2412	15-1AN-02	03-7110-05	
2012	MAK	SILETZ MOBIL SILETZ STATION CLARENCE'S TEXACO DUNMIRE BP	621 N. WATER ST. 604 MCCLAINE ST.	SILVERTON	07381	Gary R. & Denise S. Clevenger Phil Murray Wesley Windle Glick Larry D. Weaver M. R. Wood Phil Murray Robert Rash Earl C. Hartman Howard W. Hatteberg Jim Furman Thomas E. Smith Donald McCall Richard Mikesell	(503) 8	R45-2261	21-JAN-92	18-JUL-92	
6300 6882	U//D	EARL HARTMAN CHEVROLET	206 - 210 S. WATER ST.	SILVERTON	97381	Farl C. Hartman	(503) 8	873-5983	14-JAN-92	19-AUG-92	
100	LIV/D	HATTEBERGS CHEVRON	215 N. WATER STREET	SILVERTON	97381	Howard W Hattehers	(503) 8	873-5601	16-MAR-92	., ,_	
		TNT MARKET	700 MCCLAINE	SILVERTON	97381	Jim Furman	(503) 8	873-3886	21-JAN-92	21-SEP-92	
		WILCO FARMERS-SILVERTON B		SILVERTON	97381	Thomas F. Smith	(503) 8	845-2257	10-FEB-92	01-OCT-92	
		DON'S EXXON 383	110 E. WASHINGTON STREET	CTAVEN	97383	Donald McCall	(503)	769-2400	30-MAR-92	.,	
		DON'S EXXON 383 H.L. ASHBY, INC.	333 N. 1ST AVENUE	STAYTON	97383	Richard Mikesell	(503) 9	928-3385	23-JAN-92		
1366	UV/D	HANCE OIL CO. CAARDLOCK		STAYTON	97383	Leo G. Hance	(503)	769-5479	10-FEB-92	15-MAY-92	
2704	LAKE	CTAVION DD	820 N. FIRST ST.	STAYTON	97383	Robert Rash	(503) 8	845-2261	21-JAN-92	01-JUL-92	
3609	UVR	STAYTON TEXACO	789 N. 3RD AVENUE	STAYTON	97383	Phil Murray			15-JAN-92	03-AUG-92	
1285	WVR	WILCO FARMERS	1385 N. FIRST	STAYTON	97383	Thomas E. Smith	(503) 8	845-2257	10-FEB-92	01-0CT-92	
394	WVR	HAROLD F. WILTSE	11212 HWY 226	MEHAMA	97384	Donald F. Wiltse	(503) 8	859-2215	10-JAN-92	18-SEP-92	
9754	WVR	STAYTON TEXACO WILCO FARMERS HAROLD F. WILTSE FAST STOP GAS/BP	104 W STARR	SUBLIMITY	97385	Donald McCall Richard Mikesell Leo G. Hance Robert Rash Phil Murray Thomas E. Smith Donald F. Wiltse Wayne Burger			18-FEB-92	17-AUG-92	18-JUN-92





Statewide	Summary	Report	-	Zip	Code	Order

FAC ID REG FAC NAME	ADDRESS 1762 MAIN 1801 MAIN STREET 1306 MAIN STREET 4420 HWY 20 1810 MAIN ST. 7775 NW HWY 101	CITY	ZIP		PHONE		LOI _	CA	APP
5768 WVR BILL VAN VALIN CHEVRON	1762 MAIN	SWEET HOME	97386	William H. Van Valin Kirby D. Wilson Richard Mikesell Lowell & Elva Funk Mark Younger Charles & Vicki Rowlett Howard Stahr Craig James Kelson James & Gina Van Vleck Pat Seibel Richard Mikesell Elton Ball Richard Mikesell Michael T. Rowley Lee E. & Helen R. Weltner	(503)	367-2050	15-JAN-92	08-SEP-92	
8204 WVR KIRBY'S QUICK SERVICE	1801 MAIN STREET	SWEET HOME	97386	Kirby D. Wilson	(503)	367-5213	24-MAR-92	22-SEP-92	
9196 WVR M & M #6	1306 MAIN STREET	SWEET HOME	97386	Richard Mikesell			23-JAN-92		
2057 WVR MID-STATE PETROLEUM CARDL	4420 HWY 20	SWEET HOME	97386	Lowell & Elva Funk	(503)	367-2912	24-MAR-92	01-oct-92	
7065 WVR SWEETHOME TEXACO	1810 MAIN ST.	SWEET HOME	97386	Mark Younger			23-MAR-92		06-0CT-92
	7775 NW HWY 101	GLENEDEN BEA	97388	Charles & Vicki Rowlett			13-JAN-92		
	33685 HIGHWAY 99E, PO BOX	TANGENT	97389	Howard Stahr	(503)	926-4404	05-MAR-92	23-SEP-92	
2230 WVR MOBIL MINI MART	41 OLALLA RD.	TOLEDO	97391	Craig James Kelson			17-MAR-92		
5125 WVR OLALLA GROCERY	1000 STURDEVANT ROAD	TOLEDO	97391	James & Gina Van Vleck			16-JAN-92		
7215 WVR PMK DISTRIBUTING 5853 WVR STEVE CARVERS BP	HWY. 20 & ASH 254 W. HWY 20	TOLEDO	97391	Pichard Mikeaell			24-MAR-92 23-JAN-92		
	5325 DENVER ST.	TIBLED	07702	Elton Poll			23-JAN-92 23-MAR-92		
5772 WVR BILL'S BP	HWY 101	LIAIDDODT	0730/	Pichard Mikecall			23-JAN-92		
1336 WVR ROWLEY'S CHEVRON SERVICE	119 HUY 101 & HUY 34	MALDFORT	07304	Michael T Pouley			07-JAN-92		
	10076 ALSEA HIGHWAY	WALDPORT	07304	Lee E. & Helen R. Weltner			30-MAR-92		
5663 WVR FORT HILL TEXACO		WILLAMINA	97396	Phil Murray			15-JAN-92		
8945 WVR J C JONES OIL COMPANY	662 NE MAIN STREET	WILLAMINA	97396	Phil Murray Courtney Jones Clifford B. Jenne Brad Templeton Deborah Harrison David B. Allen Chuck Bierman Robert Newburn Robert Newburn			03-MAR-92		
9891 WVR PETROLEUM ENERGY PRODUCTS	BETWEEN C AND D STREETS	WILLAMINA	97396	Clifford B. Jenne			30-MAR-92		
10219 WVR BRAD'S MOBIL		EUGENE	97401	Brad Templeton			18-FEB-92		
4131 WVR BUDGET RENT A CAR OF EUGE		EUGENE	97401	Deborah Harrison		344-1670			
1204 WVR CHEVRON U.S.A., INC 92		EUGENE	97401	David B. Allen		343-0121			
3092 WVR CITY CENTER CAR WASH, INC		EUGENE	97401	Chuck Bierman			30-MAR-92	21-AUG-92	
3305 WVR COBURG DARI MART		EUGENE	97401	Robert Newburn			10-FEB-92		
3372 WVR COBURG ROAD EXXON		EUGENE	97401	Robert Newburn	(503)	683-4433	10-FEB-92	14-SEP-92	
9208 WVR COBURG TEXACO	32959 VAN DUYN RD.	EUGENE	97401	ROB FOREST			15-JAN-92		
1601 WVR EUGENE TRUCK HAVEN, INC./	32910 VAN DUYN RD.	EUGENE	97401	James Anderson	(503)	485-2137	13-JAN-92	19-MAY-92	20-APR-92
5429 WVR FARMER, KENNETH B. 6012 WVR FRANKO #39 6113 WVR FRANKO #47 1470 WVR GOSHEN TRUCK STOP	407 E. 11TH	EUGENE	97401	Robert Newburn Robert Newburn ROB FOREST James Anderson Kenneth B. Farmer Donald H. Hartvig Donald H. Hartvig Robert Newburn Kelly Higgins Robert Newburn Curtis McCracken Richard Wright Verral E. King Robert Newburn Dale Andert Thomas R Melvin Robert Newburn Donald H. Hartvig John Phimister Steve Beard Stuart W. Barr Bill Fogelson Vernon & Margaret Iverson	(503)	343-4225	03-FEB-92	29-SEP-92	
6012 WVR FRANKO #39	280 WILLAMETTE STREET	COBURG	97401	Donald H. Hartvig		295-2668			
6113 WVR FRANKO #47	285 RIVER ROAD	EUGENE	97401	Donald H. Hartvig		295-2668			
1470 WVR GOSHEN TRUCK STOP	HWY. 99 & OLD WILLAMETTE	GOSHEN	97401	Robert Newburn			10-FEB-92		
6455 WVR HIGGINS PETROLEUM, INC.		EUGENE	97401	Kelly Higgins			19-MAR-92	24-JUL-92	
2188 WVR J C PENNEY CO.INC.	300 VALLEY RIVER CENTER	EUGENE	97401	Robert Newburn		683-4433			
6873 WVR MCCRACKEN MOTOR FREIGHT,		EUGENE	97401	Curtis McCracken		222-4291		04 4110 03	
3310 WVR PANOCO,INC 77 WVR SAM'S UNION SERVICE	472 WEST 7TH 591 WILLAMETTE ST.	EUGENE EUGENE	07/01	Vocani E Ving		484-5151	06-FEB-92	00-AUG-92	
3444 WVR STAGE STOP MARKET & DELI		EUGENE	07/11	Pohert Mauhurn			03-FEB-92	1/- SED-02	
1396 WVR TEXACO SERVICE STATION		EUGENE	07/.01	Dale Andert		225-4257		14 321 72	
959 WVR UNOCAL 3838	11 COBURG RD.	EUGENE	97401	Thomas R Melvin	(203)	FE3 4F3:	20-MAR-92	25-SEP-92	
3299 WVR 18TH & CHAMBERS 7-11	1690 WEST 18TH	EUGENE	97402	Robert Newburn	(503)	683-4433	10-FEB-92		
6106 WVR ARCO-FRANKO STATION #2		EUGENE	97402	Donald H. Hartvig	_	295-2668		02. 70	
6219 WVR ASTRO/CHEVRON #207		EUGENE	97402	John Phimister			09-JAN-92	21-SEP-92	
6963 WVR BARGER TEXACO	4943 BARGER DRIVE	EUGENE	97402	Steve Beard			21-JAN-92		
4576 WVR BARR, STUART W.		EUGENE	97402	Stuart W. Barr		342-1936	_		
9173 WVR BILL FOGELSON'S TEXACO	720 WEST 7TH	EUGENE	97402	Bill Fogelson			27-MAR-92	10-SEP-92	
1081 WVR CHEVRON U.S.A., INC 93		EUGENE	97402	Vernon & Margaret Iverson			01-APR-92		
7994 WVR CURTIS SERVE-N-SAVE	885 HIGHWAY 99 NORTH	EUGENE	97402	Philip M. Schermerhorn Roy Spagnola II Charles Pinnell			04-FEB-92		
7178 WVR FAT CITY TEXACO	1795 W. 11TH	EUGENE	97402	Roy Spagnola II			13-JAN-92		
2030 WVR FERN RIDGE STORE	27359 CLEAR LAKE RD.	EUGENE	97402	Charles Pinnell			16-JAN-92		
	1701 WEST 11TH AVENUE	EUGENE	97402	Donald H. Hartvig	(503)	295-2668	01-APR-92		
6104 WVR FRANKO #11	376 HWY 99 NORTH	EUGENE	97402	Donald H. Hartvig	(503)	295-2668	01-APR-92		

FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP		PHONE	LOI	CA	APP
6111	UVD	FRANKO #3	4701 W. 11TH	EUGENE	07/02	Donald H. Hartvig Bettie Hansey Phil Murray David Coplin Dean Henderson Robert Newburn Robert Newburn Richard Wright Richard Wright ROB FOREST ROB FOREST Dale Andert Dale Andert Perry Otis Tomlin III	/5031 205-2668	01-400-02		
				EUGENE	97402	Pottie Nancey	(503) 293-2000	21-141-02	01-0CT-02	
318	LIVE	GREEN HILL SERVICE GREENHILL ARCO	6085 WEST 11TH AVE.	EUGENE	07/102	Dhil Murray	(503) 588-0655	15 - JAN - 02	1/- Alic-02	
			90600 GREENHILL RD(JET FA	EUGENE	07/02	David Conlin	(503) 500 0433	25 MAD Q2	14 YOU)E	
		MERRITT TRUAX, INC.	1395 HWY. 99 N.	EUGENE	97402	Dean Henderson	(503) 500-0971 (503) 588-0655	15 - IAN - 02	25-SED-02	
			1695 W. 18TH	EUGENE	97402	Robert Neuburn	(503) 583-4433	10-FFR-92	14-SEP-92	
		PACIFIC PETROLEUM CORP. O		EUGENE	97402	Robert Newburn	(503) 683-4433	10-FEB-92	14-SEP-92	
		PANOCO, INC #3		EUGENE	97402	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
4368	WVR	PANOCO, INC #4	2735 RIVER ROAD	EUGENE	97402	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
3615	WVR	PRAIRIE ROAD CARDLOCK		EUGENE	97402	ROB FOREST	(503) 682-3865	16-JAN-92	25-SEP-92	
6436	WVR	PICKIS TEXACO	3175 W. 11TH	EUGENE	97402	ROB FOREST	(503) 682-3865	15-JAN-92	30-SEP-92	
1388	WVR	TEXACO SERVICE STATION		EUGENE	97402	Dale Andert	(503) 225-4257	09-MAR-92		
8136	WVR	TEXACO STATION	1080 W. 7TH AVE.	EUGENE	97402	Dale Andert	(503) 225-4257	09-MAR-92		
8344	WVR	IOMLIN, PERRY UIIS III	(ST HWY, 99 NORTH	EUGENE	97402	Perry Otis Tomlin III Brad Templeton	(503) 689-4635	20-MAR-92	28-SEP-92	
		UNOCAL 6050		EUGENE	97402	Brad Templeton	(503) 344-5537	18-FEB-92	17-AUG-92	
		EUGENE MOBILE VILLAGE	4774 FRANKLIN BLVD	EUGENE	97403	Bruce Ogg	(818) 335-7048	30-MAR-92		
		GLENWOOD EXXON		EUGENE	97403	Robert Newburn	(503) 683-4433	10-FEB-92	14-SEP-92	
				EUGENE	97403	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
		TEXACO SERVICE STATION		EUGENE	97403	Dale Andert	(503) 225-4257	09-MAR-92		
		TEXACO STATION	4197 FRANKLIN BLVD.	EUGENE	97403	Dale Andert	(DUD) 24D-44D1	09-MAR-92		
		TEXACO STATION		EUGENE EUGENE	97403	Data Vmd	(503) 223-4237	71_1AN_07	DA-4110-02	
7236	UVK 1.IVD	UNIVERSITY TEXACO CLARK HOLLIS TEXACO		EUGENE	07/10	Clark Hollic	(503) 688-3270	18-FFB-07	1/-SED-02	
		FRANKO #13		EUGENE	97404	Bonald H. Hartvin	(503) 205-2668	01-APR-92	14 361 76	
		FRED MEYER - REACON OIL	50 DIVISION	EUGENE	97404	Rarry Naone	(503) 731-6487	24-FFR-92	01-0CT-92	
		SANTA CLARA ARCO	2585 RIVER ROAD	EUGENE	97404	Phil Murray	(503) 588-0455	15-JAN-92	14-AUG-92	
		EUGENE QUALIII LAK WASH	115 WEST 29TH	EUGENE	97405	Robert Newburn	(503) 683-4433	10-FEB-92	.,	
		FRANKO #15 FRANKO #48 JACKSON, BERNARD L. ALLEGANY STORE ALVADORE STORE AZALEA GENERAL STORE	87614 MCVAY HWY.	EUGENE	97405	Donald H. Hartvig	(503) 295-2668	01-APR-92		
		FRANKO #48	2795 WILLAMETTE STREET	EUGENE	97405	Donald H. Hartvig	(503) 295-2668	01-APR-92		
		JACKSON, BERNARD L.	04219 AGNESS RD.	AGNESS	97406	Bernard L. Jackson	(503) 247-7233	27-MAR-92	10-SEP-92	
		ALLEGANY STORE	COOS RIVER HWY	ALLEGANY	97407	Raymond Solomon		16-MAR-92		
580	WVR	ALVADORE STORE	90828 RAIL RD. ST.	ALVADORE	97409	Candice & Terry Weils	(503) 689-3551	13-JAN-92	21-SEP-92	
		AZALEA GENERAL STORE	462 AZALEA GLEN ROAD	AZALEA	97410	Judith Tegarden-Leseman	(503) 837-3456	20-MAR-92	01-OCT-92	
		GODDARD ENERGY CO.	2ND & ELMIRA / P.O. BOX 2	BANDON	97411	Donald Goddard	(503) 347-2808	29-JAN-92	01-0CT-92	
		RON'S OIL COMPANY SERVICE		BANDON	97411	Ron La Franchi	(503) 396-5571	10-168-92	47 242 00	
		BLACHLY COUNTRY STORE		BLACHLY	97412	Sharon Berry	(503) 925-3365	2/ JAN-92	14-MAI-92	
		HORTON MARKET		HORTON .	97412	Steven Harbick	(503) 925-3290	24"JAN"92	14-MAI-92	
		MCKENZIE BRIDGE GENERAL S	54880 MILL CREEK ROAD	BLUE RIVER	07/13	Conclding Mannie	23.0a.\8\ (203\	U-14N-92	11-3EP-92	
2021	WAL	PETE'S TEXACO BROADBENT MARKET ALLIANCE FAST MART	BOX 67	BROADBENT	97413	Pouland Colden	(503) 464-7463	15	01-00T-92	
6/.1	CIID	ALLIANCE FAST MART	500 CHETCO AVE	BROOKINGS	07/.15	August D Otten	(707) 465-4200	24-MAR-92	01-001-92	
		BI-MOR STATIONS #18	16021 HWY. 101	HARBOR	07415	Mike Moran	(503) 772-2053	22-JAN-92	17-SEP-92	
		BROOKING'S SHELL	600 CHETCO	BROOKINGS	07415	Harry Turner	(503) 469-1977	16-MAR-92	09-NOV-92	
		COLVIN OIL CO., NORTH GAT		BROOKINGS	97415	Scott Pedd	(503) 479-5343	23-JAN-92	28-SEP-92	
		D & H CHEVRON	548 CHETCO AVE.	BROOKINGS	97415	Dan W. Carpenter	(503) 469-5143	16-MAR-92	01-JUN-92	
			16258 HWY 101 SOUTH	HARBOR	97415	Gilbert Batty	(503) 469-4666	19-MAR-92	17-SEP-92	
			1002 CHETCO AVE.	BROOKINGS	97415	Dan W. Carpenter	(503) 469-5143	16-MAR-92	01-OCT-92	
		KAY'S MARKET	18493 HWY. 42	CAMAS VALLEY	97416	Lois White	(503) 679-6350	01-APR-92		
		MARKET PLUS	P.O. BOX 205	CAMAS VALLEY	97416	Manford Amos	(503) 445-2385	12-FEB-92	10-NOV-92	
		B.P.SERVICE STATION	5TH & MAIN ST.	CANYONVILLE -	97417	Dale Andert Perry Otis Tomlin III Brad Templeton Bruce Ogg Robert Newburn Richard Wright Dale Andert Dale Andert Dale Andert Peter Kryl Clark Hollis Donald H. Hartvig Barry Naone Phil Murray Robert Newburn Donald H. Hartvig Bernard L. Jackson Raymond Solomon Candice & Terry Weils Judith Tegarden-Leseman Donald Goddard Ron La Franchi Sharon Berry Sanford Rice Steven Harbick Geraldine Harris Rowland Golden August D. Otten Mike Moran Harry Turner Scott Pedd Dan W. Carpenter Gilbert Batty Dan W. Carpenter Lois White Manford Amos E. D. Dirksen	(503) 672-1666	01-APR-92	01-0CT-92	



FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE		LOI	CA	APP
1051	SWR	CANYON TEXACO	203 S.W. 4TH	CANYONVILLE	97417	Mike Monteleone John Shirtcliff Russell Jake Young Patricia & Troy Dixon Marvin L. & Jeffrey M. Perry John Phimister Walter Hazen Maurie Bassett Maurie Bassett Mike Moran Harry C. Davis Keith T. Johnson Thomas A. Craig	(503)	839-6344	27-MAR-92	26-MAY-92	
686	SWR	PENNY PINCHER GASOLINE #2	358 N. MAIN	CANYONVILLE	97417	John Shirtcliff	(503)	863-3521	16-JAN-92	01-JUN-92	
9070	SWR	RUSSELL JAKE YOUNG	225 MAIN STREET	CANYONVILLE	97417	Russell Jake Young	(503)	839-4125	23-MAR-92	01-0CT-92	
8043	WVR	LOW PASS STATION & MARKET	22501 HWY. 36	CHESHIRE	97419	Patricia & Troy Dixon	(503)	998-6066	13-JAN-92	02-SEP-92	
8343	WVR	PERRY, MARVIN L. & JEFFER	27051 HWY. 36	CHESHIRE	97419	Marvin L. & Jeffrey M. Perry	(503)	998-2042	23-MAR-92		
6222	SWR	ASTRO #228	997 NEWMARK	COOS BAY	97420	John Phimister	(503)	243-7899	09-JAN-92	21-SEP-92	
9263	SWR	BARVIEW MARKET	3686 CAPE ARAGO HWY	COOS BAY	97420	Walter Hazen	(503)	888-2322	25-MAR-92	19-MAY-92	
5154	SWR	BASSETT-HYLAND ENERGY CO.	1059 EVANS BLVD.	COOS BAY	97420	Maurie Bassett	(503)	267-2107	19-MAR-92	21-SEP-92	
1719	SWR	BASSETT-HYLAND ENERGY CO.	425 LOCKHART	COOS BAY	97420	Maurie Bassett	(503)	267-2107	19-MAR-92	21-SEP-92	
3603	SWR	BI-MOR STATIONS #10	392 SO. 41H	COOS BAY	97420	Mike Moran	(503)	772-2053	22-JAN-92	17-SEP-92	
8045	SWR	CODS BAY TEXACO	1064 EVANS BLVD.	COOS BAY	97420	Harry C. Davis	(503)	756-3426	23-MAR-92	29-SEP-92	
6027	SWR	COOS GRANGE SUPPLY	1085 SO. 2ND	COOS BAY	97420	Keith T. Johnson	(503)	267-7051	30-MAR-92	01-0CT-92	
1378	SWR	CRAIG & CRAIG INC. DBA TN	899 "D" STREET/P.O.BOX 40	COOS BAY	97420	Thomas A. Craig	(503)	267-2409	24-FEB-92	17-SEP-92	
9324	SWR	DAVEY JONES LOCKER	5092 BOAT BASIN DRIVE	CHARLESTON	97420	Clifford 1. George	(503)	269-2717	21-JAN-92	11-SEP-92	
10858	SWR	DAVIS DIL INC CARDLOCK	1655 S. 101 HWY	COOS BAY	97420	Harry C. Davis	(503)	756-3426	23-MAR-92	29-SEP-92	
8523	SWK	EMPIRE ARCO	1022 NEWMARK	COOS BAY	97420	Hal K. Graham	(503)	756-6216	27-JAN-92	01-OCT-92	
2190	SWK	ENTRUME MADINE FUEL 9 C	7744 ALACKA DACKEDO DD	COOS BAY	97420	Wilson Uno	(503)	888-9419	3U-MAR-92	01-001-92	
£100	OWK	LIGITUERS WAKING LOST & 2	4/4 CIVIU CIDEET	COOC BAY	97420	Douglas M. Fletcher	(503)	201-3392	03-158-92	29-2FP-92	
5004	SMK	CLOUCETO ENCLEROOD MYDALE	1/7/ CH PUD	COOS BAY	97420	Donald H. Hartvig	(503)	295-2008	U1-APR-92	44 055 00	
2980	SMK	HODING TENACO	1434 S.W. BLVD.	COOS BAY	97420	Clifford 1. George	(503)	269-2717	13-JAN-92	11-SEP-92	
5909 7174	2MK	MORTH RECARDIAN ENVOY	SOF N DROADUAY	COOS BAY	97420	Kichard W. Morin	(E07)	75/ /31/	10-JAN-92	15-MAY-92	
1170	OWK	NUKIH BRUADWAI EXXUN	1470 OCEAN DIVO	COOS BAT	97420	Hall C. Granam	(503)	/30-0210 75/ 7/3/	27-JAN-92	01-001-92	
11004	SHID	DAT AND MIVES VALLEY MADE	71/1 UIV /2	COOS BAY	07/20	Denoted Decision	(503)	720-3440	23-MAK-92	29-3EP-92	
4135	CIID	DOING OF ODECOM SERVICE S	SRS NEUMADY CIDEET	COOS BAI	07/20	Doil Huppov	(503)	209-3300	01-APK-92	23-3EP-32	
271	CIID	PONTE OF OKEGON SERVICE S	1622 CADE ADACH HUY	COOS BAI	97420	Populd Rogaroning	(503)	200-0433 222-3013	27-MAR-72		
9388	SMK	SHIPTCHIFFS STORE	8083 CADE ARAGO HUY	COOS BAY	97420	Mary McCettigan	(503)	267-3353	01-MAK-92		
7258	SWR	ARNOLD'S UNION 76	505 N CENTRAL	COOLILLE	97423	Arnold Sturgill	(503)	306-4441	16-MAD-02	01-001-02	
9313	SWR	BASSETT-HYLAND ENERGY CO.	340 W MAIN	COGUILLE	97423	Maurie Rassett	(503)	267-2107	10 MAR - 92	01-001-92	
9536	SWR	FOUR CORNERS GROCERY	HC 83 BOX 3000	COQUILLE	97423	Kae Perry	(503)	396-3616	10~.IAN-92	26-AUG-92	
4009	SWR	RON'S OIL #3	325 N. ADAMS ST.	COOUTLLE	97423	Ron La Franchi	(503)	396-5571	10-FFB-92	24 /2	
5022	SWR	SHELL SERVICE STATION	279 N. CENTRAL	COQUILLE	97423	David Batty	(503)	469-4666	30-MAR-92		
3572	WVR	BI-MOR STATIONS, #16	2500 E. MAIN ST.	COTTAGE GROV	97424	Mike Moran	(503)	772-2053	22-JAN-92	17-SEP-92	
5887	WVR	BILLS TEXACO	54 PACIFIC HIGHWAY SOUTH	COTTAGE GROV	97424	S. Neil Jongeward	(503)	345-9404	23-MAR-92		
254	WVR	BOYCE SHELL SERVICE	424 SOUTH PACIFIC HIGHWAY	COTTAGE GROV	97424	James E. Boyce	(503)	942-8224	23-JAN-92	30-SEP-92	
10627	WVR	CLOSED SERVICE STATION	801 WASHINGTON	COTTAGE GROV	97424	Richard Wright	(503)	286-9621	19-FEB-92	06-AUG-92	
8688	WVR	COTTAGE GROVE THRIFTY	1220 PACIFIC HWY 99N	COTTAGE GROV	97424	Robert Newburn	(503)	683-4433	18-FEB-92	01-0CT-92	
740	WVR	DAVID, KENNETH A. & ALICI	73948 LONDON RD	COTTAGE GROV	97424	Kenneth & Alicia David	(503)	942-5738	27-MAR-92	24-AUG-92	
1436	WVR	GLAUSI OIL COMPANY	803 S. PACIFIC HWY.	COTTAGE GROV	97424	Otto Glausi	(503)	687-1234	19-MAR-92	28-SEP-92	
1435	WVR	GLAUSI STATIONS, INC.	ROW RIVER ROAD & VILLAGE	COTTAGE GROV	97424	Otto Glausi	(503)	687-1234	19-MAR-92	01-0CT-92	
5972	WVR	PARRISH	33399 ROW RIVER ROAD	COTTAGE GROV	97424	Will & Jan Parrish			10-JAN-92	17-JUL-92	
3282	WVR	VILLAGE GREEN EXXON	690 ROW RIVER ROAD	COTTAGE GROV	97424	Robert Newburn	(503)	683-4433	10-FEB-92	14-SEP-92	
9985	CR	CRESCENT CREEK COTTAGES	MP 71 HWY 58	CRESCENT LAK	97425	James R. Roach, Sr	(503)	433-2324	01-APR-92		
650	CR	CRESCENT LAKE LODGE & RES	CRESCENT LAKE, P.O. BOX 7	CRESCENT LAK	97425	Russell Jake Toung Patricia & Troy Dixon Marvin L. & Jeffrey M. Perry John Phimister Walter Hazen Maurie Bassett Mike Moran Harry C. Davis Keith T. Johnson Thomas A. Craig Clifford T. George Harry C. Davis Hal K. Graham Wilson Cho Douglas M. Fletcher Donald H. Hartvig Clifford T. George Richard W. Morin Hal K. Graham Harry C. Davis Donald Drawson Phil Murray Ronald J. Hogewoning Mary McGettigan Arnold Sturgill Maurie Bassett Kae Perry Ron La Franchi David Batty Mike Moran S. Neil Jongeward James E. Boyce Richard Wright Robert Newburn Kenneth & Alicia David Otto Glausi Otto Glausi Wil & Jan Parrish Robert Newburn James R. Roach, Sr Frances L. Sauza Mark J Walker Joseph G. & Margaret A. Capron William C. Spencer	(503)	433-2505	23-MAR-92		
9060	CR	CRESENT LAKE CHEVRON	MILE POST 69 1/2, HWY 58;	CRESCENT LAK	97425	Mark J Walker	(503)	433-2533	16-MAR-92	01-0CT-92	
646	CR	ODELL SPORTSMAN CENTER	P.O. BOX 14/HWY. 58 66 N. MILL	CRESCENT LAK	97425	Joseph G. & Margaret A. Capron	(503)	433-9417	01-APR-92		
2135	WVR	CRESWELL COMMERCIAL SERVI	66 N. MILL	CRESWELL	97426	William C. Spencer William C. Spencer James J. Billo Phillip D. Clapp	(503)	895-4846	23-MAR-92	01-0CT-92	
				CRESWELL	97426	William C. Spencer	(503)	895-4846	23-MAR-92	23-SEP-92	
6548	WVR	CRESWELL SHELL #8	375 E. OREGON AVE 80616 DAVISSON RD.	CRESWELL	97426	James J. Billo	(503)	895-4716	21-JAN-92	06-AUG-92	
3028	WVR	GREEN RIVER LUMBER	80616 DAVISSON RD.	CRESWELL	97426	Phillip D. Clapp	(503)	942-0542	23-MAR-92		

FAC ID	REG	FAC NAME	ADDRESS	CITY		CONTACT	PHONE		FOI	CA	APP
9332	WVR		5 SOUTH FRONT, P.O. BOX 9	CRESWELL	97426	Johnny Johnston Dale Andert Elaine Kitcher Robert Newburn Marion Smart Larry & Edna Strong Norman & Lorraine Liles David Boyd Bob & Flora Jones Kenneth R. Owens Bill Johnson Ernest D./Barbara S. Wheeler	(503)	895-4255	30-MAR-92	01-0CT-92	
1391	WVR	TEXACO SERVICE STATION	270 E. OREGON & I-5	CRESWELL	97426	Dale Andert	(503)	225-4257	09-MAR-92		
3640	SWR	CURTIN GENERAL STORE	SO. SIDE OLD HWY. AT CURT	CURTIN	97428	Elaine Kitcher	(503)	942-2013	01-APR-92		
5220	SWR			CURTIN	97428	Robert Newburn	(503)	683-4433	10-FEB-92	14-SEP-92	
4500	SWR	JOHN'S TEXACO	I-5 & BEAR CREEK RD	CURTIN	97428	Marion Smart	(503)	942-1218	30-MAR-92		
9111	SWR	JOHN'S TEXACO STRONG'S MARKET ON THE WAY MARKET & GAS BOYD'S GROCERY ROW RIVER STORE COWBOY'S SHELL THE OLD PUMPER WHEELERS TEXACO RON'S CHEVRON ELMIRA FAMILY STORE ELMIRA STATION JASPER STORE BAY BRIDGE MARINA FLORENCE ARCO GLAUSI OIL COMPANY	11245 TILLER-TRAIL HWY	DAYS CREEK	97429	Larry & Edna Strong	(503)	825-3645	01-APR-92		
9685	WVR	ON THE WAY MARKET & GAS	38299 HWY 58	DEXTER	97431	Norman & Lorraine Liles	(503)	747-8238	10-JAN-92	11-MAY-92	
158	WVK	BOYD'S GROCERY	37635 ROW RIVER ROAD	DORENA	97434	David Boyd	(503)	942-9981	10-JAN-92	18-SEP-92	
120	WVK	KOM KINEK ZIOKE	3/3/U ROW RIVER RU.	DORENA	9/434	Bob & Flora Jones	(503)	946-1567	50-MAR-92	23-SEP-92	
2511	CLID	THE OLD DIMDED	OUR B CT	DRAIN DRAIN	07/35	Rill Johnson	(503)	030-2021 974-3141	10-MAK-92	27_CED_02	
1453	SMR	UNEFLERS TEXACO	130 N CEDAR	DRAIN	97433	Ernest D./Barbara S. Wheeler	(503)	836-2101	10-MAR-02	17-SED-02	
9360	SWR	RON'S CHEVRON	17940 HUY 38	FIKTON	97436	David I Compton	(503)	584-2781	27-MAR-92	11 3LF 7L	
3094	WVR	ELMIRA FAMILY STORE	88773 TERRITORIAL ROAD	FIMIRA	97437	Ronald Huddleston	(503)	935-1917	25-MAR-92	24-SEP-92	
219	WVR	ELMIRA STATION	88921 TERRITORIAL ROAD	ELMIRA	97437	Louis E. Brown	(503)	935-2676	16-JAN-92	18-AUG-92	
7933	WVR	JASPER STORE -	-36763 JASPER-LOWELL ROAD	FALL CREEK	97438	Calvin M. Snyder	(503)	746-2032	31-MAR-92	25-SEP-92	
8609	WVR	BAY BRIDGE MARINA	1150 BAY STREET	FLORENCE	97439	Hong-Shiou Chiou	(503)	997-2406	27-MAR-92		
6136	WVR	FLORENCE ARCO	514 HWY. 101 SOUTH	FLORENCE	97439	Phil Murray	(503)	588-0455	15-JAN-92	14-AUG-92	
1438	WVR	GLAUSI OIL COMPANY	18TH HWY. 101 FLORENCE	FLORENCE	97439	Otto Glausi	(503)	687-1234	19-MAR-92	01-0CT-92	
251	WVR	HOBERG'S CHERVON SERVICE,	345 HWY. 101	FLORENCE	97439	Wanda Hoberg	(503)	997-2413	16-JAN-92	17-SEP-92	
4089	WVR	K-G'S ONE STOP MARKET	85039 HWY. 101 SOUTH	FLORENCE	97439	Keith & Glenda Cummings	(503)	997-3242	24-JAN-92	28-SEP-92	
3643	WVR	MILES OIL CO., INC.	2175 HWY 101 N.	FLORENCE	97439	Bud and Dorie Miles	(503)	997-3882	30-MAR-92	24-SEP-92	
33/9	WVK	SAXON'S TEXACO SERVICE	HWY. 101 & NOPAL	FLORENCE	97439	Darwin E. Saxon	(503)	997-2059	01-APR-92	29-SEP-92	
0124	MAK	SIEVE'S JEXACU	BOOKS HIN 101	FLORENCE	97439	Bud and Porte Miles	(503)	997-388Z	30-MAK-92	24-SEP-92	
713	MAK	INECT COACT CHELL	1440 101 H	FLOKENCE	07/30	kaiph w. Chastain	(503)	997-3021	01-MAK*92		
7 IJ 575	SUD	FORTINE REANCH MADEET	AA11 A7ALEA CLEN PD	CLENDALE	97439	lica Spear	(503)	997~2014 932-2605	12-MAD-02	22-550-02	
272	SUR	GIENDALE SHELL SERVICE	SETHER AVE	GI FNDALF	97442	Hazel F Uhalev	(503)	832-2200	13-14N-92	21-Alig-Q2	
9021	SWR	JIM'S CHEVRON	4TH & PACIFIC	GLENDALE	97442	.I W Apperson	(503)	832-2396	30-MAR-92	01-0CT-92	
570	SWR	QUINES CREEK TEXACO	EXIT 86 1-5	GLENDALE	97442	Hazel E. Whalev	(503)	832-2290	13-JAN-92	21-AUG-92	
266	SWR	SAM'S DRIVE-IN	305 JUNCTION RD.	GLENDALE	97442	Dorothy Ash	(503)	832-2735	25-MAR-92	14-SEP-92	
9123	SWR	GLIDE STORE	117 BROWN STREET	GLIDE	97443	Orvel & Erma Jennings	(503)	496-0154	30-MAR-92	30-SEP-92	
332	SWR	PEEL COUNTRY STORE	6019 LITTLE RIVER RD	GLIDE	97443	Marvin Gibson	(503)	496-3344	25-MAR-92	04-NOV-92	
1034	SWR	D & J TEXACO MINI MART	435 SOUTH ELLENBURG	GOLD BEACH	97444	James H. Turner	(503)	247~7440	13-JAN-92	21-AUG-92	
6514	SWR	FOUR SEASONS RV RESORT	96526 N. BANK ROGUE	GOLD BEACH	97444	Jerry Biewend	(503)	247-4503	01-APR-92	14-MAY-92	
257	SWR	HOWARD'S SHELL SERVICE	1025 SOUTH ELLENSBURG	GOLD BEACH	97444	Howard Hauschildt	(503)	247-6010	24-MAR-92	01-001-92	
2049 2040	2MK	NESIKA MARKEI	32800 NESIKA KUAU	GOLD REACH	97444	Maxine Nix	(503)	247-7911	18-168-92	23-5EP-92	
7784	SWK	PODT OF COLD BEACH-AIRDOR	PISTOL KIVEK LOUP/ P.O. B	LIPIOT KIAFK	07///	Joyce A. Keiter	(503)	241-2133	23-JAN-92	13-MA1-92	
4748	SUID	PORT OF GOLD BEACH-MARINA	OLD ELLENSBURG HELY AD O B	COLD BEACH	97444	Housed Teague			31-0AN-92	17-SEP-92	
9099	SUR	ROGUE RIVER PARK	95194 N RANK ROGUE ROAD	GOLD BEACH	97444	Patrick S Perkins	(503)	247-7518	01-APR-92	01-0CT-92	
4013	SWR	TEXACO SERVICE STATION #8	505 S. FLIENSBURG	GOLD BEACH	97444	Ron La Franchi	(503)	396-5571	10-FFB-92	0, 00, 72	
932	SWR	UNOCAL 2772	129 N. ELLENSBURG AVE.	GOLD BEACH	97444	Everett Amos	(503)	247-7525	16-MAR-92	01-007-92	
9943	WVR	CENEX SOIL SERVICE CENTER	560 LASALLE STREET	HARRISBURG	97446	Dwight Forgev	(503)	688-8210	23-MAR-92		
2547	WVR	KIZER & SON, INC.	24488 ROWLAND RD.	HARRISBURG	97446		(503)	472-4919	07-JAN-92		
4779	WVR	SKIP'S TEXACO	195 SOUTH 3RD STREET	HARRISBURG	97446	Alvīs A. Stuck	(503)	995-6514	09-MAR-92	17-SEP-92	
7946	WVR	W.A.C. CORP.	23095 NORTH COBURG RD.	HARRISBURG	97446	Jody Bristow	(503)	342-5169	15-JAN-92	01-0CT-92	
2340	WVR	WINNINGHAM MORGAN CHEVRON	309 N. THIRD ST.	HARRISBURG	97446	Billy F. Morgan	(503)	995-6223	21-JAN-92	05-JUN-92	13-MAR-92
1234	SWR	IDLEYLD TRADING POST	23873 N. UMPQUA HWY.	IDLEYLD PARK	97447	Regis Gannon	(503)	496-3404	19-MAR-92	10-JUN-92	
293	SWR	LEMOLO LAKE RESORT, INC.	HC 6U, P.O.BOX 79B	IDLEYLD PARK	97447	Bill Johnson Ernest D./Barbara S. Wheeler David L. Compton Ronald Huddleston Louis E. Brown Calvin M. Snyder Hong-Shiou Chiou Phil Murray Otto Glausi Wanda Hoberg Keith & Glenda Cummings Bud and Dorie Miles Darwin E. Saxon Bud and Dorie Miles Ralph W. Chastain Jim Barnett Lisa Spear Hazel E. Whaley J W Apperson Hazel E. Whaley J W Apperson Hazel E. Whaley Dorothy Ash Orvel & Erma Jennings Marvin Gibson James H. Turner Jerry Biewend Howard Hauschildt Maxine Nix Joyce A. Reller Howard Teague Patrick S Perkins Ron La Franchi Everett Amos Dwight Forgey Alvis A. Stuck Jody Bristow Billy F. Morgan Regis Gannon D. C. Banfield	(503)	496-0900	U4-MAR-92	U4-SEP-92	
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FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT Kathy Kling Frank Knox Larry Brown Richard Wright Gary Mathews Dale Andert Thomas D. Barrett Ronald Breaker Brad Onstott John Daubert Stanley J. Russell John & Georgia Van Wormer James M. Edwards James L. Kelley Madelyn L. Porter Richard Mikesell Sidney & Patricia Schrage Raymond Wolf Anita P. Senter Richard Mikesell Terry & Kathy Koroush Mike Moran John Shirtcliff Jimmie Johnson John Shirtcliff John Shirtcliff John Shirtcliff John Shirtcliff John Shirtcliff John Shirtcliff Debbie & Douglas Neves Judy Silvers Wayne Hodge Charles J. LaFranchi Ron La Franchi Ron La Franchi Ron La Franchi Harry C. Davis Virgil Schmidt Hal K. Graham Harry C. Davis Virgil Schmidt Hal K. Graham Harry C. Davis William R Hastings Pedro Max Vasquez Harold W. & Mary F. Christians Holland Hutchings Jeff Newell Doris Baughman Mike Moran Donald Ratliff	PHONE	LOI	CA	APP
2751	WVR	CONSER QUARRY	27228 FERGUSON RD.	JUNCTION CIT	97448	Kathy Kling	(503) 998-6493	01-APR-92		
4046	WVR	GIBSON MOTOR CO.	333 IVY ST.	JUNCTION CIT	97448	Frank Knox	(503) 998-2346	14-JAN-92		
7127	WVR	JERRY BROWN CO., INC.	93244 HWY. 99 S. \P.O. BO	JUNCTION CIT	97448	Larry Brown	(503) 998-2300	21-JAN-92	01-oct-92	
4362	WVR	PANOCO, INC	811 ELM	JUNCTION CIT	97448	Richard Wright	(503) 286-9621		07-AUG-92	
10528	WVR	RIVERVIEW STORE	92573 RIVER ROAD	JUNCTION CIT	97448	Gary Mathews	(503) 998-6711	09-MAR-92		
8137	WVR	TEXACO STATION	825 IVY STREET	JUNCTION CIT	97448	Dale Andert	(503) 225-4257	09-MAR-92		
255	SWR	BARRETT CONST. & MARINA	655 SUNLAKE DR.	LAKESIDE	97449	Thomas D. Barrett	(503) 759-3728	25-MAR-92		
5614	SWR	LAKESIDE MARINA	P.O.BOX F - 8TH ST.	LAKESIDE	97449	Ronald Breaker	(503) 759-3312	27-JAN-92	01-SEP-92	
102/3	SWR	LAKESIDE STATION	100 S. 8TH	LAKESIDE	97449	Brad Onstott	(310) 823-5464	18-FEB-92		
10260	SWK	NURIH LAKE - RESURI & MAR	ZUYU NORTH LAKE AVE	LAKESIDE	97449	John Daubert	(503) 759-3515	01-APR-92		
1219	SWK	TEN MILE MAKINA, ING.	71H & PARK SI. (P.U.BUX Z	LAKESIDE	97449	Stanley J. Russell	(503) 759-3164	10-JAN-92	18-AUG-92	
0009	SWK	VANWORMER SERVICE (UNUCAL	94244 KERBER SIREE!	LANGLUIS	97450	John & Georgia Van Wormer	(503) 348-2431	10-JAN-92	09-SEP-92	0/ 050 00
700 <i>1</i>	WVK	LUKANE PAMILI STUKE	80377 TERRITORIAL BOAR	LUKANE	97451	James M. Edwards	45071 075 7000	30-MAR-92	01-0CT-92	24-SEP-92
7233	WVK	LOUGH HUMON CENTRE	117 E MAIN OF	LOKANE	97451	James L. Kelley	(503) 935-3009	25-MAR-92	40 050 03	
7700	WVK	HADISTON OF SERVICE	113 E. MAIN 51.	LUWELL	97454	madelyn L. Porter	(503) 937-2342	15~JAN-92	18-SEP-92	
0749	WVK	MADONA MITCHEN U CAC	COLO NATIONAL CONTRACTOR OF THE COLOR OF THE	MARCOLA	97423	Kichard Mikesett	(503) 928-3385	23-JAN-92	07-AUG-92	
7100	MVK.	LODO CAS EVVOU	72170 MAKCULA KUAD	MAKLULA	97434	Signey & Patricia Schrage	(503) 933-2410	31-MAK-92	30-SEP-92	
2/3	UN/D	BELLEWINITAIN MADEL	26720 DELLECUNTATE DO	MONDOE	07/5/	Anita D. Contan	(303) 343-0431 (E07) /3/ 7/11	11-MAK-92	23-565-72	
/357	MAN.	REALOCK LYLK HYKKEL	SOF MAIN OF	MONROE	07/54	Michael Wilson!	(202) 424-3011 (E0%) 020 278E	20-MAK-92	21-2EP-92	
10757	WVK	TEDDVIC DEDIID 9 CAC	STU WATH HEN OR H	MONKOE	07/5/	Kichard Mikesett	(503) 928-3383	25-JAN-92	07-AUG-92	
3578	CUD	PI_MOD STATIONS #15	JIR MAIN RWI YY W	MUNKUE MVDTIE CDEEK	97420	Hika Vanan	(DUD) 84/-DDDY	15-JAN-92	28-SEP-92	
28/	CILID	EDECUAY TEVACO	1:5 EVIT 107	MVDTIE CREEK	97457	Ichn Chinteliff	(503) //Z*ZU33 (50%) 04%-7531	22-JAN-92	01 1111-02	
8871	SUR	JIM/S MITERIES	720 S MAIN STREET	MYRTLE CREEK	07/57	limmia lohneon	(503) 863-5321	08- 14N-02	01-30K-37	
6746	SWR	MYRTIF CREEK GARAGE	3PD & MAIN	MYRTLE CREEK	97457	John Shirteliff	(503) 863-3411	16- IAN-02	01 - 1110 - 02	
1452	SWR	PENNY PINCHER #1	548 S. MAIN	MYRTLE CREEK	97457	John Shirteliff	(503) 863-3521	16-JAN-92	01-00K 72	
326	SWR	RIDDLE TEXACO	145 N. 5TH AVE.	MYRTLE CREEK	97457	John Shirtcliff	(503) 863-3521	16-JAN-92	01 JUN-92	
5242	SWR	DORA STORE	ON COOS BAY WAGON RD./HC	MYRTLE POINT	97458	Debbie & Douglas Neves	(503) 572-3385	08-JAN-92	31-AUG-92	
3629	SWR	HATFIELD, DAVID E	H.C.85, BOX 115B	MYRTLE POINT	97458	Judy Silvers	(503) 572-5208	30-MAR-92	31 704 72	
620	SWR	HODGE DISTRIBUTOR, INC	1893 ROSEBURG RD./P.O. BO	MYRTLE POINT	97458	Wayne Hodge	(503) 572-2926	23-MAR-92	01-0CT-92	
3329	SWR	KEY LOCK	800 HARRIS	MYRTLE POINT	97458	Charles J. LaFranchi	(503) 572-5313	23-MAR-92		
4005	SWR	RON'S OIL CO STATION #5	734 SPRUCE ST.	MYRTLE POINT	97458	Ron La Franchi	(503) 396-5571	10-FEB-92		
9299	SWR	WALT'S SHELL STATION	710 8TH STREET	MYTRLE POINT	97458	Walter E Barklow	(503) 572-5817	18-MAR-92	01-0CT-92	
6256	SWR	ASTRO #212	1180 N. VIRGINIA	NORTH BEND	97459	John Phimister	(503) 243-7899	09-JAN-92	21-SEP-92	
6129	SWR	FRANKO #24	1625 SHERMAN	NORTH BEND	97459	Donald H. Hartvig	(503) 295-2668	01-APR-92		
9899	SWR	GLASGOW GROCERY	220 EAST BAY DRIVE	NORTH BEND	97459	Jack W. Stevens	(503) 756-3301	01-APR~92	01-0CT-92	
548	SWR	HAUSER STORE	4163 WILDWOOD DRIVE	NORTH BEND	97459	David & Jane Cardwell	(503) 756-7771	10-JAN-92	18-AUG-92	
4011	SWR	RON'S OIL CO. #2	3550 TREMONT ST.	NORTH BEND	97459	Ron La Franchi	(503) 396-5571	10-FEB-92		
7566	SWR	SHERMAN AVENUE TEXACO	1700 SHERMAN	NORTH BEND	97459	Harry C. Davis	(503) 756-3426	23-MAR-92	29-SEP-92	
9835	SWR	T'REE ACRES	10960 HWY 101	NORTH BEND	97459	Virgil Schmidt	(503) 759-4641	30-MAR-92	01-0CT-92	
5540	SHR	VILLAGE ARCO	1805 VIRGINIA	NORTH BEND	97459	Hal K. Graham	(503) 756-6216	27-JAN-92	01-0CT-92	
1449	SWR	VILLAGE TEXACO	1300 VIRGINIA AVE.	NORTH BEND	97459	Harry C. Davis	(503) 756-3426	23-MAR-92	29-SEP-92	
5232	SWR	WAGON WHEEL GROCERY	5852 WILDWOOD DR.	NORTH BEND	97459	William R Hastings	(503) 759-3409	20-MAR-92	28-SEP-92	
3452	WVR	CARMEN'S TEXACO	22522 HWY 126	NOTI	97461	Pedro Max Vasquez	(503) 935-1244	01-APR-92	01-0CT-92	
671	WVR	NOTI MARKET	22528 HWY 126	NOTI	97461	Harold W. & Mary F. Christians		24-MAR-92	21-SEP-92	
653	SUR	HOLLAND'S AUTO SERVICE	P.O.BOX 696	OAKLAND	97462	Holland Hutchings	(503) 459-3712	23-MAR-92	21-SEP-92	
9361	SWR	RICE HILL BP	614 JOHN LONG ROAD	OAKLAND	97462	Jeff Newell	(503) 849-2154	01-APR-92	01-SEP-92	
9100	SWR	TEXACO STATION	RICE HILL INTERCHANGE	OAKLAND	97462	Doris Baughman	(503) 459-5049	01-APR-92		
3593	WVR	BI-MOR STATIONS, #17	4/686 HWY. 58	OAKRIDGE	97463	Mike Moran	(503) 772-2053	22-JAN-92	17-SEP-92	
1445	WVR	DON'S TRUCK SERVICE	P.O. BOX 732-48080 HWY 58	OAKRIDGE	97463	Donald Ratliff	(503) 782-2630	23-JAN-92	11-SEP-92	

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				CITY		CONTACT	PHONE	LOI	CA	APP
. 299	WVR	HEDEGAARD, JOHN GOMBERT & HODGE DIST., INC. HUMBUG MOUNTAIN LODGE MONTY'S TOWING SERVICE	47609 HIGHWAY 58	OAKRIDGE	97463	John & Dorothy J. Gombert & He Wayne Hodge Charles Landis H.L. Montgomery Sr. Gayle Paige Janice A. Piper Scott Pedd David Dudley Wayne Hodge Jay B. Allred Hugh Clardy Jr. Maurie Bassett James L. Brown Dan Cumberland James L. Brown Robert L. Migas Cliff Saubert Charles R. Mast Bud and Dorie Miles Ron La Franchi Robert Wade Oley Nelson Maude Masters	(503) 782-3464	12-MAR-92	21-SEP-92	
8130	SWR	HODGE DIST., INC.	15TH ST.	PORT ORFORD	97465	Wayne Hodge	(503) 572-2926	23-MAR-92	01-0CT-92	
2819	SWR	HUMBUG MOUNTAIN LODGE	39292 HWY 101	PORT ORFORD	97465	Charles Landis	(503) 332-1021	01-APR-92		
342	SWR	MONTY'S TOWING SERVICE	1536 NO. OREGON ST.	PORT ORFORD	97465	H.L. Montgomery Sr.	(503) 332-7676	09-JAN-92	18-AUG-92	10-NOV-92
5213	SWR	PORT OF PORT OXFORD	300 DOCK DRIVE	PORT ORFORD	97465	Gayle Paige	(503) 332-7121	13-JAN-92	22-MAY-92	
		SILVER SPRINGS MOBILE PAR		PORT ORFORD	97465	Janice A. Piper	(503) 396-2462	01-APR-92	10-SEP-92	
			1137 OREGON STREET	PORT ORFORD	97465	Scott Pedd	(503) 479-5343	23-JAN-92	28-SEP-92	
1387	SWR	ABBOTT'S MARKET	209 POPLAR ST.	POWERS	97466	David Dudley	(503) 439-4445	01-APR-92		
5047	SWR	HODGE DISTRIBUTOR INC	2ND & POPLAR	POWERS	97466	Wayne Hodge	(503) 5/2-2926	23-MAR-92	01-0CT-92	
3120	SWK	POWERS TEXACO 101 SERVICE	ZND & POPLAK	POWERS	97466	Jay B. Attred	(503) 439-2881	15-JAN-92	19-AUG-92	
2003 0/45	2MK	DIOCETT UVIAND ENERGY CO.	985 HIGHWAY AVE.	REEDSPORT	97407	Hugh Clardy Jr.	(202) 2/1-3/11	23-JAN-92	01-061-92	
		BASSETT-HYLAND ENERGY CO BROWN. JAMES L.		REEDSPORT	07/40/	Maurie Bassett	(503) 201-2101	10-JAN-92 25-MAD-02	01-001-92	
			9011 LOON LAKE ROAD	REEDSPORT	07/40/	James L. Brown	(303) 399-2244 (E07) 371-3/11	27-MAK-92	70-050-02	
2832	CLID	CUMBERLAND DISTRIBUTING, LOON LAKE LODGE RESORT #2	DOUTE A DOV AN	REEDSPORT REEDSPORT	97407	James I Prous	(503) 2/1-24/1	24-JAN-92 25-MAD-02	30-327-92	
0190	CUD	MIGAS AUTOMOTIVE SERVICE _	1100 BLV AVENUE	REEDSFORT	07/47	Pohort I Migos	(503) 377 ZZ44 (503) 371-3570	28-1411-02	01-001-02	
5470	CLID	ONE STOP MARKET		REEDSPORT	07/47	rliff Cambart	(503) 211-3330	20-3AN-92	01-001-32	
560	CLID	DEED SOORT MARKET	532 ETD AVENUE	PEEDSFORT	97/407	Charles P Mast	(503) 756-2346	23-14N-02		
8125	SUR	DEEDSTORT TEVACO	2118 HIGHUAY 101	DEEDSLOKI	07/47	Bud and Daria Miles	(503) 730 1770	30-MAD-02	24-SED-02	
8586	SIJR	BUNE UII CU #Y	1199 HWY AVENUE 1625 HWY 101 532 FIR AVENUE 2118 HIGHWAY 101 1070 HWY 101 16334 LOWER SMITH RIVER R 164 BAY FRONT LOOP	PEEDSONDT	07/47	Pon la Franchi	(503) 304-5571	10-FER-02	L4 3L1 7L	
8468	SWR	SMITH RIVER STORE	16334 LOWER SMITH RIVER R	REEDSPORT	97467	Robert Wade	(503) 271-5219	30-MAR-92	11-MAY-92	
9139	SUR	WINDY BAY FUEL	164 RAY FRONT LOOP	WINCHESTER R	97467	Olev Nelson	(503) 271-5414	16-MAR-92	14-MAY-92	
8714	SWR	REMOTE STORE/POST OFFICE	HWY 42	REMOTE	97468	Maude Masters	(503) 572-5638	30-MAR-92	** 1511 72	
9716	SWR	JACK'S UNION 76	1ST & MAIN	RIDDLE	97469	Jack R. Puz	(1117) 111 1111	24-JAN-92	22-MAY-92	
		ASTRO #223	164 BAY FRONT LOOP HWY 42 1ST & MAIN 1320 N. HARVARD	ROSEBURG	97470	John Phimister	(503) 243-7899	09-JAN-92	21-SEP-92	
167	SWR	BASSETT-HYLAND ENERGY CO.	4150 OLD HWY. 99 S.	ROSEBURG	97470	Maurie Bassett	(503) 267-2107	19-MAR-92	21-SEP-92	
3465	SUR	RP SERVICE STATION	1847 DIAMOND LAKE BLVD.	ROSEBURG	97470	Robert Wade Oley Nelson Maude Masters Jack R. Puz John Phimister Maurie Bassett E. D. Dirksen Eugene W. Parr Scott Pedd Scott Pedd Don Tanferani Milton L. Bartholomew Jr. Floyd M. Poland	(503) 672-1666	01-APR-92	01-OCT-92	
2345	SWR	CHILDERS & PARR	2530 N.E. STEPHENS	ROSEBURG	97470	Eugene W. Parr	(503) 672-6921	19-MAR-92	28-SEP-92	
6589	SWR	COLVIN OIL CO., ROSEBURG	346 GARDEN VALLEY ROAD	ROSEBURG	97470	Scott Pedd	(503) 479-5343	23-JAN-92	28-SEP-92	
6628	SWR	COLVIN OIL CO., ROSEBURG	368 GARDEN VALLEY	ROSEBURG	97470	Scott Pedd	(503) 479-5343	23-JAN-92	28-SEP-92	
8864	SWR	DIXONVILLE STORE	2046 BUCKHORN ROAD	ROSEBURG	97470	Don Tanferani		23-MAR-92	24-AUG-92	
		DOUGLAS COUNTY FARMERS CO	626 S.E. WASHINGTON	ROSEBURG	97470	Milton L. Bartholomew Jr.	(503) 673-0601	20-MAR-92	0/ //// 00	
4440	SMK	FAST STOP MARKET FRANKO #26		ROSEBURG	9/4/0	Floyd M. Poland	(503) 6/2-2610	23-MAK-92	U4-JUN-92	
				ROSEBURG ROSEBURG	97470	Donald H. Hartvig	(503) 295-2008	01-APK-92	Λ/ - 1UN - 02	
		HARRINGTON PETROLEUM INC HARRINGTON PETROLEUM, INC		ROSEBURG	07/70	R. A. Harrington	(503) 673-3533	21-FEB-02	04-30N-92	
		HENDERSON MOBIL	1468 S.E. STEPHENS	ROSEBURG	97470	R G Henderson	(503) 672-9983	27-JAN-92	25-SEP-92	
		JIM'S WINCHESTER GAS & AU		ROSEBURG	97470	Charles A. Rass	(503) 672-2544	30-MAR-92	בס טנו זב	
		MCCULLUM'S TEXACO SERVICE		ROSEBURG	97470	Charles B. McCullum	(503) 673-4044	10-FEB-92	08-JUN-92	
		MELROSE COUNTRY STORE	3737 MELROSE RD	ROSEBURG	97470	John R. Atkinson	(503) 672-8445	04-FEB-92	19-MAY-92	•
			8274 OLD HIGHWAY 99 NORTH	ROSEBURG	97470	Daisy & Dwane Nederhood	(503) 673-8625	11-MAR-92	25-SEP-92	
250	SWR	OK'S AUTO SUPPLY, INC.	1082 N. E. STEPHENS	ROSEBURG	97470	Don Christner	(503) 672-5848	27-JAN-92	21-AUG-92	
70/7	CLID	DANIOGO	OFO HILL CARREST MALLEY BL	ROSEBURG	97470	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
8441	SWR	PANOCO, INC #16	792 GARDEN VALLEY ROAD 345 W. HARVARD 1800 GARDEN VALLEY BLVD. 2625 N.E. DIAMOND LAKE BL	ROSEBURG	97470	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
6533	SWR	PANOCO, INC #17	345 W. HARVARD	ROSEBURG	97470	Richard Wright	(503) 286-9621	06-FEB-92	06-AUG-92	
5185	SWR	RIDGEWAY MARKET	1800 GARDEN VALLEY BLVD.	ROSEBURG	97470	Rick Williams	(503) 672-5824	30-MAR-92	01-OCT-92	
6725	SWR	ROSEBURG SHELL CENTER	2625 N.E. DIAMOND LAKE BL	ROSEBURG	97470	John Shirtcliff	(503) 863-3521	16-MAR-92	01-JUN-92	
9643	SWR	T MART	1515 W HARVARD	ROSEBURG	97470	Jerry L Tabor	(503) 673-8022	30-MAR-92		
		TEXACO SERVICE STATION	468 N.W. GARDEN VALLEY	ROSEBURG	97470	Dale Andert	(503) 225-4257	09-MAR-92		
			14188 NORTH UMPQUA HIGHWA	ROSEBURG	97470	Milton L. Bartholomew Jr. Floyd M. Poland Donald H. Hartvig R. A. Harrington R. A. Harrington B. G. Henderson Charles A. Bass Charles B. McCullum John R. Atkinson Daisy & Dwane Nederhood Don Christner Richard Wright Richard Wright Richard Wright Richard Wright Richard Wright Rick Williams John Shirtcliff Jerry L Tabor Dale Andert David B. Magers	(503) 673-7640	23-MAR-92	01-0CT-92	



FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	Robert Newburn David Coplin Donald H. Hartvig Robert Newburn Raymond Gough John Henry Morales Richard Wright ROB FOREST Phil Murray Donald H. Hartvig Dale Andert Dale Andert Lucile Peterson John R. Lindamood L. David Wing Dale Andert Don Ralls Leo W. Sanders Donald H. Hartvig Charles A. Rancour Richard Wright Mike Smalley Pauline E. Kelly Millard Lemon Thomas L. Cook Joyce Henry-MacKay Fred W. Jack Dale Andert Pedro Max Vasquez James Carney Gary R. Gilmore Wayne Gardner Jason Powell John Phimister R. A. Harrington C.H. Seagraves Jr. Ron La Franchi Leo W. Sanders Robert R. Jensen Betty Gaustad Bud and Dorie Miles Claudia C. & John T Russell Hegwood		PHONE		FOI	CA	APP
446	WVR	5TH & Q EXXON ESTATE OF H. M. RUBERG FRANKO #41 GATEWAY EXXON J & R SERVICE CENTERS, IN K MART #(7153) PANOCO, INC PETRO/SPRINGFIELD CARDLOC PLEASANT HILL TEXACO SPRINGFIELD ARCO TEXACO SERVICE STATION TEXACO STATION CAMP CREEK STORE	1795 N. 5TH	SPRINGFIELD	97477	Robert Newburn		(503)	683-4433	10-FEB-92	14-SEP-92	
6821	WVR	ESTATE OF H. M. RUBERG	28TH & CENTENNIAL	SPRINGFIELD	97477	David Coplin		(503)	688-0971	25-MAR-92		
0110	WVR	FRANKU #41	1240 RAINBOW AVE.	SPRINGFIELD	9/4//	Donald H. Hartvig		(503)	295-2668	01-APR-92	4/ OFD 03	
3158	WVR	GAIEWAY EXXUN	SOCU GATEWAY	SPRINGFIELD	9/4//	Robert Newburn		(503)	683-4433	10-FEB-92	14-SEP-92	
1200	WVK	J & K SERVICE LENIERS, IN	1/01 N 246T	SPRINGFIELD	9/4//	kaymond Gough		(503)	720-2120	15-JAN-92	01-001-92	
1203 4573	WVK	RANGEO INC	1401 N. 2151 7/8/ CATELIAY	SERTINGFIELD	97477	Dichard Unight		(503)	794-0671	01-APK-92	04_4110_02	
6445	LIVD	PETPO/SPPINGETEIN CAPNIAC	A124 MAIN ST	SPRINGFIELD	97477	DOR FOREST		(503)	482-3845	15 IAN-02	05-AUG-92	
6437	U\/D	PIFASANT HILL TEYACO	35310 HUY 58	SPRINGFIELD	97477	Phil Mucray		(505)	002 3003	15-JAN-92 15-JAN-02	03-AUG-92	
1860	UVR	SPRINGFIELD ARCO	3650 FAST MAIN	SPRINGFIELD	97477	Donald H. Hartvig		(503)	295-2668	01-APR-92	05 A00 72	
1392	WVR	TEXACO SERVICE STATION	1376 MOHAWK BLVD.	SPRINGFIELD	97477	Dale Andert		(503)	225-4257	09-MAR-92		
8133	WVR	TEXACO STATION	2303 OLYMPIC	SPRINGFIELD	97477	Dale Andert		(503)	225-4257	09-MAR-92		
7159	WVR	CAMP CREEK STORE	37-540 CAMP CREEK RD.	SPRINGFIELD	97478	Lucile Peterson		(503)	461-4691	24-MAR-92		
8877	WVR	JOHNS GAS & GROCERIES	5390 MAIN STREET	SPRINGFIELD	97478	John R. Lindamood		(503)	726-0107	12-MAR-92	30-SEP-92	30-SEP-92
6052	WVR		38477 MCKENZIE HWY.	SPRINGFIELD	97478	L. David Wing		(503)	726-8570	01-APR-92		
8134	WVR	TEXACO STATION	5737 MAIN STREET	SPRINGFIELD	97478	Dale Andert	e. P	(503)	225-4257	09-MAR-92		
		BARNES FUEL OIL SERVICE	281, S STATE STREET	SUTHERLIN	97479	Don Ralls		(509)	459-2255	30-JAN-92		
		FAST GAS & MINI MARKET	865 W. CENTRAL SUTHERLIN	SUTHERLIN	97479	Leo W. Sanders		(503)	459-4255	13-JAN-92	21-SEP-92	
		FRANKO #40	411 FRONTAGE ROAD	SUTHERLIN	97479	Donald H. Hartvig		(503)	295-2668	01-APR-92		
206	SWR	NONPARIEL STORE	8651 NONPARIEL RD.	SUTHERLIN	97479	Charles A. Rancour		(503)	459-2558	10-JAN-92	30-SEP-92	
		PANOCO SUTHERLIN #15	133 WESTWOOD	SUTHERLIN	97479	Richard Wright		(503)	286-9621	06-FEB-92	06-AUG-92	
		SMALLEY DIESEL CENTER	1625 W. DUKE RD.	SUTHERLIN	97479	Mike Smalley		(503)	459-4838	31-MAR-92	28-SEP-92	
2004	WVK	KELLY'S MARKET	13298 HWY. 36	SWISSHOME	97480	Pauline E. Kelly		(503)	268-4815	50-MAR-92	21-SEP-92	
7493	SMK	L & M MAKKEI	116 HAVEN LANE 9587 HWY 42	TENMILE .	07/81	Thomas Lemon		(503)	019-0013 470-9455	12-14N-92	10-YOG-92	
91/1	OIJO		6461 FORT MCKAY ROAD	CHTUEDLIN	07/86	Inves Henry-MacKay	•	(503)	567-3310	21-JAN-92	00-367-92	
1980	UVR	CROW MERCANTILE CO	86035 TERRITORIAL RD.	VENETA	97487	Fred W Jack		(503)	935-2848	18-FFR-02	05-AUG-92	
8138	UVR	TEXACO STATION	25547 HWY. 126	VENETA	97487	Dale Andert		(503)	225-4257	09-MAR-92	OJ AGG 72	
4334	WVR	VENETA AUTO SERVICE	88105 TERRITORIAL ROAD	VENETA	97487	Pedro Max Vasquez		(503)	935-1244	23-MAR-92	01-0CT-92	
561	WVR	NIMROD SERVICE	49195 MCKENZIE HWY.	VIDA	97488	James Carney		(503)	822-3500	01-APR-92	17-SEP-92	
5857	' WVR	VIDA COMMUNITY MARKET	45602 MCKENZIE HIGHWAY	VIDA	97488	Gary R. Gilmore		(503)	896-3261	24-MAR-92	25-SEP-92	
			42840 MCKENZIE HIGHWAY	LEABURG	97489	Wayne Gardner		(503)	896~3215	20-MAR-92	10-SEP-92	
9993	WVR	OAKRIDGE EXXON	47762 HWY 58	OAKRIDGE, OR	97492	Jason Powell		(503)	289-5558	28-FEB-92	16-SEP-92	
		ASTRO #234	401 E. MAIN ST.	WINSTON	97496	John Phimister		(503)	243-7899	29-NAL-92	21-SEP-92	
4417	SWR	HARRINGTON PETROLEUM, INC	150 HWY. 42	WINSTON	97496	R. A. Harrington		(503)	673-3533	21-FEB-92	04-JUN-92	
67:	SWR	ROD'S GROCERY STORE	501 N.W. HWY 42	WINSTON	97496	C.H. Seagraves Jr.		(503)	476-6627	23-MAR-92		
8108	SWR	ROD'S GROCERY STORE RON'S OIL #7 WINSTON EXXON A BITE OF WYOMING COVERED BRIDGE BP YACHATS TEXACO	50 N.W. MAIN	WINSTON	97496	Ron La Franchi		(503)	396-5571	10-FEB-92	40 050 00	
364 "DZD4	SWR	WINSTON EXXUN	371 S. MAIN	WINSTON	97496	Leo W. Sanders		(503)	459-4255	21-JAN-92	18-SEP-92	
10//	SWK	A BITE OF WIOMING	221 OLD HWY 99	WULF CREEK	97497	Robert K. Jensen		(503)	774 90/3	U1-APK-92	01-0C1-92	
10041	2HK	COVERED BRIDGE BP	241 SUNNY VALLEY LOOP	SUNNI VALLEI	07/00	Belly Gaustag		(503)	4/0-0946 007-7000	30-MAK-92	27cep-02	
0120	WVK	JOHN T. LAKES FULL SERVIC	101 & 9TH STREET	YONCALLA	07490	Claudia C. & John T	Lakas	(503)	8/0-333/	30-MAR-92	24-255-32	
			201 FRONT ST.	YONCALLA	07/00	Puscal Baywood	. Lakes	(202)	049-2234	11_550_02	20-251-35	
		RICE HILL TOWING	I-5 AND EXIT 148	YONCALLA	07/00	Ellic Emany		(507)	9/0-2133	10-141-02	15_MAY_02	
			EASTSIDE I-5 EXIT 148 RI	YONGALLA YONGALLA	07/.00	Daniel M. Uebb		75037	8/0-267/	71-MAD-02	(J"PIA1 72	
			1085 STEWART AVENUE	MEDFORD	97501	Douglas I Dichall		75037	770-7011	31-JAN-02	04-SEP-92	
57.43	CID	ASSURANCE TRANSPORTATION,		MEDFORD	97501	Jeremy P. Guiliano		(503)	772-6181	31-JAN-92	08-SEP-92	
		ASTRO #209	1006 S. RIVERSIDE	MEDFORD	97501	John Phimister		(503)	243-7899	09-JAN-92	21-SEP-92	
		ASTRO #211	525 N. CENTRAL	MEDFORD	97501	John Phimister		(503)	243-7899	09-JAN-92	21-SEP-92	
		ASTRO #250	1006 S. RIVERSIDE 525 N. CENTRAL 2260 W. MAIN	MEDFORD	97501	Russell Hegwood Ellis Emory Daniel M. Webb Douglas L. Pickell Jeremy P. Guiliano John Phimister John Phimister John Phimister		(503)	243-7899	09-JAN-92	21-SEP-92	
*								-				

FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT		PHONE	LOI	CA	APP
		BARNETT TIGER MART #6387		MEDFORD	97501	Mike Hawkins		(503) 772-5275			••••
		BI-MOR STATIONS, INC. #1	2809 JACKSONVILLE HWY.	MED FORD	97501	Mike Moran		(503) 772-2053			
3408	2MK	BI-MOR STATIONS, INC. #4	4999 CRATER LAKE HWY.	MEDFORD	97501	Mike Moran		(503) 772-2053			
		BI-MOR STATIONS, INC. #6 BILL TERPENING, INC.	ZERO N DACTETO DICULAY	MEDICORD	07501	Mike Moran	`:	(503) 772-2053 (503) 773-7311	22-JAN-92 09-JAN-92		
			3680 N PACIFIC HIGHWAY 3628 SOUTH PACIFIC HWY	MEDICARD	07501	Linds Royler		(503) 776-1221	20-MAR-92	30-2EP-92	
787	SUR	CHEVRON U.S.A., INC 98	1510 F PINE	CENTRAL POIN	97501	Mike Moran Mike Moran Mike Moran Bill Terpening Linda Boylan Roderick A. Bell Scott Pedd Scott Pedd Scott Pedd Karen Morris Ron Bennett Jeremy P. Guiliano Richard Mikesell Maynard Hadley Robert D. George Mike Hawkins Mike Hawkins Steve Hays		(202) 110-1221	28-FEB-92	22-SEP-92	
		COLVIN OIL CO.	20 SOUTH STAGE ROAD	MED FORD	97501	Scott Pedd		(503) 479-5343	23-JAN-92		
			785 STEWART AVENUE	MEDFORD	97501	Scott Pedd		(503) 479-5343	23-JAN-92		
		COLVIN OIL CO., MEDFORD #	1325 COURT ST.	MEDFORD	97501	Scott Pedd .		(503) 479-5343			
		COUNTY CORNER GROCERY	2797 MERRIMAN RD	MEDFORD	97501	Karen Morris		(503) 776-9118			
1061	SWR	CRATER LAKE CHEVRON	1901 CRATER LAKE HWY	MEDFORD	97501	Ron Bennett		(503) 772-7940	15-JAN-92	21-SEP-92	
		CRATER LAKE TEXACO	2501 CRATER LAKE HWY.	MEDFORD	97501	Jeremy P. Guiliano		(503) 772-6181			
		CUMMINGS TRANSFER & STORA	1029 NARREGAN ST	MEDFORD	97501	Richard Mikesell		(503) 928-3385			
			4048 CRATER LAKE AVE.	MEDFORD	97501	Maynard Hadley		(503) 772-4040			
		DOWNTOWN TEXACO	301 N CENTRAL AVE	MEDFORD	97501	Robert D. George	4	(503) 899-7761			
		HAWK OIL #9289	1067 S. RIVERSIDE	MEDFORD	97501	Mike Hawkins	· ·	(503) 772-5275	16-MAR-92		
			1050 S. RIVERSIDE	MEDFORD	97501	Mike Hawkins	1.	(503) 772-5275	16-MAR-92	01-0CT-92	
		HAYS OIL PLANT CARDLOCK	1890 S. PACIFIC HWY.	MEDFORD	97501	Steve Hays		(503) 772-2053	14-768-92	22-SEP-92	
			2185 GRIFFIN CR. RD.	MEDITURD	97501	Greg Jones		(503) //2-0/63	07-FEB-92	17-SEP-92	70 (40) 02
		LEATHERS OIL CO. MEDFORD FUEL	5020 TABLE ROCK RD. 936 S. CENTRAL	MEDIUKU	97501 07501	Brent Leathers		(503) 001-1244	10-JAN-92	25-AUG-92	20-14W-A5
		NAUMES EQUIPMENT & FUEL	2233 S. PACIFIC HUY	MEDICARD	97501	Sam Maimes		(503) 772-6223	10-5EB-02	24-Alle-92	
6515	SWR	PANOCO. INC	530 CRATER LAKE AVE.	MEDFORD	97501	Richard Wright		(503) 284-9621	06-FFR-92	06-AUG-92	
6523	SWR		348 N. RIVERSIDE	MEDFORD -	97501	Richard Wright		(503) 286-9621	06-FEB-92	06-AUG-92	
6535	SWR	PANOCO, INC #26	2001 BIDDLE RD.	MEDFORD	97501	Richard Wright		(503) 286-9621	06-FEB-92	06-AUG-92	
4100	SWR	PEEBLER, JACK N.	529 E. MAIN ST.	MEDFORD	97501	Jack N. Peebler		(503) 773-4891	23-MAR-92		
9992	SWR	POWELL DISTRIBUTING CO.	3602 N. PACIFIC HWY	MEDFORD	97501	Jason Powell		(503) 289-5558	28-FEB-92	16-SEP-92	
			1001 S. RIVERSIDE	MEDFORD	97501	Gary Mallicoat		(503) 772-7864	03-FEB-92	31-AUG-92	
		STEWART AVE. TEXACO	705 STEWART AVE.	MEDFORD	97501	Jeremy P. Guiliano		(503) 772-6181	31-JAN-92	08-SEP-92	
1595	SWR	TEXACO STATION	428 BARNETT RD.	MEDFORD	97501	Dale Andert		(503) 225-4257	09-MAR-92		
		WITHAM TRUCK STOP DIVISIO	16 N EDONT OF	MEDITURU DOLL	97501	K A Witham		(503) 773-6294	24-MAR-92	17 ccn 02	
5735	SMIC	BI-MOR STATIONS #7	16 N. FRONT ST. 1065 EAST PINE STREET	CENTRAL POIN	97502	Scott Dedd		(503) //2-2033	22-JAN-92	28-SED-02	
359	SWR	CENTRAL POINT BP DARDANELLE SERVICE HAYS OIL CARDLOCK #1	9625 OLD STAGE ROAD	CENTRAL POIN	97502	Jane Cooper		(503) 855-7974	24-FFR-92	18-AHG-92	09-DEC-92
7051	SWR	HAYS OIL CARDLOCK #1	5746 CRATER LAKE AVE.	CENTRAL POIN	97502	Steve Havs		(503) 772-2053	14-FEB-92	22-SEP-92	0, 520 .2
		KING'S CORNER MARKET	2015 HANLEY RD.	CENTRAL POIN	97502	Kevin & Patti King		(503) 772-5792	01-APR-92	01-0CT-92	
6511	SWR	PANOCO, INC #27	1480 E. PINE	CENTRAL POIN	97502	Richard Wright		(503) 286-9621	06-FEB-92	06-AUG-92	
1390	SWR	TEXACO SERVICE STATION	1125 E. PINE ST.	CENTRAL POIN	97502	Dale Andert		(503) 225-4257	09-MAR-92		
9320	SWR	BILL TERPENING, INC. WHIT	ANTELOPE ROAD	WHITE CITY	97503	Bill Terpening		(503) 773-7311	09-JAN-92	30-SEP-92	
		COLVIN OIL (MEDFORD #6)	6779 CRATER LAKE HWY 62	WHITE CITY	97503	Scott Pedd		(503) 479-5343	23-JAN-92	28-SEP-92	
		L & E'S DELI MART	7625 CRATER LAKE HWY.	WHITE CITY	97503	Donna Hadley			15-JAN-92	10-SEP-92	
		NORTHROP, EARL	8380 HWY 62	WHITE CITY	97503	Earl Northrop		(503) 826-2621	15-JAN-92	10-SEP-92	21-DEC-92
			7640 CRATER LAKE HWY.	WHITE CITY	97503	MIKE Hawkins Steve Hays Greg Jones Brent Leathers Bill Terpening Sam Naumes Richard Wright Richard Wright Richard Wright Jack N. Peebler Jason Powell Gary Mallicoat Jeremy P. Guiliano Dale Andert R A Witham Mike Moran Scott Pedd Jane Cooper Steve Hays Kevin & Patti King Richard Wright Dale Andert Bill Terpening Scott Pedd Donna Hadley Earl Northrop Richard Wright Bobbie Rainey David Budreau Mike Hawkins Mike Hawkins	• • •	(503) 286-9621	06-FEB-92	06-AUG-92	
2358	SWR	RAINEYS CORNER MARKET	4865 HWY 234	WHITE CITY	97503	Bobbie Rainey	•	(503) 826-5421	09-JAN-92	22-MAY-92	
10083	SWR	DAVE'S MOBIL	1100 BARNETT	MEDFORD	97504	David Budreau		(503) 779-1091	15-JAN-92	04-SEP-92	
3/15	SWK	UAN OIL #17/F	2232 BIDDLE ROAD	MEDITOKU	97304	Mike Hawkins		(503) 772-5275	10"MAK"YZ	01-001-92	
24 ID 8190	SMK	DAVE'S MOBIL GAS-4-LESS HAWK OIL #1345 PEAR TREE CENTER	2300 CRATER LAKE AVE. 3730 FERN VALLEY ROAD	MED FORD MED FORD	97504	Earl Northrop Richard Wright Bobbie Rainey David Budreau Mike Hawkins Mike Hawkins Eddie L. Hendrikson		(503) 772-5275 (503) 223-4500	16-MAR-92 01-APR-92	01-061-92	
		ASHLAND MUNICIPAL AIRPORT		ASHLAND	97520	Steve Hall		(503) 482-3211			
7,20	SMIX	MONTHUM HOUTETT AL VINCON	DEAD INDIAN ROAD	AUILAND	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	acese Harr		(202) 402 3211	OT AIR 72		





FAC ID RE	G FAC NAME	ADDRESS	CITY	ZIP	CONTACT Lorene Hale John Phimister Mike Moran Robert L. Voris Bill Terpening Robert Guthmiller Steve Hays Randy Hutton Mike Hawkins Kay & Kenneth Anderson Richard Wright Jason Powell Rex Bounds Danielle Roberts C.F. Adler Mike Hawkins Jeremy P. Guiliano Richard Mikesell Jeff A. Stiles Scott Pedd George L. McElroy Theron Robinson Charles Cobun Phillip O./Linda L. Blevins Jess & Joyce Woodard Richard A. Sumner Tom Jordahl Robert A. McCoy Ken & Joan Ferguson Ron Benoist Loyal Dean Mullenix Scott Pedd John Phimister Mike Moran Mike Moran Bill Terpening Scott Pedd Mike Hawkins Richard & Joyce Teal Scott Pedd Scot	PHONE		LOI	CA	APP
8905 SW	R ASHLAND TEXACO	2495 HWY 66 & 15	ASHLAND	97520	Lorene Hale	(503)	772-6622	16-MAR-92	30-SEP-92	
6220 SW	R ASTRO #227	449 E. MAIN	ASHI AND	97520	John Phimister	(503) 2	243-7899	09-JAN-92	21-SEP-92	
3575 SW	R BI-MOR STATIONS #12 DBA C	1515 SISKIYOU BLVD.	ASHLAND	97520	Mike Moran	(503)	772-2053	22-JAN-92	17-SEP-92	
3407 SW	R BI-MOR STATIONS. INC. #5	1649 ASHLAND AVE.	ASHLAND	97520	Robert L. Voris	(503)	557-9147	05-FEB-92	17-SEP-92	
9318 SW	R BILL TERPENING INC., ASHL	150 LOWE RD.	ASHLAND	97520	Bill Terpening	(503)	773-7311	09-JAN-92	30-SEP-92	
2435 SW	R GUTHMILLER'S EXXON #9291	1765 SISKIYOU BLVD.	ASHLAND	97520	Robert Guthmiller	•		13-JAN-92	22-SEP-92	
4053 SW	R HAYS OIL CARDLOCK #2	END OF SHAMROCK LANE	ASHLAND	97520	Steve Hays	(503)	772-2053	14-FEB-92	22-SEP-92	
6262 SW	R JACKSON COUNTY PARKS & RE	HOWARD PRAIRIE LAKE	ASHLAND	97520	Randy Hutton	$(503)^{-7}$	776-7001	20-MAR-92		
2417 SW	R LITHIA EXXON #2996	75 "C" ST.	ASHLAND	97520	Mike Hawkins	(503)	772-5275	16-MAR-92	01-0CT-92	
7615 SW	R LITHIA WAY EXPRESS LUBE	345 LITHIA WAY	ASHLAND	97520	Kay & Kenneth Anderson	(503)	488-5057	27-JAN-92	10-AUG-92	12-MAY-92
6529 SW	R PANOCO, INC #22	2490 ASHLAND BLVD.	ASHLAND	97520	Richard Wright	$(503)^{-2}$	286-9621	06-FEB-92	06-AUG-92	
6032 SW	R POWELL DISTRIBUTING CO.,	2073 NORTH PACIFIC HIGHWA	ASHLAND	97520	Jason Powell	(503) 2	289-5558	28-FEB-92	16-SEP-92	
70 SW	R REX BOUNDS	2366 HIGHWAY 66	ASHLAND	97520	Rex Bounds	(503)	482-3166	24-MAR-92	30-SEP-92	
8824 SW	R ROBERTS SERVICE	595 N. MAIN	ASHLAND	97520	Danielle Roberts	(503) 4	482-8631	16-MAR-92	14-MAY-92	
1372 SW	R ROGUE VALLEY STATION	461 VALLEY VIEW RD.	ASHLAND	97520	C.F. Adler	$(503)^{-7}$	776-1227	16-JAN-92	26-AUG-92	
2102 SW	R VALLEY VIEW EXXON #1233	3460 VALLEY VIEW RD @ I-5	ASHLAND	97520	Mike Hawkins	$(503)^{-7}$	772-5275	16-MAR-92	01-0CT-92	
1334 SW	R BUTTE FALLS TEXACO	326 BROAD	BUTTE FALLS	97522	Jeremy P. Guiliano	(503)	772-6181	15-JAN-92	08-SEP-92	
1/18 SW	R CAVE JUNCTION TEXACO	112 REDWOOD HIGHWAY	CAVE JUNCTIO	97523	Richard Mikesell	(503) 9	928-3385	23-JAN-92	07-AUG-92	
1200 SW	R CHEVRON U.S.A., INC 92	409 REDWOOD HWY.	CAVE JUNCTIO	9/525	Jeff A. Stiles	505/594	2-3080	15-JAN-92	15-JUN-92	
9408 SW	R COLVIN OIL CO	243 REDWOOD HWY	CAVE JUNCTIO	9/523	Scott Pedd	(503) 4	479-5343	23-JAN-92	28-SEP-92	
9174 SW	R HULLAND STUKE	7251 HULLAND LOOP ROAD	CAVE JUNCTIO	9/525	George L. McElroy	(503)	592-4441	20-MAR-92	29-SEP-92	
4118 SW	K KORRIE'S WOLD CAKE CENIEK	10449 BBV 40	TACLE DOLLE	97523	Theron Robinson	(503)	592-2396 537 3070	27-MAR-92		
04Y SW	K CHOCK'S ARCO	10000 NWY. 02	EAGLE POINT	97024	Chartes Cobun	(503) 8	320-2808	U9-JAN-92	20 444 02	
W6 1 C00	R EAGLE POINT CHEVRON	107 MAIN, W. 1/700 MW /2	EAGLE POINT	9/244	Phillip U./Linda L. Bievins	(503) (320-/13/	15~JAN-92	29-MAT-92	
020 SW	K JJ MAKKE:	14/00 HWY. DZ	EAGLE POINT	9/024	Jess & Joyce Woodard	(503) 8	320-5650	70 HAD 00	24-AUG-92	
2/0 SW	K LAKE CKEEK STUKE	EAND DITTE CALL HIS	EAGLE POINT	0752/	Kichard A. Sumner			30-MAR-92	04_0CT_03	
7000 cl	N PODIC AUTOMOTIVE CERVICE	452 SECOND AVENUE	COLD HILL	91754	Pohone & MaCovi	/E073 (0EE 00E7	10-JAN-92	01-061-92	
767 SL	P FOOTS CREEK COUNTRY STORE	3175 POGLE DIVED HUY	COLD HILL	07525	Ven & Joan Ferguson	(505)	כנספיננס	19-MAK-92	10-SEP-92	
8856 SL	R COLD HILL TEXACO	404 SND WARNIE	COLD HILL	97525	Ron Ranoist			30-MVD-03	17-SED-02	
6014 SL	R ANTIERS GROCERY & SERVICE	8530 MONUMENT DR.	GRANTS PASS	97526	Loval Dean Mullenix	(503) (476-4038	13-141-02	01-00T-92	
6597 SL	P ARCO #3	1044 N.F. ATH	GRANTS PASS	97526	Scott Pedd	(503)	470-5343	23 - JAN - 02	28-SEP-02	
6267 SH	R ASTRO #219	324 N.F. #F# ST.	GRANTS PASS	97526	John Phimister	(503) 2	243-7899	00-JAN-92	21-SEP-92	
7557 SW	R BI-MOR #21/DBA REDWOOD SH	730 REDWOOD HIGHWAY	GRANTS PASS	97526	Mike Moran	(503)	772-2053	22-JAN-92	17-SEP-92	
3599 SH	R BI-MOR STATIONS #8	625 N.E. 7TH	GRANTS PASS	97526	Mike Moran	(503) 7	772-2053	22-JAN-92	17-SEP-92	
9319 SI	R BILL TERPENING, INC. GRAN	515 ROUGE RIVER HWY	GRANTS PASS	97526	Bill Terpening	(503) 7	773-7311	09-JAN-92	30-SEP-92	
807 SM	R BP OIL SITE #11014	1995 N.E. 6TH	GRANTS PASS	97526	Scott Pedd	(503) 4	479-5343	27-MAR-92	28-SEP-92	
2413 Sk	R CAVEMAN EXXON #2871	104 N.W. MORGAN LANE	GRANTS PASS	97526	Mike Hawkins	$(503)^{-7}$	772-5275	16-MAR-92	01-OCT-92	
2292 Sh	R CLOVER CREST MARKET	2600 CLOVERLAWN DR.	GRANTS PASS	97526	Richard & Joyce Teal	(503) 4	479-3850	20-MAY-92	07-JUL-92	
7328 SW	R COLVIN OIL CO. ARCO #5	800 N.E. E ST.	GRANTS PASS	97526	Scott Pedd	(503) 4	479-5343	23-JAN-92	28-SEP-92	
6617 Sh	R COLVIN OIL CO., GRANTS PA	650 REDWOOD HIGHWAY	GRANTS PASS	97526	Scott Pedd	(503) 4	479-5343	23-JAN-92	28-SEP-92	
6601 Sk	R COLVIN OIL CO., GRANTS PA	1553 WILLIAMS HIGHWAY	GRANTS PASS	97526	Scott Pedd	(503) 4	479-5343	23-JAN-92	28-SEP-92	
6745 Sk	R COLVIN OIL COMPANY, INC.	2520 FOOTHILL BOULEVARD	GRANTS PASS	97526	Scott Pedd	(503) 4	479-5343	23-JAN-92	28-SEP-92	
178 Sk	R D & E COUNTRY STORE	350 OXYOKE RD.	GRANTS PASS	97526	Ella-Lou Staples	(503) 4	479-5996	14-FEB-92		
6044 Sh	R DON'S PETROLEUM INC	610 REDWOOD HWY.	GRANTS PASS	97526	Don Jackson			22-JAN-92	30-SEP-92	
3870 SI	R E & I MARKET	1410 WILLIAMS HWY.	GRANTS PASS	97526	Keith W. & Dixie Mendenhall	(503) 4	476-4100	20-MAR-92	01-0CT-92	
8904 SH	R FREEWAY SHELL	1998 VINE STREET	GRANTS PASS	97526	Mike Moran	(503) 7	772-2053	22-JAN-92	17-SEP-92	
2424 SI	R HAWK OIL #6993	840 N.E. "F"	GRANTS PASS	97526	Mike Hawkins	(503) 7	772-5275	16-MAR-92	01-0CT-92	
9997 SI	R HUGO HITCHING POST	6411 HUGO ROAD	GRANTS PASS	97526	Kathleen V. Krushe	(503)	479-6518	28-MAY-92	28-SEP-92	
8603 SI	R JENKINS MARKET	2035 SW BRIDGE STREET	GRANTS PASS	97526	Cliff Jenkins	(503) 4	474-7722	18-FEB-92	24-AUG-92	

FAC 1D	REG	FAC NAME	ADDRESS 4986 MONUNEMT DRIVE 5000 MONUMENT DRIVE 529 N.E. "F" ST. 1741 SOUTH PACIFIC HIGHWA 5635 RIVERBANK ROAD 124 N.E. MORGAN LANE 935 ROGUE RIVER HWY. 509 S.E. 7TH ST. 3660 ROGUE RIVER HWY 780 UNION AVENUE 6891 WILLIAMS HWY. 6410 WILLIAMS HWY. 6410 WILLIAMS HWY 5547 RIVERBANKS 7500 HWY 238 15095 HWY 238 15095 HWY 238 15095 HWY 238 15095 HWY 238 15096 HWY 238 15096 HWY 238 15096 HWY 238 15097 HWY 238 15097 HWY 238 15098 HWY 238 15095 HWY 238 1104 GRIFER ROAD 11744 GALICE RD. 11744 GALICE RD. 1107 GALICE ROAD 11744 GALICE RD. 1108 GRIFWALL CREEK DR 1109 GALICE ROAD 11744 GALICE RD. 1174 GREEK DRIVE 480 MILL CREEK DR 151 MILL CREEK DR 152 PINE STREET 153 MILL CREEK DR 154 PINE STREET 154 DEPOT STREET 155 PINE STREET 156 E. EVANS CREEK RD. 157 CREEK PR 157 CR 157 CR 157 CR 157	CITY	ZIP	CONTACT	** *** -&	PHONE		LOI	CA	APP
8900	SWR	NORTH VALLEY FUEL	4986 MONUNEMT DRIVE 5000 MONUMENT DRIVE 529 N.E. "F" ST.	GRANTS PASS	97526	Justin V. George		(503)	476-2525	06-MAR-92		
4492	SWR	NORTH VALLEY TEXACO	5000 MONUMENT DRIVE	GRANTS PASS	97526	Jeremy P. Guiliano		(503)	772-6181	31-JAN-92	08-SEP-92	-
7670	SWR	OIL HOUSE, THE	529 N.E. "F" ST.	GRANTS PASS	97526	James Ayling	:	(503)	476-2218	12-FEB-92	24-SEP-92	
6037	SWR	POWELL DISTRIB. CO., COLV	1741 SOUTH PACIFIC HIGHWA	GRANTS PASS	97526	Jason Powell		(503)	289-5558	28-FEB-92	16-SEP-92	
540	SWR	RIVER BANKS MARKET	5635 RIVERBANK ROAD	GRANTS PASS	97526	Lee Walker	:	(503)	479-1416	27-MAR-92		
1384	SWR	TEXACO SERVICE STATION	124 N.E. MORGAN LANE	GRANTS PASS	97526	Dale Andert		(503)	225-4257	09-MAR-92		
7651	SWR	U-SAVE GAS	935 ROGUE RIVER HWY.	GRANTS PASS	97526	Patricia K. Lingafe	l'ter	(503)	476-1783	30-MAR-92	21-AUG-92	
3224	SWR	VIRGIL'S CHEVRON STATION	509 S.E. 7TH ST.	GRANTS PASS	97526	Virgil Welch		(503)	476-3565	11-MAR-92	08-SEP-92	
9390	SWR	ALTHEIDE, SYLVIA	3660 ROGUE RIVER HWY	GRANTS PASS	97527	Sylvia Altheide		(503)	474-0871	30-MAR-92		
9187	SWR	FAIRGROUNDS TEXACO	780 UNION AVENUE	GRANTS PASS	97527	Randy Harris		(503)	476-6321	19-FEB-92	21-SEP-92	
2257	SWR	MURPHY AUTOMOTIVE	6891 WILLIAMS RWY.	GRANIS PASS	9/52/	Fred Herrman		(503)	772-6363	30-MAK-92	30-SEP-92	
9108	SWR	MURPHY STORE	6410 WILLIAMS RWY	GRANIS PASS	97527	David & Steve Rives		(503)	862-2135	U8-JAN-92	18-AUG-92	
4525	SWR	SHAN CREEK MARKET	5547 RIVERBANKS	GRANIS PASS	9/52/	Oliff Matney		(503)	4/6-3895	18-MAR-92	09-SEP-92	
9231	SWK	/-/ MINI MAR!	7500 HWY 238	JACKSONVILLE	97530	Mary M. Jacks		(503)	899-1346	10-JAN-92	11-MAY-92	
9209	SWK	APPLEGATE STUKE	15095 HWY 238	APPLEGATE	9/530	Randi H. Lummis		(503)	846-6659	18-758-92	11-MAY-92	OE OCT 03
2002	SWK	JACKSUNVILLE TEXACO -	TOOLE H. ADDIECATE BOAD	JACKSUNVILLE	9/530	Robert D. George		(505)	899-7701 800 1101	23-MAK-92	17-5EP-92	03-061-92
750	SMK SMK	MUKEE BRIDGE SIDED SEDVICE	20'E E CALLEDRALA ET	JACKSONVILLE	グレンシリ	Fruit Loud Barriage	•	(503)	899-1101 800-1047	21- 14N-02	10-6ED-02	
2762	CLID	t & D MADNET	100 CALIFE DOAD	MEDITM	97330	Koni 2 Alica Hisioh	' !	(503)	677~1001 176=3831	27-8AN-92	38-CED-03	
5628	CUD	CALLCE STODE	117// CALICE DD	MEDITAL	07532	Mary Thomseon		(503)	476-3818 474-3818	13-JAN-02	13-MAY-02	
7675	SMK	MEDITA CAS DILIMO /LITETAM	310 MEDITA DA	MEDITA	07532	William # Plante		(503)	476-3616 476-1566	30-MAR-92	01-00T-92	
1231	SUR	MOORE GARY	33096 REDWOOD HUY	O'RRIEN	97534	Gary Moore		(503)	596-2555	01-APR-92	28-SEP-92	
3409	SUR	BI-MOR STATIONS INC. #2	608 N. MAIN ST.	PHOENIX	97535	Virginia Vinson		(503)	535-4164	16-JAN-92	28-SEP-92	
2430	SWR	PHOENIX EXXON #9290	800 N. MAIN	PHOENIX	97535	Mike Hawkins	•	(503)	772-5275	16-MAR-92	01-0CT-92	
9610	SWR	CASCADE GORGE PROPERTIES	2651 MILL CREEK DR	PROSPECT	97536	Carl Wegner	-	(503)	560-3795	18-MAR-92	29-JUN-92	
8890	SWR	PROSPECT AUTOMOTIVE	351 MILL CREEK DRIVE	PROSPECT	97536	A. O. DeWayne		(503)	560-3664	21-JAN-92	01-0CT-92	
5673	SWR	PROSPECT TEXACO	480 MILL CREEK	PROSPECT	97536	Doris Wegner		(503)	560-3919	19-MAR-92	01-0CT-92	
2216	SWR	UNION CREEK RESORT	HWY. 62	PROSPECT	97536	James R. Ring		(503)	560-3565	01-APR-92		
6633	SWR	COLVIN OIL CO., ROGUE RIV	95 PINE STREET	ROGUE RIVER	97537	Scott Pedd		(503)	479-5343	23-JAN-92	28-SEP-92	
3736	SWR	LARRY'S TRIANGLE SERVICE	MAIN & DEPOT ST.	ROGUE RIVER	97537	Gordon L. Hatch		(503)	582-3253	01-APR-92	14-SEP-92	
2433	SWR	ROGUE RIVER EXXON #9316	#1 PINE ST.	ROGUE RIVER	9/55/	Mike Hawkins		(503)	772-5275	16-MAR-92	01-001-92	
4/59	SWR	ROGUE RIVER LEXACO	42 DEPOT STREET	ROGUE RIVER	9/55/	Jeremy P. Guillano		(503)	//2-0181 500 7771	31-14N-A5	14 CED 03	
2811	SMK	WIMER FAMILY MARKET	19/70 DEDUCOR HUY	KOROF KIVEK	9/00/	Josephine Worthingto	on	(503)	202-2211 020-770E	27 - 141 - 02	10-2EF-32	
194	SWK	SELMA SERVICE	1845U KEUWUUU NWI	SELMA COUR	7/220	Kichard Mikesett		(503)	920-3263 970-3263	16-MAD-02	10-8ED-02	
2000	SMK	SHADY COVE MOBIL	21023 NWT #02	SHADY COVE	71237	At Kad		(503)	777-7711	10-MAK-72	30-SED-02	
7267	OUD	TALENT CAR ALESS #0/00	21 TALENT AVE	TAI ENT	075/0	Mike Haukine		(503)	772-5275	16-MAD-02	01-0CT-02	
4115	SMIC	DITIME ED	2/231 HUY 62	TDATI	97541	Fd Diame		(503)	878-2145	22-JAN-92	22-SEP-92	
5637	SUR	SUNSET ON THE ROGUE	26876 HIGHWAY 62	TRATI	97541	Norman & Adelia Ondo	rev	(503)	878-3330	20-MAR-92	21-AUG-92	
9359	SUR	COCHRAN LARRY & SHERRY	7845 REDWOOD HWY	WILDERVILLE	97543	Larry & Sherry Cochi	ran	(503)	476-3924	30-MAR-92	24-SEP-92	
555	SWR	PROVOLT STORE	14299 WILLIAMS HWY.	WILLIAMS	97544	Doralee McLaughlin		(503)	846-6286	30-MAR-92		
9298	SWR	T & H GAS	120 FAST FORK ROAD	WILLIAMS	97544	Richard Worth		(503)	846-6940	23-JAN-92		
4929	SWR	WILLIAMS GENERAL STORE	20180 WILLIAMS HWY	WILLIAMS	97544	John & Marge Chamber	rs	(503)	846-6212	20-MAR-92	01-0CT-92	
111	CR	A.M.A.MINY MART/TEXACO SE	7255 S. 6TH ST.	KLAMATH FALL	97601	Anesti Audeh		(503)	882-3463	14-FEB-92	23-JUL-92	23-JUL-92
7882	CR	ALTAMONT SERVICE	2700 ALTAMONT DR.	KLAMATH FALL	97601	Anthony & Anna Della	a Ripa	(818)	703-6138	31-MAR-92	21-AUG-92	
3250	CR	BEACON GAS-N-GO #11-6	4214 GREENSPRINGS DR.	KLAMATH FALL	97601	L R Mittnacht		(503)	883-8412	24-FEB-92	30-SEP-92	
7627	CR	BOYER'S CORNER MARKET	1939 RIVERSIDE DR.	KLAMATH FALL	97601	Martin & Glenda Boye	er	(503)	882-3915	10-JAN-92	10-SEP-92	
1171	CR	CAMPUS TEXACO SERVICE	BIEHN ST. AT HWY. 97N	KLAMATH FALL	97601	Terry Slade		(503)	884-4117	12-FEB-92	04-SEP-92	
		CARDLOCK	978 SPRING ST.	KLAMATH FALL	97601	Ed Clough		(503)	884-5167	27-MAR-92	01-SEP-92	
751	CR	CHEVRON U.S.A., INC 90	3131 s. 6TH	KLAMATH FALL	97601	L R Mitthacht Martin & Glenda Boyd Terry Slade Ed Clough Terry L. Wilkenson		(503)	882-6875	03-FEB-92		



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FAC ID REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT Ed Clough Ed Clough Ed Clough Scott Pedd Thomas A. Darling Janine Barrett Terry Slade Donald H. Hartvig Terry Slade James F. Clough James Titus Janine Barrett Terry Slade Thomas & Beth Stout Robert Langley Terry Slade France M & Ronald L Hahn Dino Boito Gail H. Rickards Andy Parker et all Janine Barrett H. C. Hassett Terry Slade Terry Slade Terry Slade Terry Slade Lerry Slade Frence Anduth Neuroth Gregory J. Decker Terry Slade Ed Clough Terry Slade Terry	PHONE	LOI	CA	APP
267 CR	CLOUGH OIL CO	3730 HIGHWAY 97 NORTH	KLAMATH FALL	97601	Ed Clough	(503) 884-5167	27-MAR-92	01-0CT-92	
703 CR	CLOUGH OIL CO.	3303 WASHBURN WAY	KLAMATH FALL	97601	Ed Clough	(503) 884-5167	27-MAR-92	01-oct-92	
692 CR	CLOUGH OIL CO. (CARDLOCK)	3620 N. HWY 97	KLAMATH FALL	97601	Ed Clough	(503) 884-5167	27-MAR-92	01-0CT~92	
8261 CR	COLVIN OIL CO., KLAMATH F	3434 S. 6TH ST.	KLAMATH FALL	97601	Scott Pedd	(503) 479-5343	23-JAN-92	28-SEP-92	
1209 CR	DARLINGS OIL WELL #1	SPRAGUE RIVER HWY	KLAMATH FALL	97601	Thomas A. Darling	(805) 482-6983	27-MAR-92	29-SEP-92	
4883 CR	EAST MAIN GULL #414	630 E. MAIN ST.	KLAMATH FALL	97601	Janine Barrett	(206) 624-5900	30-MAR-92	01-0CT-92	
4780 CR	EIGHTEEN WHEELER TRUCKSTO	8600 HWY 97 S.	KLAMATH FALL	97601	Terry Slade	(503) 884-4117	12-FEB-92	04-SEP-92	
323 CR	FRANKO #45	RT. 5, BOX 1325	KLAMATH FALL	97601	Donald H. Hartvig	(503) 295-2668	01-APR-92		
1519 CR	HOMEDALE TEXACO & FOOD MA	5419 S. 6TH	KLAMATH FALL	97601	Terry Slade	(503) 884-4117	12-FEB-92	04-SEP-92	
2692 CR	JIM CLOUGH/DBA THURBER FU	3021 GREENSPRINGS DRIVE	KLAMATH FALL	97601	James F. Clough	(503) 884-5167	18-MAR-92	01-0CT-92	
4330 LK	JIM'S DETAIL PLUS	2104 SOUTH OTH ST.	KLAMAIH FALL	9/601	James IITUS	(503) 883-1744	U8-JAN-92	01-001-92	
4000 LK	MAIN OF CUEL #413	2300 S. SIXIN SI.	KLAMAIN FALL	07401	Janine Barrett	(200) 024-3900 (E07) 004-4117	3U-MAK-92	01-001-92	
1221 CK	ODESSA MEDCANTILE	28200 HGV 1/0 U	PLAMATH FALL	07601	Thomas & Poth Stout	(503) 864-4117	12-150-72	11_MAY_02	
131 CK	OF THE STOPE	13200 NW 140 W	KLAMATH FALL	07601	Pohert Langley	1022-0CC (COC)	09-14N-02	11-MAY-02	
4777 CP	OPERON AVENUE SERVICE	2075 OPECON AVE	VI AMATH FALL	97601	Terry Stade	(503) 884-3000	12-EED-02	U/~65p~05	
7451 CR	PELICAN MARINA	O28 FRONT STREET	KI AMATH FALL	97601	France M & Ponald 1 Mahn	(503) 882-5834	30-MAD-02	04-367-72	
353 CR	PICK RATSELL'S EXYON SERV	4532 S ATH ST	KI AMATH FALL	97601	Dino Roito	(707) 538-4040	00-0CT-02		
2145 CR	ROCKY POINT RESORT	HARRIMAN RT ROY 92	KLAMATH FALL	97601	Gail # Pickards	(503) 356-2287	30-MAD-02	01-0CT-92	
709 CR	SERVICE STATION	4330 S SIYTH ST	KI AMATH FALL	97601	Andy Parker et all	(503) 330 2207	27-MAD-02	01-0ED-02	
AROR CR	SHASTA GULL #420	3601 SHASTA WAY	KI AMATH FALL	97601	Janine Rarrett	(206) 624-5000	30-MAD-02	01 3LF 72	
5249 CR	THURRERS TRUCK STOP	3817 HIGHNAY 97 NORTH	KLAMATH FALL	97601	H C Hassett	(503) 882-0501	01-ADD-02	01 001 72	
622 CR	TOWN & COUNTRY TEXACO	3732 S. 6TH ST.	KLAMATH FALL	97601	Terry Slade	(503) 884-4117	12-FFR-92	21-SEP-92	
8337 CR	WEBB'S SERVICE	2135 S. ATH STREET	KLAMATH FALL	97601	Terry Slade	(503) 884-4117	12-FFR-92	01-0CT-92	
1524 CR	WORDEN TRUCK STOP	HWY. 97 S.	KLAMATH FALL	97601	Terry Slade	(503) 884-4117	12-FEB-92	04-SEP-92	
8546 CR	COUNTRY VILLA MARKET	4449 HOMEDALE ROAD	KLAMATH FALL	97603	L R Mittnacht	(503) 883-8412	24-FEB-92	16-SEP-92	
10737 CR	CRATER LAKE LODGE, INC.	MAZAMA VILLAGE	CRATER LAKE	97604	Dick Gordon	(503) 594-2511	24-MAR-92		
9924 CR	ADEL STORE	P.O. BOX 19	ADEL	97620	Chuck & Ann Cleland	(503) 947-3850	25-MAR-92	01-0CT-92	
149 CR	NEW BEATTY STORE	P.O.BOX 133	BEATTY	97621	Leona Maddax	(503) 533-2469	30-MAR-92	24-SEP-92	
2021 CR	LAWRENCE CHEVRON	HWY. 140	BLY	97622	Dean Lawrence	(503) 353-2551	31-JAN-92	28-SEP-92	
345 CR	ALLEN B. MYERS	HWY. 140 / ROUTE "A", BOX	BONANZA	97623	Anduth Neuroth	(503) 545-6929	01-APR-92		
9909 CR	BONANZA MINI MART & SHELL	HWY 70 & 2ND ST.	BONANZA	97623	Gregory J. Decker	(503) 884-2552	27-JAN-92	24-JUL-92	30-0CT-92
1525 CR	CASCADE 97	HWY 97	CHILOQUIN	97624	Terry Slade	(503) 884-4117	12-FEB-92	04-SEP-92	
1517 CR	CHILOQUIN SHELL	1ST & CHOCKTOOT	CHILOQUIN	97624	Terry Slade	(503) 884-4117	12-FEB-92	04-SEP-92	
1174 CR	CLOUGH OIL CO CARDLOCK	HWY 97 N & 422 S	CHILOQUIN	97624	Ed Clough	(503) 884-5167	27-MAR-92	01-001-92	
1327 CK	MAI-SLADE OIL LU.	P.O. BOX 213	CHILOGUIN	0742/	Frod & Domalo Tuttle	(503) 884-4117	12-FEB-92	30-5EP-92	
8/15 CD	VENU CYDACE	NE DO BOX DOU	CUITOGOIM	07627	Samual A Acinalli In	/E031 882-003A	20-MAD-02	71-957-72	
6764 CP	EN STAIR & SOME PETROLEUM	1440 NORTH ATH	1 VKENIEM	97630	David Staub	(503) 802-7730	01-ADD-02	2.1-3EF-72	
281 CD	EIVE CORNERS STORE	5 MILES WEST LAVEVIEW ON	LAKEVIEW	97630	Michael D. Counts	(503) 947 2101	28-FFR-02	13-MAY-92	
007Y CB	IAVE COUNTY AIDDODT	COUNTY ROAD	IAKEVIEU	97630	James W. Ginson	(503) 947-6003	21-144-02	13 11(1)_	
5102 CD	LAYE PORRIE CENE	126 N F ST	LAKEVIEU	97630	Robbie Lake	(503) 947-2268	13- IAN-92		
90 FR00	I AVEVIEU RP	715 N 4TH	LAKEVIEU	97630	Roh Grav	(916) 241-1167	30-MAR-92	01-0CT-92	
5064 CB	I AVENTED CHEVRON	ATH & G ST	LAKEVIEW	97630	Navid Staub	(503) 947-2101	01-APR-92	01 001 72	
9668 CP	LAKEVIEW TRUCK STOP	1206 SO. G STREET	LAKEVIEW	97630	Bob Grav	(916) 241-1167	30-MAR-92	01-0CT-92	
6073 CR	MT. HIGH SERVICE INC	350 HWY. 395 W.	LAKEVIFU	97630	John Conrov	(503) 947-4578	27-MAR-92	14-SEP-92	
191 CR	VALLEY FALLS STORE	HC-64 BOX 689	LAKEVIEW	97630	Jeffery W & Carol J Sullivan	(503) 947-2052	01-APR-92	· ·· · -	
5036 CR	DAVE'S INDEPENDENT STATIO	2234 RAILROAD & BROADWAY	MALIN	97632	Dave LeQuieu	(503) 723-6796	26-MAR-92	01-0CT-92	
694 CR	STAUB PETROLEUM PRODUCTS	MAIN & BROADWAY	MALIN	97632	Brad Staub	(916) 667-2227	01-APR-92		
1509 CR	A & M TEXACO	MAIN & FRONT	MERRILL	97633	Jeffery W & Carol J Sullivan Dave LeQuieu Brad Staub Brad Staub	(916) 667-2227	01-APR-92		
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FAC ID REG	FAC NAME	ADDRESS	CITY	ZIP		PHONE	LOI	CA	APP
6120 CR	FRANKO #44	E. FRONT STREET/P.O. BOX	MERRILL	97633	Phil Murray	(503) 588-0455	16-MAR-92	01-OCT-92	
9965 CR	HATFIELD PACIFIC PRIDE	HWY 39 AND STATELINE ROAD	MERRILL	97633	Brad Staub	(916) 667-2227	01-APR-92		
		FRONT STREET, P.O. BOX 29	MERRILL	97633	James R. Merrilees	(503) 798-5816	16-JAN-92	09-JUN-92	
238 CR	MIDLAND TEXACO	HWY 97 S. AT MAIN ST.	MIDLAND	97634	Gene & Rebecca Smith	(503) 884-1715	01-APR-92		
448 CR	WARREN GERALD D. & JANICE	1ST & MAIN	MIDLAND	97634	Gerald & Janice Warren	(503) 882-1172	23-MAR-92	21-SEP-92	
2464 CR	SUMMER LAKE STORE	P. O. BOX 36	SUMMER LAKE	97640	Bernice R. McKav	(503) 943-3164	17-JAN-92	28-SEP-92	
730 CR	ALFALFA STORE	HWY 97 S. AT MAIN ST. 1ST & MAIN P. O. BOX 36 26160 ALFALFA RD. 19 N.E. OLNEY AVE. 1700 SW SIMPSON 913 N.E. FIRST 612 S.E. THIRD 1120 S.E. HWY 97 1315 E. 3RD 555 N.W. FRANKLIN 3305 N. HWY 97 64683 COOK AVE. 1815 N.E. 3RD BEND-BURNS HWY U.S. 20, S 1143 N.E. THIRD 764 N.E. GREENWOOD 1144 N.E. 3RD 285 RIVERSIDE 63076 N. HWY. 97 755 N.E. GREENWOOD 981 GALVESTON STREET	REND	97701	Alfred & Claudia Green	(503) 382-0761	27-JAN-92	14-SEP-92	
1432 CR	BEAR COUNTRY PETROLEUM. I	19 N.E. OLNEY AVE.	BEND	97701	George Van Scov	(503) 382-4561	20-MAR-92		
6956 CR	BEND METRO PARKS	1700 SW SIMPSON	BEND	97701	Ernest Drapela	(503) 389-7275	30-JAN-92		
6398 CR	BEND OIL CO./FIRST STREET	913 N.E. FIRST	BEND	97701	Robert J. Nordby	(503) 382-4751	10-JAN-92	06-JUL-92	
1829 CR	BEND OIL CO./SOUTH PACIFI	612 S.E. THIRD	REND	97701	Robert L. Nordby	(503) 382-4751	10-JAN-92	06-JUL-92	
1407 CR	CHEVRON U.S.A. INC. ~ 90	1120 S.F. HWY 97	BEND	97701	GARY P ANDERSON	503/382-1109	01-APR-92		
1026 CR	CHEVRON II.S.A. INC 98	1315 F. 3RD	BEND	97701	Dan H. Vogt	(503) 389-1025	27-MAR-92	23-SEP-92	
1832 CR	CITY CENTER SHELL SERVICE	555 N W FRANKIIN	RENU	97701	Robert J. Nordby	(503) 382-4751	10-JAN-92	~ /	
6564 CR	HARRIS ENTERPRISES INC.	3305 N. HUY 97	REND	97701	ROR FOREST	(503) 682-3865	15-JAN-92	25-SEP-92	
7453 CR	TVY'S TUMALO STORE	AAART COOK AVE	RÉND	97701	James G TVV	(503) 475-2422	23-MAR-92	18-SEP-92	
146 CR	JERRY'S QUILK STOP	1815 N F 3PD	BEND	97701	Jerald D. Gardner	(503) 389-1276	07-FFR-92	21-SEP-92	
529 CR	MILLICAN STORE	REND-RURNS HUY II S 20 S	REND	97701	Mickey N Haisler	(503) 576-2746	19-MAR-92	22-SEP-92	
1716 CR	NORTH SHELL	1143 N F THIRD	REND	97701	Robert I Nordby	(503) 382-4751	10-JAN-92	22 421 72	
196 CR	PILOT BUTTE EXXON	764 N E GREENUOOD	REND	97701	Robert J. Nordby	(503) 382-4751	10-JAN-92	06-3111-92	
42 CR	PED CAPPET CAP UASH	1144 N F 3PD	.REND	97701	Michael Faccett	(503) 388-2652	02-MAR-92	29-SEP-92	
241 CR	DIVERSIDE SERVICE & COOCE	285 DIVERSINE	REND	07701	Parl 1 Podgere	(503) 382-8771	01-APR-02	27 321 72	
251 CK	INDUSTRIES SERVICE & GROCE	43074 N NUV 07	DEND	07701	lee Pentecost	(503) 532 5777	01-APR-02	25-SED-02	
1827 CR	HADE BOYANTS AUTO SERVICE	755 N E CREENUOOD	REND :	07701	Tami Revent	(503) 380-4775	00-MAR-02	28-SED-02	
8100 CR	WESTSIDE EXXON	981 GALVESTON STREET	DEND	07701	Pohert I Nordby	(503) 382-4751	10- IAN-92	06-3111-92	
5660 CB	WESTSIDE MOBIL CAR WASH (718 NU COLLINETA	BEND	97701	Kenneth Meston	(503) 382-6126	23-MAR-92	01-0CT-92	
5845 CR	CHI THE LAKE RESORT	AA MI S U REND OR HUY	REND	97702	Kent Rockholt	(503) 389-3230	30-MAR-92	0, 00, 72	
101 CR	DRI CORP	44 ML. S.W. BEND OR. HWY. 353 S.E. THIRD ST	REND	97702	Krea Roth	(503) 389-7368	30-MAR-92	28-SEP-92	
3637 CR	DESCHUTES COUNTRY STORE,	19745 BAKER ROAD	BEND	97702	David Jordan	(503) 389-0503	16-MAR-92	30-SEP-92	
180 CR	ELK LAKE RESORT	CASCADES LAKES HUY.	REND	97702	Lerov Hackbart	(503) 389-6736	30-MAR-92	21-SEP-92	
	INN OF 7TH MTN./MOBIL GAS	18575 S. CENTURY DR	REND	97702	David Quiros	(503) 389-9318	01-APR-92	30-SEP-92	
1705 CR	JAKE'S TRUCK STOP	61260 S HUY 97	REND	97702	Kim Wolfe	(503) 382-1041	23-MAR-92	28-AUG-92	
3657 CD	JAKE'S TRUCK STOP LAVA LAKE LODGE RED CARPET CAR WASH	CASCADE LAKES HWY. CLOSE	REND	97702	James Frazee	(503) 382-7857	30-MAR-92	30-SEP-92	
2021 CK	DED CYDDET CYD TIYCH	275 c = 70h	BEND	07702	Michael Faccett	(503) 388-2652	02-MAR-92	29-SEP-92	
887/ CD	PIDO UELLO & UELLO COMME	1100 S E DIVISION	REND	97702	George M. Wells	(503) 388-0802	30-MAR-92	L) 5L1 /L	
0008 CB	RIPP, WELLS & WELLS COMME SPEEDE MART	41304 C HUY 07	BEND	97702	Jim Ford	(503) 388-4520	16-JAN-92	01-00T-92	
656 CR	TWIN LAKES RESORT, INC.	11200 S. CENTURY DR.	BEND	97707	William R Sisson	(503) 593-6526	23-MAR-92	29-SEP-92	
	AUTOSPORT UNLIMITED	2100 NE HWY 20	REND	97709	Margaret Ann Cole	(503) 382-3561	26-FEB-92	10-SEP-92	
	FIELDS GENERAL STORE		FIFIDS	97710	Ken & Julie Thompson	(503) 388-7365	25-MAR-92	21-SEP-92	
	BROTHERS STAGE STOP	34100 HWY 20 E - PO BOX 1	BROTHERS	97712	Shirley A. Moore	(503) 576-2755	08-JAN-92	11-MAY-92	
	HAMPTON STATION	EAST HWY. 20	HAMPTON	97712	Gary Robertson	(503) 576-2622	02-MAR-92	25-SEP-92	
		14 NORTH BROADWAY	RIPNS	97720	Chris Summers	(503) 888-6061	30-MAR-92	29-SEP-92	
	BURNS CHEVRON	BROADWAY & MADISON STREET	BLIDNE	07720	Paymond Lleaks	(503) 573-2622	23IAN-92	01-007-92	
		188 N BROADWAY	DIIDNG	07720	T M Marchall	(503) 573-6016	14-348-92	15-MAY-02	
	BURNS FORD, INC.	HC 74 DOV 974	DUNNO	07770	I. M. Mai Statt	(503) 573-5355	20.MAD.02	ID PIAT JE	
		HC 71, BOX 87A	DUNNO	07770	Ctorford B. Connett	(202) 212-2622 (202) 212-2622	28-EED-02	11_CED_00	
	BURNS ONE STOP SERVICE	682 N. BROADWAY	BUKN2	7//20	Standord K. Bennett	(EUZ) 20E-2640	01-10D-92	11-3EF-74	
	FRANKO #1	524 W. MONROE	BUKN2	9//20	Donato A. Hartvig	(202) 272-4314	27 JAN - 02	21-980-02	
2202 UR	L.R. SWARTHOUT, INC.	19 W. MONROE	DURNS	07720	E R SWAITHOUL	/502\ K41_10//	10- 14N-92	25-AUC-02	
4299 CR	LEATHERS OIL CO. LEATHERS OIL CO.	HC 71, BOX 87A 682 N. BROADWAY 524 W. MONROE 19 W. MONROE HINES & FILMORE 1202 OREGON AVE.	DUKNS	07720	Propt Loathore	(503) 661-1244	10-JAN 92	25-AUG-02	28- IAN-92
שלא לא	LEATHERS OIL CO.	1202 OREGON AVE.	CNAUG	71160	Di Cit Leathers	(203) 001 1244	10 DAR 72	E2 A00 72	LO UAN /L



	G FAC NAME	ADDRESS	CITY	ZIP		PHONE	LOI	CA	APP
		SR 2 - 1604 BUCHANAN	BURNS	97720	James R. Oard Pattiy Glerup Steve Hebener Shana Lee Crisp Lawrence W. & Mary Loar Sr.	(503) 493-25	35 08-JAN-92	28-SEP-92	
10049 C	CAMP SHERMAN STORE CAMP SHERMAN STORE CAMP SHERMAN STORE	596 N. BROADWAY	BURNS	97720	Pattiy Glerup	(503) 513-69	66 21-JAN-92	21-AUG-92	
9967 C	R STEVE'S EXXON	489 W. MONROE	BURNS	97720	Steve Hebener	(503) 573-90	30 27-MAR-92	22-JUL-92	
552 CI	R PRINCETON SERVICE	BOX 1	PRINCETON	97721	Shana Lee Crisp	(503) 573-54	50 01-APR-92		
9058 CI	R CAMP SHERMAN STORE	CENTER OF MAIN ROAD	CAMP SHERMAN	97730	Lawrence W. & Mary Loar Sr.		27-JAN-92	18-SEP-92	
	CHEMULT OIL COMPANY, INC.	HWY 97 AND SECOND STREET	CHEMULT	97731	Richard Davis	(503) 549-68	11 23-MAR-92	01-0CT-92	
	R CHEMULT TEXACO	HWY 97 & 1ST STREET	CHEMULT	97731	Gil Ernst	(503) 433-95	11 19-MAR-92	26-AUG-92	
8866 CI	DIAMOND LAKE RESORT	(NONE)	DIAMOND LAKE	97731	Steve Koch	(503) 793-33	33 06-FEB-92	14-SEP-92	
666 (1	ERICKSONS EXXON	STAR ROUTE-CHEMULT	CHEMULT	97731	Robert J. Nordby	(503) 382-47	51 10-JAN-92	06-JUL - 92	
8897 0	CRECCENT CHEVRON	HWY 97 & 3RD P.O. BOX 152	CHEMULT	97731	Penny Jacobson	45071 700 45	26-FEB-92		
0/1/ CI	E DIAMOND LAKE RESORT E ERICKSONS EXXON E P.J.'S EXXON C CRESCENT CHEVRON C CRESCENT TEXACO HIGH CHAPARRAL INN L LEATHERS OIL CO. FORT ROCK GENERAL STORE	HWY. 97 SOUTH	CRESCENT	9//33	George Van Scoy	(503) 382-45	61 11-MAR-92	21-SEP-92	
9410 U	C CRESCENT TEXALU	HWY 97 & WARD STREET	CKESCENT	9777/	Jeff & Wendy Coker	4E07) E11 4E	23-JAN-92	15-MAY-92	
7217 U	I HIGH CHAPAKKAL INN	101 9 E CIDEET	CULVER	97734	Richard Becker	(503) 546-65	31 15-JAN-92	31-AUG-92	
0112 0	ECOT DOCK CENEDAL STORE	131 & E 31KEE1	FORT BOCK	97775	Brent Leathers	(503) 001-12	94 10-JAN-92	25*AUG-92	27 400 02
9112 G	HIGH CHAPARRAL INN LEATHERS OIL CO. FORT ROCK GENERAL STORE FRENCHGLEN MERCANTILE GILCHRIST SERVICE STATION GENERAL FARM SUPPLY, INC. HINES FOOD MARKET AMERICAN PACIFIC PETRO/JE	K. KOADS 310 - 312	FOR I KUCK	91133	Halana Kanak	(503) 5/6-25	00 10-JAN-92	15-3UN-92	21-448-92
1175 C	CILCURIST SERVICE STATION		CLICURICE	9//30	matena konek	(503) 493-25	00 10-MAR-92	18-SEP-92	
52/7 C	CENEDAL EADM CHODLY THE	NICHINA SU	GILCHKISI	02779	C Permit Zimmonnen	(202) 422-92	11 19-MAK-92	20-AUG-92	
2541 0	Wines cook Mapyer	HIGHNAT ZO DOV 447	NINES	07770	Came D. William	(200) 000-JY	04 3U-MAK-92	0/ ccb 03	
10771 0	AMERICAN PACIFIC PETRO/JE	TOO N ATH OT	DINES	91130	taba cald	(503) 5/3-03	91 21-JAN-92	04-SEP-92	
4538 C	CRANE PRAIRIE RESORT	FOREST ROAD 2116 D	MADKAS	07770	John Gold	(503) 536-12	07 21"JAN"92	11-MA1-92	
0.025	IACKSON PAIN E	15746 BURGESS ROAD	LA PINE LA PINE	91139	Paul E Jackson	(503) 502-21 (503) 534-1/	01	01-001-92	
7134 0	I A DINE CAS FOR LESS	51345 BUN 07	IA DINE	07730	Cil Ernet	(503) 230-14	41 J-JAN-92 11 10-MAD-02	02-5EP-92	
4852 C	LA PINE TEXACO INC	51453 S HUY 97	IA DINE	07730	Willia & Linda Oleon	(503) 433-73	58 10-EEE-02	12-1614-02	
9612 C	CRANE PRAIRIE RESORT JACKSON, PAUL E. LA PINE GAS FOR LESS LA PINE TEXACO INC LAPINE HIWAY CENTER LAPINE MINI MART INC ROBINSON, ORREN WICKIUP JUNCTION BOB SMITH SERVICE LIYY'S JIFFY MARKET KARDGARD SITE KEN EDGMON, INC. LEATHERS OIL CO.	51365 HWY. 97 51453 S. HWY. 97 51425 HWY 97	IA PINE	97739	Carol Brever	(503) 536-20	45 18-FFR-92	17-SED-92	
9746 C	LAPINE MINI MART INC	52530 HWY 97	IA PINE	97739	Fred Morrow	(503) 536-32	RR 01-4PR-92	17 325 75	
742 C	ROBINSON, ORREN	51571 HYW 97 / P.O. BOX 3	LA PINE	97739	Orren Robinson	(503) 536-21	31 N9-JAN-92		
9013 C	WICKIUP JUNCTION	17000 BURGESS ROAD	LA PINE	97739	Norman St Clair	(503) 536-22	11 30-MAR-92	01-00T -9 2	
8914 C	BOB SMITH SERVICE	250 N 5TH	MADRAS	97741	Robert C. Smith	(200, 200 ==	02-MAR-92	26-AUG-92	
7470 C	IVY'S JIFFY MARKET	40 NW 4TH STREET	MADRAS	97741	James G. Ivy	(503) 475-24	22 23-MAR-92	18-SEP-92	
5565 CI	KARDGARD SITE	NW HESS & HIGHWAY 26	MADRAS	97741	Lou Dobbins	(503) 475-21	77 23-MAR-92	01-SEP-92	
5903 C	R KEN EDGMON, INC.	HIGHWAY 97 & M STREET	MADRAS	97741	Kenneth E. Edgmon	(503) 475-24	36 31-MAR-92	29-SEP-92	
4262 C	R LEATHERS OIL CO.	158 5TH ST.	MADRAS	97741	Brent Leathers	(503) 661-12	44 10-JAN-92	25-AUG-92	28-JAN-92
210 C	MADRAS J & L TRUCK STOP &	992 SW HWY 97	MADRAS	97741	Gerald Barker	(503) 475-35	13-JAN-92	24-SEP-92	
6795 C	NORTH MADRAS SHELL	NORTH HWY. 97	MADRAS	97741	W.J. Wren	(503) 548-10	35 10-JAN-92	21-SEP-92	
9973 C	RAINBOW RAFTING	WARM SPRINGS STAR ROUTE	MADRAS	97741	Bob McInturff	(503) 581-15	85 01-APR-92		
6748 C	R SOUTH MADRAS SHELL	622 FIFTH ST.	MADRAS	97741	W_J_ Wren	(503) 548-10	35 10-JAN-92	17-SEP-92	
8477 0	R NORTH MADRAS SHELL R RAINBOW RAFTING SOUTH MADRAS SHELL SOUTH SIDE TEXACO TIGER MART UTTER OIL CO	1094 S.W. HWY 97 1357 SW HWY 97	MADRAS	97741	K. M. Utter	(503) 475-29	34 27-FEB-92	28-SEP-92	
8892 0	IIGER MAKI	1357 SW HWY 97	MADRAS	9//41	Richard L. Allen	(503) 475-71	27 10-JAN-92	30-SEP-92	
8479 C	UITER OIL CO	178 SW 4TH ST	MADRAS	97741	Richard R. Utter	(503) 475-29	34 20-MAR-92	01-0CT-92	
	R UTTER OIL CO BULK PLAN	229 N.W. BIRCH LANE	MADRAS	97741	Richard R. Utter	(503) 475-29	34 20-MAR-92	01-0CT-92	
	R CANNON'S TIRE CENTER	P.O. BOX /	MITCHELL	97750	Robert Cannon		17-JAN-92	09-SEP-92	
	R SCHNEE'S GROCERY & SERVIC	MAIN ST PO BOX 188	MITCHELL	97750	George M. Schnee	(503) 462-34	9 08-JAN-92	20-MAY-92	
5272 C	R PAULINA STORE	100 & MAIN ST.	PAULINA	97751	Ingeborg Brittner	(503) 477-33	11 08-JAN-92	27-JUL-92	
5217 C	R POST GENERAL STORE R THE COUNTRY STORE R ART'S PLACE	HC 68 BOX 2600	POST	97752	Marvin Peters	(503) 477-32	35 30-MAR-92		
4401 C	R THE COUNTRY STORE	ROUTE 1, BOX 385	POWELL BUTTE	97753	Ronald W. Sloper	(503) 548-43	28 02-MAR-92	25-AUG-92	
9221 C	R ART'S PLACE	BUX 1845 PLR	PRINEVILLE	9//54	John C. & Wilma L. Hansen		21-JAN-92		
	R BOB'S PRINEVILLE EXXON	440 E. SKU	PRINEVILLE	97754	KODERT FOX	(503) 447-66	25-MAR-92		
	R CARSON OIL	P.O. BOX 7 MAIN ST PO BOX 188 100 & MAIN ST. HC 68 BOX 2600 ROUTE 1, BOX 385 BOX 1845 PLR 240 E. 3RD 400208 LAMONTA ROAD	PRINEVILLE	9//24	Samura Gaytoru	(303) ZZ4-85'	JU 25-JAN-92	17-000-00	
دعد ر	R KAACARD LOCK	HARWOOD & LAMONTA ROAD &	LVINEATER	#1104	Steve Hebener Shana Lee Crisp Lawrence W. & Mary Loar Sr. Richard Davis Gil Ernst Steve Koch Robert J. Nordby Penny Jacobson George Van Scoy Jeff & Wendy Coker Richard Becker Brent Leathers Ira Dutcher Malena Konek Gil Ernst C. Barry Zimmerman Gary D. Miller John Gold Patrick Schatz Paul E. Jackson Gil Ernst Willie & Linda Olson Carol Brewer Fred Morrow Orren Robinson Norman St Clair Robert C. Smith James G. Ivy Lou Dobbins Kenneth E. Edgmon Brent Leathers Gerald Barker W.J. Wren Bob McInturff W.J. Wren K. M. Utter Richard R. Utter Richard R. Utter Robert Cannon George M. Schnee Ingeborg Brittner Marvin Peters Ronald W. Sloper John C. & Wilma L. Hansen Robert Fox Sandra Gaylord Geraldine Johnson	(202) 441-04	76 11-MAR-92	11-957-76	

FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	Brent Leathers Richard H. Lehman Stuart J. Shelk, Jr. W.J. Wren J.D. & Twila Flegel Barbara Rogers B.G. Overall Sam Puckett Richard R. Utter Maxine Terry W.J. Wren Robert W. Byram Sandra Gaylord Jeff Abbott Lou Dobbins W.J. Wren Mark Arnett Justin King Dennis L. Stoll Shirley Anderson W.J. Wren John Ryan Norman Faulkner Bennie D. Macomber Ted W. Rogers Helmut Junge Dennis L. Stoll Richard Davis Rich Mathis Odie Briley Deryl J. Ferguson Roy L. Comrie George Bonbright John Phimister Floyd D. Lamberson George E. Bonbright George E. Bonbright David & Toni Walters Darrell V. Gemmell George E. Bonbright Steve Hart Bea Herd Emile M Holeman Darrell V. Gemmell Donald W. Rognon Nathan Crowther	PHONE		LOI	CA	APP
4288	CR	LEATHERS OIL CO.	801 W. 3RD	PRINEVILLE	97754	Brent Leathers	(503)	561-1244	10-JAN-92	25-AUG-92	28-JAN-92
1369	CR	OCHOCO FUEL CO.	301001 MCKAY RD	PRINEVILLE	97754	Richard H. Lehman	(503)	447-5812	13-JAN-92	18-AUG-92	
7188	CR	OCHOCO LUMBER COMPANY	COMBS FLAT ROAD	PRINEVILLE	97754	Stuart J. Shelk, Jr.	(503)	447-6296	16-MAR-92		
6804	CR	OCHOCO SHELL	E. OCHOCO HWY. & COMBS FL	PRINEVILLE	97754	W.J. Wren	(503) 5	548-1035	10-JAN-92	17-SEP-92	
8930	CR	OVERALL PETROLEUM CO.	480 LAMONTA ROAD	PRINEVILLE	97754		(503) 4	447-6581	10-FEB-92	10-AUG-92	
10665	CR	PACIFIC PRIDE	GARDNER RD	PRINEVILLE	97754	J.D. & Twila Flegel	(503)	447-7609	01-APR-92		
140	CR	PINE GROCERY	402402 LAMONTA RD.	PRINEVILLE	97754	Barbara Rogers	(503)	447-6619	24-FEB-92	17-SEP-92	
9091	CR	PRINEVILLE QUIK STOP	205 W. 3RD	PRINEVILLE	97754	B.G. Overall			10-FEB-92	03-AUG-92	
2943	CR	PRINEVILLE RESERVOIR RESO	1300. P.L.R.	PRINEVILLE	97754		(503)	447-7468	30-MAR-92		
3107	CR	PUCKETT'S DISTRIBUTING	341 E. THIRD ST.	PRINEVILLE	97754	Sam Puckett	(503)	447-6807	30-MAR-92	06-DCT-92	
8480	CR	SAM'S TEXACO	398 WEST THIRD STREET	PRINEVILLE	97754	Richard R. Utter	(503) 4	475-2934	20-MAR-92	01-OCT-92	
1222	CR	TERRY, HILLARD H., GAS FO	1170 MADRAS HY	PRINEVILLE	97754	Maxine Terry	(503) 4	447-7633	31-MAR-92		
0083	CR	THIRD STREET SHELL	550 W. THIRD ST.	PRINEVILLE	97754	W.J. Wren	(503)	548 - 1035	04-FEB-92	17-SEP-92	08-JAN-93
2467	CR	BYRAMS CHEVRON, INC.	516 S.W. 5TH	REDMOND	97756	Robert W. Byram	(503) 5	548-8315	23-MAR-92	28-SEP-92	
8910	CR	CARSON OIL CO.	244 E ANTLER BLVD	REDMOND	97756	Sandra Gaylord	(503) 2	224-8500	23-JAN-92	11-SEP-92	
9022	CR	FULL STOP	2057 S. HWY 97	REDMOND	97756	Jeff Abbott	(503) 3	382-3961	11-FEB-92	15-MAY-92	
8891	CK	PIUNEER PUP	_2310 NE HWY 9/	REDMOND	97756	Lou Dobbins	(503) 4	475-2177	23-MAR-92	01-SEP-92	
0100	CR	PLUM' FIERCE	612 S. FIFTH S1.	REDMOND	97756	W.J. Wren	(503)	48-1035	04-FEB-92	17-SEP-92	08-JAN-93
64U3 / 9E 0	CR	PULAK BEAK GAS & WASH	742 N. OIK	REDMOND	9//56	Mark Arnett	(503)	48-6424	30-JAN-92	22-SEP-92	
403U 5730	CD.	REDMOND TICED WART	712 S. DIR	REDMOND	97/56	Justin King	(517) 3	3/1-5/00	01-APR-92	07 00	
5320	CD.	REDWOND THUCK CENTRE	1030 S. RWI 9/	KEDMUNU	7//20	pennis L. Stoll	(503) 3	362-5558	23-MAR-92	23-SEP-92	
73C7	CD	CIVIL CIDEEL CHELL	1004 5. OIN	REDMOND	07754	Shirley Anderson	(503) 4	222-1335 749-407E	21-1-8-92	47 orn 03	
2780	ro ro	T_M_T	107 3. SIAIN SI.	REDMOND	07754	W.J. Wren	(202) 2	748~1U33	70 HAD 03	17-SEP-92	
0.087	CD	TEVACO FOOD MADY	398 WEST THIRD STREET 1170 MADRAS HY 550 W. THIRD ST. 516 S.W. 5TH 244 E ANTLER BLVD 2057 S. HWY 97 2310 NE HWY 97 612 S. FIFTH ST. 722 N. 6TH 712 S. 5TH 1638 S. HWY 97 1362 S. 6TH 109 S. SIXTH ST. 111 NW 6TH 539 N. 6TH HIGHWAY 20 US HWY 20 & OAK THREEWIND SHOPPING CENTER	KEDMOND	07754	Hopmon Foulknes	(203) 3	340-031/ 5/8 4000	20-MAK-92	47 cm 02	
4047	CD	DILEY STODE & CADAGE	TICOPIAN SU	REDPIOND	07759	Roppie D. Mosember	(202) 2	746 1009	27 HAD 03	11-2EP-92	
1050	CE	CHEVDON II S & THE - 07	HE BUY 20 8 OAK	CICTEDO	07750	Ted II Degree	(017) 2	3/3-2002 5/0 0107	20 MAR 02	01-2EP-37	
8808	CD.	DOCEDS MOUNTAIN MODII	TUDERLIND SUCRETURE CENTER	SISIERS	07750	Palmus kunan	(202) 2	149-9193	20-MAK-92	21-9EP-92	
5332	CD	CICTEDS CENEDAL STORE	570 CACCADE	SISIERS	07750	Donnie L Stell	/E071 7	242 EEE0	20-FEB-92	24-SEP-92	
808	CR	SISTERS OIL CO	FIR & CASCADE ST	SISTERS	97750	Pichard Davis	(503) 3	5/0_4911	23-MAR-92	23-SEP-92	
7995	CR	SUTTLE LAKE RESORT	13300 HUY 20	SISTERS	97750	Pich Mathie	(503) 5	305 - 6662	01_0CT_02	01-001-92	
9937	CR	CROOKED RIVER AUTOMOTIVE	CROOKED RIVER PANCH - PHA	CROOKED RIVE	97760	Odia Brilay	(503) 5	5/8-50/1	13-141-02	18_CED_02	
1230	CR	TERRERONNE MARKET INC	8150 HUY OF MORTH	TERRERONNE	97760	Daryl I Fermienn	(503) 5	70-2341 70-2341	U2-MV0-05	01-001-02	
9326	FR	ATH STREET CAR WASH & SER	801 S F COURT	PENDI ETON	07801	Pov I Comrie	(503) 2	76-2003	01-MDD-02	01-001-92	
8097	FR	ARROWHEAD TRUCK PLAZA	RT 1 ROX 531	PENDIFTON	97801	George Rophright	(503) 2	276-6666	05-FFR-02	24-550-02	
6230	ER	ASTRO #235	1302 SOUTHGATE	PENDLETON	97801	John Phimister	(503) 2	243-7899	09-148-92	21-SEP-92	
5874	ER	BARNHART PROPERTIES. INC.	1-84 EXIT 202	PENDI ETON	97801	Floyd D. Lamberson	(503) 2	76-6709	10-JAN-92	13-MAY-92	
6085	ER	BONBRIGHT OIL	814 S.W. DORIAN	PENDLETON	97801	George E. Bonbright	(503) 2	276-6666	05-FEB-92	24-SEP-92	
1376	ER	CHEVRON U.S.A., INC 91	4314 WESTGATE	PENDLETON	97801	George E. Bonbright	(503) 2	276-6666	10-FEB-92	24-SEP-92	
1327	ER	DAVE'S CHEVRON FOOD MART	335 S.E. COURT	PENDLETON	97801	David & Toni Walters	(503) 2	276-3610	08-JAN-92	28-MAY-92	10-JUN-92
7076	ER	DELMER-CRAWFORD SHELL OIL	300 PATAWA RD. S.E.	PENDLETON	97801	Darrell V. Gemmell	(503) 3	362-3939	27-MAR-92		
6510	ER	EASTSIDE BONOCO	903 S.E. COURT	PENDLETON	97801	George E. Bonbright	(503) 2	276-6666	05-FEB-92	24-SEP-92	
7394	ER	FAST GAS/BONBRIGHT OIL CO	1704 S.W. EMIGRANT	PENDLETON	97801	George E. Bonbright	(503) 2	276-6666	05-FEB-92	24-SEP-92	
9907	ER	HARTS SERVICE CENTER	238 SW COURT	PENDLETON	97801	Steve Hart	-		20-MAR-92	01-OCT-92	
10215	ER	HERD'S HANDY MART	1304 S.W. DORION	PENDLETON	97801	Bea Herd	(503) 2	276-4519	26-MAR-92	30-SEP-92	
82	ER	HOLEMAN, EMILE M	212 S.W. DORION ROAD	PENDLETON	97801	Emile M Holeman	(503) 2	276-5373	25-MAR-92	16-SEP-92	
8903	ER	INDIAN HILLS TEXACO	313 NYE	PENDLETON	97801	Darrell V. Gemmell	(503) 3	62-3939	30-MAR-92	28-SEP-92	
1745	ER	PENDLETON	1413 SW EMIGRANT AVE.	PENDLETON	97801	Donald W. Rognon	(801) 7	734-6400	28-FEB-92		
6156	ER	PENDLETON GRAIN GROWERS	1111 S.W. DORION	PENDLETON	97801	Nathan Crowther	(503) 2	276-7611	30-MAR-92	28-SEP-92	
6151	ER	PENDLETON GRAIN GROWERS,	1013 S.W. EMIGRANT	PENDLETON	97801	Nathan Crowther	(503) 2	276-7611	30-MAR-92	28-SEP-92	



FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	CONTACT	PHONE		LOI	CA	APP
4158	ER	PENDLETON SHELL		PENDLETON	97801	Don Russell George E. Bonbright Betty Shoun Vern Kube Roy L. Comrie Sam Byrnes Doug Hattenhauer Don Russell Randall Clough Dennis Gronquist Sam Byrnes George J. Kaup Charles P. Good Donald D. and Lila M Waldrop	(503) 4	81-4876	30-MAR-92	17-SEP-92	
6502	ER	ROUND-UP BONOCO	1004 S.W. COURT	PENDLETON	97801	George E. Bonbright	(503) 2	76-6666	05-FEB-92	24-SEP-92	
1446	ER	ROUND-UP CROP DUSTERS, IN	PENDLETON MUNICIPAL AIRPO 816 SOUTHGATE 1852 WESTGATE 1852 S.W. COURT HALE & MORRISON HWY 19 SOUTH 401 LOCUST 100 BEECH STREET LOCUST & BEECH STREETS 3RD & CURRANT (SW CORNER) 5TH & MAIN 3RD & CURRENT (NE CORNER)	PENDLETON	97801	Betty Shoun	(503) 2	76-3115	16-APR-92		
10076	ER	SUNSHINE GAS 'N WASH	816 SOUTHGATE	PENDLETON	97801	Vern Kube	(503) 2	78-0099	22-JAN-92	24-SEP-92	
5276	ER	WESTGATE SERVICE STATION	1852 WESTGATE	PENDLETON	97801	Roy L. Comrie	(503) 2	76-1921	31-MAR-92	18-AUG-92	
6537	ER	WESTSIDE MOBIL SERVICE	1852 S.W. COURT	PENDLETON	97801	Roy L. Comrie	(503) 2	76-1921		18-AUG-92	
10256	ER	ADAMS CARDLOCK	HALE & MORRISON	ADAMS	97810	Sam Byrnes	(503) 2	76-3361	16-MAR-92		
8411	ER	ARLINGTON BULK PLANT	HWY 19 SOUTH	ARLINGTON	97812	Doug Hattenhauer			18-FEB-92	28-AUG-92	
1717	ER	ARLINGTON SHELL	401 LOCUST	ARLINGTON	97812	Don Russell	(503) 4	81-4876	27-JAN-92	17-SEP-92	
8058	ER	CLOUGH CHEVRON	100 BEECH STREET	ARLINGTON	97812	Randall Clough	(503) 4	54-2790	17-JAN-92	21-SEP-92	
8879	ŁK.	GRONGUIST TEXACO	LOCUST & BEECH STREETS	ARLINGION	9/812	Dennis Gronquist	(503) 4	54-2911	25-MAR-92	12-JUN-92	
10/1/	t R	ATHENA CARDLOCK	3RD & CURRANT (SW CORNER)	ATRENA	97813	Sam Byrnes	(503) 2	76-3361	16-MAR-92	17-SEP-92	
236	ER	FREUS MARKET CHEVRUN	JIH & MAIN	ATHENA	97813	George J. Kaup	(503) 5	66-3831	13-JAN-92	01-JUN-92	
8180	EK	RUL MURRISON UIL CU., (KE	3RD & CURRENT (NE CORNER)	AIHENA	97813	Charles P. Good	(503) 5	66-3844	19-MAR-92	24-SEP-92	•
7140	EK	BAKER CIII CONOCO	2/5 E CAMPBELL SI	BAKER	97814	Donald D. and Lila M Waldrop	45071 0	00 7400	16-MAR-92	30-SEP-92	
2/33	EK	BAKER IRUCK CURRAL -	-515 CAMPBELL -4702 MAIN ST. 2150 BROADWAY	BAKER	97814	Raiph E. Poole	(503) 8	89-3128	21-JAN-92	05-JUN-92	
100	EK	BAKER VALLET CHEVRUN .	-1/UZ MAIN SI.	BAKER	97814	William, Jr. Howe	(203) 5	23-4581	2/-JAN-92	18-AUG-92	
6103	ER	COUD CHURLA	10 STREET / UN 20 - DOUTE	BAKEK	07014	Robert L. Black	(503) 5	23-42/2	10-JAN-92	24-567-92	
7757	ER	EUEDV IM M	10 STREET/HWY 30 - ROUTE 2500 CEDAR ST. CORNER OF CAMPBELL & BAKE 2212 10TH STREET	DAVED	07014	lm M Emons	(503) 5 (503) 5	27-7070	10-FEB-92	24-5EP-92	
6112	ED	EDANKO #75	CODNED OF CAMPBELL & DAVE	DAVED	07914	Donald U Wantwin	(202) 2	43-4949 05-2448	U8-JAN-92	19-AUG-92	
4001	ED	CVE VND GNVCK	2212 10TH CTREET	DAKED	07814	Maria ! Condoor	(200) 2	77-000	01-455.02	28-ccn-02	
5248	FR	GENERAL FARM SUPPLY THE	870 FIM ST	RAYED	97014 97814	C Barry 7 immermen	(200) J	RR-508/	30-MAD-02	20-2EP-92	
4056	ER.	GENERAL FARM SUPPLY INC	2075 TENTH ST	BAKER	97814	C Rarry Zimmerman	(208) 8	88-5084	30 MAR 72		
1146	FR	GILES DON	2212 10TH STREET 879 ELM ST. 2975 TENTH ST. 496 CAMPBELL ST. RICHLAND INTERCHANGE 1-84 1706 CAMPBELL STREET 500 CAMPBELL EAST HIGHWAY 30 9TH AND PLACE HWY 26 JUNCTION HIGHWAY 7 101 S.E. FRONT P.O. BOX 581 101 N. MAIN LAUREL LANE 101 S.W. FRONT 132 N. WASHINGTON 131 N WASHINGTON 133 N. WASHINGTON 145 S. CANYON BLVD. 205 E. WALNUT	BAKER	97814	Donald O Giles	(503) 5	23-7822	01-ADR-02	21-CED-02	
10141	ER	OREGON TRAIL WEST RV PARK	RICHLAND INTERCHANGE 1-84	BAKER	97814	Don G. Shennard	(503) 5	23-3988	10-JAN-92	22-JUN-92	
248	ER	SHARON OIL OF BAKER CITY	1706 CAMPBELL STREET	BAKER	97814	Robert L. Black	(503) 5	23-4575	13-JAN-92	22-SEP-92	
1606	ER	TEXACO FOODMART	500 CAMPBELL	BAKER	97814	Donald Q. Giles	(503) 5	23-7822	22-JAN-92	21-SEP-92	
648	ER	TRIANGLE FARM SUPPLY, INC	EAST HIGHWAY 30	BAKER	97814	Wm. M. Emery	(503) 5	23-4949	08-JAN-92	19-AUG-92	
6884	ER	UNION OIL PRODUCTS	9TH AND PLACE	BAKER	97814	Robert L. Black	(503) 5	23-4575	16-JAN-92		
7136	ER	AUSTIN HOUSE	HWY 26 JUNCTION HIGHWAY 7	BATES	97817	Robert L. Dempster	(503) 4	48-2387	27-JAN-92	11-JUN-92	27-JUL-92
7079	ER	BOARDMAN EXXON	101 S.E. FRONT	BOARDMAN	97818	James C. Hubbard	(503) 4	81-3456	17-MAR-92	30-SEP-92	
5066	ER	BOARDMAN TEXACO	P.O. BOX 581	BOARDMAN	97818	Doug Hattenhauer			18-FEB-92	29-SEP-92	
244	ER	DEWEY'S CHEVRON	101 N. MAIN	BOARDMAN	97818	Frank Bates	(503) 4	81-9235	28-FEB-92	04-SEP-92	
8882	ER	RUSSELL OIL CARDLOCK	LAUREL LANE	BOARDMAN	97818	Don Russell	(503) 4	81-4876	27-JAN-92	17-SEP-92	
4188	ER	RUSSELL OIL CO.	101 S.W. FRONT	BOARDMAN	97818	Vern Russell	(503) 4	81-4876	13-JAN-92	11-MAY-92	
4772	ER	JACKSON MINI STATION	132 N. WASHINGTON	CANYON CITY	97820	Gregory Jackson	(503) 5	75-1348	17-JAN-92	20-MAY-92	
10860	ER	JACKSON OIL TANK FARM INC	131 N WASHINGTON ST	CANYON CITY	97820	Gregory Jackson	(503) 5	75-1348	17-JAN-92	20-MAY-92	
1990	ER	JACKSON OIL, INC. PLANT C	133 N. WASHINGTON	CANYON CITY	97820	Gregory Jackson	(503) 5	75-1348	17-JAN-92	20-MAY-92	
1426	ER	TILL'S MOBIL	145 S. CANYON BLVD.	CANYON CITY	97820	Ferris G. Hill	(503) 5	75-0292	30-MAR-92		
1216	ER	CONDON TEXACO	205 E. WALNUT	CONDON	97823	Carleton E. Cathcart	(503) 3	84-2646	25-MAR-92	01-0CT-92	
1472	ER	COONEY'S	421 S. MAIN	CONDON	97823	Peggie Flatt	(503) 3	84-2292	23-MAR-92		
5323	ER	FATLANDS, INC.	110 MAIN ST.	CONDON	97823	Thomas Fatland	(503) 3	84-2131	08-JAN-92	19-AUG-92	
166	ER	SCHREINER'S CHEVRON, INC.	401 S. MAIN ST.	CONDON	97823	Peggie Flatt	(503) 3	84-2292	27-MAR-92	17-SEP-92	
618	ER	DOLLAR'S CORNER	808 MAIN ST.	COVE	97824	Robert T. Rudman	(503) 5	68-4451	15-JAN-92	12-JUN-92	
1223	ER	DAYVILLE TEXACO	HIWAY 126, MP 131	DAYVILLE	97825	Richard Smith	(503) 9	87-2123	30-JAN-92	27-AUG-92	
81	ER	BUD'S CHEVRON SERVICE	STH AND ALBANY	ELGIN	97827	J. L. Rogers	(503) 4	57-3777	21-JAN-92	11-SEP-92	
9340	ER	HENDERSON FUEL, ELGIN SIT	133 N. WASHINGTON 145 S. CANYON BLVD. 205 E. WALNUT 421 S. MAIN 110 MAIN ST. 401 S. MAIN ST. 808 MAIN ST. HIWAY 126, MP 131 8TH AND ALBANY TOLLGATE HWY PT 2 POY 80 C (PAIMED IN	ELGIN	97827	Leisa Prince	(503) 8	86-3027	11-MAR-92	28-SEP-92	
00000	EK	MERT'S FRONTIER STORE	8TH AND ALBANY TOLLGATE HWY RT. 2, BOX 89 G/PALMER JU 395 ALBANY - HWY. 82	ELGIN	9/82/	Alberta Eckstein	203 45/	0405	25-MAR-92	24-AUG-92	
4514	EK	O & M GAS & GROCERIES	SYS ALBANT - HWT. 02	ELGIN	A1051	Charles P. Good Donald D. and Lila M Waldrop Ralph E. Poole William, Jr. Howe Robert L. Black Durand Brewster Wm. M. Emery Donald H. Hartvig Marla J. Gardner C. Barry Zimmerman C. Barry Zimmerman Donald Q. Giles Don G. Sheppard Robert L. Black Donald Q. Giles Wm. M. Emery Robert L. Black Robert L. Dempster James C. Hubbard Doug Hattenhauer Frank Bates Don Russell Vern Russell Gregory Jackson Gregory Jackson Gregory Jackson Gregory Jackson Gregory Jackson Ferris G. Hill Carleton E. Cathcart Peggie Flatt Thomas Fatland Peggie Flatt Robert T. Rudman Richard Smith J. L. Rogers Leisa Prince Alberta Eckstein Orrin Wagoner	(505) 4	31-3241	UD-JAN-AS	12.700-25	

FAC ID REG	FAC NAME	ADDRESS	CITY	ZIP		PHONE		LOI	CA	APP
2991 ER	CASTILLEJI, PAUL	111 N.W. 1ST	ENTERPRISE	97828	Sam Byrnes Vicki Fleshman Leisa Prince Irving E. Ness Jr. Benjamin D. Grote Stevie F. Testerman James Butner Rod Poole	(503)	276-3361	22-JAN-92	17-SEP-92	
		106 ALAMO	ENTERPRISE	97828	Vicki Fleshman	(503)		01-APR-92		
9291 ER	HENDERSON FUEL COMPANY	GOLF COURSE ROAD	ENTERPRISE	97828	Leisa Prince	(503)		11-MAR-92	28-SEP-92	
	IRV'S SERVICE	100 W. NORTH	ENTERPRISE	97828	Irving E. Ness Jr.	(503)		09-JAN-92		
218 ER	MT. MART	302 WEST NORTH STREET	ENTERPRISE	97828	Benjamîn D. Grote	(503)				
	STEVE'S AUTO REPAIR & SER		ENTERPRISE	97828	Stevie F. Testerman	(503)	426-3244	26-FEB-92	25-AUG-92	
	WALLOWA COUNTY GRAIN GROW		ENTERPRISE	97828	Benjamin D. Grote Stevie F. Testerman James Butner Rod Poole W. F. Mac Innes Clifford Cole Walter & Rhonda Dillman George Allensworth Calvin Sherman Dennis Miller Jeddie Aylett Donald H. Hartvig Norval & Mary Jo Lane Doug Hattenhauer Brent leathers Nathan Crowther Nathan Crowther Nathan Crowther Lynn & Robert Phipps Linda Gandy Shelley Warren Don Russell Edgar D. Mackan Charles Morris Larry Mills Phyllis E. White Daniel Akers David L. Barnett Barbara Wadekamper Carlisle B. Wilson Gregory Jackson Brent Leathers Mark A. Smith Paul Castilleji Deborah K. Campbell Donald D. Waldrop Steve Winn Donald D. Waldrop	(503)	426-3116	09-MAR-92		
	FOSSIL HARDWARE & BUILDIN		FOSSIL	97830	Rod Poole	(503)	763-3441	18-MAR-92	24-AUG-92	
6386 ER	WRIGHT CHEVROLET, INC.	2ND & MAIN, P.O. BOX 466	FOSSIL	97830	W. F. Mac Innes	(503)	763-4175	23-MAR-92	21-SEP-92	
	COLE BROTHERS AMERICAN ST		HAINES	97833	Clifford Cole	(503)	856-3401	13-MAR-92	02-JUL-92	06~JUL-92
	HALFWAY GARAGE	150 SOUTH MAIN	HALFWAY	97834	Walter & Rhonda Dillman	(503)	742-2136	31-JAN-92	27-JUL-92	
	PINE-EAGLE FARMER'S COOP.		HALFWAY	97834	George Allensworth	(503)	893-6181	28-FEB-92	14-SEP-92	
	CAL'S SERVICE CENTER	MAIN & CENTER P.O. BOX 81	HEPPNEK	9/836	Calvin Sherman	(50.5)	6/6-5062	17-JAN-92	01-SEP-92	
	MILLER'S MINI-MART & CHEV		HEPPNER	97836	Dennis Miller	(503)	6/6-5556	09-JAN-92	14-SEP-92	
	AYLETT, J.	RT.1, BOX 818	HERMISTON	97838	Jeddie Aylett	(503)	205 2778 205 2778	09-JAN-92		
	FRANKO #21 GOTTA STOP MINI MART	1235 N. FIRST 1580 HIGH LAND	HERMISTON	07070	Donald H. Hartvig	(203)	293-2008 E27 10E7	01-APK-92	22.ern 02	
		_1580 HIGH LAND 710 HERMISTON WEST AVENUE	HERMISTON	07070	Norval & Mary Jo Lane	(505)	707-1907	19-555-02	26-YHC-02	
	LEATHERS OIL CO.		HERMISTON	07838	Pront leathers	(503)	661127.7	10-150-72	25-AUG-92	
	PENDLETON GRAIN GROWERS		HERMISTON	07838	Nother Crouther	(503)	001-1644 274-7411	30-MAD-02	28-6E0-02	
			HERMISTON	07839	Nathon Crouthon	(503)	270-7011 274-7411	30-MAR-92	28-6ED-02	
	PHIPPS CHEVRON SERVICE		HERMISTON	07838	Lynn & Pohert Dhinne	(503)	547-7577	23-MAD-02	15-SED-02	
	REHER'S SERVICE		HERMISTON	97838	Linda Gandy	(503)	567-6733	17-JAN-02	28-SED-02	
	SHORT STOP #1	PUNKIN CENTER & DIAGONAL	HERMISTON	97838	Shelley Warren	(503)	567-9590	30-MAR-92	01-00T-92	
	SUN MART	1430 N. 1ST	HERMISTON	97838	Don Russell	(503)	481-4876	26-MAR-92	01-0CT-92	
	WONDRACK DISTRIBUTING	55 W ELM	HERMISTON	97838	Edgar D. Mackan	(503)	567-5559	20-MAR-92	01 001 72	
	LEXINGTON SERVICE	110 W MAIN STREET	LEXINGTON	97839	Charles Morris	(503)	989-8319	13-JAN-92	06-JUL-92	13-JUL-92
5042 ER	MORROW COUNTY GRAIN GROWE		LEXINGTON	97839	Larry Mills	(503)	989-8221	27-JAN-92		
10112 ER	WHITE, PHYLLIS E.	BOX 6	IMNAHA	97842	Phyllis E. White	(503)	577-3112	06-FEB-92	28-SEP-92	
10172 ER	AKERS RENTAL GARAGE	MAIN & SPRING	IONE	97843	Daniel Akers	(503)	228-1905	27-MAR-92		
	BARNETT, DAVID L	320 MAIN STREET	IONE	97843	David L. Barnett	(503)	422-7576	16-JAN-92	24-JUN-92	
1331 ER	BROWNS AUTO & TRUCK STOP		IRRIGON	97844	Barbara Wadekamper	(503)	922-4221	17-JAN-92	22-JUN-92	
	BOBS CHEVRON SERVICE	301 W. MAIN	YAG NHOL	97845	Carlisle B. Wilson	(415)	955-6843	12-FEB-92	92-אטנ	
	JACKSON OIL INC. WEST CAR		JOHN DAY	97845	Gregory Jackson	(503)	575-1348	17~JAN-92	20-MAY-92	
	LEATHERS OIL CO.	603 W. MAIN	JOHN DAY	97845	Brent Leathers	(503)	661-1244	10-JAN-92	25-AUG-92	30-JAN-92
7184 ER	MAINSTOP MINI MARKET & TE		YAG NHOL	97845	Mark A. Smith	(503)	575-0327	10-JAN-92	26-MAY-92	
∠900 EK /57 EB	CASTILLEJI, PAUL KIMBERLY CENTER	MAIN & WALLOWA 1ST & MAIN	JOSEPH	070/0	Paul Castilleji	(503)	432-3331 074-337	13-14N-72	1U-SEP-92	
	A & B ENTERPRISES	I-84 & EXIT #265	KIMBERLY LA GRANDE	07850	Donald D. Haldcon	(503)	734-2231 063-8661	03-EEB-05	1K*CED-02	
	BERRY'S SUPER TEXACO	1508 ADAMS	LA GRANDE	07850	Steve Winn	(503)	2507-290	21-JAN-92	31-AHG-02	
	BY-RITE GAS & SNACK	2112 ISLAND AVE	LA GRANDE	97850	Donald D. Waldrop	(503)	963-8461	03-FEB-92	16-SEP-92	
	C & M COUNTRY STORE		ISLAND CITY	97850	Rrian D. Waldron	(503)	963-8461	09-MAR-92	01-JUL-92	01111-92
	DON KEELING CHEVRON SERVI		LA GRANDE	97850	Donald F. Keeling			10-JAN-92		J. 552 72
	FREEWAY CONOCO	2310 ISLAND AVE	LA GRANDE	97850	Donald D. Waldrop			03-FEB-92		
	FREEWAY TEXACO	2614 ISLAND AVE	LA GRANDE	97850	Steve Winn			21-JAN-92		
	GEM FUEL CO.	2602 WALLOWA LAKE HIGHWAY	LA GRANDE	97850	Brian D. Waldrop Donald E. Keeling Donald D. Waldrop Steve Winn Donald Shepherd Robert Becker G. Wesley Kalmbach Donald D. Waldrop			13-JAN-92		
	GEM FUEL CO.	2708 ISLAND AVE	LA GRANDE	97850	Robert Becker			20-MAR-92		
	GEORGE'S TEXACO	802 ADAMS	LA GRANDE	97850	G. Wesley Kalmbach			17-JAN-92		01-0CT-92
1047 ER	OAK STREET EXXON	408 ADAMS	LA GRANDE	97850	Donald D. Waldrop			03-FEB-92		
535 ER	STARKEY TRADING POST	58588 GRANDE RONDE RD	LA GRANDE	97850	Jo Anne Able			17-JAN-92	21-SEP-92	



FAC ID	REG	FAC NAME	ADDRESS	CITY	ZIP	James G. Voelz James G. Voelz Donald D. Waldrop Wendell W. Rock Coy Johnston James Butner Carl Lewis Johnny Brown Murrel D. Oliver William Perkins Donald W. Rognon Nathan Crowther Karrie Rencken C. R. Nelson Jerry Boyer Dean Nichols Ivan McDaniel Melvin McKern John & Barbara Murdoch Dennis Lawson Nathan Crowther Charles Gooding John E. McBride Joe B. Donaldson Lisa Keith Ronald G. Worley George Allensworth Curt Randall Donald D. Waldrop Sue Hibdon John Hammell Sr Ted Morgan George E. Bonbright Craig Smith Steve Skidgel Dale E. Anderson Gary Thompson Daniel Vincent L C Skellenger Amy Bertelsen Attila Koppany Gary & Sandra Powell Brent Leathers Marla J. Gardner George E. Bonbright Lonnie L. Mattison Arnold Emery Phillip Yeargain Larry Dean Stratton Leon N. Fisher	PHONE		LOI	CA	APP
8761	ER	VOELZ OIL COMPANY	804 - 21st	LA GRANDE	97850	James G. Voelz	(503)	963-3214	28-MAY-92	28-MAY-92	
8760	ER	VOELZ, JAMES G.	1701 ADAMS	LA GRANDE	97850	James G. Voelz	(503) 9	963-3881	17-JAN-92	28-MAY-92	
1394	ER	WALDROP MOBIL CARD-LOCK	HIGHWAY 82	LA GRANDE	97850	Donald D. Waldrop	(503)	963-8461	03-FEB-92	16-SEP-92	
5635	ER	WENDELLS CORNER	2304 ADAMS	LA GRANDE	97850	Wendell W. Rock	(503) 9	963-6841	17-JAN-92	15-JUN-92	27-APR-92
391	ER	D.K. GARAGE	HIWAY 395	LONG CREEK	97856	Coy Johnston	(503)	421-3396	27-JAN-92	24-AUG-92	
10955	ER	WALLOWA COUNTY GRAIN GROW	HWY 82 & COLLEGE ST	LOSTINE	97857	James Butner	(503)	426-3116	09-MAR-92		
9848	ER	CRAZY CARL'S BLUE MT LODG	BOX 157	MEACHAM	97859	Carl Lewis	(503)	276-7020	16-APR-92	01-0CT-92	
2359	ER	BROWNS SERVICE CENTER	419 S. MAIN	MILTON-FREEW	97862	Johnny Brown	(503)	938-6013	10-JAN-92	14-SEP-92	
1205	ER	CENTRAL SHELL	322 SOUTH MAIN	MILTON-FREEW	97862	Murrel D. Oliver	(503)	938-6388	30-MAR-92	03-SEP-92	
226	ER	LEE'S MARKET	ROUTE 3, BOX 82A	MILTON-FREEW	97862	William Perkins	(503)	938-3881	31-JAN-92		
1746	ER	MILTON-FREEWATER	RT. 4 BOX 96	MILTON FREEW	97862	Donald W. Rognon	(801)	734-6400	28-FEB-92		
6159	ER	PENDLETON GRAIN GROWERS,	21/ E. BROADWAY	MILTON-FREEW	97862	Nathan Crowther	(503) (2/6-/611	30-MAR-92	28-SEP-92	
8554	ER	UMAPINE MARKET	ROUTE 2, BOX 87R	MILTON-FREEW	97862	Karrie Rencken	(503)	738~5936	01-APR-92	0/ 1/10 00	
10212	ER	VILLA MARI	HWY 11 & CROCKETT RD.	MILION-FREEW	97864	L. R. Nelson	(503) 9	738-7247	13-JAN-92	26-AUG-92	
1460	ER	BOYER, JERRY	P.O. BOX 308	MONUMENT	97864	Jerry Boyer	(503)	734-229U	26-FEB-92	16-5EP-92	
9547	ER	CROSSRUADS SERVICE STATIO	-TIU W MAIN	MUUNI VERNON	9/802	Dean Nichols	(503) (55/~4/U3	10-JAN-92	43-5EP-92	
2615	ER	MCDANIEL DIL, INC.	393 EAST MAIN ST.	MOUNT VERNON	97865	IVan McDaniel	(503)	777 //77	21-JAN-92	12-JUN-92	
/20	EK	MCKERN'S IEXACU	I NI NI MUUNIAIN	MOUNT VERNON	9/800	Melvin McKern	(503) 5	732-4431 202 2274	17-JAN-92	13-8EP-92	
185	EK	MORDUCK'S SERVICE STATION	227 C. H. DARREY STREET	NUKIH PUWUEK	97007	John & Barbara Murdoch	(503) (090°22/1	23-MAK-92	Z9-2EP-92	
7682	EK	D & D SERVICE	ZZ/ S.W. BIRCH SIREE!	PILOT ROCK	97868	Dennis Lawson	(503) 4	443-2011 274 7411	70 MAR 03	05-JUN-92	
1424	EK	PENDLEION GRAIN GROWERS,	E BIRCH CREEK RD.	BILL BOCK	07020	Nathan Crowther	(503) A	2/0-/011 2/7-4070	30-MAK-92	20-5EP-92	
0700	EK	PILUI KUCK SUPEK MINI MAK	DAY DIDER	PILOI RUCK	07868	lohn E McPride	(503) .	767-0030 7.43-2255	13-141-02	07-AUG+02	
1275	EK CD	DONALDEDS INC. D	11/ N E EDONT (D O BOY 3	DONIBLE CITY	07860	loe R Donaldeon	(503)	920-3722	10-JAN 72	13-MAY-02	
9070	ED	HINT'S ECONOMY INC	211 FRONT STREET	DRAIDIE CITY	97869	lisa Keith	(503) (820-4477	02-MAR-92	18-SEP-92	
2/72	ED	LIGHT S LOOKONT, INC.	175 S U FRONT ST	PRAIRIE CITY	97869	Ronald G Morley	(503) 8	320-3654	28-FFR-92	28-SEP-92	
2507	ED	PINE-FACIF FARMERS CO-OP	FIRST ST	BICHLAND	97870	George Allensworth	(503) 8	323-6181	28-FFR-92	14-SEP-92	
4941	ER	RICHIAND AUTOMOTIVE	HTGHWAY 86	RICHLAND	97870	Curt Randall	(503) 8	393-6150	10-JAN-92	18-SEP-92	
2420	FR	RICHIAND STATION	HWY. 86 & RAKER	RICHIAND	97870	Donald D. Waldrop	(503)	263-8461	03-FF8-92	16-SEP-92	
3600	ER	SENECA GROCERY	HIGHWAY 395 & 4TH	SENECA	97873	Sue Hibdon	(503)	542-2108	27-JAN-92	,,	
1591	ER	HAMMELL'S MARKET	HWY 19	SPRAY	97874	John Hammell Sr	(503)	567-0910	17-JAN-92	12-JUN-92	11-MAR-92
143	ER	SPRAY GENERAL STORE	MAIN STREET	SPRAY	97874	Ted Morgan	(503)	468-2254	10-FEB-92	28-AUG-92	
6526	ER	STANFIELD BONOCO	310 S. MAIN ST.	STANFIELD	97875	George E. Bonbright	(503) 2	276-6666	05-FEB-92	24-SEP-92	
9836	ER	SUMMERVILLE STORE & TEXAC	MAIN & PATTEN	SUMMERVILLE	97876	Craig Smith	(503) 5	534-2111	21-FEB-92	28-SEP-92	
4070	ER	GRANITE STORE	CENTER STREET	GRANITE	97877	Steve Skidgel			09-JAN-92	29-SEP-92	
177	ER	STAGE STOP SERVICE STATIO	MILL STREET - BOX 127	SUMPTER	97877	Dale E. Anderson	(503) 8	394-2304	16-JAN-92	05-มบท-92	
8953	ER	DALE STORE	HWY 395 S.	DALE	97880	Gary Thompson	$(503)^{4}$	421-3484	08-JAN-92	28-AUG-92	
9753	ER	DAN'S UKIAH SERVICE	CORNER OF MAIN & CAMAS	UKIAH	97880	Daniel Vincent	(503)	427-3010	30-MAR-92	03-SEP-92	
9368	ER	SKELLENGER, L C	BATTLE MT. STATION	UKIAH	97880	L C Skellenger			11-MAR-92	24-SEP-92	
10186	ER	AM/PM ARCO OF UMATILLA	1880 6TH STREET	UMATILLA	97882	Amy Bertelsen	(503)	922-5506	30-MAR-92	18-SEP-92	
9630	ER	CROSSROADS TRUCK STOP, IN	HWY. 730 & BRIDGE JUNCTIO	UMATILLA	97882	Attila Koppany	(503)	922-3297	27-JAN-92	14-SEP-92	
6333	ER	G & S CHEVRON	1010 6TH ST.	UMATILLA	97882	Gary & Sandra Powell	(503)	922-3082	17-JAN-92	21-SEP-92	
4251	ER	LEATHERS OIL CO.	700 G. ST.	UMATILLA	97882	Brent Leathers	(503)	661-1244	10-JAN-92	25-AUG-92	
6629	ER	PRICE-LESS GAS, INC.	6TH AND G STREET	UMATILLA	97882	Marla J. Gardner	$(208)^{-3}$	377-0024	01-APR-92	28-SEP-92	
6524	ER	UMATILLA BONOCO	1251 6TH ST.	UMATILLA	97882	George E. Bonbright	(503) 2	276-6666	05-FEB-92	24-SEP-92	
1466	ER	UMATILLA TEXACO	1100 6TH ST.	UMATILLA	97882	Lonnie L. Mattison	(503) 9	922-3617	31-MAR-92	30-SEP-92	
5198	ER	EMERY'S TEXACO	363 N. MAIN STREET	UNION	97883	Arnold Emery	(503)	62-5043	15-JAN-92	05-AUG-92	
1078	ER	UNION CHEVRON SERVICE	FRONT & DEARBORN	UNION	9/883	Phillip Yeargain	(503) 5) / C C - 200	3U-MAR-92	01-001-92	70 1111 02
6447	ER	STRATTON'S STORE	107 MAIN STREET, BOX 99	UNITY	9/884	Larry Dean Stratton	(505) 4	440-3461 004-0074	1/-JAN-92	20-3EY-92	20~10N-A℃
1261	EK	BILL'S HIGHWAY SERVICE	402 E NWI. 02	WALLOWA	A1003	Leon N. Fisher	(202)	1 600-00-	בע־אאוין־טע	01-001-76	

FAC ID	REG	FAC NAME	ADDRESS	CITY		CONTACT	1	PHONE		LOI	CA	APP
1508	ER	GOEBEL, HAROLD	1ST & DOUGLAS	WALLOWA	97885	Ron Goebel Leisa Prince Suzi Reeve Roger A. Irie Juanita J. Bennett Jocelyn Berk-Hammon M. C. Vilsmeyer Lee Carsten Brian Coleman Hattie J. Hucker R. E. Ramsey Daniel Corta Margarette Eckstein James H. Zatica Loren & Eva Canaday Bud Bowman Elizabeth Stringer C. Barry Zimmerman Glenn Honeywell George Roth Dave Tower Frankie Lattin Don Eddy Frank Bristow Wallace C. Warila J Donald W. Ragnon		(503) 8	886-2811	17-JAN-92	21-AUG-92	
5472	ER			WALLOWA	97885	Leisa Prince		(503)	886-3027	11-MAR-92	28-SEP-92	
673	ER	SUZI'S HANDY MART		WESTON	97886	Suzi Reeve		(503)	566-2705	15-JAN-92	14-MAY-92	03-AUG-92
550	ER	TOLLGATE MT. CHALET		WESTON	97886	Roger A. Irie		(503)	566-2123	10-JAN-92	27-AUG-92	
609	ER	STATELINE GROCERY/RT. 2 B	10 MILES SOUTH ADRIAN-END	ADRIAN	97901	Juanita J. Bennett		(503)	339-3204	27-MAR-92	28-SEP-92	
2838	ER	FRONTIER MARKET		BROGAN	97903	Jocelyn Berk-Hammon	ď	(503)	473-2262	17-JAN-92	30-SEP-92	
9932	ER	VILSMEYER GROCERY	5626 JOHN DAY HIGHWAY	BROGAN	97903	M. C. Vilsmeyer		(503)	473-2614	18-MAR-92	20-JUL-92	
4654	ER		VANDACAR RD	DURKEE	97905	Lee Carsten		(503)	877-2207	10-JAN-92	01-JUN-92	
615	ER	COLEMAN SERVICE	U.S. HIGHWAY 20/23 MILES	HARPER	97906	Brian Coleman	:	(503)	358-2372	15-JAN-92	10-SEP-92	
1704	ER	HUCKER GARAGE	2977 "A" STREET	HARPER	97906	Hattie J. Hucker		(503) 3	358-2442	12-JUN-92		
192	ER	FAREWELL BEND INC.	ROUTE 2 PO BOX 17 700 MAIN STREET BURNS JUNCTION	HUNTINGTON	97907	R. E. Ramsey	:	(503) 8	869-2845	30-MAR-92	01-0CT-92	
10096	ER	CORTA OIL CO. INC.	700 MAIN STREET	JORDAN VALLE	97910	Daniel Corta		(503)	586-2227	30-MAR-92	30-SEP-92	
1011	EK	CUNSIEIN, MAKGAKCIIC C.	BOKKS JUNCLION	JORDAN VALLE	97910	Margarette Eckstein	'			13-JAN-92	22 - JUN-92	22-JUN-92
2231	ER	JIM'S TEXACO	BOX 157, MAIN & BLACKABY	JORDAN VALLE	97910	James H. Zatica	1,	(503)	586-2244	01-APR-92	24-AUG-92	
9601	ER			JUNTURA	97911	Loren & Eva Canaday				10-JAN-92	25-SEP-92	
5460	ER	BUD'S ONE STOP		NYSSA	97913	Bud Bowman	5			27-JAN-92	22-SEP-92	
7012	ER	FARMERS FEED & SEED CO	_117 GOOD AVE.	NYSSA	97913	Elizabeth Stringer		(503) 3	372-3117	16-APR-92		
4059	ER	GENERAL FARM SUPPLY, INC.	312 MAIN STREET	NYSSA	97913	C. Barry Zimmerman		(208) 8	888-5984	30-MAR-92		
10213	ER.	LAKE OWYHEE RESORT	LAKE OWYHEE/P.O. BOX 1605	NYSSA	97913	Glenn Honeywell		(503) 3	372-2444	17-JAN-92	28-SEP-92	
106	ER	NYSSA CO-OP SUPPLY	18 N. SECOND ST.	NYSSA	97913	George Roth		(503) 3	372-2254	10-JAN-92	21-SEP-92	
1381	ER		304 MAIN	NYSSA	97913	Dave Tower		(208) 3	342-4588	01-APR-92	01-0CT-92	
2821	ER	SUNSET MARKET 913 .	2653 LYLLE	NYSSA	97913	Frankie Lattin		(503) 3	372-2352	01-APR-92		
4225	ΕÞ	VP VALLEY DECOLLETS .	518 MAIN ST	NYSSA	97913	Don Eddy .	•	(208) 3	365-4661	01-APR-92	01-0CT-92	
211	ER	BRISTOW, FRANK CHEVRON U.S.A., INC 96 DJ'S SINCLAIR	5586 HWY SPUR 95	ONTARIO	97914	Frank Bristow		(503)	262-3666	10-JAN-92	16-JUL-92	
981	ER	CHEVRON U.S.A., INC 96	591 E.IDAHO AVE.	ONTARIO	97914	Wallace C. Warila J	Γ	503/883	3-8985	17-MAR-92		
5002	ER	DJ'S SINCLAIR	1218 SW 4TH AVENUE	ONTARIO	97914	Wattace C. Warita J Donald D. Waldrop Donald W. Rognon Ralph E. Poole Vern Wright Tom Grant Chris Summers Ann Caldwell Rupe Jack Titcomb Chris Summers		(503)	963-8461	03-FEB-92	16-SEP-92	
		FLYING J CONVENIENCE STOR	2609 S.W. FOURTH AVENUE	ONTARIO	97914	Donald W. Rognon		(801)	734-6400	28-FEB-92		
5464	ER	FREEWAY CARDLOCK	1040 NW 20TH (1-84 INTERC	ONTARIO	97914	Ralph E. Poole		(503) 8	889-3128	21-JAN-92	04-JUN-92	
1602	ER	FREEWAY TEXACO	1765 N. OREGON ST.	ONTARIO	97914	Vern Wright		(503) 8		24-FEB-92		
4464	ER	GRANT'S PETROLEUM		ONTARIO	97914	Tom Grant				13-JAN-92		
5578	ER	FREEWAY TEXACO GRANT'S PETROLEUM JACKSON OIL CO.		ONTARIO	97914	Chris Summers		(503) 8		30-MAR-92	29-SEP-92	
8193	ER	MATHEWS CHEVROLET		ONTARIO	97914	Ann Caldwell Rupe		(503) 8		30-MAR-92		
4286	ER	ONTARIO FARM	3 MILES SOUTH OF ONTARIO	ONTARIO	97914	Jack Titcomb		(208)		27-JAN-92		
4784	ER	MATHEWS CHEVROLET ONTARIO FARM ORE IDA TRUCK STOP		ONTARIO	97914	Chris Summers		(503) 8		30-MAR-92		
6458	ER	PHILLIPS 66 STATION		ONIAKIO	71714	DAVE TONE!	-	(400)		01-APR-92		
		POOLE'S COUNTRY STORE				Ralph E. Poole				21-JAN-92		
		POOLE'S COUNTRY STORE				Ralph E. Poole	;			21-JAN-92		
				ONTARIO	97914	James W. Widmer	8			13-JAN-92		
		"A" STREET SERVICE		VALE	97918	James W. Widmer William N. Cummings Dave Tower	to.			17-JAN-92		
		PHILLIPS 66 STATION		*ALL	11110	pare lone.		(208) 3	342-4588	01-APR-92	U1-OCT-92	
			•			Marla J. Gardner	•			01-APR-92	25-SEP-92	
10014	ER	VALE OREGON IRRIGATION DI	521 A. STREET W.	VALE	97918	Ronald Jacobs		(503)-4	473-3243	01-APR-92		
			•									

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State of Oregon Department of Environmental Quality

Memorandum[†]

Date: January 11, 1993

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item L, EQC Meeting, January 29, 1993

Report to the Legislature: Fourth Annual Environmental Cleanup Report

Statement of Purpose

This is the fourth annual Environmental Cleanup Report of the Environmental Cleanup Division. ORS 465.235 requires that the Department of Environmental Quality (DEQ) submit a report to the Legislature, Governor, and EQC outlining the program's accomplishments during the previous fiscal year and its goals for the current fiscal year.

<u>Highlights</u>

The Fourth Annual Environmental Cleanup Report discusses the accomplishments of the Environmental Cleanup Division (ECD). ECD has successfully met all goals targeted in the 1992 Report to the Legislature:

- full implementation of the Voluntary Cleanup Program
- establishment of soil cleanup levels for "simple sites"
- development of numeric cleanup levels for petroleum in groundwater
- clarification of lender liability
- initiation of the orphan site account

The report provides a more detailed description of each goal.

[†]A large print copy of this report is available upon request.

Memo To: Environmental Quality Commission Agenda Item L January 29, 1993 Meeting Page 2

The report highlights accomplishments achieved during the previous fiscal year (July 1991 - June 1992) and projects accomplishments for the current fiscal year (July 1992 - June 1993). Specific areas addressed include the number of site assessments performed, and the number of investigations and cleanups completed by each Section: Voluntary Cleanup, Site Response, and Underground Storage Tank Cleanup. The number of emergency spills and illegal drug lab cleanups responded to by DEQ is also discussed.

Issues and priorities to be addressed during the next year are outlined in the report. Streamlining the cleanup process, financing cleanups and assisting local governments with cleanups are priorities for the environmental cleanup program. ECD is currently addressing these issues and expects to make significant progress in these areas during the next year.

Department Recommendation

It is recommended that the Commission approve this report.

Attachments

Fourth Annual Environmental Cleanup Report

Approved:

Section:

Policy & Program Development

Division:

Environmental Cleanup Division

Report Prepared By:

Sally Puent

Phone:

(503) 229-6431

Date Prepared:

1/11/93

SP:m SITE\SM35\SM4894 1/11/93

FOURTH ANNUAL

ENVIRONMENTAL CLEANUP REPORT

January 1993

submitted to:

Governor Barbara Roberts

Oregon Legislative Assembly

Environmental Quality Commission

by:

Fred Hansen, Director Department of Environmental Quality

Mary Wahl, Acting Administrator Environmental Cleanup Division

printed on recycled paper

FORWARD

This report summarizes the accomplishments of the Department of Environmental Quality's (DEQ) Environmental Cleanup Division (ECD) and the challenges that lie ahead. ECD's mission is to discover, assess, investigate and clean up sites contaminated by hazardous substances.

I am pleased to report that ECD has met every goal identified in last year's Report to the Legislature:

- the Voluntary Cleanup Program is up and running
- soil cleanup standards have been adopted
- numeric cleanup levels for petroleum in groundwater have been established
- lender liability has been clarified, and
- the Orphan Site Account has been funded.

However, much remains to be done. Over the next year we will continue working to streamline the cleanup process so more sites can be cleaned up more quickly at less expense. Continued development of the Voluntary Cleanup Program will remain a priority. Interim cleanup actions will be emphasized for all cleanups. Financing cleanups will continue to be one of our biggest challenges, and we are committed to pursuing cost recovery and the sale of pollution control bonds.

Another priority is to reach out to local governments and work more closely with them in cleaning up contaminated land and returning it to productive use. One way we hope to expand this cooperative exchange is through a special Environmental Cleanup Conference we are holding in January 1993.

New challenges will continue to arise for Oregon's Environmental Cleanup Program. I believe the program and staff are innovative and flexible enough to meet those challenges and make the program more effective as it continues to evolve.

Respectfully,

Fred Hansen

Director

Department of Environmental

Quality

Accomplishments

The Environmental Cleanup Division (ECD) has successfully met all the goals targeted in the 1992 Report to the Legislature. These goals were:

- full implementation of the Voluntary Cleanup Program
- •establishment of soil cleanup levels for "simple sites"
- development of numeric cleanup levels for petroleum in groundwater
- clarification of lender liability
- •initiation of the orphan site account

A more detailed description of each follows.

Introduction

The Department of Environmental Quality (DEQ) established the Environmental Cleanup Division (ECD) 1988 to implement Oregon's environmental cleanup laws. mission is discover, to assess, investigate and clean up sites contaminated by hazardous substances.

This report presents ECD accomplishments during the past fiscal year (July 1991-June 1992). It also summarizes cleanup activities that are in progress, those that have been completed during the current fiscal year, and those projected for completion through June 1993.

Tables A through D show cleanup activities conducted since ECD was created, as well as cleanup work that is projected through the end of the current biennium (July 1991-June 1993). For comparison, Appendix A is a condensed version of the 1991 Four-

Year Plan. Appendix B, the ECD Glossary, provides descriptions of cleanup activity phases. The glossary also provides definitions of general environmental cleanup terminology. Appendices C and D list the status of all current projects.

Site Screening & Assessment

ECD's site screening and assessment involves discovery of a potentially contaminated site, initial screening and ranking, and assigning the site to an appropriate cleanup process.

The Environmental Cleanup Site Information System (ECSI) is an electronic filing system or database of potentially contaminated or contaminated from hazardous substances. As of June 1992, 100 new sites were added to ECSI with 110 more expected to be added by June 1993. Currently there are 1103 sites in ECSI.

The Confirmed Release List (CRL), a subset of ECSI, is a list of sites where contamination has been verified. Thirty-seven new sites were added to the CRL during the 1991-92 fiscal year. Sixty more are estimated to be included by June 1993. The CRL currently has 80 sites.

The "inventory", also a subset of ECSI, is a list of sites where contamination been confirmed through preliminary assessment (PA) and the need for further action has been Twenty-two new sites determined. were added to the Inventory during 1991-1992 fiscal vear with approximately another 34 added by June 1993. The are currently 50 sites on the inventory.

Between July 1991 and June 1992, preliminary assessments were completed at 54 sites. Forty more are expected to be completed by June 1993. This will bring the total PAs completed during the biennium to 94. The total is consistent with ECD's 1991 Four-Year Plan which estimates 100 PAs for the 1991-1993 biennium. Staff reductions and an emphasis on hazard ranking--necessary to ensure worst sites are addressed first--have slowed the total number of PAs completed.

Simple Site Cleanup Process

In June 1992, the Environmental Quality Commission (EQC) modified the Environmental Cleanup Rules by adopting numeric soil cleanup levels for about 75 hazardous compounds. The

rules also provide a streamlined process for "simple", soil-only contaminated sites. The soil cleanup levels and streamlined cleanup process have encouraged more cleanups of simple sites through the Voluntary Cleanup Section (VCS). Currently VCS is overseeing 54 active simple and complex projects.

The 1992 report combined VCS project statistics with those of the Site Response Section. VCS statistics are reported separately in this year's report. Now that the soil cleanup standards are in effect and many VCS projects are going through the simple site process, it is logical and more meaningful to report separately.

New projects are initially placed in the pre-remedial development (PD) phase. Activities such as negotiations, file review, and work plan approvals occur in the PD phase. VCS had 17 projects in the PD phase during the fiscal year 1991-1992 and expect to have an additional 36 during the fiscal year 1992-1993.

For the fiscal year ending June 1992, three removals, and one remedial action were completed. Four remedial investigations were also completed. For the fiscal year ending June 1993, ten removals, three remedial actions, and 11 remedial investigations are expected to be finished. There are currently eight projects on the VCS "waiting list". About three new projects are signed up each month.

Complex Site Cleanup Process

In 1991, DEQ received Legislative budget approval and Emergency Board budget expenditure limitation for initiation of the Orphan Site Account. Orphan sites are sites where the responsible parties are unknown, unwilling or unable to clean up. In July 1992, pollution control bonds were sold, initiating the orphan site account. These funds have enabled cleanups to proceed on schedule at five orphan site cleanups.

One of these orphan sites, McCormick & Baxter Creosoting Company in north Portland, has been a high priority. The Site Response Section (SRS) has completed a remedial investigation (RI) and a feasibility study (FS) at the site and is currently taking public comments on the proposed cleanup options. DEQ expects to recommend a final cleanup remedy for McCormick & Baxter by Spring 1993.

For the fiscal year ending June 1992, six remedial investigations and four feasibility studies were completed. By the end of June 1993, another 18 remedial investigations and 13 feasibility studies are expected to be completed.

During the fiscal year 1991-1992, four removals and six "remedial designs/remedial actions" were finished. Another five removals and four "remedial designs/remedial actions" are expected to be done by June 1993.

These projections are consistent with the projected Four-Year Plan figures for the 1992-93 biennium. However, the number of removals exceeds the projection. The increase in the number of removals reflects ECD's move toward implementing interim actions whenever feasible. (A discussion of interim actions follows in the *Issues* section of the report.)

Operation and maintenance (O&M) activities, that is, follow up monitoring, are currently underway at one site. By June 1993, O&M activities will be started at two more sites and completed at one site.

Underground Storage Tank (Petroleum) Cleanup Process

ECD handles cleanup of petroleum contamination from underground storage tanks (USTs) under a separate process. Because of the great number of UST sites needing cleanup, ECD has streamlined the process to allow more sites to be cleaned up more quickly. Amendments to the Cleanup Rules for Petroleum UST **Systems** established numeric cleanup levels for contamination petroleum groundwater. These amendments became effective in October 1992. The rule amendments provide clear directions and standards, thus making it easier and more efficient for owners to clean up these sites.

The UST Cleanup Section has continued to hold the well attended "Contractor's Day" annually. This

provides an opportunity for the public to ask questions about the UST cleanup process.

The UST Cleanup Section has initiated a concerted effort to make sure that piles of contaminated soil at UST sites are treated and/or removed in a timely manner. Problems with existing soil piles are being addressed and permit requirements are being modified to ensure proper future handling of contaminated soils.

During the fiscal year ending June 1992, 1062 releases of petroleum from tanks were reported, 374 investigations, and 331 cleanups were completed. For the 1991-1993 biennium, it is estimated that more than 1100 cleanups will be initiated and 537 completed. These numbers are significantly higher than estimated in the 1991 Four-Year Plan.

Spill Response and Drug Lab Cleanups

DEQ cleans up only a small portion of the hundreds of emergency spills reported annually. DEQ's spill response program includes oversight of cleanup and disposal activities performed by responsible parties, and arranging cleanups when no responsible party is available. For the fiscal year ending June 1992, DEQ authorized cleanup of 32 emergency spills, costing a total of \$79,115 in contracted cleanup expenses.

In March 1992, rules were adopted rescinding the requirement for local government to pay for part of drug lab cleanup costs. DEQ is currently fully funding cleanup of illegal drug lab sites. Previously, local governments were required to pay a "cost-share" amount. During the fiscal year ending June 1992, 80 drug labs were cleaned up at a cost of \$197,677.

Lender Liability

Rule amendments clarifying the scope of exemption from cleanup liability for financial institutions and other persons who hold security interests in property were adopted by the EQC in December 1992. The amendments also identify instances when certain trustees would not be liable for cleanup costs of trust properties.

DEQ/EPA--Effective Cooperation Means More Cleanups

The U. S. Environmental Protection Agency (EPA) supports DEQ in its cleanup efforts in many ways. Two important EPA state support programs are the Core Grant and cooperative agreements.

The Core Grant provides training and equipment for state cleanup program development. Originally, the Core Grant paid for the development of an extensive ECD computer system, which tracked sites and provided timely information to the public and other agencies. This system paved the way

for the Environmental Cleanup Site Information System (ECSI) which enables ECD to track the status, assess and assign priority to more than 1000 sites statewide. Recently the Core Grant funded the development of soil cleanup rules for simple sites. The rules allow more effective and efficient cleanups of simple sites. EPA is also considering the development of similar cleanup rules nationally.

DEQ has also developed a time accounting system which supports accurate cost recovery through the Core Grant.

Cooperative agreements provide funds for DEQ to develop site identification systems such as ECSI and Geographical Information Systems (GIS). GIS identifies sensitive and potential problems areas in the state which helps DEQ better manage its resources.

Cooperative agreements also provide funds for DEQ to conduct assessments of contaminated property. EPA's support enables the state to clean up more sites. As many as 50-75% of sites undergoing cleanup in the Voluntary Cleanup Program result from problems identified through site assessments.

The number of contaminated sites currently being cleaned up by DEQ has doubled (from 50 to more than 100) as a direct result of EPA support.

Summary

All goals outlined in the 1992 Legislative Report were attained during the current fiscal year: adoption of soil cleanup standards, adoption of groundwater standards for petroleum UST leaks, initiation of the Orphan Site Account by the sale of pollution control bonds, and adoption of lender liability rule amendments.

In addition, investigation and cleanup activities initiated and completed for the 1991-1993 biennium are closely in line with those projected in the 1991 Four Year Plan.

Table A: Projects Completed

Site Assessment

	1/88-6/90	7/90-6/91	7/91-6/92	7/92-6/93*	TOTAL
Suspected					
Releases Added	883	74	100	110	1167
Confirmed Release					
List Additions	0	33	37	60	130
Facilities added					
to Inventory	0	. 24	22	34	80
Preliminary					
Assessments	51	48	54	40	193

Site Response

Removals	6	5	4	5	20
Remedial					
Investigations	4	3	6	18	31
Feasibility					
Studies	3	3	4	13	23
Remedial Design &					
Remedial Action	3	3	6	4	16

Voluntary Cleanup

Pre-Remedial	<u> </u>			·	
Development	**	1	20	28	49
Removals	**	. 0	3	10	13
Remedial					
Investigations	**	1	4	11	16
Feasibility					
Studies	**	0	0	3	3
Remedial Actions	**	0	1	3	4

Underground Storage Tank Cleanup

Releases Reported	1499	988	1062	650	4199
Investigations	1165	488	374	333	2360
Cleanups	403	343	331	206	1283

Drug Lab/Spill Response

Drug Lab Cleanups	216	89	80	60	445
Spill Cleanups	109	30	32	40	211

^{*} Projected

^{**} Prior to initiation of program

Table B: Projects Initiated

Site Assessment

	1/88-6/90	7/90-6/91	7/91-6/92	7/92-6/93*	TOTAL
Preliminary					
Assessments	73	45	40	39	197

Site Response

Removals	11	3	2	6	22
Remedial					
Investigations	29	14	9	5	57
Feasibility					
Studies	13	5	3	4	25
Remedial Design &					
Remedial Action	11	4	6	10	31

Voluntary Cleanup

Pre-Remedial					
Development	**	13	17	36	66
Removals	**	1	3	9	13
Remedial					
Investigations	**	2	7	39	48
Feasibility					
Studies	**	0	0	7	7
Remedial Actions	**	0	3	3	6

Underground Storage Tank Cleanup

Cleanups	627	545	754	371	2297

^{*} Projected

^{**} Prior to initiation of program

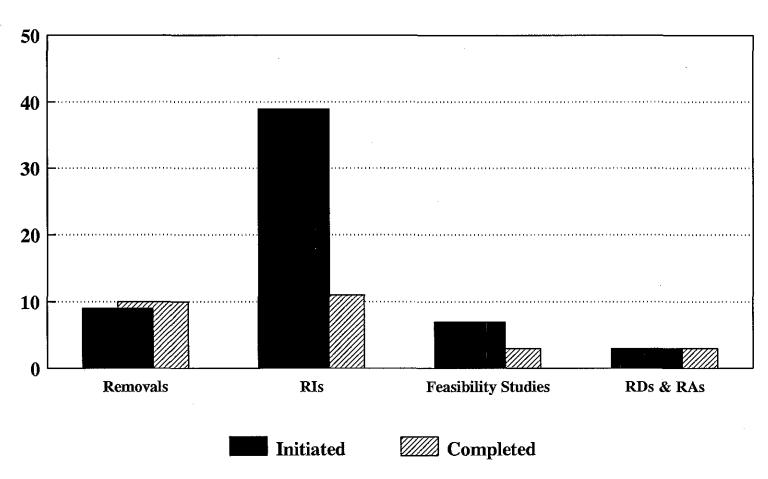
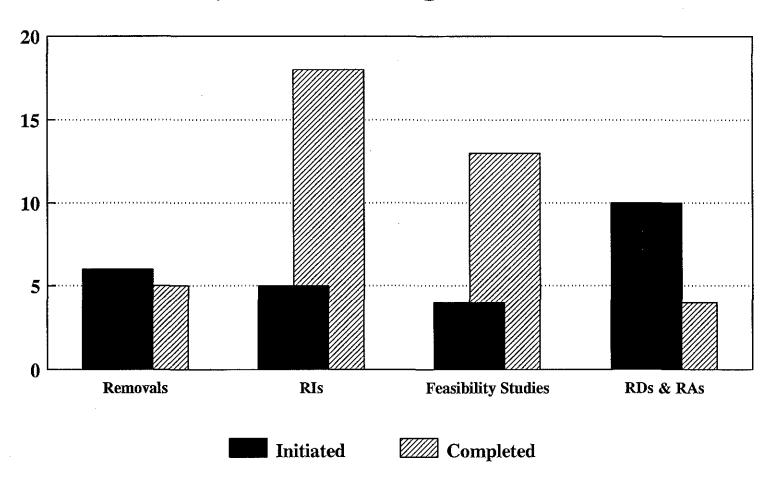


Table D: Site Response July 1992 through June 1993



Issues

The Environmental Cleanup Division (ECD) was established in 1988 by the Department of Environmental Quality (DEQ) and charged with implementing Oregon's environmental cleanup law. The following section discusses key issues to be addressed in implementing the law in the coming year. Issues highlighted include: streamlining the cleanup process, financing cleanup, and local government assistance.

Streamlining the Process

During the past two years, ECD has worked hard to streamline the cleanup process, and continued efforts are planned. A summary of the ways the cleanup process has been simplified sets the stage for a discussion of future efforts.

with the of the First, support Legislature, the Voluntary Cleanup Program was established to assist responsible parties in their efforts to complete environmental cleanups. As of December 1992, 54 projects are receiving assistance, six projects have been completed, and eight are on a waiting list. As suggested by the number of participants, demand for the program is strong and continues to increase. In addition, the U.S. Environmental Protection Agency (EPA) and other agencies have expressed interest in Oregon's Voluntary Cleanup Program as a model for other state and federal cleanup efforts.

The emergence of the Voluntary Cleanup Program has enabled ECD to become more responsive to the needs of property owners who want oversight for site investigations and cleanups.

Second, the Environmental Quality Commission has enacted two major regulations of administrative designed to provide greater certainty in the cleanup process. These regulations include: a) soil cleanup standards for hazardous substances at "simple" sites; and b) groundwater cleanup standards for petroleum contamination from underground storage tanks. standards, and associated guidance, are now providing responsible parties with greater certainty about "how clean is clean". As a consequence, ECD anticipates more sites will get cleaned up more quickly at a reduced cost.

Third, greater emphasis is being given interim actions such as soil removals, stabilization, site security, and groundwater treatment systems. In general, interim actions help stabilize sites and reduce risks to public health and the environment. Investigations are focused so when it is apparent that an interim action will prevent the spread of contamination or achieve a significant degree of cleanup early in the process, implementation occurs. In many cases, interim actions speed selection of a final cleanup remedy which also helps to reduce long-term cleanup costs.

Many environmental cleanup projects remain inherently complex and However, expensive. committed to efforts to simplify and improve the cleanup process whenever practical and in the public interest. For example, during the next year ECD anticipates growth in the Voluntary Cleanup Program, completion guidance for cleanup standards. feasibility evaluation of the developing hazardous substance groundwater cleanup standards, and dedication of additional resources for interim actions. The UST Cleanup Program is also looking at innovative ways to streamline the process and better manage the heavy workload.

Financing Environmental Cleanup

Financing environmental cleanups remains a central challenge for ECD and Oregon's Legislature. Specific cleanup programs, such as the Underground Storage Tank Cleanup and the Drug Lab Cleanup Programs, face significant hurdles in securing more stable financing. These program-specific needs, and potential solutions, will be presented to the Legislature for consideration.

ECD must also maintain balanced financial support among ECD's cleanup processes. While Voluntary Cleanup Program participants have exceeded expectations, the program's demand is supported, in part, by the state environmental cleanup law's enforcement measures. Voluntary projects do not encompass the whole of Oregon's contamination problems.

Work on orphan sites and enforcement cleanups must also continue to ensure cleanup of Oregon's worst sites first.

However, for ECD as a whole, two principle activities will most clearly impact the ability of the state to continue effective environmental cleanups. These activities are: cost recovery and development of the Orphan Site Account.

Cost Recovery. During the past two years, ECD has become more aggressive and far more successful in its efforts to require responsible parties to pay for the costs of site cleanup. During the most recent reporting quarter (July-September 1992), ECD recovered from responsible parties more than 32% of the state's site-specific expenditures for environmental cleanup.

Cost recovery is consistent with the environmental cleanup law 1987 requirements and, of course, reduces the need for other forms of public expenditure. The advent of the Voluntary Cleanup Program, with its user-fee supported structure, represents one means by which ECD has enhanced expenditures the percentage of recovered. Close to 100% of the state's costs are recovered in the voluntary program.

Also, in addition to seeking cost recovery for direct project expenses, ECD now routinely bills responsible parties for administrative and related overhead expenses attributed to the projects.

Orphan Site Account. "Orphan" sites are those where the responsible parties are unknown, unwilling or unable to pay for cleanup. Sites now being investigated and cleaned up using the Orphan Site Account (OSA) include East Multnomah County Groundwater, McCormick and Baxter Creosoting Company, Nu-Way Oil Company, Milwaukie Area Groundwater, and Groundwater. Lakewood Estates Proposed additions are D&D Battery, Fashion Dry Cleaners, and Springfield Area Groundwater.

In September 1991, the Legislative Emergency Board approved an initial \$7.3 million expenditure limitation for OSA project work. OSA funds were raised, as planned, by sale of pollution control bonds, with debt service provided by three fees established by the Legislature.

In order to continue funding of current and future orphan sites, it will be necessary to sell additional pollution control bonds during the 1993-95 biennium. The OSA activities currently under way will help define the necessary tasks and, therefore, the scope and size of any request for an increase in OSA expenditure limitation.

Local Government Assistance

ECD is working closely with local government officials to help elected officials and their staffs cope with potential environmental cleanup liability.

ECD and the International City/County Management Association (ICMA) are

presenting an environmental cleanup seminar for local government officials in early 1993. Oregon Department of Economic Development, the League of Oregon Cities, the Association of Oregon Counties, and the American Planning Association, Oregon Chapter are also co-sponsoring the event. A number of local governments are currently working with ECD under the Voluntary Cleanup Program.

The purpose of this conference is to provide information on the state's cleanup programs and to encourage input from local governments and other state agencies. DEQ's goal is to be more responsive to local government needs throughout the state.

Summary

Streamlining the process, financing cleanups, and assisting local governments are priorities for the environmental cleanup program. ECD is currently addressing these issues and expects to make significant progress in these areas during the next year.

APPENDICES

Four-Year Plan

In January of 1991, a four-year plan of action for the state's environmental cleanup report was submitted to the Governor, the Legislature and the Environmental Quality Commission as required by ORS 465.235. The following information provides a condensed version of the plan. Except as noted, the January 1991 Legislative Report's Four-Year Plan has not been amended.

Four-Year Plan Activities

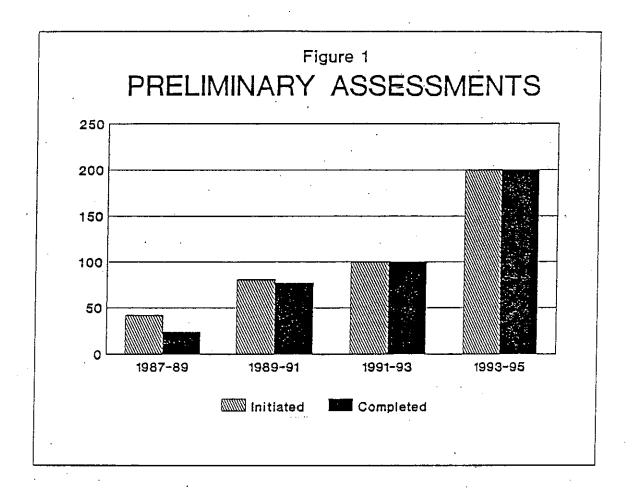
Two major trends in the future of environmental cleanup activities can be anticipated. First, the total number of activities will increase because the rules infrastructure and for implementing the environmental cleanup program have been established. Second, a shift in the types of activities completed is expected as sites move from investigative to cleanup stages. Figures 1-5 depict the number of DEQ projects which will be initiated and Figure 1, for example, completed. shows that the number of completed preliminary assessments is expected to climb from 77 in the 1989-91 biennium to approximately 100 in 1991-93 and 200 in 1993-95.

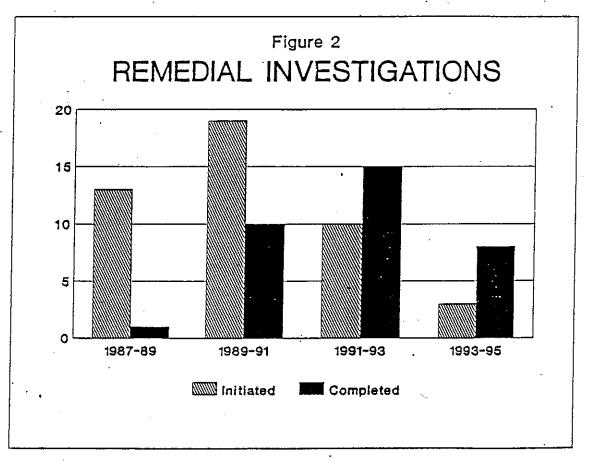
In contrast to the anticipated steady growth in completion of preliminary assessments, a different trend is anticipated for remedial investigations and feasibility studies. As shown in Figure 2, DEQ projected that 10 remedial investigations would be completed in the 1989-91 biennium, followed by 15 in 1991-93 and 8 in 1993-95.

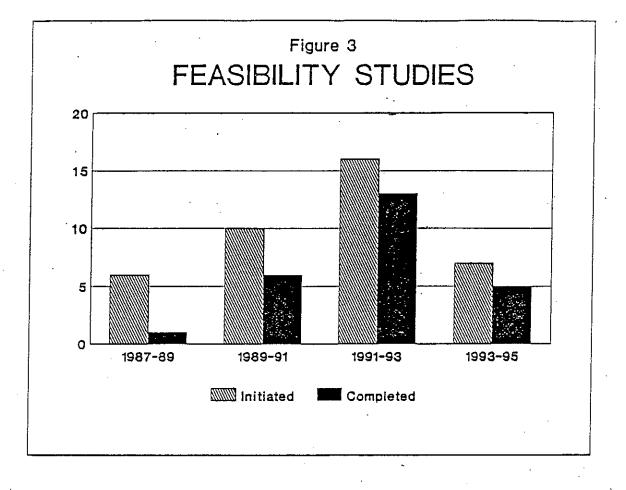
Likewise, 6 feasibility studies were scheduled for completion in 1989-91, followed by 13 in 1991-93 and 5 in 1993-95 as shown in Figure 3. This anticipated short-term surge in completion of remedial investigations and feasibility studies reflects movement of sites currently under investigation to cleanup stages.

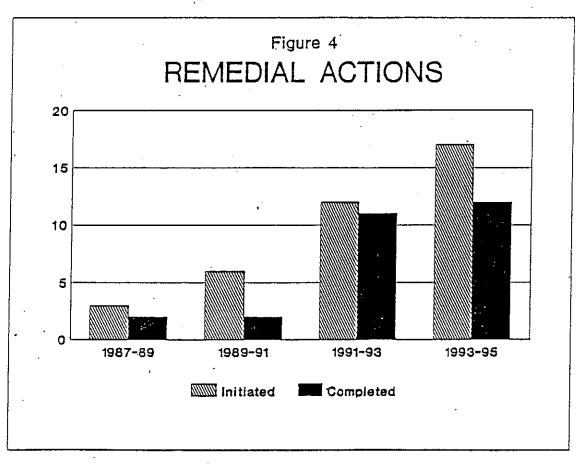
Figure 4 demonstrates the combined effect of increasing environmental cleanup activity and the movement of individual sites from investigation to cleanup phases. As shown, DEQ estimates the number of completed remedial actions will increase from 2 in the 1989-91 biennium to 11 in 1991-93 with an additional 12 completed in 1993-95.

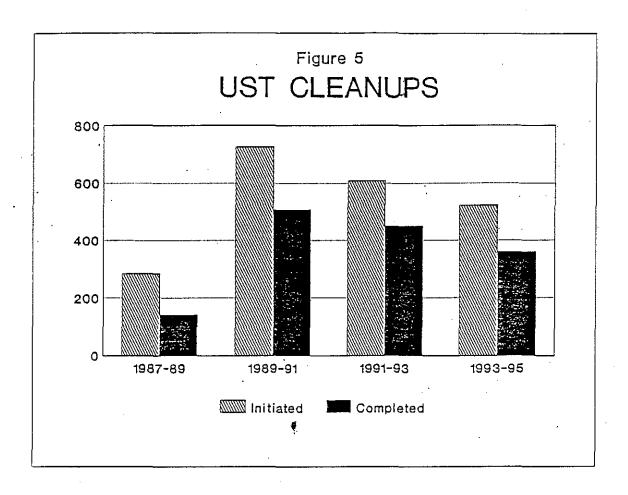
Hundreds of sites contaminated by petroleum products already have been identified and cleaned up, primarily sites where petroleum product contamination has been limited to soils. Figure 5 summarizes the number of UST cleanups completed per biennium and projections for the program's future.











Environmental Cleanup Division GLOSSARY

aquifer: an underground bed or layer of earth, gravel or porous stone that contains water.

background: the level of hazardous substance occurring naturally in the environment prior to a spill or release.

confirmed release list: a list of properties where it has been verified that a hazardous substance has been released into the environment. Sites on the confirmed release list do not necessarily require any cleanup action.

consent order: A legal document that specifies a responsible party's obligations when entering into a cleanup settlement with the state.

corrective action plan: a work plan specifying exactly how a site contaminated with petroleum products will be cleaned up.

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act-commonly known as Superfund; the federal law passed in December 1980 authorizing identification and cleanup of abandoned hazardous waste sites.

DEQ: Department of Environmental Quality; the Oregon state agency established to restore, enhance, and maintain the quality of Oregon's air, water and land.

ECD: Environmental Cleanup Division; the division within DEQ created to identify and clean up sites contaminated with hazardous substances.

EPA: United States Environmental Protection Agency; the agency responsible for enforcing federal laws protecting the environment.

EQC: Environmental Quality Commission; the five-member citizen panel appointed by the Governor to set the environmental policies and regulations for Oregon.

feasibility study (FS): a study conducted to determine different options for cleaning up a site; it is based on information gathered during the "remedial investigation." The FS examines different levels of cleanup, cost effectiveness, permanence and level of protection, as well as available technology.

groundwater: the mass of water in the ground that fills saturated zones of material such as sand, gravel or porous rock.

inventory: the list of sites where release of a hazardous substance has been confirmed and further investigation is necessary.

LUST: leaking underground storage tank.

NPL: National Priorities List; the EPA's official list of hazardous waste sites nationwide to be addressed under the Superfund law.

numeric cleanup standards: a matrix used in simple soil cleanups that defines "how clean is clean" by setting a pre-approved cleanup level.

orphan site: a site contaminated with hazardous substances where the owner/operator is unknown, unwilling or unable to pay for cleanup.

plume: the extent or boundaries of the spread of contamination in groundwater.

preliminary assessment (PA): the initial determination to confirm whether a hazardous substance has been released into the environment, and whether further action is necessary.

RCRA: Resource Conservation and Recovery Act (1980); regulates management and disposal of hazardous materials and wastes currently being generated, treated, stored, disposed or distributed.

release: a hazardous substance that has spilled, leaked or otherwise been discharged into the environment.

remedial action (RA): work done at a contaminated site to clean up, control or contain the hazardous substances.

remedial investigation (RI): an environmental investigation that includes information on the types and concentrations of hazardous substances, the geology and hydrology of the area, and an evaluation of potential risks to human health and the environment.

risk assessment: a comprehensive evaluation that examines potential risk to human health and the environment in terms of routes of exposure, populations at risk, and degree of harmful effects.

SARA: Superfund Amendments and Reauthorization Act (1986); federal law reauthorizing and expanding the jurisdiction of CERCLA.

site investigation: an environmental investigation that includes information to determine whether a site should proceed to the next stage of investigation or whether it should be placed in a No Further Action status. A site investigation may be performed when a full RI/FS is not required.

Superfund: see CERCLA

ust: underground storage tank

work plan: a detailed report that includes a schedule for completing an investigation, a description of sampling methods to be used, quality control measures and safety procedures.

APPENDIX <u>C</u>

PROJECT ASSIGNMENT/STATUS Site Response Section

	LEAD/		·		,
PROJECT NAME / LOCATION		RR % ASE COMPL	SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
Alkali Lake Alkali Lake, Lake Co. #291	STATE RI STATE	INIT	2,4,-D, Chlorinated phenols, MCPA, dioxins, furans	groundwater soil surface Water	EPA completed field work for Phase I ecological assessment. DEQ groundwater sampling completed in July. Four. miles of cattle fence around west. Alkali Lake complete in July.
Allied Plating Portland #6	FED PD FED PM		Heavy metals	groundwater soil	Removal conducted October 1992. Record of decision expected in fall 1992.
Associated Chemists, Inc. Portland #94	STATE PA STATE	c25	PCP, solvents	unknown	Associated Chemists submitted letter to supplement PA performed by Parametrix. Associated Chemists declined opportunity to conduct voluntary PA.
Ballweber Aurora #1086	STATE PD PRP RI		1,1,1-TCA, 1,1-DCE	groundwater	Project related to Lakewood Estates. Site and financial information requested by DEQ received & reviewed by DEQ & DOJ. Additional information requested. DEQ conducted limited site investigaton in Sept & Oct. Results being evaluated.
Bergsoe Metal Corporation St. Helens #12	STATE PM PRP FS		CD, CR, PB, Liquid waste	groundwater soil	Pond sediment dredging continues with a second sweep scheduled for November 1992.
Broadway Cab Portland #383	STATE RI PRP	c75	PNA, benzene, toluene, xylene	groundwater soil	Risk assessment received and under review.
Carlton Company Milwaukie #1035	STATE RI		1,1-DCE, PCE, TCE, VC	groundwater soil	A full round of sampling will be conducted in early November.
Cascade Corporation Troutdale #635	STATE RI PRP FS		DCE, PCE, TCE, TPH	groundwater soil surface water	Interim TSA Assessment Report received. Additional wells to be installed.
Columbia Steel Joslyn Słudge Pond Portland #104	STATE RI PRP FS		Creosote, PCP, THP	groundwater soil	The risk assessment report received 8/7/92 has been approved. The FS report received 10/30/92. DEQ review under way.
Cornell Pump Milwaukie #1093	STATE PA	A C50	TCE, TCA	groundwater soil surface water	Revised preliminary assessment submitted. Facility requested to update hazardous waste generator status and address stormwater runoff.
D&D Radiator White City #1166	STATE PD STATE) INIT	AS, CU, CR, PB	soil	Plan to secure site by end of December. Investigating PRP status and evaluating site for removal action.
Dant and Russell Mill Site North Plains #108	STATE RI PRP FS		AS, CR, CU, PAHS, PCP	groundwater soil surface water	Draft final RI/FS report for groundwater, surface water and sediment received.

	LEAD/				
PROJECT NAME / LOCATION	FUND CURR SOURCE PHAS		SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
Dant and Russell Soils Unit North Plains #108	STATE RD PRP	C25	AS, CR, PCP, PAHs, Dioxins	soil	Verbal agreement reached on consent decree.
Doane Lake Study Portland #36	STATE CO PRP	INIT	PNA, VOCs, metals, pesticides, phenols	groundwater soil surface water	DEQ commented on final report and requested additional information on 5/2/91. Doane Lake Industrial Group has formally declined to submit additional information as requested.
Dow Corning Corp Springfield Plant Springfield #694	STATE RI PRP	INIT	1,1,1-TCA, 1,1-DCA PCE, TCE, 1,1-DCE	groundwater soil	The SI work plan approved 6/17/92. Field work conducted July thru Sept 1992.
East Multnomah Co. Area Troutdale #13	STATE RI STATE	c 50	DCE, PCE, TCA, TCE	groundwater soil surface water	DEQ developed conceptual approach for completion of Regional RI/FS. Presented to Boeing Cascade & City of Portland 11/12/92. Followup meeting scheduled 12/7/92.
East Multnomah Co. Monitoring East Mult. Co. #13	STATE PM PRP	INIT	TCE, PCE, DCE	groundwater	3rd Quarter sampling completed week of 11/9/92. Results pending.
Elixir Industries Aurora #1087	STATE PD PRP RI	C75 C75	1,1,2,2-tetrachloro- ethane, toluene	septic system	Final field investigation report received August 18th. Additional sampling round completed in June. Results received on August 18th. No further work requested at this time.
Foothills Blvd. Dump Grants Pass #578	STATE PD STATE	INIT	PCB, metals, pesticides	Soîl	In process of completing SOW for monitoring well installation.
Forrest Paint Co. Eugene #201	STATE RA PRP	INIT	MEK, Toluene, ethyl benzene, xylene	groundwater soil	Installation and construction of groundwater treatment system completed. Performance evaluations to be conducted at end of first year of operation.
Frontier Leather Sherwood #116	STATE SI MIXED	INIT	chromium, lead, unknown waste	soils	Sampling for soil and GW around buried lab waste completed. Results under review.
Gould, Inc./N.L. Portland #49	FED RA PRP	INIT	CD, PB, ZN	groundwater soîl surface water	Design completed. Remedial action initiated. Air monitors are installed. DEQ field audit for air monitoring performed October 1992.
Guilds Lake Portland #404	STATE RD PRP	INIT	РВ .	soil	Cleanup consists of an asphalt- concrete cap and institutional controls. Marathon and City of Portland will implement remedy in 1993.
Hanna Industries Milwaukie #1114	STATE PA STATE	C75	solvents, metals, acids	groundwater soil	Preliminary assessment equivalent submitted. Site referred to NWR for RCRA compliance issues.
Illinois Tool Works, Inc. Milwaukie #1016	STATE RI PRP	INIT	Trichloroethene	groundwater soil	Risk assessment work plan received for review in September 1992 and comments returned. Revised work plan expected early November 1992.

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PROJECT NAME / LOCATION	LEAD/ FUND Source	CURR PHASE		SUBSTANCES Of Concern	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
J. H. Baxter Company-Eugene Eugene #55	STATE PRP	RĬ	C25	AS, CR, CU, PCP, creosote	groundwater soil	Off-site contamination with PCP extends 500'- 750' north. The work plan for groundwater extraction and treatment system was approved 6/10/92. The system is under construction and scheduled to be on line by December 1992.
Joseph Forest Products Joseph #61	FED MIXED	RD RA	INIT INIT	AS, CR, CU	groundwater soil	Cleanup to begin summer 1993 and include excavation and off-site disposal of contaminated soil, demolition of buildings, and groundwater monitoring.
L. D. McFarland Eugene #63	STATE PRP	RI	c75	РАН, РСР	groundwater soil	Results of September 1992 sampling have been reviewed by DEQ and indicate additional monitoring wells will be needed. McFarland submitted Draft Interim Action plan for site.
Lakewood Estates Aurora #1038	STATE STATE		INIT C75 C50 C50	Organics	groundwater	Interim treatment system for main water supply well planned for completion by November 1992. (See Elixir Industries and Ballweber projects for related activities).
Laurence-David, Inc. Eugene #65	STATE PRP	RI	c50	Chlorinated solvents, non- chlorinated solvents	groundwater soil	The lawsuit between PRPs was settled 7/1/92. LDI subsequently sued by insurance carrier in declaratory relief action. Trial scheduled for June 1993. An extension of RI report due date to 7/93 was granted.
Martin Marietta Reduction Facility The Dalles #72	FED PRP	RA	C75	Cyanide, F, PAHs, sulfates	groundwater soil	Remaining cleanup work to be completed includes institutional controls, unit process evaluation and report preparation.
McCormick & Baxter Creosoting Portland #74	STATE STATE		C75 C75	Metals, PCP, TCA, creosote	groundwater sediment soil surface water	Plant closed. Final RI/FS reports received in September. Preparation of ROD underway.
Milwaukie Area Groundwater Contamination Milwaukie #706	STATE STATE		C25 C25	TCE, chlorinated solvents	groundwater	Emphasis on site discovery. Regional hydrogeological study initiated in October 1992.
Multnomah County Parks - Blue Lake Portland #1187	STATE STATE	PA	c75	TCA .	Soil, groundwater	Phase I PA received and under review.
NorWest Publishing Portland #962	STATE STATE	PA	C75	TCA	soil, groundwater	PA report received; under review.
Northwest Pipe and Casing - Clackamas Clackamas #139	FED FED	PD RI	C75 INIT	PCB, PNAs, VOCs	groundwater soil surface water	EPA has assigned site to NPL List. DEQ is supporting EPA in some geophysical work & water levels. Field work began in October.

PROJECT NAME / LOCATION	LEAD/ FUND (<u>SOURCE</u> I	CURR PHASE		SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
Nu-Way Oil Co. Portland #88	STATE F STATE	RI	INIT	PCB, VOCs, heavy metals, petroleum hydrocarbons	groundwater soil	RI/FS on hold due to lack of funding. Bonds sold 7/21/92 providing funding to continue work. Task Order issued for scoping removal assessment. Scoping meeting held 9/2/92. Final meeting summary report received 10/9/92.
Nu-Way Oil Security Portland #88	STATE F	P M	INIT	PCB, VOCs, heavy metals, petroleum hydrocarbons	groundwater soil	Property owner has not complied with consent order. DEQ had security fence installed October 9, 1992.
OREMET - Alkali Lake Investigation Lake County #1253.	STATE S	SI PD	INIT	lead, chromium, radium, 226, 228	soil	Final work plan received & field work completed week of July 6th. DEQ lab results received & forwarded.
Opti-Craft Portland #1186	STATE I	PA	C75	TCA	soil groundwater	PA report in review.
Pacific Detroit Diesel Allison Springfield #1031	STATE I	RI	INIT	TCA, TPH, chlorobenzene	groundwater soil	DEQ submitted comments on SI report 7/10/92. Revised SI report submitted 8/14/92. PDDA currently preparing plans to conduct a removal action.
Pendleton Grain Growers- Pendleton Pendleton #641	STATE I	PD	C75	pesticides	groundwater soil	Reviewed and generated comments on draft work plan for soil removal.
Portable Equipment Salvage Co. Clackamas #149	STATE I	RD	INIT	CU, PCB, PB, dioxin	soil	PP&L currently exploring disposal options for PCB and lead contaminated soils.
Portland General Electric - Station L - Op. Unit 3 Portland #151	STATE PRP	RI	C75	PAH, PCB, metals	groundwater soil	Final phase III soil report being prepared by PGE. Three groundwater monitoring wells installed in July 1992. Risk assessment due in November 1992.
Precision Castparts - Pltd. Titanium Facility Portland #274	STATE STATE	PA	INIT	solvents, PCBs, metals	unknown	Voluntary expanded PA requested. Precision Castparts will not voluntarily perform XPA. EPA to perform RCRA facility assessment and site investigation in July 1992.
Production Parts Milwaukie #1117	STATE STATE	PA	C25	TCE, PCE	groundwater	Voluntary PA submitted in early July. Need for further investigation identified. Production Parts to conduct voluntary XPA to address areas of concern.
Rhone-Poulenc - Doane Lake Facility Portland #155	STATE	RI FS	C50 C25	Pesticides, VOCs, chlori- nated benzenes, chlori- nated phenolics, metals	groundwater soil surface water	Revised Phase II work plans received and under review by DEQ.
Schnitzer Investment Corp-Moody Portland #875	STATE PRP	FS	C25	CD, PCB, PB, VOCs, pesticides	soil	Meeting to discuss FS issues delayed to December 1992.
Southern Pacific - Milwaukie Milwaukie #1190		PD RI	INIT -	TCE, PCE	groundwater soil surface water	Comments on draft work plan provided to Southern Pacific. Revised work plan to be submitted in December 1992.

	LEAD/				
PROJECT NAME / LOCATION	FUND CUI SOURCE PH/	RR % ASE <u>COMPL</u>	SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
Springfield Area Groundwater Springfield #1049	STATE PD STATE	INIT	TCA	groundwater	DEQ currently working with Springfield Utility Board to design groundwater monitoring network.
Stanley Proto Tool Milwaukie #1171	STATE PA	C75	solvents, metals	groundwater soil	PA equivalent submitted. DEQ determined need for further action at the facility. Referred to VCS.
Swift Adhesives Portland #884	STATE FS PRP	C50	1,1,1TCA, 1,1DCA, TCE, 1,1DCE	groundwater soil	DEQ comments on draft RI submitted to Swift. Final report due 1/3/93.
Teledyne Wah Chang Albany #315	FED RI PRP FS	C75 C75	PCBs, metals, radio- nuclides, solvents	groundwater soil surface water	Most field work of Phase II remedial investigation completed. Buried drums discovered under Schmidt Lake now being removed. Draft RI/FS report received 10/15/92.
Teledyne Wah Chang Sludge Ponds Albany #315	FED RA PRP	с75	metals, radionuclides, solvents	sludges	Confirmation sampling plan for Lower Riv solids pond and Schmidt Lake approved. Sampling of Schmidt Lake delayed due to drum removal.pond and Schmidt Lake
Tugman Park Landfill Eugene #843	STATE RI PRP	· INIT	metals, PAHs	soil surface water	The City of Eugene has selected a contractor. Preparation of detailed work plan will now begin. Work plan scoping meeting held with contractor on October 19, 1992.
Umatilla Army Depot Activity Hermiston #514	FED FS PRP	c50	explosives, metals, pesticides	groundwater soil	RI report approved 8/21/92. Risk Assessment report approved 8/25/92. Public hearing on proposed plans for 3 operable units held 9/15/92. Cleanup chosen for lagoon soils unit on 9/30/92.
Union Pacific Railroad - The Dalles The Dalles #54	STATE RI PRP FS	C75 C75	metals, PCP, VOCs, creosote	groundwater soil	Revised draft final RI report and draft FS report received 9/92. Riverfront Park cleanup completed, except for sediments in Columbia River near old pipeline. Further investigation in this area planned.
United Chrome Products, Inc. Corvallis #317	FED OM MIXED	INIT	CR(VI),	groundwater soil	Operation and maintenance of groundwater extraction operating well. Consent decree signed by EPA, DEQ & City of Corvallis on cost settleme
Warn Industries Milwaukie #1118	STATE PA STATE	C50	solvents, hydrocarbons	unknown	PA submitted and reviewed. XPA currently being performed by Warn Industries.
White King Lakeview #601	STATE FS STATE RD	INIT	unknown	unknown	New project. DEQ attended a meeting with Forest Service and EPA. Proposed plan is being developed. DOJ will assist in drafting a 3 party agreement.
Willamette Oaks Building Portland #883	STATE RI PRP	C75	BTEX, PCE, TCE, long-chain hydrocarbons	groundwater soil	Investigation is complete. Report was received 3/19/92, and comments submitted. Two more wells to be installed. Grayco has contacted City about wells in park, installation
SITE\SM35\SM4877		-	Page 5		pending City approval.

SITE\SM35\SM4877

SENDIX D

PROJECT ASSIGNMENT/STATUS Voluntary Cleanup Section

				voluntary cleanup s	ection	
PROJECT NAME / LOCATION	LEAD/ FUND <u>Source</u>	CURR PHASE	% COMPL	SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
3M Medical Imaging Systems White City #1045	STATE PRP	RI	INIT	Voc	groundwater soil	Voluntary cleanup agreement signed 9/92. PA submitted 10/92.
Beaverton Honda Beaverton #1185	STATE PRP	RI	INIT	gasoline	soil groundwater	A phase I RI work plan is being finalized.
Beaverton Mall Beaverton #691	STATE STATE		INIT INIT	chlorinated solvents	groundwater soil	Soil removal completed. 300 cubic yards of soil removed. 10,000 gallons of groundwater from excavation treated.
Bend Millwork Systems Bend #323	STATE PRP	SI	INIT	Chloropyriphos, Pentachlorophenol, Stoddard solvent	soil	VCS has overseen preliminary work to characterize extent of PCP contamination. Final investigation and cleanup pending BMS and DEQ review of applicability of RCRA wood preserving rule at site. review of applicability of RCRA wood preserving rule at site.
Bend-Research Inc. Bend #1158	STATE PRP	SI	INIT	cr, radionuclides	soil	PA complete. Developing sampling and removal plan.
Catellus Development Corp Milwaukie Milwaukie #887	STATE PRP	RI	INIT	creosote	soil groundwater	Agreement between VCS and Catellus for full site characterization signed 8/92. RI/FS proposal submitted and approved. Draft RI/FS work plan submitted 10/92.
Coos - Curry Electric Cooperative Coquille #1107	STATE PRP	RI	C25	unknown	unknown	Soil treatment and disposal alternatives are being evaluated.
Corvallis Disposal Co. Corvallis #1218	STATE PRP	PD	INIT	petroleum	soil	Monitoring groundwater.
Durametal Corporation Tualatin #258	STATE PRP	RI	C25	petroleum hydrocarbons, phenol, PCBs, metals	groundwater soil	Backfilling of clean portions of the excavation started. Met with Health Division to discuss sampling water wells in the area.
Eastern Oregon Correctional Institute Pendleton #1173	STATE PRP	VPA	INIT	unknown	unknown	Letter agreement signed 3/92 for oversight of PA. Site visit conducted on 5/28/92. Draft PA submitted and reviewed 8/26/92.
Eastside Machine Co. Creswell #1217	STATE PRP	PD	COMP	acetone, paint products	soil	Work plan for sediment sampling received and under review.
Farmcraft Tigard #1223	STATE PRP	VPA	INIT	pesticides	soil	XPA sampling plan in development.
GNB - Beaverton Beaverton #142	STATE PRP	Rĭ	INIT	lead (Pb)	soil	VCS approved plans to remove lead-contaminated soils at loading dock construction zone in 8/91. Agreement between GNB & VCS to fully characterize site signed 8/92. RI/FS proposal submitted and approved 9/92.
				Page 1		

Page 1

	LEAD/		Comments of the		
PROJECT NAME / LOCATION	FUND C	URR % PHASE COMPL	SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
GNB - Salem Salem #358	STATE XI PRP	PA INIT	lead oxide, petroleum	soil	VCS reviewed PA and Sampling Plan submitted 12/91. VCS and GNB agree on sample locations for XPA, 8/92. Work plan submitted 10/92.
Giustina Bros. Mill Eugene #1079	STATE W	IL COMP	TCE, vinyl chloride	soil, groundwater	File currently under review.
Gunderson, Inc. Portland #1155	STATE PI	D INIT	unknown	unknown	Report delayed. File review to be completed upon receipt.
Houston's Inc. Portland #1052	STATE R PRP	I INIT	TCE, DCE, PCE, petroleum, diesel	soil, groundwater	Meeting held with company to discuss recommendations 9/16/92. DEQ provided additional details on recommendations. Company prepared work plan 10/14/92.
Howard Cooper Facility Coburg #1229	STATE P	D INIT	chlorinated solvents, petroleum, hydrocarbons	soil, groundwater	DEQ waiting for revised work plan.
Infiniti Beaverton Beaverton #1106	STATE R PRP	I INIT	chlorinated solvents, gasoline	groundwater soil	A phase I RI work plan is being finalized.
J. O. Olsen Manufacturing Co. Eugene #1254	STATE P	D INIT	petroleum hydrocarbons, pentachlorophenol	soil groundwater	File review summary memo completed; focused RI/FS recommended.
Jessup Company White City #1222	STATE P		chlorinated solvents	groundwater	Expanded PA to include monitoring well installation and sampling proposed.
Linnton Oil Fire Training Grounds #1189 Portland	STATE R PRP	ei init	chlorinated solvents, petroleum hydrocarbons	soil groundwater	Meeting held 10/7/92 to discuss conceptual plan. Formal agreement for two phase RI/FS in preparation.
Mid-Coast Marine Shipyard Coos Bay #1174	STATE P PRP	PM INIT	metals, TBT	sandblast grit, sediment	Final work plan provided and approved. Pilot study completed. Interim action completed. Report under preparation.
Mid-State Petroleum Inc. Albany #1209	STATE P	PD INIT	hydrocarbons, petroleum	groundwater soil	DEQ performed site visit. Waiting for sampling results to be submitted.
Mill Creek Correctional Facility Salem #1175	STATE V PRP	/PA INIT	unknown	unknown	Letter agreement signed 3/92 for oversight of PA. Site visit conducted 5/92. Draft PA received 10/92.
National Guard Armory Salem #1172	STATE P PRP	PD INIT	TPH, halogenated compounds, metals	groundwater soil	Additional information necessary to complete file review received 10/16/92. Final review in progress.
Norpac Foods, Inc Salem Salem #1257	STATE R PRP	RI INIT	petroleum, diesel	soil	DEQ waiting for revised work plan.

	LEAD/			· ·		, · · · · · · · · · · · · · · · · · · ·
PROJECT NAME / LOCATION	FUND SOURCE	CURR Phase		SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
North Marine Drive Portland #1170	STATE PRP	PD	C75	TPH, PCB, pesticides	groundwater soil	City of Portland developing plans for road construction. Nature of VCS involvement to be determined as construction proceeds.
Northwest Aviation Independence #374	STATE PRP	RI	C25	unknown	unknown	The final work plan has been completed. A letter agreement addendum is being developed.
Oregon Metallurgical II Albany #858	STATE PRP	PD	INIT	Chlorinated Solvents, Inorganics, PCBs,	soil, groundwater surface water	File review initiated.
Oregon State Correctional Institute Salem #1176	STATE PRP	VPA	INIT	unknown	unknown	Letter agreement signed 3/92 for oversight of PA. Site visit conducted 4/92. Draft PA submitted and reviewed 5/92. Final PA submitted 9/8/92.
Oregon State Penitentiary Salem #621	STATE STATE	RI	INIT	DCE, TCE, PCE	groundwater	Draft Interagency Agreement undergoing management approval. Work plan submitted 9/18/92. DEQ provided comments. Final work plan received and approved.
Oregon Wilbert Vault Corp. Clackamas #1154	STATE PRP	SI .	INIT	VOC's	soil	Groundwater sampling planned for November 1992.
Oregon Women's Correctional Center Salem #1177	STATE PRP	VPA	INIT	unknown	unknown	Letter agreement signed 3/92 for oversight of PA. Site visit conducted 6/92. Draft PA submitted 10/92.
Port of St Helens Railroad Avenue St. Helens #959	STATE PRP	PD	INIT	PAHs, arsenic	sediment, soil	Recommendations provided to the Port of St.Helens. Port is negotiating with other PRPs. Site returned to waiting list pending active response. EPA notified. DEQ requested site be posted. Signs currently being posted.
RFD Publications, Inc. Tigard #1249	STATE PRP	₽D	INIT	halogenated solvents, hydrocarbons	soil	File review underway.
Riverfront Research Park Eugene #1018	STATE PRP	RI	INIT	petroleum	soil	A draft intergovernmental agreement and scope of work is being negotiated. Field work was conducted on the Western and Millrace parcels.
Santiam Correctional Institute Salem #1178	STATE PRP	VPA	INIT	unknown	unknown	Letter agreement signed 3/92 for oversight of PA. Site visit conducted 6/92. Draft PA submitted 10/92.
Schoen Electric Albany #1195	STATE PRP	SI	INIT	petroleum hydrocarbons	soil	Sampling & Analysis plan reviewed. Memo with comments prepared and sent 8/26/92. Sampling and analysis Sampling & Analysis plan reviewed, plan approved 9/10/92.

PROJECT NAME / LOCATION	LEAD/ FUND SOURCE	CURR PHASE	% Compl	SUBSTANCES OF CONCERN	MEDIA CONTAMINATED	PROJECT ACTIVITY STATUS
Selmet, Inc. Albany #342	STATE STATE	PD	INIT	chlorinated solvents, inorganics	groundwater soil	Letter agreement signed. DEQ beginning file review.
Sheridan Mill Sheridan #1182	STATE PRP	PD	INIT	herbicides, insecticides	soil	Negotiations for a letter agreement are in progress.
Shiny Rock Mining Corp. Lyons #1251	STATE PRP	FS RA	COMP INIT	lead, cadmium, petroleum, diesel	soil, tailings	Staff report on proposed remedial action approved. ROD prepared and undergoing approval process. Land farming in progress, Block-making completed. Evaluation of block disposition underway.
Simplot Soil Builders-Vale Vale #1216	STATE PRP	SI PD RI	INIT INIT INIT	1,2 - DCP, petroleum, diesel, pesticides	groundwater, soil	File summary and recommendations provided to Simplot. Latest investigation results reviewed. Revised work plan submitted. Draft agreement prepared. Negotiations underway.
South Fork Forest Camp Tillamook #1179	STATE PRP	VPA	INIT	unknown	unknown	Site visit conducted 6/92. Draft PA submitted 7/14/92. Final PA submitted 8/27/92.
South Waterfront Redevelopment - I Portland #602	STATE PRP	RI	c50	Ba, Cr, Cu, PCB, Pb, Zn, petroleum hydrocarbons	groundwater soil	Continued investigation pending PDC Commissioners approval of additional funding.
South Waterfront Redevelopment - II Portland #602	STATE PRP	RA	C50	Metals, PCB, volatile organics	groundwater soil	Extension of Area A road continuing. Development in Area B completed. Stockpiled soils remain in Area C.
Southern Pacific Trans. Co. - Eugene Yards Eugene #312	STATE STATE	SSA PD	C50 INIT	hydrocarbons, petroleum	groundwater soil	Letter agreement signed. File review complete. Site visit scheduled.
Southern Pacific Transportation Company - Ashland #1146	STATE PRP	RI	INIT	petroleum products	soil, groundwater surface water	Agreement for RI/FS in preparation.
Wade Manufacturing Co. Tualatin #1199	STATE PRP	PD	INIT .	petroleum hydrocarbons	soil, groundwater	Monitoring wells installed and sampled. Bioremediation of petroleum hydrocarbon contaminated soil underway.

ACRONYMS

	Pichloropropane	AC	Active	ACZA	Ammoniacal Copper Zinc Arsenate	APT	Aquifer Performance Test
ARAR 1	Applicable Revelant Appropriate	AS	Arsenic	BA .	Barium	BLA	Blue Lake Aquifier
	Requirements	_		-05	DEM o 1 /		E00/ 0 1 /
BTEX	Benzene, Toluene, Ethyl Benzene,	C	Closed	C25	25% Complete	C50	50% Complete
. 075	Xylene	CD.	P			COMPL	Campleto
C75	75% Complete	CD	Cadmium	CO	Closeout	COMPL	Complete
CR	Chromium		Chromium-6	CU	Copper	DCA	Dichloroethane
DCE	Dichloroethylene	DEC	Consent Decree	DEQ	Dept. of Environmental Quality		Dept. of Geology & Mineral Industries
DO1	Department of Justice	DRUGL	Drug Lab	EA	Endangerment Assessment	EPA	Environmental Protection Agency
F	Fluorine	FED	Federal	FS	Feasibility Study	GW TR	Groundwater Treatment
HRS	Hazard Ranking System	I	Inactive	IAG	Interagency Agreement	INIT	Initiated
IRAM	Interim Remedial Action Measures	IW	Industrial well	LSI	Listing Site Inspection	LTR	Letter Agreement
LUST	Leaking Underground Storage Tank Section	MEK	Methyl Ethyl Ketone	MG	Magnesīum	MIXED	PRP and Agency
NFA	No Futher Action	NPL	National Priorities List	OM	Operations and Maintenance	ORD	Consent Order
PAH	Polyaromatic Hydrocarbons	PASI	Preliminary Assessment/Site	PB	Lead	PCB	Polychlorinated Biphenyls
			Investigation				
PCE	Perchloroethylene	PCP	Pentachlorophenol	PD	Pre-remedial Development	PM	Pre-remedial Measures
PNA	Polynuclear Aromatics	PRP	Potentially Responsible Party	QA	Quality Assurance	RA	Remedial Action
RAP	Remedial Action Plan	RCRA	Resource Conservation and Recovery Act of 1976	RD	Remedial Design	REMOV	Removal
RI	Remedial Investigation	RIFS	Remedial Investigation/ Feasibility Study	ROD	Record of Decision	SAS	Site Assessment Section
SGA	Sand & Gravel Aquifer	SI	Site Investigation	SITE	Superfund Innovative Technology Evaluation	SOW	Scope of Work
SRS	Site Response Section	STA	State Technical Assistance Project	SUPER	Superfund	T	Terminated
TBT	Tri-Butyl-Tin	TCA	Trichloroethane	TCE	Trichloroethylene	TGA	Troutdale Gravel Aquifer
TPH	Total Petroleum Hydrocarbons	TRC	Technical Review Committee	TSA	Troutdale Sandstone Aquifer	UAO	Unilateral Administrative Order
VC	Vinyl Cloride	VCS	Voluntary Cleanup Section	VOC	Volatile Organic Compounds	VPA	Voluntary Preliminary Assessment
XPA	Extended Preliminary Assessment	ZN	Zinc				,
*** ***							

Date: January 15, 1993

To:

Michael Downs, through Barbara Burton

From:

Steven Desmond WS+

Subject:

Operator Certification

Biennial Report To The Legislature

Both the Health Division and the Department are to develop and submit a "joint" report to the Legislative Assembly regarding their respective Operator certification programs (ORS 448.409).

As has been the case in previous years, each program has produced a separate report and submitted both together under one cover letter. The Department's piece of the joint report covering wastewater system operator certification actions is attached in its final form for your review prior to submission to Fred Hansen and the EQC.

I understand that the Health Divisions draft report has been finalized. That piece of the joint report is being coordinated by Mary Alvey, Manager of the Health Division's Monitoring and Compliance Unit, Drinking Water Section (phone 731-4381). I do not yet have a copy.

I have also attached a draft cover memorandum for Fred Hansen and a draft cover letter for the joint report from the Department and the Health Division to the Legislative Assembly.

Please let me know if you have any questions or concerns.

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject: Agenda Item M, January 28, 1993 EQC Meeting

Review of report to the legislature on the Wastewater

System Operator Certification Program

Background

The 1987 Oregon Legislature passed HB 3386 (ORS 448.405 to 448.470, 448.992 and 448.994) referring to water and wastewater system (sewage treatment works) operator certification. 448.409 requires a joint Biennial Report to the Legislative Assembly from the Health Division and the Department of Environmental Quality.

The Department's piece of this joint Biennial Report entitled, "WASTEWATER SYSTEM OPERATOR CERTIFICATION PROGRAM BIENNIAL REPORT TO THE LEGISLATURE, 1991 - 1992", is attached.

Statement of the Issues

As required by ORS 448.409, the report must include: 1) a summary of actions taken under the statute, 2) an evaluation of those actions, and 3) information and any recommendations, including legislative recommendations, the Department considers appropriate.

Requested Commission Action

It is requested that the Commission review the draft report, provide guidance for modifications if deemed appropriate, and approve submittal of the final report to the Legislature.

Approved:

Division: Michael Downs

Report Prepared By:

Steve Desmond

Phone:

229-6824

Date Prepared:

January 4, 1993

January 1993

The 1987 Oregon legislature enacted H.B. 3386 (ORS 448.405 to 448.470, 448.992 and 448.994) establishing a certification requirement for water and wastewater system operating personnel. The statute requires a joint biennial report to the Legislative Assembly from the Department of Environmental Quality and the Health Division.

Attached is the report which is a summary and evaluation of actions taken under ORS 448. Appropriate recommendations are included.

Respectfully Submitted,

Fred Hansen, Director
Department of Environmental
Quality

Michael R. Skeels, Phd, MPH Division Administrator Health Division

William Wessinger, Chair Environmental Quality Commission

Wastewater System Operator Certification Program Biennial Report To The Legislature 1991 - 1992

The following report, required by ORS 448.409, summarizes activities of the Wastewater System (Sewage Treatment Works) Operator Certification Program (Program). The program is administered by the Department Of Environmental Quality (Department) under Oregon Administrative Rules, Chapter 340, Division 49 (OAR 340-49). The report complements a similar report prepared by the Oregon State Health Division on Drinking Water System Operator Certification.

PROGRAM INFORMATION

The Environmental Quality Commission adopted rules under OAR 340-49 (Rules) in 1988 as directed by the 1987 Oregon legislature, pursuant to ORS 448.408, et seq. A copy of the rules and statute are attached to this report. Forty-eight states now have mandatory certification requirements for system supervisors.

The purpose of the statute and implementing rules is to help protect public health and the environment, including Oregon's water resources, through proper operation and maintenance of wastewater systems by establishing specific qualifications and requirements for operating personnel.

The rules require that system owners must designate one or more certified operators to supervise the operation of their collection and/or treatment system(s). All principal system supervisors designated as such by a system owner must hold valid and proper certification with the program at a grade level (I-IV) that corresponds to the classification of system to be supervised.

Systems are classified by the Department in accordance with criteria under the rules in one of four classes (I-IV). Class IV systems are the most complex facilities and require the system supervisor hold a grade level IV certificate. A grade level IV certification has the highest required standards for education, training and experience.

The rules outline the criteria which the Department uses to classify systems. The criteria were established based on the experience and knowledge required to supervise various types of systems. Systems are classified according to size and complexity of operation.

For collection systems design population is a principal factor. For treatment systems, consideration is given for various elements such as process components, operational conditions, monitoring and testing, effluent disposal, solids handling and sludge (biosolids) management.

The collection system (sewers) is ranked independently of the treatment system. It is possible for a wastewater system owner to have to have two different class systems, for example, a Class IV treatment system and a Class III collection system.

The rules establish a program whereby the Director may issue a certificate in system operation to qualified persons who meet specific requirements. To become certified, individuals must meet minimum qualifications for education, training, experience, and must pass a written examination. To maintain a certificate, the operator must demonstrate continuing professional growth in the field.

A growing number of persons certified with the program (estimated 60 percent), do so on a voluntary basis as they are not supervisors and therefore are not required to be certified under the rules. This voluntary growth is a healthy sign of the programs acceptance and will help assure a reservoir from which to draw qualified, professional and committed supervisors for the future.

The program presently issues certificates under three categories as follows:

- * Collection System Operation, Grade Levels I IV
- * Treatment System Operation, Grade Levels I IV
- * Provisional Collection or Treatment Operation, Grade Level I

With the exception of provisional certificates, all applicants must successfully complete an examination with an overall score of 70 percent or higher to obtain a standard renewable certificate. A person may qualify for a provisional certificate at grade level I if they are participating in Department-approved training and gaining on-the-job or "hands-on" work experience under the guidance of a certified operator. This certificate is not renewable and is valid for a period of one year.

To help assure compliance, the Department has incorporated certification, supervisory designation and reporting requirements into system operating permits which it issues under state and federal permitting programs. Department staff routinely determine permit compliance through self-monitoring reports, file record review and field compliance determination activities. When warranted, the Department may use its enforcement authority coupled with technical assistance to compel compliance.

The program continues to evolve to meet the needs of both system owners and operating personnel. In accordance with the rules, the Department has established a standing Wastewater System Operator Certification Advisory Committee to ensure continued representation of wastewater operators, system owners and the educational community in advising the Department on certification examination preparation and evaluating needs of the program. A copy of the roster of committee members is attached to this report.

SUMMARY OF SIGNIFICANT ACTIONS

During the biennium a data base was developed and enhanced to include information on system owner and system supervisor (operator) compliance. The data base includes system supervisory, classification and certified personnel information.

To help assure compliance with certification requirements, the Department began to incorporate certification requirements into all existing wastewater system operating permits, either by permit modification or through the permit renewal process. As of the end of this reporting period, over 90 percent of regulated system permits contained certification requirements including supervisory designation and reporting.

In a major effort to gain compliance with certification rules and associated reporting requirements now under operating permits, the Department issued over 65 "Notices of Non-compliance" to system owners (permittees) in May of 1992. The response to the notices was excellent with better than 80 percent taking corrective action leading to compliance.

The Department received and processed several requests for variances to the rules primarily focusing on legitimate time extensions to accommodate recruiting and/or additional training needs for supervisory personnel. During the biennium over 100 evaluations were conducted resulting in changes in system classifications for 30 systems. The Department reviews a system's classification any time there is a substantive change in the facility and/or the complexity of it's operation. Plan review, permit modifications and variance requests under the rules may trigger a review.

During this reporting period the Department administered a total of 594 examinations; 263 in 1991 and 331 in 1992. Regularly scheduled examinations were held twice annually at six sites around the State. In addition, the Department scheduled five special examinations to meet demonstrated needs, (i.e., hardship, compliance, geographic consideration, etc.).

Beginning in June of 1991, operators were allowed to apply for and receive certification in both collection and treatment at grade level I. This certification option has reduced costs to operators of smaller facilities as only one exam is now scheduled instead of two. Most small Class I systems (collection and treatment) are supervised by one person.

Written examinations periodically undergo review, including question validation and evaluation. Changes are made as appropriate to assure a "need to know" focus. In 1992, Oregon's wastewater examinations were submitted to the Association of Boards of Certification (ABC) for comparative assessment and evaluation with ABC standardized examinations. ABC found all Oregon examinations substantially equivalent to theirs and offered a

reciprocal agreement (presently recognized by 26 certifying authorities). The Department is considering the merit of entering into such an agreement.

The Department continues to participate on the Environmental Services Advisory Committee (ESAC) for development and evaluation of training. Also, the Department has implemented a method of auditing renewal applications for required continuing education. the rules were not revised during the biennium.

EFFECTIVENESS OF ACTIONS

The Department's records indicate approximately 93 percent of wastewater system owners required to have certified operators have met the requirement. This figure is up from 50 percent when the mandatory requirement went into effect in July of 1989.

A number of indicators show continued support of the program including, increased employer preference for certification as evidenced by current recruiting practices, promotional and pay incentives, and increased employer support for professional skill training. Minimum standards have been elevated for employment for both supervisory and operating staff as evidenced by an increasing number of utilities now requiring certification as a prerequisite for employment for non-supervisory positions.

Effectiveness may also be indicated by the increasing number of operating personnel participating in continuing education as reported by sponsors and providers of wastewater related training. The Pacific Northwest, and Oregon specifically, has probably more continuing education offerings in the form of workshops, seminars, short schools and community college classes, than any other region in the nation. Oregon's two community colleges (Clackamas and Linn-Benton) which provide one-year certificate and two-year degree programs in water/wastewater technology report a full student load.

In 1991, the program completed the first renewal process where continuing education was required. Over 900 operators reported training far in excess of the minimum combined total of 1800 CEU's required to demonstrate professional growth in the field. (Note: each operator must earn a minimum of 2.0 Continuing Education Units (CEU's) or college hours. 2.0 CEU's equals 20 contact hours of training). Many operators had either not participated in training before or had been away from continuing education for many years.

Today, system owners (employers) have a larger and more qualified operator pool from which to recruit than ever before. Competition for employment is keen, even for positions at entry level.

The Department believes that certification continues to play a key role in improving the day-to-day operation of Oregon's wastewater systems. Having qualified (trained and certified) persons operating these systems helps to assure optimization of facilities designed and built to protect public health and the environment.

CURRENT PROGRAM STATUS

As of December 31, 1992 Oregon's certification program had 1452 persons certified in wastewater collection and/or treatment system operation. One of every four certified operators (27%) hold both wastewater collection and treatment system certification. The total number of valid certificates at the biennium's end was 1840. Program records indicate that the number of operating personnel certified under the program continues at a net annual growth rate of about 3 percent. The number of operators certified in both collection and treatment system operation has risen from 21 to 27 percent or one in four.

Certificates by reciprocity from other states numbered 48 during the biennium. A reciprocity certificate was issued at the grade level where the person demonstrated that all minimum qualifications as established under the rules were met for education, training, work experience <u>and</u> successfully completing a substantially equivalent written examination.

Wastewater Certificates

<u> Grade Level</u>	•	<u>Collection</u>		Treatme:	<u>nt</u>
Provisional	(I)	20		52	
I		194		341	
II		313	7	253	
III		136		140	
IV		<u> 155</u>		236	
	Total	818	+	1022	= 1840

Wastewater Examinations 1991 - 1992

Certificate		Passing		
<u>Grade Level</u>	<u>Collection</u>	Rate	Treatment	<u>Rate</u>
Combined (C/T) I	56	84%	(56)	(84%)
I	73	96%	152	89%
II	61	92%	110	87%
III	14	85%	75	69%
$\mathtt{I}\mathtt{\Lambda}$	<u>9</u>	89%	44	74%
Total	213		381	

Oregon Classified Wastewater Systems

System Class	<u>Collection</u>	Treatment
I	165	265
II	116	85
III	28	36
IV	<u>26</u>	_32
То	$\overline{335}$	418

Program Revenue And Expenditures

As of November 30, 1992 the Department has collected \$30,765.00 in operator certification fees (1991 -1993 Biennium). In carrying out the program, the Department has expended \$116,046.00 through November 30, 1992. It is estimated that the Department will receive an additional \$60,000.00 in fees, including renewal fees, prior to the end of the biennium. The total program expenditures for the fiscal biennium are estimated at \$164,000.00. The remaining expenditures not funded by certification fees are funded by permit fees, federal funds, and general funds.

RECOMMENDATIONS

The Department has no recommendations for any changes to the program at this time.

OREGON ADMINISTRATIVE RULES

DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAPTER 340

DIVISION 49

REGULATIONS PERTAINING TO CERTIFICATION OF WASTEWATER SYSTEM OPERATOR PERSONNEL

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OREGON ADMINISTRATIVE RULES

DEPARTMENT OF ENVIRONMENTAL QUALITY

CHAPTER 340

DIVISION 49

REGULATIONS PERTAINING TO CERTIFICATION OF WASTEWATER SYSTEM
OPERATOR PERSONNEL

[ED. NOTE: The Tables referred to within the text of this division may be found at the end of this division.]

PREFACE

- (1) The purpose of these rules is to help protect public health, the environment, and the water resources of Oregon through proper operation and maintenance of wastewater collection and treatment systems by establishing requirements regarding certification of wastewater treatment works personnel. The principal objectives of the rules are to:
 - (a) Establish criteria for classifying wastewater treatment and collection systems;
 - (b) Define the requirements of wastewater system owners whose systems must be supervised by a person who holds a valid certificate at a grade level equal to or greater than wastewater treatment works classification;
 - (c) Define the minimum qualifications for certifying personnel and those who supervise the operation of wastewater systems in accordance with wastewater systems classifications;
 - (d) Define the requirements and fees for persons who apply for certification including examination requirements, renewal certification and certification through reciprocity;
 - (e) Establish criteria for variances;
 - (f) Establish penalties for violations of these rules; and
 - (g) Assure a reservoir of qualified wastewater treatment system personnel that are certified to operate and maintain sewage treatment works systems in Oregon.

(2) Certification, under these regulations, is available to all personnel who meet the minimum qualifications in a given classification and grade. All wastewater system personnel are encouraged to apply for certification in the highest classification and grade consistent with their qualifications. Maintenance and laboratory personnel in wastewater systems are encouraged to participate in the respective voluntary certification programs.

DEFINITIONS

340-49-010

As used in these regulations unless otherwise required by context:

- (1) "Approved Dry Weather Flow" means the average dry weather design capacity of the sewage treatment system as approved by the Department, or the population equivalent design of the system.
- (2) "Certified", for the purpose of these rules, means an individual holds a current Oregon wastewater operator/collection certificate issued by the Department of Environmental Quality.
- (3) "Commission" means the Environmental Quality Commission.
- (4) "Continuing Education Unit (CEU)" means a nationally recognized unit of measurement for assigning credits for education or training that provides the participant with advanced or post high school learning. One CEU is equivalent to 10 contact hours of lecture and/or formal organized training conducted under responsible sponsorship, capable direction and qualified instruction. Forty-five CEU are equal to one year of post high school education (30 semester hours or 45 college quarter hours).
- (5) "Contract Operations" means the wastewater system owner has a written contract with a wastewater treatment systems operations company entity or person for supervising the operation of the wastewater system in accordance with these rules.
- (6) "Department" means the Department of Environmental Quality.
- (7) "Director" means the Director of the Department of Environmental Quality or any official designee of the Director.
- (8) "Industrial Waste" means liquid wastes from an industrial or commercial process discharged into a sanitary sewer system for conveyance and treatment.
- (9) "NPDES" permit means a waste discharge permit issued in accordance with requirements and procedures of the National Pollutant Discharge Elimination System authorized by the Federal Clean Water Act and OAR Chapter 340, Division 45.

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- (10) "Oral Examination" means an examination administered by the Department where the applicant provides verbal answers to the written examination for the level of certification the applicant is seeking.
- (11) "Population" means the design population of the sewage works system represented as the number of people or the population equivalent the system is designed to serve. Equivalent population ordinarily is determined based on 70 gallons per person per day approved dry weather design flow or 0.17 lbs BOD5 per person per day whichever is greater.
- (12) "Provisional Certificate" means a temporary certificate issued by the Department to a person meeting the requirements of these rules.
- (13) "Post High School Education" means education acquired through programs such as short schools, bona fide correspondence courses, trade schools, community colleges, colleges, formalized workshops, seminars, etc., for which continuing education credit or college credit is issued by the training sponsor. One year of post high school education is equal to 30 college semester hours, 45 college quarter hours, or 45 CEUs.
- (14) "Shift Supervisor" means the person to whom the system owner designates authority for executing the specific practice and procedures for operating the wastewater system when the system is operated on more than one daily shift. The shift supervisor is not required to be on-site. The shift supervisor shall be available to the system owner and to any other operator during the shift supervisor's assigned shift. The system owner is not required to have a shift supervisor if another certified supervisor is available.
- (15) "Supervise" means responsible for the technical operation of a sewage treatment works system performance which may affect its performance or the quality of the effluent produced by such sewage treatment works.
- (16) "Supervisor" means the person to whom the system owner designates the authority for establishing and executing the specific practice and procedures for operating the wastewater system in accordance with the policies of the owner of the system and the permit requirements. The supervisor may be employed part-time when acting as the supervising party in a contractual agreement for wastewater treatment systems with an approved dry weather design flow of less than 75,000 gallons per day. The supervisor is not required to be on site at all times. The supervisor or part-time supervisor shall be available to the system owner and to any other operator.
- (17) "Wastewater" (Sewage) means the water-carried human or animal waste, from residences, buildings, industrial establishments or

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- other place, together with such groundwater infiltration and surface water as may be present. The admixture of domestic and industrial waste, or other byproducts, such as sludge, shall also be considered sewage.
- (18) "Wastewater Treatment System" (Sewage Treatment Systems) for the purpose of these rules and as defined in ORS 454.010, means any structure, equipment or process treating and disposing of domestic waste and sludge including industrial waste discharged to sewage treatment works.
- (19) "Wastewater Collection System" (Sewage Collection System) for the purpose of these rules means the trunks, arterials, pumps, pump stations, piping and other appurtenances necessary to collect domestic and/or industrial liquid wastes from a community, individual, corporation or entity, which produces sewage or other liquid waste treatable in a community or private wastewater treatment facility.
- (20) "Wastewater Systems" means any structure, equipment or process required to collect, carry away and treat domestic waste and dispose of sewage as defined in ORS 454.010.
- (21) "Wastewater System Personnel" (Sewage System Personnel) means any person engaged in the on-site, day-to-day operation of a wastewater treatment system or a wastewater collection system. It is not intended that this title shall include city officials, county managers, engineers, directors of public works or equivalent, whose duties do not include the actual operation or on-site supervision of facilities and/or operator personnel. Other common terms that mean the same are wastewater treatment operator and wastewater collection system operator.
- (22) "WPCF" permit means a Water Pollution Control Facilities permit to construct and operate a collection, treatment and/or disposal system with no discharge to navigable waters. A WPCF permit is issued by the Department in accordance with the procedures of OAR Chapter 340, Division 14 and Division 45.

GENERAL REQUIREMENTS

- (1) After July 1, 1989, each wastewater system owner with an approved dry weather design flow 75,000 gallons per day or greater shall have their system supervised by one or more operators who hold a valid certificate at a grade level equal to or greater than the wastewater treatment system classification.
- (2) After July 1, 1989, any wastewater system owner with a system having more than one daily shift shall have their shift

- supervisor, if any, certified at no less than one grade level lower than the wastewater system classification.
- (3) After July 1, 1989, each wastewater system owner with an approved dry weather design flow less than 75,000 gallons per day shall either have their system supervised by one or more operators who hold a valid certificate at a grade level equal to or greater than the wastewater treatment system classification, or contract for part-time supervision with an operator who holds a valid certificate at a grade level equal to or greater than the wastewater treatment system classification.
- (4) Owners of on-site wastewater disposal systems permitted in accordance with ORS 454.605 are exempt from these requirements.
- (5) By July 1, 1989, and in accordance with permit conditions thereafter, each wastewater system owner shall file with the Department the name of operators designated the responsibility of supervising the operation of their wastewater system in accordance with these rules. The wastewater system owner may redesignate or replace designated operators with other properly certified operators at any time and shall notify the Department in writing within 30 days of replacement or redesignation of operators certified in accordance with these rules.
- (6) A wastewater system may not be without an individual certified at the classification of the system more than 30 days. During this period, the system owner must ensure a person certified no less than one grade lower than the system classification is available to the system owner and to any other operator.

CLASSIFICATION OF WASTEWATER SYSTEMS

- (1) All wastewater systems shall be classified by the Department as a wastewater treatment system and wastewater collection system, as appropriate, in accordance with the following classification system:
 - (a) Wastewater Treatment Systems:

(A)	Class	I.					1-30	total	points.
(B)	Class	ΙΙ					31-55	total	points.

- (D) Class IV 76 or more points.
- (b) Wastewater Collection Systems:
 - (A) Class I 1,500 or less design population.
 - (B) Class II 1,501 to 15,000 design population.
 - (C) Class III 15,001 to 50,000 design population.

- (D) Class IV \dots 50,001 or more design population.
- (2) Wastewater treatment system classifications shall be derived by the total points assigned based on criteria shown in Table 1, OAR 340-49-025.
- (3) The Director shall advise wastewater system owners of the classification of their system(s).
- (4) If the complexity of a wastewater treatment system is not reflected in Table 1 -- Criteria for Classifying Wastewater Treatment Systems (OAR 340-49-025), the Director may designate a classification higher than that which would be based on accumulated points upon written notice to the wastewater treatment system and in accordance with OAR 340-45-005, et seq., and OAR 340-14-005, et seq., as applicable. The designation shall be consistent with the intent of the classification system.
- (5) If deemed appropriate, the Director may designate a classification for a wastewater collection system higher than that which would be solely based on population upon written notice to the wastewater collection system and in accordance with permit issuance procedures contained in OAR 340-45-005, et seq., and OAR 340-14-005, et seq., as applicable. The designation shall be consistent with the intent of the classification system.
- (6) The Director may change the classification of a wastewater system upon written notice to the system owner in accordance with OAR 340-45-005, et seq., and OAR 340-14-005, et seq., as applicable, and shall give the owner a reasonable time to comply with the requirements of the new classification.
- (7) The wastewater system owner may appeal the classification of their system in accordance with OAR 340-49-075, Variances, and OAR 340-45-005, et seq., or OAR 340-14-005, et seq.

MINIMUM QUALIFICATIONS FOR WASTEWATER TREATMENT OPERATOR CERTIFICATION, NEW CERTIFICATES AND CERTIFICATE UPGRADES

- (1) Classifications are established as follows: Wastewater Treatment System Operator, Grade Levels I-IV; and Provisional Wastewater Treatment System Operator; Wastewater Collection System Operator, Grade Levels I-IV, and Provisional Wastewater Collection System Operator; Combination Wastewater Treatment and Collection Systems Operator, Grade Level I and Combination Wastewater Treatment and Collection System Operator, Grade Level II.
 - (a) Wastewater Treatment System Operator Levels:

- (A) Provisional Wastewater Treatment System Operator: Persons may qualify for a Provisional Certificate to obtain on the job training and experience to meet the Wastewater Treatment System Operator Grade Level I qualifications if they are:
 - (i) Employed at a wastewater treatment system,
 - (ii) Have completed high school or equivalency,
 - (iii) Are participating in or have completed a Department approved training program, and
 - (iv) Are supervised full or part-time by a certified wastewater treatment system operator. The Provisional Certificate will be current for a period of 12 months after which the individual must have passed a Grade Level I exam within the 12-month period. Upon passing the Grade Level I examination and obtaining 12 months experience at a wastewater treatment system, the individual will receive a Grade Level I certificate. It shall remain valid for the remaining certification period in which the Provisional certificate was granted.
- (B) Grade Level I Wastewater Treatment System Operator Certification Qualifications. Persons may qualify for this classification and grade level if they meet the following qualifications:
 - (i) Education: Completion of high school or equivalency, and
 - (ii) Experience: Twelve (12) months experience at a Class I or higher Wastewater Treatment Plant, and
 - (iii) Exam: Satisfactorily pass Wastewater Treatment Plant Operator Grade Level I examination.
- (C) Grade Level II Wastewater Treatment System Operator Certification Qualifications. Persons may qualify for this classification and grade level if they meet the following qualifications:
 - (i) Education: Completion of high school or equivalency, and
 - (ii) Experience: Three (3) years at a Class I or higher Wastewater Treatment System, or two (2) years at a Class I or higher Wastewater Treatment System and one (1) year of post high school education, and

- (iii) Exam: Satisfactorily pass Wastewater Treatment Operator Grade Level II examination.
- (D) Grade Level III Wastewater Treatment System Operator Certification Qualifications. Persons may qualify for Operator Grade Level III Certification if they meet the following qualifications:
 - (i) Education: Completion of high school or equivalency, and
 - (ii) Experience: Eight (8) years experience, of which half must have been at a Class II or higher Wastewater Treatment System, or
 - (I) Five (5) years experience, of which half must have been at a Class II or higher Wastewater Treatment System, and one year of post high school education, or
 - (II) Four (4) years experience, of which half must have been at a Class II or higher Wastewater Treatment System, and two years post high school education, or
 - (III) Three (3) years experience, of which half must have been at a Class II or higher Wastewater Treatment System, and three years of post high school education, and
 - (iii) Exam: Satisfactorily pass a Wastewater Treatment Operator Grade Level III examination.
- (E) Grade Level IV Wastewater Treatment System Operator Certification Qualifications. Persons may qualify for Operator Grade Level IV Certification if they meet the following qualifications:
 - (i) Education: Completion of high school or equivalency, and a minimum of one year post high school education, and
 - (ii) Experience: Ten (10) years experience, of which half must have been at a Class III or higher Wastewater Treatment System, or
 - (I) Six (6) years experience, of which half must have been at a Class III or higher Wastewater Treatment System, and two years of post high school education, or
 - (II) Five (5) years experience, of which half must have been at a Class III or higher

- Wastewater Treatment System, and three years of post high school education, or
- (III) Four (4) years experience, of which half must have been at a Class III or higher Wastewater Treatment System, and four years post high school education, and
- (iii) Exam: Satisfactorily pass a Wastewater Treatment Operator Grade Level IV examination.
- (b) Wastewater Collection System Operator:
 - (A) Provisional Wastewater Collection System Operator: Persons may qualify for a Provisional Certificate to obtain on the job training and experience to meet the Wastewater Collection System Operator Grade Level I qualifications if they are:
 - (i) Employed at a wastewater collection system,
 - (ii) Have completed high school or equivalency,
 - (iii) Are participating in or have completed a Department approved training program, and
 - (iv) Are supervised full or part-time by a certified wastewater collection system operator. The Provisional Certificate will be current for a period of 12 months after which the individual must have passed a Grade Level I written exam within the 12-month period. Upon passing the Grade Level I exam and obtaining 12 months experience at a wastewater collection system, the individual will receive a Grade Level I certificate current for the remaining certification period in which the Provisional certificate was granted.
 - (B) Grade Level I Wastewater Collection System Operator Certification Qualifications: Persons may qualify for this classification and grade level if they meet the following qualifications:
 - (i) Education: Completion of high school or equivalency, and
 - (ii) Experience: Twelve (12) months at a Class I or higher Wastewater Collection System, and
 - (iii) Exam: Satisfactorily pass a Wastewater Collection System Operator Grade Level I examination.

- (C) Grade Level II Wastewater Collection Wastewater Operator Certification Qualifications. Persons may qualify for this classification and grade level if they meet the following qualifications:
 - (i) Education: Completion of high school education or equivalency, and
 - (ii) Experience: Three (3) years at a Class I or higher Wastewater Collection System, or two (2) years at a Class I or higher Wastewater Collection System, and one year of post high school education, and
 - (iii) Exam: Satisfactorily pass a Wastewater Collection System Operator Grade Level II examination.
 - (D) Grade Level III Wastewater Collection System Operator Certification Qualifications. Persons may qualify for this classification and grade level if they meet the following qualifications:
 - (i) Education: Completion of high school or equivalency, and
 - (ii) Experience: Eight years experience, of which half must have been, at a Class II or higher Wastewater Collection System, or
 - (I) Five (5) years experience, of which half must have been at a Class II or higher Wastewater Collection System, and one year of post high school education, or
 - (II) Four (4) years experience, of which half must have been at a Class II or higher Wastewater Collection System, and two years post high school education, or
 - (III) Three (3) years experience, of which half must have been at a Class II or higher Wastewater Collection System, and three years of post high school education, and
 - (iii) Exam: Satisfactorily pass a Wastewater Collection System Grade Operator Level III examination.
 - (E) Grade Level IV Wastewater Collection System Operator Certification Qualifications. Persons may qualify for this classification and grade level, if they meet the following qualifications:

- (i) Education: Completion of high school or equivalency, and
- (ii) Experience: Ten (10) years experience, of which half must have been at a Class III or higher Wastewater Collection System, or
 - (I) Eight (8) years experience, of which half must have been at a Class III or higher Wastewater Collection System, and one year of post high school education, or
 - (II) Six (6) years experience, of which half must have been at a Class III or higher Wastewater Collection System, and two years of post high school education, or
 - (III) Five (5) years experience, of which half must have been at a Class III or higher Wastewater Collection System, and three years of post high school education, or
 - (IV) Four (4) years experience, of which half must have been at a Class III or higher Wastewater Collection System, and four years post high school education, and
- (iii) Exam: Satisfactorily pass a Wastewater Collection System Operator Grade Level IV examination.
- (c) Wastewater Treatment System and Wastewater Collection System Grade Level I Combination Certificate: Persons may qualify at renewal for this certificate provided they meet the minimum qualifications set forth in OAR 340-49-030(1)(a)(B) and 030(1)(b)(B) for wastewater treatment system and wastewater collection system personnel Grade Level I.
- (d) Wastewater Treatment System and Wastewater Collection System Grade Level II Combination Certificate: Persons may qualify at renewal for this certification classification provided they meet the minimum qualifications set forth in OAR 340-49-030(1)(a)(C) and 030(1)(b)(C) for wastewater treatment system and wastewater collection system personnel Grade Level II.
- (2) The Department shall give credit to meet experience qualifications set forth in OAR 340-49-030(1) for related experience up to 50 percent, in any of the following areas, with the total in any of related experience credit not to exceed 6 months:
 - (a) Wastewater sewage treatment systems operations.

- (b) Wastewater collection systems operations and maintenance.
- (c) Water treatment system operations.
- (d) Water distribution system operations.
- (e) Water treatment laboratory.
- (f) Wastewater treatment laboratory.
- (g) Wastewater treatment systems maintenance.
- (h) Industrial waste treatment operations and maintenance. -
- (3) Education credit can be gained in programs such as short schools, bona fide correspondence courses, trades schools, community colleges, formalized workshops, seminars, and other training for which CEU is given by the training sponsor.
- (4) The Department shall consider the relevance of the subject matter covered at seminars, workshops, conferences, and other training sessions when evaluating the education qualifications of an applicant for certification.
- (5) The applicant for certification has the responsibility for providing experience and education records to the Department for screening and evaluating the applicant's qualifications.

CERTIFICATION OF WASTEWATER TREATMENT AND COLLECTION SYSTEM PERSONNEL

- (1) All applications received under the Department administered Voluntary Certification temporary rules and until September 9. 1988, shall be processed in accordance with the Voluntary Certification Program rules.
- (2) Those persons holding a current voluntary Oregon Wastewater Treatment Operator or Collection System Operator certificate issued by the Department before May 1, 1989, shall be issued certificates by the Director upon receipt of a completed renewal application. These certificates shall be issued for the same classification and grade as the certificate issued under the voluntary program, unless an upgrade certificate has been obtained.
- (3) The Director shall issue certificates to persons meeting the education and experience qualifications set forth in OAR 340-49-030, and who satisfactorily pass the exam for the classification and grade level sought.

- (4) From the date of adoption of these rules and until May 1, 1989, Wastewater Collection Personnel may apply for Collection Certification or Upgrade Collection Certification based on the education and experience qualifications. No written examination will be required. After May 1, 1989, all applicants for Wastewater collection certification will be required to meet all qualifications for certification in 340-49-030(b) including the requirement of passing a written examination.
- (5) Each certificate issued shall designate the classification and grade of the person certified.

CERTIFICATE AND RENEWAL

340-49-040

- (1) All certificates issued by the Department before May 1, 1989 shall be valid until June 30, 1989.
- (2) Beginning July 1, 1989 and thereafter, a certificate may be renewed for a two-year term to those who submit a complete renewal application and payment of the fee required by OAR 340-49-065.
- (3) The Department will send each certificate holder a renewal notice at least 60 days before the certificate lapses. Notice will be mailed to the last address of record. Failure to receive notice does not relieve the holder of responsibility to renew the certificate.
- (4) For a certificate or renewal issued after May 1, 1989, the next and subsequent renewal of a certificate shall be based on demonstration of continued professional growth in the field. An operator shall submit satisfactory evidence of completion of approved training of a minimum of two (2) CEUs as a condition for renewal of the certificate. An operator holding more than one certificate issued under these rules, need only complete the training required to satisfy renewal requirements for one of these certificates.

REINSTATEMENT OF LAPSED CERTIFICATES

340-49-045

- (1) Renewal applications received by May 1, 1989 will not require reexamination if the certificate has not lapsed more than three years.
- (2) After May 1, 1989, an operator seeking renewal of a lapsed certificate may submit an application for renewal within 180 days after the certificate lapses without reexamination. Upon receipt of application, including proof that all qualifications have been

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- met and payment of the fee required by OAR 340-49-065, the Director shall renew the certificate.
- (3) After May 1, 1989, the Department will require re-examination of an operator whose renewal application is post-marked more than 180 days after the certificate lapses.

CERTIFICATE AND RECIPROCITY

OAR 340-49-050

- (1) The Director may accord a person with a valid certificate in another state or province reciprocal treatment and issue a certificate without examination when, in the judgment of the Director, the certification requirements in the other state or province are substantially equivalent to the requirements set forth in these rules.
- (2) When such reciprocity is granted, the person shall be subject to the same requirements of renewal as any other person initially certified by these rules.

EXAMINATIONS

- (1) Persons applying for a new certification or to be certified at a higher grade level must be examined, except pursuant to OAR 340-49-035(4), file a completed application and payment of the fee required by OAR 340-49-065 at least 30 days before the date set for an examination, and meet the education and experience qualifications for the classification and grade level sought.
- (2) The Department will notify the applicant of eligibility for an examination.
- (3) Persons accepted for examination shall be examined at the next scheduled examination date, unless the Department at its discretion, chooses to administer an exam at times in addition to the scheduled exams.
- (4) A minimum score of 70 percent correct answers is required to satisfactorily pass an examination.
- (5) Any person who fails an examination may repeat such examination at a later date upon submittal of a complete application and fee.
- (6) Examination shall consist of material in content and level appropriate to each classification and grade level.

- (7) Examinations shall be administered by the Department or its designee, at places and times scheduled by the Department, with 60 days public notice of the schedule. A minimum of two examinations shall be scheduled per calendar year.
- (8) The Department, at its discretion, may administer written or oral examinations at times other than those scheduled.
- (9) All examinations will be graded by the Department, or its designee, and the applicant shall be notified of grade attained and pass or fail. Examinations will not be returned to the applicant.

CERTIFICATION FEES

340-49-060

- (1) All persons applying for certification shall be subject to the fee schedule contained in OAR 340-49-065 (Table 2).
- (2) Upon the Department receipt of an application and fee, the fee shall be non-refundable, unless no action has been taken on the application, the Department determines that no fee is required, or the Department determines the wrong application has been filed.
- (3) All fees shall be made payable to the Department of Environmental Quality.

CONTRACTS FOR PART-TIME SUPERVISION

- (1) When a wastewater system owner enters into a contract for parttime supervision with a certified operator to comply with OAR 340-49-015(3), the contract shall include the following:
 - (a) The parties involved, including names, addresses and phone number of each, and certification class and grade of the operator(s).
 - (b) The specific starting date and expiration date of the contract.
 - (c) The minimum number of visits to be made to the wastewater treatment works system(s) by the contract supervisor.
 - (d) The duties and responsibilities of each party involved.
- (2) The contract for supervision shall be sufficient such that a contracted certified operator shall be available to respond on-

- site upon request of the wastewater system owner and to any other operator.
- (3) The Director may require the wastewater system owner to make changes to the contract if the wastewater treatment system is in violation with the conditions of the permit.
- (4) The owner of the wastewater treatment works systems shall maintain the contract on file for Department review.

VARIANCES

340-49-075

- (1) The Director may grant variances from requirements of wastewater system owners when it is demonstrated to the satisfaction of the Department that strict compliance with the rule would be highly burdensome or impractical due to special conditions or causes; and when the public or private interest in the granting of the variance is found by the Department to clearly outweigh the interest of the application of uniform rules.
 - (a) A request for a variance must be submitted in writing by the wastewater system owner required to comply with these rules and shall include justification for the requested variance.
 - (b) The variance request shall be evaluated and processed by the Department as a permit action in accordance with OAR 340-45-005, et seq. and OAR 340-14-005, et seq., as applicable.
 - (c) The Director shall notify the wastewater system owner of the decision to grant or deny a variance in accordance with applicable permit issuance procedures, set forth in OAR 340-45-005, et seq., and OAR 340-14-005, et seq.
 - (d) If the Director denies the variance, the system owner may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of the variance decision. Any hearing held shall be conducted pursuant to the regulations of the Department.

REFUSAL AND REVOCATION OF CERTIFICATE AND APPEAL PROCESS

340-49-080

(1) The Director may refuse to issue or revoke the certificate of any person in accordance with the procedures set forth in OAR 340-11-097, et seq. Grounds for revocation of a certificate shall be:

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- (a) Obtaining a certificate by fraud, deceit, or misrepresentation, or
- (b) Proven gross negligence, incompetence or misconduct in performance of duties as an operator, or
- (c) Failure of the operator to comply with the lawful orders, rules or regulations of the Department, or
- (d) False or fraudulent report or record by the operator regarding the operation or supervision of the treatment system.
- (2) If the Director believes that good cause exists to suspend or revoke a person's certificate, the Director shall give notice to the person of opportunity for hearing in accordance with 340-11-106%
- (3) The Director, after a period of twenty-four (24) months, may reinstate any person whose certificate has been revoked upon presentation of evidence satisfactory to the Director, which warrants such reinstatement. The Director may require reexamination as a condition of the certificate reinstatement.

PENALTY PROVISIONS

340-49-082

- (1) Any wastewater system owner, municipal or private, who knowingly and willfully violates any of the provisions of these rules, may be subject to:
 - (a) Criminal penalties according to provisions under ORS 448.992 or ORS 448.415(2).
 - (b) Civil penalties according to OAR Chapter 340, Division 12 for violations of provisions of NPDES or WPCF permits.
- (2) Any individual who knowingly and willfully violates any provision of these rules may be subject to revocation of certification, and criminal penalties under ORS 448.992 or 448.415(2).

ADVISORY COMMITTEE

- (1) By October 31, 1988, the Department shall establish an Advisory Committee to:
 - (a) Assist in developing examinations.

- (b) Evaluate the effectiveness of the program.
- (c) Recommend needs of the program.
- (2) Advisory Committee meetings shall be scheduled at least twice a year.
- (3) The composition of the Committee shall include, at a minimum, representatives of operators, system owners, and the educational community.

TABLE 1

OAR 340-49-025

Criteria for Classifying Wastewater Treatment Systems

(1)	Design Population or Population Equivalent	Poi	nts
	Less than 750 751 to 2000 2001 to 5000 5001 to 10,000 Greater than 10,000	1 1.5	point points points points points points plus 1 point per 10,000
(2)	Approved Dry Weather Design Flow (MGD)		
	Less than 0.075 Greater than 0.075 to 0.1 MGD Greater than 0.1 to 0.5 MGD Greater than 0.5 to 1.0 MGD Greater than 1.0 MGD	1 1.5	point points points points points points plus, 1 point per 1 MGD
(3)	Unit Processes		
•	Pre-Treatment		
	Comminution Grit Removal, Gravity Grit Removal, Mechanical Screen(s), Mechanical Influent Pump Station Flow Equalization Unit	1 1 2 1 2	points
	Primary Treatment		
	Community Septic Tank(s) Clarifier(s) Flotation Clarifier(s) Chemical Addition System Imhoff Tank	2 5 7 2 3	points
	Secondary Treatment		
	Low Rate Trickling Filter(s) High Rate Trickling Filter(s)	7 10	points points
	Trickling Filter - Solids Contact System Single mode activated sludge less than 0.1 MGD	12 ⁻ 6	points points

Two or more modes activated sludge less than 0.1 MGD	8	points
Single mode activated sludge greater than 0.1 MGD	10	points
Two or more modes activated sludge greater than 0.1 MGD	15	points
Pure oxygen activated sludge	20	points
Activated Bio Filter Tower less than 0.1 MGD	6	points
Activated Bio Filter Tower greater than 0.1 MGD	12	points
Rotating Biological Contact 1 to 4 shafts	7	points
Rotating Biological Contact, 5 or more shafts	12	points
Stabilization Lagoons, 1 to 3 cells without aeration	5	points
Stabilization Lagoons, 2 or more cells with primary aeration	7	points
Stabilization Lagoons, 2 or more with full aeration	9	points
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Recirculating gravel filter	7	points
Chemical Precipitation unit(s)	3	points
Gravity Filtration Unit(s)	2	points
Pressure Filtration Unit(s)	4	points
Nitrogen Removal,	4	points
Mechanical or chemical system		•
Nitrogen Removal,	2	points
Biological/anoxic system	_	•
Phosphorus Removal units	4	points
Effluent Microscreen(s)	2	points
Chemical Flocculation units	3	points
Anaerobic Primary Sludge Digester(s) without Mixing and Heating	5	points
Anaerobic Primary Sludge Digester(s) with Mixing and Heating	7	points
Anaerobic Primary and Secondary Sludge Digesters	10	points
Sludge Digester Gas reuse	3	points
Aerobic Sludge Digester(s)	8	points
Sludge Storage Lagoon(s)	2	points
Sludge Lagoon(s) with aeration	3	points
	3 1	•
Sludge Drying Bed(s)		point
Sludge Air or Gravity Thickening	3	points
Sludge Composting, in Vessel	12	points
Sludge Belt(s) or Vacuum Press(es) /Dewatering	5	points
Sludge Centrifuge(s)	5	points
Sludge Incineration	12	points
		-
Sludge Chemical Addition Unit(s)	2	points

	Non-Beneficial Sludge Disposal Beneficial Sludge Utilization	1 3	point points
	Liquid chlorine disinfection Gas chlorine disinfection Dechlorination system Other disinfection systems including ultraviolet and ozonation	2 5 4 5	points points points points
(4)	Effluent Permit Requirements		
	Minimum of secondary effluent limitations for BOD and Total Suspended solids	2	points
	Minimum of 20 mg/l BOD and Total Suspended Solids	3	points
	Minimum of 10 mg/l BOD and Total Suspended Solids	4	points
	Minimum of 5 mg/l BOD and Total Suspended Solids	5	points
	Effluent limitations for effluent oxygen	1	point
(5)	Raw Waste Variation. Points in this category conditions are extreme, to the extent that oper procedure changes are needed to adequately travariation of raw waste.	erati	on and handling
	Conveyance and Treatment of Industrial wastes covered by the federal pretreatment program	4	points
(6)	Sampling and Laboratory Testing		
	Samples for BOD, Total Suspended Solids performed by outside laboratory.	2	points .
	BOD, Total Suspended Solids performed	4	points
	at treatment plant.		Politica .
	at treatment plant. Fecal Coliform analysis performed by outside laboratory.	1	points
	Fecal Coliform analysis performed by	1 2	
	Fecal Coliform analysis performed by outside laboratory. Fecal Coliform analysis performed at		points

TABLE 2

OAR 340-49-065

Fee Schedule for Wastewater Treatment Works Systems Operator Certification

Application Type	Fee
New Certification Includes examination	\$ 50.00
Renewal Certification (2-Year Renewal Period)	\$ 40.00
Certification to a higher grade Includes examination	\$ 35.00
Certification through Reciprocity	\$ 55.00
Reinstatement of Lapsed Certificate	\$ 50.00

Persons applying for a Wastewater Treatment and Collection System Operator Grade Level I or Grade Level II Combination Renewal Certificate (OAR 340-49-030(1)(d)) must only submit a single renewal fee.

Fees are non-refundable upon making application, except as provided in OAR 340-49-060(2).

Chapter 448

1991 EDITION

Swimming Facilities; Water and Sewage Systems

	SWIMMING FACILITIES	(Fodos	ual Safa Dwinking Water Ast Administration
448.005	Definitions for ORS 448.005 to 448.090	448.273	ral Safe Drinking Water Act Administration) Federal Safe Drinking Water Act adminis-
448.011	Authority of Health Division	***********	tration
448.015	Applicability of ORS 448.005 to 448.090	448.277	Health Division as administrator
448.020	Permit required to construct swimming		(Civil Penalties)
	facilities	448,280	• • • • • •
448.030	Permit application; contents; issuance or denial; plan review and construction per- mit fees	448.285	12
448.035	Annual license required to operate; fees; expiration date	448,290	Process for imposing civil penalty
448.037	Variance; application; fee		(Jurisdiction of Cities)
448.040	Entry on premises for inspection purposes; reports	448.295	Jurisdiction of cities over property used for system or sources
448.051	Inspection of facilities; suspension or re-	448.300	City ordinance authority
	vocation of permit or license; hearings on suspension or revocation	448.305	Special ordinance authority of certain cities
448.060	Closing facility	448.310	Investigation of complaints
448.090	Disposition of moneys	448.315	Special police to enforce ORS 448.295
448.095	Natural bathing places exempt	448.320	Jurisdiction over violations of city ordi-
448.100	Delegation to county to administer ORS 448.005 to 448.060; standards; fees; suits involving validity of administrative rule	448.325	nances Injunction to enforce city ordinances
			(Water Pipes and Fittings)
	WATER SYSTEMS (Generally)	448.330	Moratorium of pipe and fittings for potable water supply; acceptability criteria; ex-
448,115	Definitions for ORS 448.115 to 448.285		ceptions
448.119	Application of ORS 448.119 to 448.285 to water systems	<u> </u>	OPERATOR CERTIFICATION FOR SEWAGE TREATMENT WORKS AND
448,123	Purpose		TABLE WATER TREATMENT PLANTS
448.127	Short title		(Generally)
•	(Administration)	448.405	Definitions for ORS 448.405 to 448.470
448.131	Water quality, construction and installa- tion standards; effect on existing facilities	448.407	Advisory committee to commission and division
448.135	Variances; notice to customers; compli-	448.409	Biennial report
448.140	ance schedules; notice; hearing		(Sewage Treatment Works)
448,145	Operation on permit When permit may be issued; compliance	448.410	Authority and duties of Environmental Quality Commission
448.150	schedule; hearing; notice Duties of division	448.415	Certification required for operators
448.155	Personnel training; public information	448,420	Special certification provisions
448,160	Emergency plans	448.425	Deposit and use of fees
	Local government water service plans	448.430	Certification exception
448.170	Division agreement to authorize local gov-		(Potable Water Treatment Plants)
	ernment to exercise duties	449.450	Authority and duties of Health Division
448.175	Division authority to order compliance	448.450	Certification required for operators
448.180	Waiver of construction standards	448.455	,
448.250	Remedy when system a health hazard;	448.460	Special certification provisions
	special master; sale of system	448.465 448.470	Deposit of fees Certification exception
448.255	Notice of violation; content; hearing; order; appeal	440410	PENALTIES
448.265	Prohibited actions; nuisance abatement	448.990	Penalties for violations of swimming facil-
448.268	Area of ground water concern; declaration	110000	ity or water system requirements
448,271	Transfer of property that includes well; testing; effect	448.992	Sewage treatment works violation penal- ties

448.994 Potable water treatment plant violation penalty

CROSS REFERENCES

Administrative procedures and rules of state agencies, 183.310 to 183.550

Deaths or injuries to be reported, Ch. 146 Discrimination in public places, 30.670

District boundary changes, 199.464

Safe drinking water projects, 285.757

Swimming pools, joint construction and operation by local governments, Ch. 190

448.100

County authority to restrain violation of public health laws, 431.157

448.115 to 448.285

Declaration of area of ground water concern, 468B.175

Declaration of ground water management area, 468B.180

Health hazard annexation or district formation, facilities and services, boundaries, 431.705 to 431.760

448.315

Police standards and training, 181.610 to 181.690

- (9) "Supervise" means to operate or to be responsible for directing employees that are responsible for the operation of a water system.
- (10) "Water distribution system" means that portion of the water system in which water is stored and conveyed from the potable water treatment plant or other supply point to the premises of a consumer.
- (11) "Water system" includes sewage treatment works or potable water treatment plants and water distribution systems that have 15 or more service connections used by year-round residents or that regularly serve 25 or more year-round residents. [1987 c.635 §1]

Note: 448.405 to 448.470 and 448.992 and 448.994 were enacted into law by the Legislative Assembly but were not added to or made a part of ORS chapter 448 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

448.407 Advisory committee to commission and division. To aid and advise the Environmental Quality Commission and Health Division in the adoption of rules under ORS 448.410 and 448.450, the Director of the Department of Environmental Quality and the Assistant Director for Health shall appoint an advisory committee. The members of the committee shall include but need not be limited to representatives of all types of water systems. [1987 c.635 §16]

Note: See note under 448.405.

- 448.409 Biennial report. On or before January 1, 1989, and biennially thereafter, the Department of Environmental Quality and Health Division shall develop and submit a joint report to the Legislative Assembly. The report shall include, but need not be limited to:
- A summary of actions taken under ORS 448.405 to 448.470, 448.992 and 448.994;
- (2) An evaluation of the effectiveness of such actions; and
- (3) Any information and recommendations, including legislative recommendations the department or the division considers appropriate. [1987 c.635 §17]

Note: See note under 448.405.

(Sewage Treatment Works)

- 448.410 Authority and duties of Environmental Quality Commission. (1) The commission shall:
- (a) Adopt rules necessary to carry out the provisions of ORS 448.410 to 448.430 and 448.992.
- (b) Classify all sewage treatment works. In classifying the sewage treatment works, the commission shall take into consideration size and type, character of wastewater to be treated and other physical conditions affect-

- ing the sewage treatment works and the skill, knowledge and experience required of an operator.
- (c) Certify persons qualified to supervise the operation of sewage treatment works.
- (d) Subject to the prior approval of the Executive Department and a report to the Emergency Board prior to adopting the fee, establish a schedule of fees for certification under paragraph (c) of this subsection. The fees established under the schedule shall be sufficient to pay the costs incurred by the department in carrying out the provisions of ORS 448.410 to 448.430 and 448.992 and shall be within the budget authorized by the Legislative Assembly as that budget may be modified by the Emergency Board.
- (2) The commission may grant a variance from the requirements of ORS 448.415, according to criteria established by rule by the commission.
- (3) In adopting rules under this section, the commission shall consult with the Health Division in order to coordinate rules adopted under this section with rules adopted by the Health Division under ORS 448.450. [1987 c.635 §2; 1991 c.703 §9]

Note: See note under 448.405.

- 448.415 Certification required for operators. (1) Except as provided in ORS 448.430, any sewage treatment works, whether publicly or privately owned, used or intended for use by the public or private persons must be supervised by an operator certified pursuant to ORS 448.410. The operator's certification must correspond to the classification of the sewage treatment works supervised by the operator.
- (2) Except as provided in ORS 448.430, a person may not:
- (a) Allow any sewage treatment works to be operated unless the operator is certified or the sewage treatment works is supervised by an operator certified under the provisions of ORS 448.410 to 448.430 and 448.992.
- (b) Perform the duties of an operator unless the person is certified under the provisions of ORS 448.410 to 448.430 and 448.992. [1987 c.635 §§3, 4]

Note: See note under 448.405.

448.420 Special certification provisions. On and after September 27, 1987, an operator holding a current Oregon sewage treatment certification issued under a voluntary certification program shall be considered certified under the program established under ORS 448.410 at the same classification and grade. Certification of operators by any state that, as determined by the director, accepts certifications made under ORS 448.410 to 448.430 and 448.992, shall be accorded re-

try and determine any prosecution brought under such ordinance. If prosecution is had in a justice of the peace court or a district court, the court shall remit to the city, after deducting court costs, the amount of any fine collected, except as otherwise provided by ORS 46.045 (2). If a jail term is imposed, the convicted person shall be confined in the city jail or in the county jail and if confined in the county jail the county shall be entitled to recover from the city the actual costs of such incarceration. [Formerly 449.328]

448.325 Injunction to enforce city ordinances. In cases of violation of any ordinance adopted under ORS 448.300 or 448.305 any city or any corporation owning a domestic water supply source or the community water supply system for the purpose of supplying any city or its inhabitants with water may have the nuisance enjoined by civil action in the circuit court of the proper county. The injunction may be perpetual. [Formerly 449.340]

(Water Pipes and Fittings)

448.330 Moratorium of pipe and fittings for potable water supply; acceptability criteria; exceptions. (1) The Assistant Director for Health may prohibit the sale of water pipe used to carry potable water and solders, fillers or brazing material used in making up joints and fittings in this state and the installation or use of water pipe used to carry potable water and solders, fillers or brazing material used in making up joints and fittings in any private or public potable water supply system or individual water user's lines until such time as the assistant director determines that adequate standards exist and are practiced in the manufacture of water pipe used to carry potable water and solders, fillers or brazing material used in making up joints and fittings to insure that the pipe and solder do not present a present or potential threat to the public health in this state.

(2) The Assistant Director for Health shall adopt, by rule, product acceptability criteria for water pipe used to carry potable water and solders, fillers or brazing material used in making up joints and fittings for water supply purposes which insure that the pipe and solder do not present a threat to the public health in this state. The Health Division shall be responsible for the monitoring of the sale and use of water pipe used to carry potable water and solders, fillers or brazing material used in making up joints and fittings for compliance with the product acceptability criteria. The Building Codes Agency shall cooperate with, and assist, the Health Division in its monitoring efforts.

- (3) No water pipe used to carry potable water or solders, fillers or brazing material used in making up joints and fittings which does not conform to the product acceptability criteria adopted under subsection (2) of this section shall be sold in this state or installed in any part of any public or private potable water supply system or individual water user's lines.
- (4) Notwithstanding subsection (1) or (3) of this section, the Assistant Director for Health may grant exemptions from any prohibition of the sale or use of water pipe used to carry potable water for the emergency repair or replacement of any existing part of a water supply system, or for the necessary use by a well driller in the installation of a well. The assistant director may require any person using water pipe used to carry potable water under this subsection to notify the Health Division of the date and location of that use. [1979 c.535 §1; 1987 c.414 §152]

OPERATOR CERTIFICATION FOR SEWAGE TREATMENT WORKS AND POTABLE WATER TREATMENT PLANTS

(Generally)

448.405 Definitions for ORS 448.405 to 448.470. As used in ORS 448.405 to 448.470:

- (1) "Commission" means the Environmental Quality Commission.
- (2) "Department" means the Department of Environmental Quality.
- (3) "Director" means the Director of the Department of Environmental Quality.
- (4) "Division" means the Health Division of the Department of Human Resources.
- (5) "Operator" means a person responsible for the operation of a potable water treatment plant, water distribution system or sewage treatment works.
- (6) "Person" means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, municipality or any other political subdivision of this state, any interstate body or any other legal entity.
- (7) "Potable water treatment plant" means that portion of a water system that in some way alters the physical, chemical or bacteriological quality of the water being treated.
- (8) "Sewage treatment works" means any structure, equipment or process required to collect, carry away and treat domestic waste and dispose of sewage as defined in ORS 454.010.

ciprocal treatment and shall be recognized as valid and sufficient within the purview of ORS 448.410 to 448.430 and 448.992, if in the judgment of the director, the certification requirements of such state are substantially equirements of ORS 440.0 to 448.430 and 448.992 or any rule adopted under ORS 448.410 to 448.430 and 448.992. [1987 c.635 §5]

Note: See note under 448.405.

448.425 Deposit and use of fees. Any fees collected pursuant to the schedule adopted under ORS 448.410 shall be deposited in the General Fund of the State Treasury to the credit of the Department of Environmental Quality. Such fees are continuously appropriated to the department to pay the cost of administering the provisions of ORS 448.410 to 448.430 and 448.992. [1987 c.635 §6]

Note: See note under 448.405.

448.430 Certification exception. The requirements of ORS 448.415 shall not apply to:

- (1) Any sewage treatment works with an approved design flow of less than 75,000 gallons a day, if the owner has contracted with a certified operator to provide part-time supervision as the commission by rule determines necessary; or
- (2) A subsurface sewage disposal system as defined in ORS 454.605. [1987 c.635 §7]

Note: See note under 448.405.

(Potable Water Treatment Plants)

148.450 Authority and duties of Health Di (1) The Health Division shall:

- (a) Adopt rules necessary to carry out the provisions of ORS 448.450 to 448.470, 448.992 and 448.994.
- (b) Classify all potable water treatment plants and water distribution systems actually used or intended for use by the public. In classifying the potable water treatment plants and water distribution systems, the division shall take into consideration size and type, character of water to be treated and other physical conditions affecting the treatment plants and distribution systems and the skill, knowledge and experience required of an operator.
- (c) Certify persons qualified to supervise the operation of a potable water treatment plant or a water distribution system.
- (d) Subject to the prior approval of the Executive Department and a report to the Emergency Board prior to adopting the fee, establish a schedule of fees for certification under paragraph (c) of this subsection. The fees established under the schedule shall be sufficient to pay the cost of the division in carrying out the provisions of ORS 448.450 to 448.470, 448.992 and 448.994 and shall be

within the budget authorized by the Legislative Assembly as that budget may be modified by the Emergency Board.

- (2) The division may grant a variance from the requirements of ORS 448.455 according to criteria established by rule by the division.
- (3) In adopting rules under this section, the division shall consult with the Department of Environmental Quality in order to coordinate rules adopted under this section with rules adopted by the Environmental Quality Commission under ORS 448.410. [1987 c.635 §9; 1991 c.67 §125; 1991 c.703 §10]

Note: See note under 448.405.

448.455 Certification required for operators. Except as provided in ORS 448.470, any potable water treatment plant or water distribution system whether publicly or privately owned, used or intended for use by the public or private persons must be supervised by an operator certified pursuant to ORS 448.450. The operator's certification must correspond to the classification of the water treatment plant or distribution system supervised by the operator.

- (2) Except as provided in ORS 448.470, a person may not:
- (a) Allow any potable water treatment plant or water distribution system to be operated unless the operator is certified or the potable water treatment plant or water distribution system is supervised by an operator certified under the provisions of ORS 448.450 to 448.470, 448.992 and 448.994.
- (b) Perform the duties of an operator unless the person is certified under the provisions of ORS 448.450 to 448.470, 448.992 and 448.994. [1987 c.635 §§10, 11]

Note: See note under 448.405.

Special certification visions. On and after September 27, 1987, an operator holding a current Oregon water treatment certification issued under a voluntary certification program shall be considered certified under the program established under ORS 448.450 at the same classification and grade. Certification of operators by any state that, as determined by the division, accepts certifications made under ORS 448.450 to 448.470, 448.992 and 448.994, shall be accorded reciprocal treatment and shall be recognized as valid and sufficient within the purview of ORS 448.450 to 448.470, 448.992 and 448.994, if in the judgment of the Assistant Director for Health, the certification requirements of such state are substantially equivalent to the requirements of ORS 448.450 to 448.470, 448.992 and 448.994 or any rule adopted under ORS 448.450 to 448.470, 448.992 and 448.994. [1987 c.635 §12]

Note: See note under 448.405.

448.465 Deposit of fees. Any fees collected pursuant to the schedule adopted under ORS 448.450 shall be deposited in the General Fund of the State Treasury to the credit of the Health Division. Such fees are continuously appropriated to the department to pay the cost of administering the provisions of ORS 448.450 to 448.470, 448.992 and 448.994. [1987 c.635 §13]

Note: See note under 448.405.

448.470 Certification exception. (1) The requirements of ORS 448.455 shall not apply to a water system for which the source of water is ground water and that has less than 150 service connections. However, the operator of a water system exempt under this section shall not be exempt from any continuing educational requirements established by rule by the Health Division.

(2) The requirements of ORS 448.455 shall not apply to a water system that is directly supervised by a registered professional engineer who has a valid certificate to practice engineering issued under ORS 672.002 to 672.325. [1987 c.635 §14; 1989 c.1091 §1]

Note: See note under 448.405.

PENALTIES

448.990 Penalties for violation of swimming facility or water system requirements. (1) Violation of ORS 448.005 to 448.090 by any person, firm or corporation, whether acting as principal or agent, employer or employee, is punishable, upon conviction, by a fine of not less than \$25 nor more than \$500 or by imprisonment in the county jail not exceeding six months, or by both. Each day that the violation continues is a separate offense.

- (2) Violation of any of the following is punishable as a Class A misdemeanor:
- (a) Any rule of the Health Division adopted pursuant to ORS 448.115 to 448.330.

- (b) Any order issued by the Health Division pursuant to ORS 448.175.
- (c) ORS 448.265 or 448.315 (2)(a). [Amended by 1967 c.344 §8; subsections (2) to (5) enacted as 1973 c.835 §177; 1975 c.254 §18; part renumbered subsection (5) of 468.990; 1983 c.271 §4]

448.992 Sewage treatment works violation penalties. (1) Except as provided in subsection (2) of this section, any person who knowingly and willfully violates ORS 448.415 (2) shall upon conviction be punished by a fine of not more than \$500 per day of violation or imprisonment for not more than six months, or both.

(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under ORS 448.410 to 448.430, or by any rule adopted under ORS 448.410 to 448.430, shall upon conviction, be punished by a fine of not more than \$500 or by imprisonment for not more than six months, or both. [1987 c.635 §8]

Note: See note under 448,405.

448.994 Potable water treatment plant violation penalty. (1) Except as provided in subsection (2) of this section, any person who knowingly and willfully violates ORS 448.455 (2) shall upon conviction be punished by a fine of not more than \$500 per day of violation or imprisonment for not more than six months, or both.

(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under ORS 448.450 to 448.470 and 448.992, or by any rule adopted under ORS 448.450 to 448.470 and 448.992, shall upon conviction, be punished by a fine of not more than \$500 or by imprisonment for not more than six months, or both. [1987 c.635 §15]

Note: See note under 448.405.

ATTACHMENT 3

WASTEWATER SYSTEM OPERATOR CERTIFICATION ADVISORY COMMITTEE MEMBERS

- 1. J. Michael Read, Chair City of Portland 5001 N. Columbia Blvd. Portland, OR 97203
- 2. Gerald W. Breazeale
 League of Oregon Cities'
 Designate
 (City of Madras)
 416 Sixth Street
 Madras, OR 97741
- 3. Glen R. Hogue City of La Grande, Public Works Department 800 X. Avenue La Grande, OR 97850
- 4. John Lewis
 Clackamas Community
 College
 19600 S. Molalla Ave.
 Oregon City, OR 97045
- 5. Leo B. Lightle City of Brookings 898 Elk Drive Brookings, OR 97415
- 6. Holly Mason
 Linn-Benton Community
 College
 Water/Wastewater Dept.
 6500 SW Pacific Blvd.
 Albany, OR 97321
- 7. Terry D. Penhollow SunRiver Utilities P.O. Box 3699 SunRiver, OR 97707
- Paul D. Rogers
 Oregon State Parks
 525 Trade Street
 Salem, OR 97310

- 9. Wayne Weaver
 Bear Creek Sanitary
 Authority
 3915 S. Pacific Hwy.
 Medford, OR 9750110.
- 10. Stephen R. Yoder City of Silverton 1453 Pine Street Silverton, OR 97381

Environmental Quality Commission

☐ Rule Adoption Item		
☐ Action Item		Agenda Item <u>N</u>
☐ Information Item		January 29, 1993 Meeting
Title:		
Periodic Rule Review		
Summary:		
report is the result of int intended to analyze whet	ed to review their administrative ternal rule review as well as pub- ther rules should be amended, re- on minimizing economic effect	escinded, or retained without
-	from over 7,000 individuals when The agency received 24 respon	
new or have recently bee considered when the rule	en revised. Also, the criteria listers were created. In general, the ales. These committees help en	
Department Recommendat	ion:	
It is recommended that t staff report and attachme		review reports as presented in the
		7 . (1)
Report Author	Division Administrator	Director

[†]A large print copy of this report is available upon request.

State of Oregon Department of Environmental Quality

Memorandum

Date: January 29, 1992

To:

Environmental Quality Commission

From:

Fred Hansen, Director

Subject:

Agenda Item N, January 29, 1993 EQC Meeting

Periodic Rule Review Report

Statement of the Issue

State agencies are required to review their rules every three years. The Department has completed the required review, including internal and public input for Oregon Administrative Rules chapter 340, divisions 11 through 180. This agenda item is a report on the process and the recommendations.

Background

ORS 183.545-550 requires state agencies to review all of their administrative rules every three years. The review process is intended to analyze whether rules should be amended, rescinded, or retained without change. It also requires an analysis of ways to minimize the impact of rules on business and whether small business is impacted disproportionately.

The Department reviews and updates rules frequently due to program development, changing federal laws, and required EPA review of certain programs. Throughout these rule changes, the Department relies extensively on advisory committees and public input.

The process officially began in September of 1991 when notices were sent to names on any lists that would imply they were interested in DEQ rules. The Department used 49 lists and solicited public comment from over 7,000 individuals. The Department received 24 written responses and the programs also conducted internal rule reviews.

The internal rule reviews and analysis of public comments have been compiled as Attachments A and B to this agenda item.

Memo To: Environmental Quality Commission Agenda Item N January 29, 1993 Meeting Page 2

Authority to Address the Issue

The statute requiring periodic rule review has been in place since 1981 and states:

ORS 183.545-183.550.

183.545 Review of rules to minimize economic effect on businesses. Each agency periodically, but not less than every three years, shall review all rules that have been issued by the agency. The review shall include an analysis to determine whether such rules should be continued without change or should be amended or rescinded, consistent with the stated objectives of applicable statutes, to minimize the economic effect on businesses and the effect due to size and type of business.

- 183.550 Public comment; factors to be considered in review. (1) As part of the review required by ORS 183.545, the agency shall invite public comment upon the rules. (2) In reviewing the rules described in subsection (1) of this section, the agency shall consider:
 - (a) The continued need for the rule;
- (b) The nature of complaints or comments received concerning the rule from the public;
 - (c) The complexity of the rule;
- (d) The extent to which the rule overlaps, duplicates or conflicts with other state rules or federal regulations and, to the extent feasible, with local governmental regulations;
- (e) The degree to which technology, economic conditions or other factors have changed in the subject area affected by the rule; and
 - (f) The statutory citation or legal basis for each rule.

Summary of Any Prior Public Input Opportunity

Of the 7,000 individuals who received the rule review notice, 24 responded in written comments. Some of the responses were general and did not refer to any specific rules. The comments that were relevant to a specific rule were forwarded to the appropriate program for analysis. Comments and analysis are described in Attachment B.

Conclusions

• As required by statute, the Department has evaluated its rules based on the listed criteria. The rules are determined largely not to need revision because they were recently created or revised and impact on business was taken into account. Many of DEQ's rules are reviewed and changed regularly as required by federal and

Memo To: Environmental Quality Commission Agenda Item N January 29, 1993 Meeting Page 3

state law. DEQ relies heavily on advisory committees when creating rules. The advisory committees always include representatives of businesses that would be affected. This serves as a built in process for minimizing the impact on business.

• The Department needs to update the following rules by the projected dates:

Air Quality housekeeping changes, Agenda item J, January 29, 1993

Division 40, Groundwater, expected in 1995

Division 41, State-wide water quality management plan, Fall 1994

Division 44, Waste disposal wells, 1995

Division 45, NPDES and WPCF permits, mid-1993

Division 49, Certification of water system operators, mid-to-late 1993

Division 50, Land application and disposal of sewage sludge, mid-1993

Division 61, Solid waste management, Spring 1993

Division 71, On-site sewage disposal, Fall 1993

Division 110, PCBs, Summer 1993

Division 111, Used oil/road oiling, mid-1993

Recommendation for Commission Action

It is recommended that the Commission accept the rule review reports as presented in Attachments A and B of the Department Staff Report for Agenda Item N.

Attachments

- A. Rule Review Reports from internal review in programs
- B. Rule Review public comments, analysis, and recommendations
- C. Public notice of Rule Review
- D. Index of Department rules

Approved:

Section:

Division:

Report Prepared By: E

Elana Stampfer

Phone: 229-5889

Date Prepared: December 29, 1992

1991/2 PERIODIC RULE REVIEW CHECKLIST DEQ AIR QUALITY DIVISION

RULE	: OAF	340-	■ ************************************
REVI	EWER:		DATE:
Α.	SIME	PLE CI	LEAN-UP ISSUES:
1.		NO	THERE ARE TYPOGRAPHICAL AND/OR GRAMMATICAL ERRORS IN THE RULE. IF YES, SPECIFY:
2.			THE RULE CONTAINS CITATIONS TO: ANOTHER RULE; ANOTHER SECTION WITHIN THE SAME RULE; THE OR OR CFR; OR THE ORS. IF YES:
			YES NO ALL CITATIONS ARE CORRECT. IF NO, LIST INCORRECT AND CORRECT CITATIONS:
3.			THE RULE CONTAINS DEFINITIONS OR SPECIFIES THE APPLICABILITY OF A RANGE OF RULES. IF YES:
			THE RANGE OF RULES AFFECTED IS SPECIFIED. IF NO, LIST CORRECT RANGE:
4.			THE RULE REQUIRES SOURCE TESTING OR CONTAINS AN EMISSION STANDARD. IF YES:
			YES NO TEST METHODS ARE CORRECTLY REFERENCED. IF NO, SPECIFY METHOD:
5.			THE RULE IS (OR SHOULD BE) PART OF THE STATE IMPLEMENTATION PLAN (SIP). IF YES:
	·		YES NO THE LAST TIME THE RULE WAS AMENDED, OAR 340-20-047 WAS ALSO AMENDED.

(В.	ISSUES THAT MAY REQUIRE MORE EVALUATION: YES NO EVAL-
	1.	UATE THE RULE IS STILL NEEDED.
	2.	THE RULE SHOULD BE SIMPLIFIED.
•	3.	THE RULE LIKELY CONFLICTS WITH OR UNNECESSARILY DUPLICATES OTHER FEDERAL, STATE OR LOCAL LAW.
	4.	THE RULE LIKELY COULD BE REVISED TO REDUCE ECONOMIC IMPACT OR ENHANCE JOB PRODUCING ENTERPRISES WITHOUT UNDERMINING ITS PURPOSE OR VIOLATING FEDERAL OR STATE LAW.
·	5.	THE RULE LIKELY NEEDS TO BE REVISED DUE TO CHANGES IN TECHNOLOGY OR OTHER FACTORS.
**************************************	c.	OTHER INFORMATION:
	1.	YES NO STATUTORY AUTHORITY EXISTS FOR THE RULE. LIST THE AUTHORITY (SECTION OR RANGE OF SECTIONS):
	2.	ORS THE RULE IS ALREADY SCHEDULED FOR REVISIONS. IF YES, INDICATE SCHEDULE:

1991/2 PERIODIC RULE REVIEW CHECKLIST DEQ AIR QUALITY DIVISION

INSTRUCTIONS

Check the appropriate boxes for the rule(s) assigned to you, fill in appropriate details if known, and return to the Yone McNally by January 17, 1992.

Item by item instructions:

- A. Simple Clean-up Issues:
 - 1. Indicate if there are any typographical and/or grammatical errors. In some cases, the official printing of the rules has erroneous headings, missing words, and other problems. Some are hard to understand due to sentence structure. If you read a provision and have to ponder about what it means, check this box.
 - 2. Mark each type of citation contained in a rule and verify that the citations are correct by looking them up.

For citations to another rule or another section within the same rule, please note the following numbering system used in the OAR: Chapter-Division-Rule(Section)(subsection)(paragraph)(subparagraph). For example, OAR 340-25-465(5)(a)(A)(i) is chapter 430, division 25, rule 465, section (5), subsection (a), paragraph (A), subparagraph (i). In some cases, our rules mix up the terms rule and section (e.g. stating "as used in this section" when meaning "as used in this rule"). If you're not sure, ASK.

For citations to the Federal Register (FR) or Code of Federal Regulations (CFR), be aware that the citation is to the rule as it appeared in the FR on the date cited or in the CFR on the July 1 preceding the adoption of the OAR. If you want to incorporate any amendments in the federal rule since adoption, we must revise the OAR. If the citation is to the FR, in most cases it should be revised to a CFR citation with a publication date for clarity. The following format should be used:

- a. If the latest CFR is the correct citation -> "40 CFR 60.53 (published July 1, 1991)";
- b. If the CFR as of a previous publication date is correct and latest CFR is not correct -> "40 CFR 60.53 (published July 1, 1989)";

c. If the federal rule was amended since July 1, 1991 and the latest version is correct -> "56 FR 47404 (published September 19, 1991)";

d. If you mean to refer to a specific FR because the CFR includes other amendments you don't want or because the FR was a notice or other item which didn't amend the CFR -> "50 FR 15392 (published April 17, 1985".

For citations to the ORS, note that most of Air Quality's rules are now in Chapter 468A, and the sections in the statue have been reorganized. Look up the new citation.

- 3. Definition rules and applicability rules should specify the range of rules that they refer to. The following format should be used:

 - b. If a definition rule refers to a range of rules ->
 "As used in OAR 340-25-305 through 340-25-325{;
 unless otherwise required by context]:";
 - c. If an applicability rule refers to an entire division -> "The rules in this Division apply to ...";
 - d. If an applicability rule refers to a range of rules -> "OAR 340-30-012 through 340-20-115 apply to ...".
- 4. If a rule requires a source to conduct source testing, the test method should be specified, along with any modifications to the test procedures found in the source test manual.

If a rule contains an emission standard, the applicable test method should be specified and the source test manual should be referenced.

Check with Mark Fisher for the appropriate test method.

If a rule is (or is intended to be) part of the State Implementation Plan (SIP), each time it is amended, OAR 340-20-047 must be amended also to incorporate the change into the SIP. A first cut method test is to look at the last date the rule was amended (in the history section at the end of the rule) and see if OAR 340-20-047 was amended on that same date. If it is not, flag it for further review.

The following rules are part of the SIP:

<u>Division</u>	Rules		
14	All		
20	001-047,	140-430	
21	A11		
22	005-300		
23	All		
24	300-310,	315-335,	340-350
25	005-025,	105-430,	850-905
26	All	-	
27	All		
29	All	•	
30	All		
31	005-040,	055	
34	A11		

B. Issues That May Require More Evaluation:

Please flag rules that need revisions or should be evaluated to determine if they need revisions based on the issues raised in this section. These revisions or evaluations will likely require additional time and will not be on the Periodic Rule Review track, but we should identify them now for continuing investigation. Note any supplementary information on the checklist needed to clarify the revisions needed.

A rule or portion of a rule may no longer be needed or may need revisions because:

- o the regulated source type no longer exists,
- o the rule is superseded by another rule (e.g. an interim requirement is superseded by a final requirement),
- o the federal requirement has changed,
- o a compliance schedule has expired (can the schedule be deleted?),
- o the rule is too complex,
- o technology or economic factors have changed, or
- o other reasons.

C. Other Information:

- 1. List the ORS section number(s) that provides statutory authority for the rule (e.g. ORS 468.065). Note: following the 1991 Legislative session, the ORS was reorganized, and most of the Air Quality Division sections were moved to from ORS chapter 468 to chapter 468A. You can get a copy of the new ORS chapters from Andy Ginsburg or Yone McNally.
- 2. Check if the rule is currently being revised or will soon be revised for other reasons. Note if any issues raised on the checklist will be addressed at that time.

Agenda Item N ATTACHMENT A

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

INTERNAL RULE REVIEW

Each program at the Department of Environmental Quality (DEQ) conducted an internal rule review. The reports for Water Quality, Hazardous and Solid Waste, and Environmental Cleanup and Air Quality follow.

WATER QUALITY PROGRAMS

Water quality programs are covered in Oregon Administrative Rules (OAR) Chapter 340, Divisions 40-41,43-56, 71-73, and 81.

DIVISION 40

GROUNDWATER QUALITY PROTECTION

The rules within this Division establish the mandatory minimum groundwater quality protection for state agencies, cities, counties, industries, and citizens. The rules cover both point and non-point sources of pollution. 340-40-001 to 340-40-080 are predominately applied to point sources of pollution which required a discharge permit of some type. Rules above 340-40-100 are applicable to non-point pollution control efforts. Removal and remedial actions subject to Oregon Revised Statutes (ORS) 465.200 to 465.380, 466.705 to 466.835, and 466.895 are not subject to the requirements of these rules.

1) Economic impact of the rule

The Groundwater Quality Protection rules do cause an economic impact because they require facilities discharging waste to the groundwater to provide pollution control facilities for limiting pollutant discharges to groundwater.

2) Continued need for rule

Protection of groundwater quality is a high priority of the state; several of the minor state benchmarks focus on groundwater. Because of public demands the Department revised and adopted the point source rules in October 1989 (OAR 340-40-001 to 080). Additionally, the Oregon Legislature passed the Groundwater Protection Act in 1989. The rules are relatively new and implementation of these statutes and rules are still in progress.

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3) Complexity or redundancy of the rule

The rules have been written using advisory committees to ensure better clarity. Additionally, guidance documents were produced when the rules were adopted to better explain the requirements and options within the rules. These guidance documents are now in the process of being updated to better address issues that have arisen since the original rules and guidance were developed.

4) Extent to which rules overlap, duplicate or conflict with other state rules

The rules were crafted to avoid overlapping, duplicating or conflicting with other rules and regulations. This was achieved by developing the rules through advisory committees, which had the appropriate representative on them and holding extensive public hearing on the rules. There are no parallel federal or local regulations which address groundwater protection issues.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The technology for the protection of groundwater is continually being improved and advanced in many areas. The groundwater protection rules have been designed to take into consideration new advances in groundwater protection and are flexible enough to accommodate new technologies. Economic conditions have not changed significantly since the adoption of these rules; additionally, many studies have shown that protection of the groundwater resource is much cheaper and more cost effective that cleaning up the groundwater after it has been contaminated.

6) Statutory citation or legal basis for the rule

OAR:	ORS:
340-40-001 to 080 340-40-100 to 135	468.015, 468.020 and 468.700 to 468.720 468.020, 468.694 and 536.137

7) The rule's potential for enhancement of job producing enterprises

The rules require the development, design and construction of pollution control facilities. These activities are supported by consulting firms which develop plans and designs and construction firms which build the physical pollution control facilities.

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8) Internal consistency of the rule

The rules were developed through advisory committees and public hearings to ensure that internal consistency was maintained. Public comments have not noted any inconsistency problems with the rules.

DIVISION 41

STATE-WIDE WATER QUALITY MANAGEMENT PLAN: BENEFICIAL USES, POLICIES, STANDARDS, AND TREATMENT CRITERIA FOR OREGON

1) Economic impact of the rule

The Water Quality Management Plan rules do cause an economic impact because they establish water quality protection policies, standards and treatment criteria which have to be achieved by water pollution sources. This requires the pollution sources to treat their wastewater before being discharged to waters of the state, thus requiring sources to expend resources for wastewater treatment.

2) Continued need for rule

It is the specifically stated policy of the state to protect water quality to provide for the identified beneficial uses of the water. Wastewater continues to be produced and discharged to the waters of the state; therefore, the rules are needed to prescribe the necessary levels of wastewater treatment and beneficial use protection.

3) Complexity or redundancy of the rule

The rules are written to describe the general policies and standards statewide as well as identify the specific standards for each individual basin within the state. This was done to provide an overall statewide direction to the program as well as provide sources within each individual basin with the specific information on the requirements for that particular basin. The rules are complex because the establishment of specific water quality standards for each and every basin is complex. The Department is required by federal law to review the standards every three years to determine if they continue to provide the necessary level of protection and are kept up to date with current scientific information and knowledge.

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4) Extent to which rules overlap, duplicate or conflict with other state rules

These rules do not overlap nor are they redundant with any other rules of the Department because this is the only rule division establishing water quality protection standards and policies for water of the state.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The science behind the water quality standards is constantly under review. Research is always underway to examine many different parts and elements of the standards. Consequently, it is required by federal law that the Department review the standards every three years to determine if they still reflect the current scientific information. The latest review was completed in September 1991. The Department has just recently initiated the next triennial standards review which will be completed in the fall of 1994.

6) Statutory citation or legal basis for the rule

The Commission's authority to establish water quality policy and standards is contained in ORS 468B.

7) The rule's potential for enhancement of job producing enterprises

The rules provide the basis for protecting water quality in Oregon. As such, they identify for potential industrial and commercial wastewater sources the specific requirements for operation in the state. This provides certainty in the requirements. Rule implementation provides job opportunities in many sectors including the environmental consultant field and basic pollution control technologies. The construction of wastewater control and treatment facilities provides a significant level of opportunity in the construction industry.

8) Internal consistency of the rule

The Department is, as mentioned before, continually reviewing and revising the standards. Part of this review is to determine if they are internally consistent.

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DIVISION 43

CHEMICAL MINING

1) Economic impact of the rule

There will be an economic impact associated with this rule. The rule requires certain controls of cyanide and other chemicals used in mining which may be costly to implement. The rule will add to the cost of extracting gold from low grade ores, which will reduce the profit margin for the activity. The rule may prevent mining of some very low grade ores.

This is a new rule adopted September 1, 1991. Since the rule was adopted, there have been no chemical mining operations proposed, although there are some applications being prepared. Consequently, the exact economic impact is unknown at this time.

2) Continued need for the rule

This is a new rule, and need for the rule has not diminished since its adoption.

3) Complexity or redundancy of the rule

This rule is necessarily complex because it regulates a complex industry. The rule is new and has not yet been tried on a project. Until a project has actually been through the process under the rule, we will not know whether there are unacceptable complexities which are not now apparent. The rule is not redundant. The Department worked closely with the Department of Geology and Mineral Industries (DOGAMI) in the development of the rule. The rule does refer the applicant to certain statutory requirements of DOGAMI.

4) Extent to which rule overlaps, duplicates or conflicts with other state rules

Rather than duplicating other state rules, the rule adds by reference other applicable water quality related rules which might apply to a chemical mining operation.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

This is a recently adopted rule and should be up to date with technology, economic conditions, or other factors.

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6) Statutory citation or legal basis for the rule

The Commission's authority to adopt rules for the protection of water quality is found in ORS 468B.

7) The rule's potential for enhancement of job producing enterprises

Until the rule was adopted, the mining industry did not know what would be expected of them in a mining project in Oregon. Since Oregon is known as an environmentally conscious state, there has been some reluctance to mine here because of the uncertainties of regulation. With the adoption of the rules, the requirements are known and new mining operations are likely to be initiated. The environmental requirements of the rules will provide opportunities for engineers and other consultants to develop treatment and control systems.

8) Internal consistency of the rules

In the development of this rule, great care was taken to maintain consistency with other Department rules.

DIVISION 44

CONSTRUCTION AND USE OF WASTE DISPOSAL WELLS OR OTHER UNDERGROUND INJECTION ACTIVITIES

1) Economic impact of the rule

This rule does prohibit certain underground injection activities in Oregon. This may have an economic impact. For example, in many states, hazardous wastes are injected into the ground for disposal through deep disposal wells. This rule prohibits deep well injection of hazardous wastes. In Oregon, hazardous waste must go to a licensed above-ground hazardous waste disposal site. We have no information as to whether underground injection in Oregon's geologic structure would be less expensive that the above-ground disposal currently permitted.

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2) Continued need for rule

The Underground Injection Control (UIC) program is one of the water pollution control programs delegated to the Department by EPA under the Safe Drinking Water Act. Without rules regulating these practices, the program could not be delegated to Oregon but would be controlled by EPA. In addition, for the protection of groundwater, this rule or an equivalent is essential.

3) Complexity or redundancy of the rule

This rule is not redundant to other rules affecting underground injection activities. The rule was last modified in 1983. Since then the state has adopted new groundwater policy and developed groundwater protection rules. This underground injection control rule now needs to be updated to address some additional issues and to better regulate certain aspects of underground injection associated with certain wastewaters such as storm water. It is the Department's intent to modify this rule in the near future.

4) Extent to which rules overlap, duplicate, or conflict with other state rules

DOGAMI does have rules related to the underground injection of oil and gas field production water. The Department works closely with them and does not duplicate their efforts. In addition, the Department of Water Resources does have rules pertaining to the injection of geothermal fluid. Again, the Department works closely with them and does not duplicate their requirements. The Department does not believe that the rule overlaps, duplicates, or conflicts with other state rules.

5) Degree to which technology, economic condition, or other factors have changed in the affected subject area

There have been no changes in technology, economic conditions, or other factors which have made this rule outdated, ineffective, or in need of modification. There are other reasons listed in this review which will impel the Department to expand and modify the rules.

6) Statutory citation or legal basis for the rule

The Commission's authority to establish water quality rules is contained in ORS 468B.

7) The rules potential for enhancement of job producing enterprises

This rule is strictly regulatory and has no potential for enhancement of job producing enterprises.

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8) Internal consistency of the rule

The rule is not inconsistent with other rules within the agency. However, the rule does need to be expanded to address other issues which are related to the groundwater policy and rules.

DIVISION 45

REGULATIONS PERTAINING TO NPDES AND WPCF PERMITS.

1) Economic impact of the rule

Division 45 has substantial fiscal and economic impacts on municipalities, industries, small businesses, government and the general public. These impacts are both positive and negative. Negative fiscal impacts are associated with costs for collection, transport, and treatment of wastes and disposal of the treated effluent and sludge. These costs include capital investment, operation and maintenance costs and payment of waste treatment permit fees to the Department. The total costs are not known but capital investment alone in municipal treatment facilities, from 1970-1988, was estimated by DEQ water quality staff to be in excess of \$1 billion. Capital investment in industrial treatment facilities is probably equivalent to investment in municipal facilities. Costs for collection of wastes and for ongoing operation and maintenance are not included in the above estimates. A reasonable estimate of total pollution control costs for facilities regulated by NPDES and WPCF permits in Oregon from 1970-1990 would be \$3 billion. In addition, permitted municipal and industrial sources pay permit processing and annual compliance determination fees. These fees amount to about \$1.5 million annually statewide.

The fiscal impacts of the costs are borne by all users of the collection and treatment systems and by industry customers either through direct billings or product prices. Municipal rate payers pay an average statewide of \$16-22 per month for debt retirement and ongoing operation and maintenance.

There are substantial positive fiscal and economic impacts associated with the NPDES and WPCF permit rules. Most pollution abatement in the state is performed by municipal and industry sources operating under these permits. Without the high degree of treatment provided by municipalities and industry, most rivers and smaller streams would be seriously polluted, and water quality standards would not be attainable. Water contact recreation would not be possible and both fresh and salt water commercial and sports fisheries would be drastically curtailed.

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2) Continued need for the rule

NPDES and WPCF permits are the primary tools for regulating point source discharges of waste in Oregon. There is no other mechanism for achieving waste treatment and for allowing specified effluent discharge loads to streams. The permitting process is also the primary tool for preventing discharges to ground water. Without Division 45 there would be no way to control point source waste discharges in Oregon.

Division 45 also includes waste discharge permit fees for all domestic and industrial sources under permit. The fees provide approximately 40 percent of the water quality division revenue for municipal and industrial permitting activities, for pretreatment and sludge management activities and for compliance determination activities. With fiscal restraints imposed by Measure 5 tax limitations and reduction of federal program grant funds, these fees will be an increasing share of the water quality program revenue. Elimination of the fees would result in a severe curtailment of essential activities.

3) Complexity or redundancy of the rule

The rules governing issuance of NPDES and WPCF permits are not complex. The rules clearly set forth requirements for obtaining permits and there is no redundant language. As noted below there are no conflicts between the Division 45 rules and other state or federal rules.

4) Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations, and local government regulations

There are federal regulations which require issuance of NPDES permits. The regulations specify minimum treatment requirements which must be met. The federal regulations do not conflict with Division 45 because NPDES permit activities have been delegated from EPA to the State of Oregon. In effect, the state rules are applied in lieu of minimum federal regulations.

The rules pertaining to permit issuance do not overlap with other state regulations. DEQ is the only state agency authorized to regulate wastewater treatment and discharge.

The rules do not duplicate or conflict with local government ordinances. Generally, local governments adopt environmental ordinances to implement state regulatory requirements. Some local government ordinances extend or augment state permitting requirements.

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5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

New technology occurs continually in the wastewater treatment field. The Division 45 rules specify permitting requirements but are not technology specific. Permits are written for environmental and public health protection. Permittees are free to choose the appropriate technology necessary to meet the permit requirements.

Division 45 does not directly address economic conditions in issuance of NPDES or WPCF permits, i.e., permit requirements must be met regardless of current or changed economic conditions. The rules are sufficiently flexible, however, to allow water quality program permit writers to negotiate implementation schedules which recognize economic conditions. If, for example, a permittee cannot meet a specified permit requirement, a stipulation and final order can be prepared which will reduce treatment requirements and override permit conditions. The order would include a negotiated schedule for upgrading the treatment facility—the schedule can be lengthened to account for economic conditions.

Division 45 allows for waiver or reduction of waste treatment annual compliance determination fees based on "hardship." The rules need to be amended to specify hardship and to specifically address economic conditions related to hardship.

6) Statutory citation or legal basis for the rule

468.065	Issuance of permits; content; fees; use
468.070	Denial, modification, suspension or revocation
468B.005	Definitions for water pollution control laws.
468B.025	Prohibited Activities
468B.035	Implementation of Federal Water Pollution Act
468B.050	When permit required

7) The rules' potential for enhancement of job producing enterprises

Division 45 requires substantial capital investment and ongoing expenditures for day-to-day operations. To the extent that the funds could be used for productive enterprise, the rules diminish potential for job creation. However, since the rules require wastewater treatment permits, they lead directly to job creation in water pollution control activities. Examples include jobs for system maintenance and jobs for operation of sewage treatment plants and industrial waste treatment facilities. More importantly, the rules are essential for maintaining a clean environment. Most industries are extremely sensitive to the need for a clean environment as a necessary condition for attracting skilled employees. Without assurances of a clean environment the state would be unable to attract new industry

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8) Internal consistency of the rule

There are several internal inconsistencies in Division 45 which need to be addressed in the near future. These are enumerated as follows:

- While the permit processing fees for domestic waste treatment permits and industrial treatment permits are comparable, the annual compliance determination fees do not appear to be comparable. For example the annual compliance determination fee for a major pulp and paper mill is \$6,000; but the annual fee for a community such as Salem is over \$45,000. Both are considered major facilities. Either the rules should be amended or documentation should be developed to justify the fee differential.
- The section of the rules regulating pretreatment should be modified to exempt permittees less than 5 million gallons per day (mgd) from the provisions of the federal pretreatment program but also to allow DEQ regulation of categorical industries within the boundaries of these permittees. This will require some mechanism to regulate in lieu of a permit.
- The section of the rules describing when a permit is required needs clarification regarding publicly-owned collection systems which discharge to other publicly-owned systems for subsequent treatment and discharge. The rules should be modified to enable/require the Department to issue a WPCF permit, or to more clearly exempt these systems from permitting requirements.

DIVISION 47

REGULATIONS PERTAINING TO OIL SPILLS INTO PUBLIC WATERS

Rules within this Division were developed pursuant to ORS 468B.300 to 468B.990. Initial sections of these rules which prescribe procedures for reporting, controlling and cleaning up oil spills into public waters and for approvals for use of chemicals and for disposal of spilled oil were adopted by the Environmental Quality Commission (EQC) in 1972. Substantial additions related to oil spill contingency planning and fees were adopted in 1991 and 1992 based on new legislation passed by the 1991 legislature. Advisory Committees are currently evaluating the need for additional rules related to prevention of oil spills. Future work will examine natural resource damage assessment.

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1) Economic impact of the rule

These rules are directed at the maritime shipping industry and oil transport and storage industry. There is an economic impact on the industry in terms of fees to the Department to support the oil spill prevention program; cost for membership in an association or to a firm to provide oil spill response capability and for liability insurance; and costs for contingency plan development, equipment, training and drills.

2) Continued need for rule

Oil spill prevention and response preparedness is a high priority to the state, region and nation as indicated by recent legislation passed on the state (1989, 1991) and federal (1990) level and emphasis on regional cooperation through the State/BC Task Force (West Coast states and British Columbia). Cooperative efforts have been made to develop rules and programs with the State of Washington, U.S. Coast Guard (USCG), oil industry and environmental community. The Department has recently developed these rules through advisory committees and public comment and is currently in the process of developing additional rules related to oil spill prevention, natural resource damage assessment and use of dispersants. Planning and implementation of these rules is in progress.

3) Complexity or redundancy of the rule

These rules, while somewhat complex, were developed to be consistent with the State of Washington. This was a priority as much of the regulated community is also regulated by rules from the State of Washington. The USCG is currently developing contingency planning rules. As stated in the purpose statement of the rules, the contingency plan rules are intended to promote a consistent west coast approach to oil spill prevention and response and support coordination with state, federal and other contingency plans.

4) Extent to which rules overlap, duplicate or conflict with other state rules

These rules do not overlap, duplicate or conflict with other rules within the state and complement, as well as possible, rules in the State of Washington. Other state agencies, the State of Washington and the USCG were involved in the development of these rules. Industry and the environmental community was strongly involved and reviewed and commented on the rules to insure that they did not overlap with other rules. The rules and statues require that contingency plans be reviewed by other state and federal agencies as part of the review process.

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5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

Oil spill cleanup technology is continuing to be improved and refined. The rules and required plans have the flexibility to take this into account. Given the recent adoption of these rules, the economic conditions in the affected subject area have not greatly changed.

6) Statutory citation or legal basis for the rule

OAR:

ORS:

340-47-005 to 230

468B.300 to 468B.990

7) The rule's potential for enhancement of job producing enterprises

The rule has potential for enhancing job producing enterprises, especially in the areas of oil spill contingency planning, risk reduction, response training and preparedness.

8) Internal consistency of the rule

These rules do not appear to cause any internal inconsistencies.

DIVISION 48

CERTIFICATION OF COMPLIANCE WITH WATER QUALITY REQUIREMENTS AND STANDARDS

1) Economic impact of the rule

The rules do have an economic impact. They require that activities being conducted under federal permits meet the state's water pollution control program requirements. Therefore, individuals conducting activities requiring federal permits such as hydroelectric facilities are required to submit an application to the Department for a Section 401 certification. The economic impact occurs when applicants develop the information for the application and conduct the necessary work or activity required by the Department to protect the water quality. These activities must be in compliance with the state's water quality standards.

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2) Continued need for rule

The rule continues to be needed because these activities continue to be undertaken in the state. The rules help ensure that the regulated activities are performed in an environmentally sound manner.

3) Complexity or redundancy of the rule

The rules are not complex. They identify what information the applicant needs to include in the application. The Department has worked with other state and federal agencies to minimize redundancy in this rule. We at all possible opportunities attempt to use the information developed by the applicant to satisfy other agency requirements, if relevant. We also have identified and worked with the federal agencies for which this certification is needed to inform the applicant an early stage of project requirements.

4) Extent to which rules overlap, duplicate or conflict with other state rules

No other state agency has the responsibility to provide this certification nor does any other state agency have the authority to establish water quality standards and policies or to make certifications that activities conducted under federal permit comply with the state water pollution control program; therefore, it does not conflict with other programs or rules. On the contrary, it is usually specifically identified in other state and federal program rules and regulations as needed for the proposed activity.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The rules themselves do not prescribe technologies the specific conditions of a certification or technologies of the proposed activity may change over time. One specific interest of the certification is to see that the proposed activity is being conducted with the current technology.

6) Statutory citation or legal basis for the rule

ORS 468B.035 ORS 468B.040 and .045 Agenda Item N Attachment A Page 15 January 29, 1993

7) The rule's potential for enhancement of job producing enterprises

The rule provides opportunities for environmental consultants, and reduces the time needed to receive certifications by identifying the information needed to proceed with activities impacted.

8) Internal consistency of the rule

The rules are internally consistent within the division and across other water quality rule divisions.

DIVISION 49

REGULATIONS PERTAINING TO CERTIFICATION OF WATER SYSTEM OPERATORS

Background

The EQC adopted Division 49 rules in 1988 as directed by the 1987 Oregon legislature, pursuant to ORS 448.408, et seq. The Health Division Administrator similarly was required to adopt rules for certifying water distribution and treatment system personnel. Oregon is among 48 states that now have mandatory certification requirements in effect.

The purpose of the statute and associated rules is to help protect public health and Oregon's environmental and water resources through proper operation and maintenance of wastewater systems by establishing requirements regarding certification of wastewater system personnel.

To become certified, individuals must meet minimum qualifications for education, experience and written examination set forth in the rules. To renew certification, the operator must demonstrate continuing professional growth (training) in the field.

Division 49 (rules), which regulates wastewater system operator certification, is a relatively new program for the Department. The certification program has voluntary and mandatory features, both equally key in meeting legislative intent.

The mandatory certification aspect (effective July 1, 1989) is two part in that: 1) wastewater system owners of public and private domestic wastewater systems (collection, treatment and disposal) must have their systems supervised by one or more operators who hold appropriate and valid certification under the rules; and 2) supervisors of wastewater systems must be properly certified.

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The voluntary feature is that all persons who meet established standards for certification may be certified, regardless of whether they are presently in a supervisory position. At the time of this writing, over 1,300 individuals are certified. More than one-half or about 700 are certified either on a voluntary basis or as a employment requirement (other than by rule). This growing number assures a reservoir from which to draw qualified, professional and committed operators for the future.

1) Economic impact of the rule

The fees for certification are not required to be paid by the system owners. Although, some communities do pay the fees for certifying operators, many certified operators pay their own fees and related training expenses.

The intent of the 1987 legislature was that the certification program be self-supported through fees established under the rules. Fees received are dedicated to the program and the fee schedule should be periodically adjusted to support the activities required to carry out the program.

Many system owners recognize the benefits derived by employing certified personnel. Most publicly-owned wastewater systems in Oregon today require certification as a prerequisite to hiring of not only supervisory personnel, but other operating staff as well. Therefore, many system owners do pay the cost of certification-related fees, including training (continuing education). Certification-based pay and promotion incentives have become commonplace in the industry. This indicates an increased recognition of the value of having certified staff.

The rules have increased operating costs to some system owners and operating personnel who would not have otherwise employed or contracted certified operators. These costs could be broken down into three categories: 1) fees to obtain certification (initial or upgrade to higher level); 2) fees for renewal; and 3) training expenses to enable personnel to acquire necessary training and continuing education credit to qualify for certification and renewal.

Presently, fees range from \$35 to \$55, depending on the type of application. Two-year renewal are \$40 and those operators holding grade level I or II collection and treatment certification may renew for a single fee. The cost of required continuing education (20 hours or two credits) ranges from as little as \$50 to \$450 per two-year period, depending on whether per diem and lost work effort are included.

Small municipalities and businesses who own wastewater collection and/or treatment systems may experience a greater proportional fiscal and economic impact due to a smaller economic base from which to cover mandated supervisory costs, which may include contracts for part-time system supervision.

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Contract costs for operational system supervision, training and oversight range from \$100 to \$400 per month. It is estimated that there are about a dozen contractors providing supervisory services in Oregon.

Of the approximately 500 systems in Oregon that may be subject to Division 49 rules, 185 or 37 percent are privately owned systems largely businesses such as institutions, campgrounds, commercial, mobile home parks, moorages and RV parks. Almost all of these businesses (estimate 97 percent) have design flows below 75,000 gallons per day and qualify for a special exemption crafted to allow options in system supervision and thus reduce costs.

How Division 49 rules have addressed costs:

- The rules specifically exempt systems under 5,000 gallons per day that are permitted under the On-site Sewage Disposal rules (OAR Chapter 340, Division 71). Thus, individual homeowners and most small rural businesses on simple septic tank/drainfield systems are automatically excluded.
- Owners of systems less than 75,000 gallons per day design flow may contract with a properly certified operator for part-time supervision. Thus, small system owners do not have the expense of employing a certified operator on staff full time.
- Under the rules, a system owner may request a variance to the rules if undue hardship or burden exists.
- A two-year certificate renewal term. This two-year term reduces the actual yearly cost to certified persons, as well as administrative costs to the Department.
- Many small system owners/operators are required to have or employ those who have certification in <u>both</u> collection and treatment system operation. To reduce the costs associated with maintaining the two certificates, (i.e., application, examination, continuing education and certificate renewal fees), the rules allow:
 - 1) that continuing education requirements need only be met for one certificate;
 - a reduced fee for persons holding both collection and treatment system operation certificates at grade level I and/or II (presently two renewals for one or 50 percent savings); and

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- a single application and examination fee for certification in both collection and treatment operation at grade level I. (Note: In June of 1991, the Department developed a combined examination. For those that qualify, only one examination now has to be scheduled and taken).
- Allows for provisional certificates to be issued to operators of small systems. This
 allows both the individual operator and the system owner to comply with statutory and
 rule requirements of having a certified supervisor while the individual is in the
 process of training.

The rules establish criteria for imposing penalties, fines, variances, and certificate revocation. The Department has specified requirements of system owners in permits through the permit issuance or modification process. Thus, the opportunity exists for owners of systems to request a variance to the rule and permit requirements through the permitting process, as well as outright.

All said, these costs do not appear to have created any economic hardship or result in a competitive disadvantage for business. Benefits to system owners and the public at large far outweigh the costs of certification and training. Proper operation and maintenance of Oregon's wastewater systems is essential to ensure maximum protection of public health and the state's environmental resources as well as to optimize the return of the significant public and private investment in these systems.

2) Continued need for the rule

The 1987 Oregon legislature, in enacting ORS 448.405 to 448.494, required the EQC to adopt rules to carry out the intent of certification requirements. The primary objective was to bring to all Oregon citizens the benefits of having skilled, knowledgeable and experienced personnel.

The statute generally prohibits any person to allow a system to operate unless the system is operated or under the supervision (direction) of properly certified operators. Further, the statute prohibits unsupervised persons who are not certified from performing the duties of an operator or system supervisor. Both are misdemeanors subject to criminal penalty. Without the rule, system owners and operators may not be able to comply with Oregon Law.

The rules help the Department to assure that properly trained operators are supervising each system, which in turn insures public health hazards and pollution are minimized. Continuation of the rules will help assure that the intent of the legislature is carried out and that operating personnel can apply for and obtain certification.

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Continuation of the rule will allow personnel to maintain and upgrade their current certification and new operators to become certified; thus, strengthening the reservoir of qualified persons to supervise Oregon's wastewater systems.

Prior to the effect of the rules, less than 50 percent of Oregon's wastewater systems were operated and/or supervised by properly certified operators (under voluntary program). At the time, a survey of systems not in compliance with their operating permits indicated that 75 percent of those systems did not employ certified operators. As of this writing, about 90 percent of all systems employ properly certified operators.

The draft reauthorization of the Clean Water Act includes national requirements and standards for operator certification. Continuation of the rule will help assure that Oregon's system owners and operators are prepared to respond to future requirements proposed under the act, and that Oregon is prepared to continue its program without EPA primacy.

3) Complexity or redundancy of the rule

The rules regulating operator certification are relatively complex in some areas. Guidance documents have been and will continue to be developed and updated to assist system owners and operators regarding certification examination, contract supervision, supervisor's availability, system classification, etc.

For the most part, the rules are rather straightforward. There was a certain amount of flexibility in language, including the Director's discretionary authority and variances to accommodate the many variations of systems and supervisory scenarios. The rules have not proven to be unnecessary burdensome to administer, and they will be revised as necessary and appropriate to keep them as simple and straightforward as possible.

4) Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations, and local government regulations

The rules focus on the technical operation of wastewater systems. The program does not appear to overlap, duplicate or conflict with other rules, federal regulations, and local government regulations.

It is quite possible that individuals certified under these rules may also be required to be certified or licensed under other local, state or federal regulations for related duties and responsibilities under their particular job description.

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As mentioned above, national certification standards and requirements for both domestic and industrial operator certification are included in the draft reauthorization of the federal Clean Water Act. This program and its requirements parallel to a certain extent that which is proposed and may be acceptable for continuance of a state program under the Act.

5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

Wastewater collection and treatment technology is changing. The rules are flexible enough to accommodate the changes that affect the wastewater system operation field.

Under the rules, DEQ evaluates wastewater systems and classifies each based on current size, and processes employed, and complexity of operation, etc. Certification examination content is evaluated periodically to assure "need to know" subject matter is keeping pace with technological advances. In addition, certificate renewal is based on the operator demonstrating professional growth in the field.

6) Statutory citation or legal basis for rule

Oregon Law (1987), ORS 448.405 to 448.430, and 448.992 directed and enabled the EQC to adopt these rules (pursuant to OAR 340-11-010, et. seq.) for classifying wastewater systems, certifying wastewater system personnel, establishing fees to recover expenses associated with implementing a certification program, and assuring compliance with statutory requirements.

7) The rules' potential for enhancement of job producing enterprises

For both large and small wastewater systems, the operational effort on-site varies. For some very small systems with minimum and/or seasonally reduced operational effort, it may not be feasible to employ a specialist on staff. The rules allow a contract with an operation specialist who is certified and may have the expertise required to assure preventive maintenance, optimize system performance and minimize pollution and environmental health risks. Thus, the opportunity does exist, and the rules flexible enough, to allow individuals, non-profits, governments and business to provide system supervisory personnel under contract.

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8) Internal consistency of the rules

Division 49 does not appear to cause inconsistencies internally. Wastewater system operating permits issued under OAR Chapter 340, Divisions 14, 45 and 71, include requirements for system owners to properly operate and maintain their systems. The language is silent on staff and/or supervisory qualifications (training and certification). These rules afford an option to define supervisory qualifications to include certification under Division 49.

DIVISION 50

LAND APPLICATION AND DISPOSAL OF SEWAGE TREATMENT PLANT SLUDGE AND SLUDGE DERIVED PRODUCTS INCLUDING SEPTAGE

1) Economic impact of the rule

At the direction of the 1983 legislature, the EQC adopted rules and guidelines (OAR, Chapter 340, Division 50) to promote the beneficial land application and marketing and distribution of domestic sewage treatment facility sludge (biosolids) and sludge derived products as an option to landfill disposal or incineration. The rules are necessary to prevent public nuisances (e.g., odor complaints), protect the public health and safeguard the environment by prescribing methods, procedures and restrictions required for the processing and beneficial recycling of solids derived from primary, secondary and advanced wastewater treatment.

Division 50 rules have both positive and negative fiscal impacts on municipalities, small businesses, government and the general public. Negative fiscal impacts are associated with costs for the treatment and land application of sludge. These costs include capital investment, operation and maintenance costs and payment of wastewater treatment permit fees to the Department. However, most permitted sources select sludge land application over incineration or landfilling because it is the most cost effective, environmentally sound, solids handling method.

Generally greater than 25 percent of a wastewater treatment works' infrastructure capital costs are directed towards the development of solids removal and processing facilities while 35 to 50 percent of a treatment facility's annual operating budget is aimed at solids separation, removal, treatment (conditioning, thickening and digestion) transport and land application activities. These costs are largely subsidized via monthly users fees.

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Farmers, siliviculturalists, etc., who receive sludge or sludge derived products and septage realize several economic benefits (e.g., \$50 to \$60 per acre savings in fertilizer; expanded water holding capacity and ease of tillage of soils that receive solids; and improved soil and water conservation via increased site erosion resistance) from these biosolids, particularly, since most sources both supply and land apply solids free of charge to cooperative land owners. Further, the use of sludge saves natural resources and energy needed to manufacture commercial nitrogen fertilizers from petrochemical products.

There are substantial positive ecological benefits associated with the sludge rules. Without the high degree of treatment and site management rules require, surface waters, groundwater, air and land resources could become significantly polluted by solids contaminants. The beneficial land application of sludge or sludge derived products and septage is generally considerably less expensive than wasting of these recyclable resources via landfill disposal or incineration. Further, EPA studies and risk assessment modeling indicate sludge landfilling and incineration pose a much greater threat to water, air and land resources and public health than the beneficial recycling of biosolids via land application. In addition, solids disposal at landfills unnecessarily depletes space necessary for other less recyclable waste products.

Rules prevent sludge from being applied at rates which would impair existing and future beneficial uses at solids receiving sites (they establish limits on the quantity of trace toxic inorganic and organic substances that can be land applied). In the absence of Division 50 rules, the potential for solids over-application could increase sharply, leading to unnecessary groundwater contamination by nutrients and pathogens and increased accumulation of environmentally significant amounts of trace toxic residues (substances like dioxins, furans, Polychlorinated Biphenyls (PCB), arsenic, mercury or lead) which could negatively impact property values and land, groundwater, surface water and air uses as well as require expensive remediation to mitigate problems, resulting in direct economic loss to land holders and the general public.

2) Continued need for the rule

The protection of public health, air, water, land, and ecological resources from unreasonable exposure to toxic inorganic and organic substances and pathogens commonly found in domestic wastewater, solids derived from wastewater treatment and septage is a high priority to the citizens of the State of Oregon. Oregon sludge rules and guidelines were adopted in 1984 to help protect the State's natural resources and public health, prevent nuisances, and promote the beneficial recycling (land application) of properly treated and managed sludges and septage.

Oregon sludge and septage rules implement on-going sludge and septage management programs which need to be continued.

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3) Complexity or redundancy of the rule

The rules governing sludge and septage management in Oregon are not too complex or difficult to understand. Aside from the guidelines portion of the rules, several guidance documents have been developed to assist regulated sludge producing sources, sludge handlers and septage pumpers, in the implementation of rules. Guidance documents will continue to be updated as appropriate to facilitate program implementation.

Department staff and DEQ's Domestic Sludge Technical Advisory Committee have continuously tracked and catalogued a number of housekeeping changes which would simplify and clarify sludge management rules. However, rule modifications (envisioned in mid-1993) have been delayed pending the promulgation of new federal technical regulations.

On November 25, 1992, EPA signed new federal sludge and septage regulations (40 CFR Part 503) which will require a number of modifications to Oregon sludge rules and guidelines. Those regulations are expected to become effective in mid-January, 1993. They establish minimum pollutant limits, sludge and septage stabilization standards, site management requirements and monitoring, record keeping and recording requirements for sludge and sludge derived products, like compost, and septage and recycling (i.e., solids land application at beneficial use rates).

EPA, in the preamble to the new federal sludge regulation, declared those standards the most complex they have ever written. Standards cross all resource boundaries (air-water-land) and involve the use of the most comprehensive and current risk assessment methods devised by the agency. However, the Department intends to keep Oregon sludge and septage rules as simple and straightforward as possible.

4) Extent to which the rule overlaps, duplicates or conflicts with other state and federal regulations and local government regulations

Aside from OAR Chapter 340, Division 50, several other state (DEQ) and federal (EPA) rules and regulations govern sludge and septage management to some extent. Most rule areas do not overlap, however, there are a few exceptions. The guideline portion of Division 50 rules overlap with some minimum solids stabilization provisions (processes to significantly and further reduce pathogens) in existing (40 CFR Part 257) and recently signed (40 CFR Part 503) federal sludge regulations. Overlapping areas will be removed when rules are revised to reflect the new 40 CFR Part 503 requirements.

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Infrastructure requirements for domestic solids storage and composting facilities are addressed under Division 61 (Solid Waste Management) requirements. And solid waste requirements define sludge and include a provision which allows partially stabilized sludge and septage to be land applied in remote sites which are located at least one-quarter mile from areas commonly frequented by the general public. The remote exemption status will conflict with new federal sludge regulations (40 CFR Part 503). New regulations do not include the land application of partially stabilized sludge or septage in remote settings amongst their site management options.

Division 61 regulations also contain permitting requirements for sources who treat domestic septage by mechanical means or in pits, ponds and lagoons which are designed exclusively to handle septage and/or other RCRA Subtitle D liquids. However, these Division 61 provisions due not conflict with Division 50 rules.

Domestic wastewater treatment sources that generate sludge and septage are regulated under OAR Chapter 340, Divisions 14 and 45 (source permitting requirements) as well as Division 49 (sewerage works facilities operator certification requirements). These rules are complementary to sludge rules. Sludge storage and composting facilities can be permitted under either a Solid Waste Management Permit (Division 61) or a domestic source wastewater permit (Divisions 14 or 45). Although overlap exists between these rules, they have not posed conflicts to existing sources.

Under OAR Chapter 340, Division 52, owners of sewerage works that produce solids and septage alkaline stabilization facilities are required to submit plans and specifications for Department review and approval prior to constructing or modifying those facilities. Further, businesses that remove and handle septage are regulated under OAR Chapter 340, Division 71 requirements. Those rules establish minimum requirements for septage pumping and hauling equipment and include provisions for the monitoring, record keeping and reporting of septage handling activities. Neither rule divisions conflict with Division 50 rules.

Federal regulations governing sludge management are currently embodied in 40 CFR Parts 50, 51, 52, 60, 61, 122, 123, 124, 257, 258, 501, as well as portions of Parts 260 and 261 and amendments to 40 CFR Parts 122, 123, 124 and 40 CFR 501 were promulgated in May 1989 [Parts 122, 123, 124 and 40 CFR 501 are administrative regulations related to domestic wastewater source permitting. They require states like Oregon, who operate sludge and septage regulatory programs, to commence applying minimum requirements for sludge monitoring, recording and reporting and record keeping in permits once new federal technical regulations (40 CFR Part 503) become effective (early 1993)]. OAR Chapter 340, Division 50 rules contain some provisions for monitoring, reporting and record keeping which will have to be modified once 40 CFR Part 503 becomes effective.

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No conflicts exist between 40 CFR Parts 50, 51, 52, 60, 61 (air pollution control regulations which apply to sources who incinerate domestic sludge), 258 (domestic sludge co-disposal and co-incineration standards), 260 and 261 (solid and hazardous waste classification, management and listing standards).

No similar state or local governmental regulations exist.

5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

New technology occurs continuously in the field of domestic solids stabilization and use and sludge rules are sufficiently pliant to accommodate technological changes. Alterations in technology are recognized under current rules and will be reflected in future rule amendments. Division 50 rules specify sludge handling and land application requirements but do not dictate that sources use specific technologies to meet processing and stabilization standards. Permittees are free to choose the appropriate technology necessary to meet rule requirements.

Division 50 does not directly address economic conditions related to the processing or land application of sludge. Rules are sufficiently flexible, however, to allow water quality program sludge staff to negotiate implementation schedules which recognize economic conditions.

6) Statutory citation or legal basis for the rule

The 1983 Legislative Assembly enacted sludge statutes into law. ORS 468B.095 provides the basis for the Division 50 rules.

7) The rule's potential for enhancement of job producing enterprises

Division 50 requires substantial capital to fund daily operations. Since the rules require wastewater treatment works to process solids to make them amenable to land application, they lead directly to job creation at wastewater treatment facilities. Examples include jobs for system maintenance and operation of sewage treatment plants.

Division 50 is sufficiently flexible to allow entrepreneurs to investigate new technologies for solids stabilization and utilization. The sludge rule allows local domestic wastewater treatment sources to select which technology they prefer to meet stabilization requirements. Further, the rule enables wastewater treatment works to privatize all phases of solids handling from removal and processing at the domestic wastewater treatment works which generates the solids to solids land application. And Division 50 is suitably pliant to

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encourage the creation of enterprises to use sludge-derived products (bulk sludge and compost) as feedstocks for the manufacture of commercial fertilizers, planting and potting mixes and topsoils that can be marketed to wholesalers and retailers. In addition, rules allow properly stabilized sludge and sludge-derived products like compost to be used by commercial landscapers.

8) Internal consistency of the rule

While rules overlap somewhat with Division 61 Solid Waste rules, overlaps do not cause inconsistencies between programs and they afford additional options for handling domestic wastewater treatment plant solids and septages than are provided for under Division 50 rules alone.

DIVISION 51

CONFINED ANIMAL FEEDING OR HOLDING OPERATIONS

1) Economic impact of the rule

This rule does have an economic impact upon the confined animal feeding agricultural industry. The rule requires a permit from the agency and requires plan review. The rule also provided guidelines for the collection and disposal of manure and other wastewaters. Those guidelines require that sufficient wastewater storage be provided to hold not only the wastewater generated at the facility, but one half of the annual rainfall falling upon the confinement area. Collection, storage, and disposal of the wastewater does have an economic impact on the facility.

2) Continued need for rule

This rule is an essential part of the regulation of confined animal feeding operations. However, the rule was adopted in 1972 and last modified in 1979. There are changes which need to be made to update it to current practice.

3) Complexity or redundancy of rule

This rule is not complex. On the contrary, it is probably too simple and not definitive enough for some situations. The rule is not redundant to any other rules of the agency or other agencies.

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4) Extent to which rule overlaps, duplicates, or conflicts with other state rules

This rule does overlap some rules of other agencies. However, it does not duplicate or conflict with their requirements. For example, the rule requires that plans for wastewater treatment and disposal systems be submitted to the Department for review and approval. If a waste storage lagoon was part of the waste storage facility, the Department would review the plans of the lagoon in relation to the volume of storage required and protection of groundwater. For lagoons over a certain size, the Department of Water Resources (WRD) also requires that plans be submitted to them for review and approval. Their review is for dam and dike structural safety. Since they are providing that review, the Department does not consider those issues in our review, unless the facility is smaller than what the WRD rules regulate. The Oregon Department of Agriculture (DOA) also has some rules pertaining to confined animal feeding operations. However, those rules only relate to certain annual fees and do not conflict with this rule.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

There have been no changes in technology, economic conditions, or other factors which affect this rule. The rule is broad enough to account for any changes in technology which become available.

6) Statutory citation or legal basis for the rule

The Commission's authority to establish rules is found in ORS 468B.

7) The rule's potential for enhancement of job producing enterprises

This rule is strictly regulatory and does not enhance job producing enterprises.

8) Internal consistency of the rule

This is a very simple rule. It is consistent with other Department rules and policies. The fact that it has not been modified since 1979 is a testimony to that.

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DIVISION 52

REVIEW OF PLANS AND SPECIFICATIONS

1) Economic impact of the rule

Division 52 requires that domestic and industry sources submit to the Water Quality Division (WQD) for review most engineering plans and specifications pertaining to disposal systems, treatment works and sewerage systems. There are both negative and positive fiscal and economic impacts associated with the rule. Negative impacts are minor and are associated with fees which are required when a set of engineering plans are submitted. The fees impact the source as a direct cost. The fees are generally low and are intended to cover the WQD's cost for performing the review. There are substantial positive fiscal and economic impacts. Through the plan review activities, design errors are determined, incorrect capacity calculations are uncovered, and the source has the benefit of receiving technical assistance and advice from engineers who review hundreds of similar plans. It is not possible to place a dollar value on the positive fiscal benefits but several millions of dollars have been saved through these engineering reviews.

2) Continued need for the rule

The rule could be eliminated (assuming statutory amendments). If this were the case the Department and permitted sources would rely entirely on consulting engineers. Elimination of the rule would result in the following losses: a) there would no longer be an independent review; b) the permitted source would no longer receive technical assistance from experienced engineers; c) the WQD would lose technical knowledge and understanding of municipal and industry treatment systems and would be forced to rely heavily on fines to achieve compliance with regulatory requirements; d) the WQD's clearinghouse function pertaining to new and innovative technologies would be eliminated; and e) federal granting agencies such as Farmers Home and EPA require independent reviews but do not perform the reviews--consequently federal grant money would be lost to the state.

3) Complexity or redundancy of the rule

The rule is clearly written, is not particularly complex and there are no redundancies. There is no need to clarify or amend the rule.

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4) Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations, and local government regulations.

As noted above federal granting agencies do not perform engineering review functions but instead rely on DEQ to perform this activity. Other state agencies with an interest in municipal and industry waste treatment such as the Economic Development Department (EDD), Department of Transportation (DOT), Department of Land Conservation and Development (DLCD) and others rely on DEQ to perform the necessary engineering reviews. The DEQ activities and plan development activities by permitted sources (or their consultant) do not overlap since a clear distinction is made between plan development and independent plan review.

5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

New technology occurs continually in the wastewater treatment field. The plan review engineers perform a key role in gathering new information (in part through plan review) and in passing this information on to the permitted sources. The plan review rules are sufficiently flexible to accommodate changes in technology and economic conditions. In recent years, the WQD has worked with many small communities to find ways to cut materials, construction and operating costs for wastewater collection and treatment systems.

6) Statutory citation or legal basis for the rule

468.065(4) Submission of plans, specification....
468B.055 Plan approval required; exemptions

7) The rules' potential for enhancement of job producing enterprises

Division 52 is neutral with respect to enhancement of job producing enterprises. The plan review engineers are supportive of new technology and innovations in wastewater collection and treatment. To this extent, new enterprise is encouraged.

8) Internal consistency of the rule

The rule sets forth procedures and requirements for review of plans and specifications for the construction or installation of disposal systems, treatment works and sewerage systems. These rules were reviewed and updated in 1990 and no changes are suggested at this time.

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DIVISION 52

REVIEW OF PLANS AND SPECIFICATIONS

1) Economic impact of the rule

Division 52 requires that domestic and industry sources submit to the WQD for review most engineering plans and specifications pertaining to disposal systems, treatment works and sewerage systems. There are both negative and positive fiscal and economic impacts associated with the rule. Negative impacts are minor and are associated with fees which are required when a set of engineering plans are submitted. The fees impact the source as a direct cost. The fees are generally low and are intended to cover the WQD's cost for performing the review. There are substantial positive fiscal and economic impacts. Through the plan review activities, design errors are determined, incorrect capacity calculations are uncovered, and the source has the benefit of receiving technical assistance and advice from engineers who review hundreds of similar plans. It is not possible to place a dollar value on the positive fiscal benefits but several millions of dollars have been saved through these engineering reviews.

2) Continued need for the rule

The rule could be eliminated (assuming statutory amendments). If this were the case the Department and permitted sources would rely entirely on consulting engineers. Elimination of the rule would result in the following losses: a) there would no longer be an independent review; b) the permitted source would no longer receive technical assistance from experienced engineers; c) the WQD would lose technical knowledge and understanding of municipal and industry treatment systems and would be forced to rely heavily on fines to achieve compliance with regulatory requirements; d) the WQD's clearinghouse function pertaining to new and innovative technologies would be eliminated; and e) federal granting agencies such as Farmers Home and EPA require independent reviews but do not perform the reviews--consequently federal grant money would be lost to the state.

3) Complexity or redundancy of the rule

The rule is clearly written, is not particularly complex and there are no redundancies. There is no need to clarify or amend the rule.

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4) Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations, and local government regulations.

As noted above federal granting agencies do not perform engineering review functions but instead rely on DEQ to perform this activity. Other state agencies with an interest in municipal and industry waste treatment such as the Economic Development Department, Department of Transportation, DLCD and others rely on DEQ to perform the necessary engineering reviews. The DEQ activities and plan development activities by permitted sources (or their consultant) do not overlap since a clear distinction is made between plan development and independent plan review.

5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

New technology occurs continually in the wastewater treatment field. The plan review engineers perform a key role in gathering new information (in part through plan review) and in passing this information on to the permitted sources. The plan review rules are sufficiently flexible to accommodate changes in technology and economic conditions. In recent years, the WQD has worked with many small communities to find ways to cut materials, construction and operating costs for wastewater collection and treatment systems.

6) Statutory citation or legal basis for the rule

468.065(4) Submission of plans, specification....
468B.055 Plan approval required; exemptions

7) The rules' potential for enhancement of job producing enterprises

Division 52 is neutral with respect to enhancement of job producing enterprises. The plan review engineers are supportive of new technology and innovations in wastewater collection and treatment. To this extent, new enterprise is encouraged.

8) Internal consistency of the rule

The rule sets forth procedures and requirements for review of plans and specifications for the construction or installation of disposal systems, treatment works and sewerage systems. These rules were reviewed and updated in 1990 and no changes are suggested at this time.

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DIVISION 53

DEVELOPMENT AND MANAGEMENT OF THE STATEWIDE SEWERAGE WORKS CONSTRUCTION GRANTS PROGRAM

The rules within this Division establish the procedures and priority criteria to be used by the Department for development and management of a statewide priority list of sewerage works construction projects potentially eligible for financial assistance from the U.S. Environmental Protection Agency's Municipal Wastewater Treatment Works Construction Grants program, Section 201, Public Law 95-217.

1) Economic impact of the rule

The Construction Grants program has had a beneficial economic impact. Municipal projects selected to receive grants under these rules cost more than they otherwise would (due to all of the requirements that have to be met), but communities receiving such assistance received grants of from 55 to 75 percent of eligible costs. Through this program, Oregon communities have received 555 grants totaling \$657,311,879 for projects costing \$882,028,158 since 1972.

2) Continued need for rule

Congress decided to end the Construction Grants program in 1987. Under federal law, the last new grants were made September 30, 1991. However, some 45 communities still hold active grants for one or more projects at some stage of development. According to U.S. EPA all of these grants are to be administratively completed by September 30, 1995, and closed out by September 30, 1997.

Because this Division deals with a process for prioritizing applications for new grant assistance, and no new grants may legally be made, it would appear that Division 53 is no longer needed. Ultimately, that will be the case, but it seems prudent to retain the Division until all existing grants are closed out or at least administratively complete.

3) Complexity or redundancy of the rule

Many guidance documents were produced by the Environmental Protection Agency. These, as well as training and hands on technical assistance has been provided to communities requesting Construction Grant assistance.

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4) Extent to which rules overlap, duplicate or conflict with other state rules

The rules were crafted to avoid overlapping, duplicating or conflicting with other rules and regulations. They do parallel federal regulations for the Construction Grants program and have been reviewed and approved by the EPA.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

Technology for the environmentally sound collection, treatment and disposal of municipal wastewater has not changed a great deal during the life of the program. The U.S. EPA did invest funds in investigating experimental systems, and encouraged communities to solve their problems with cost-effective innovative or alternative technologies by guarantying that even if such a system doesn't work, it will be replaced with a conventional one at no additional local expense.

6) Statutory citation or legal basis for the rule

OAR: ORS: 340-53-005 to 035 468B

7) The rule's potential for enhancement of job producing enterprises

Sewage Works construction projects financed through this program create jobs for consulting firms such as engineers, etc. as well as temporary employment for a variety of craft people during construction. As such, direct job enhancing effects are temporary. However, there are also substantial, indirect job producing effects from increased investment in a community's capacity to accommodate growth in an environmentally sound fashion. Lastly, preserving clean water is an important quality of life issue that is at the heart of what makes Oregon a desirable place to be.

8) Internal consistency of the rule

The rules have been in effect since 1980, and were last modified over fours ago. No internal inconsistencies have been identified with the rules.

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DIVISION 54

STATE REVOLVING FUND PROGRAM

The rules within this Division establish the procedures and selection criteria to be used by the Department in deciding which municipal applicants will receive below market interest rate loan financing for projects that solve water quality problems by planning, designing or constructing Municipal Wastewater Treatment Works. In statute the State Revolving Fund (SRF) is called the Water Pollution Control Revolving Fund.

1)Economic impact of the rule

The SRF program has a beneficial economic impact because it reduces Municipal borrowing costs for required facilities which discharge waste to the surface water, groundwater or reuse it.

2) Continued need for rule

With the demise of the EPA's Municipal Wastewater Treatment Works Construction Grants program, the SRF has been established as a permanent, significant source of financial assistance for local governments with municipal wastewater treatment needs. To date, a total of \$77.5 million has been committed to the SRF (\$64.3 million in federal grants together with \$13.2 million in state match). Another \$25 million will be available in Fiscal Year (FY) 1993-94 and a similar (or lesser amount) is expected in FY 1994-95, after which federal grants will cease (according to current law). As a condition of receiving the federal grants the state has agreed to manage this fund in perpetuity to help local governments solve priority water quality problems.

Because of the demands of the local governments using the fund, the Department has revised these rules twice since they were first adopted in 1989, most recently December 11, 1992. Implementation of these statutes and rules is still in the process of development.

3) Complexity or redundancy of the rule

The rules have been written using advisory committees in an attempt to improve clarity. Most of the December 11, 1992, changes to the rule were editorial in nature to simplify the rule, add flexibility and improve readability. Additionally, guidance documents were produced when the rules were adopted to better explain the requirements and options within the rules. These guidance documents are now in the process of being updated to better address issues that have arisen since the original rules and guidance were developed.

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Finally, Department staff provides a lot of direct technical assistance to communities using this resource.

4) Extent to which rules overlap, duplicate or conflict with other state rules

The rules were crafted to avoid overlapping, duplicating or conflicting with other rules and regulations. This was achieved by developing the rules through advisory committees, which had the appropriate representative on them and holding extensive public hearing on the rules. There are parallel federal regulations for SRF programs to which these state rules conform. Finally, the EPA has reviewed and approved these rules.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

Technology for the environmentally sound collection, treatment and disposal of municipal wastewater has not changed a great deal during the life of the program. The EPA did invest funds in investigating experimental systems, and encourages communities to solve their problems with cost-effective innovative or alternative technologies.

The primary reason for the existence of these program rules is assist local governments to solve water quality problems caused by their wastewater discharges. Clearly, macroeconomic factors such as construction cost inflation and the general level of interest rates have a very large effect on affordability.

6) Statutory citation or legal basis for the rule

OAR: ORS:

340-54-005 to 075 468,423 to 468,440

7) The rule's potential for enhancement of job producing enterprises

Sewage works construction projects financed through this program create jobs for consulting firms such as engineers, etc., as well as temporary employment for a variety of craft people during construction. As such, direct job enhancing effects are temporary. However, there are also substantial, indirect job producing effects from increased investment in a community's capacity to accommodate growth in an environmentally sound fashion. Lastly, preserving clean water is an important quality of life issue that is at the heart of what makes Oregon a desirable place to be.

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8) Internal consistency of the rule

The rules were developed through advisory committees and public hearings to ensure that internal consistency was maintained. Public comments have not noted any problems with consistency in these rules.

DIVISION 55

REGULATIONS PERTAINING TO THE USE OF RECLAIMED (TREATED EFFLUENT) FROM SEWAGE TREATMENT PLANTS

1) Economic impact of the rule

In August 1990, the EQC adopted rules (Division 55) governing the reuse of wastewater from sewage treatment plants. Rules were established to encourage the use of recycled wastewater as a beneficial resource, as an option to its disposal via discharge to surface water. The rules are necessary to protect the environment and public health in Oregon by prescribing the methods, procedures and restrictions required for beneficial reclaimed water uses. They recognize that reclaimed wastewater recycling enhances water quality by reducing discharges of treated effluents to surface waters and conserves water resources by reducing the demand for out of stream and groundwater withdrawals.

Recycled wastewater rules promote the advancement of programs which will enhance agricultural production and preserve landscaped expanses in areas where irrigation water supplies are limited. Recycled wastewater contains nutrients vital to vegetative growth. Wastewater reuse often offers permitted sources a cost effective wastewater management option, enables waste load allocations to be met for NPDES discharge permit requirements, and recycled wastewater programs can be developed to provide additional water supplies by replacing existing surface and groundwater supplies.

Division 55 rules have both positive and negative fiscal impacts on municipalities, small businesses, government and the general public. Negative fiscal impacts are associated with additional treatment, storage, conveyance, and effluent land application costs. These costs include capital investment, operation and maintenance costs and payment of wastewater treatment permit fees to the Department. However, most sources select land application as their means for effluent handling because it is the most cost effective wastewater handling alternative.

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Farmers, nurserymen, sod farms, golf courses, owners of urban landscaped areas, etc., who receive reclaimed effluent realize a number of direct and indirect economic benefits (e.g., savings in fertilizer and water costs). Most municipalities provide farmers reclaimed water free and they often subsidize all or a substantial portion of effluent transmission and application equipment. In some instances, where water supplies are scarce, otherwise non-productive farm lands have been converted to highly productive agricultural sites through the development of reclaimed water land application systems, directly benefitting both the farmer and the environment.

Cities and school districts that use reclaimed water in green belt areas and parks realize direct savings in water costs and access to reuse water enables municipalities to direct potable water resources to other beneficial uses. Droughts recently experienced in Oregon have intensified the need for water conservation and heightened the demand for reclaimed water. As increased population places expanded demand on potable water supplies, public and private landscaped areas (in locations where insufficient potable water supplies result in bans on landscape irrigation with drinking water supplies) will benefit from the availability of reclaimed water.

There are substantial positive ecological impacts associated with wastewater reuse rules. Rules prevent reclaimed water from being applied at rates which could result in groundwater contamination. They help prevent soil erosion in arid areas by promoting luxuriant vegetative growth. Access to reclaimed water decreases demands on natural ground and surface water supplies that would otherwise be used for irrigation.

2) Continued need for the rule

Division 55 rules implement on-going domestic wastewater reclamation and reuse programs needed to encourage effluent recycling, provide an option to surface water discharge in TMDL limited streams, enhance surface and groundwater quality, and conserve water resources which justify their continuance. They also provide necessary direction to sewage treatment plant owners who wish to reuse treated effluents in a manner that protects both the environment and public health.

3) Complexity or redundancy of the rule

These rules are not duplicated anywhere else in state or federal administrative codes. They provide the sole direction and regulatory means for managing treated effluent from sewage treatment plants.

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The rules were drafted with the intent of maintaining flexibility. As such, they are somewhat general. The Department does not believe that they are too complex or too difficult to understand,

To help provide permitted sources and the public additional direction on effluent reuse, the Department has drafted guidance documents which: a) Explain the scope, intent and application of the reuse rules; b) outline elements which need to be considered in effluent reclamation and reuse plans (rules require reuse plan submittal and approval by the Department); and c) indicate appropriate treatment levels and site management restrictions for a variety of reclaimed effluent uses. In addition, the Department regularly distributes guidance developed by the California-Nevada Section of the American Water Works Association which provides direction for planning, construction and operation of non-potable waster systems in order to help expedite the implementation of effluent reuse projects. Further, additional guidance is planned which will assist sources on how to determine appropriate effluent reuse loading rates.

Guidance documents will continue to be developed and updated as appropriate to facilitate program implementation.

Department staff continuously track rule application. Rule modifications will be made if experience in program implementation indicates substantive modifications necessary or changes are needed to simplify and clarify effluent reuse regulations.

4) Extent to which the rule overlaps, duplicates or conflicts with other state and federal regulations and local government regulations

Rule areas do not overlap with federal, state or local governmental regulations.

5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

These rules are relatively new. The Department does not believe that conditions have changed to warrant rule revisions. The rules have been prepared with sufficient flexibility to allow the use of new technology as it develops.

6) Statutory citation or legal basis for the rule

ORS 468.020 authorizes the EQC to adopt rules and standards it considers necessary and proper in performing the functions vested by law in the Commission. ORS 468B.050 requires a permit from the Department before any person may construct, install, modify or operate any disposal system or part thereof or any extensions or addition thereto.

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7) The rule's potential for enhancement of job producing enterprises

The rules provide a regulatory means for owners of sewage treatment plants to reuse treated effluent for a variety of beneficial purposes. On this basis, treated effluent can diverted to uses, particularly agricultural uses, for the production of job-producing enterprises that may not otherwise be possible because of the lack of available water.

8) Internal consistency of the rule

Division 55 rules are not inconsistent with other rules and they afford non-discharge options for handling domestic wastewater treatment plant effluents which are not covered under other rules.

DIVISION 56

INSTREAM WATER RIGHTS

1) Economic impact of the rule

These rules could have a positive economic impact in the area of streams in which they are implemented for the water pollution sources discharging to the specific streams in which rights are granted. They could also have an impact on future consumptive water rights if water levels fall to the point where junior water rights would be cut off to provide for senior instream rights.

2) Continued need for rule

The rules were just passed by the EQC as required by recent legislation. The Department has yet to use the rules to apply for instream rights.

3) Complexity or redundancy of the rule

The rules identify the process and method the Department will use to apply for instream water rights for the Water Resources Department. They are not complex or redundant with any other rules of the Department.

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4) Extent to which rules overlap, duplicate or conflict with other state rules

The rule were required as a part of recent legislation and they do not overlap with, duplicate or are in conflict with other state rules. These rules were developed to address a specific situation as described by statute.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

These rules are too new to be so affected.

6) Statutory citation or legal basis for the rule

ORS 537.332 to ORS 537.360

7) The rule's potential for enhancement of job producing enterprises

The rules have limited opportunity to enhance job producing enterprises other than they may assist a city or industry in meeting instream water quality standards and thus allow them to operate.

8) Internal consistency of the rule

The rules are internally consistent, and do provide the Department with another tool to assist in meeting instream water quality standards.

DIVISIONS 71, 72, AND 73

REGULATIONS PERTAINING TO ON-SITE SEWAGE DISPOSAL SYSTEMS AND THE LICENSING OF SEWAGE DISPOSAL SERVICE BUSINESSES

The rules within these divisions prescribe minimum standards for the construction, alteration, repair, operation and maintenance of subsurface, alternative and nonwater-carried sewage disposal systems. Also included are the basic licensing requirements for persons that provide sewage disposal services and a schedule of fees for permits, licenses, and other on-site actions established for the Department and its agents. The purpose of these rules is to restore and maintain the quality of public waters, and to protect the public health and general welfare of the people of the state.

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1) Economic impact of the rule

There are both positive and negative fiscal and economic impacts associated with the rules within these divisions. The rules require that all persons proposing to construct, alter or repair an on-site system, or proposing to provide sewage disposal services, submit applications and fees. Fees are the major source of revenue for funding the on-site program. The fees impact the applicants as a direct cost. Other direct economic impacts to applicants are the costs associated with the construction, operation and maintenance of the sewage treatment and disposal systems that will serve each applicant's home or business. On the positive side, the rules enhance the quality of life experienced by residents and visitors to the State, by restoring and maintaining a clean and healthful environment. The rules promote and protect the public's interest in health, safety and water quality.

2) Continued need for the rule

Protection of public health, safety and water quality is a high priority of the state. Domestic sewage continues to be generated and discharged from homes and other structures and must be treated and disposed of safely. When public sewerage collection and treatment facilities are not available, the public must rely on the use of on-site sewage treatment and disposal systems. More than one-third of the residents of the state use on-site sewage disposal methods. These are the primary rules that prescribe the minimum standards for on-site sewage disposal methods necessary to protect the public interest.

3) Complexity or redundancy of the rule

The rules have been promulgated using advisory committees to ensure clarity and ease of implementation. Considerable effort has been taken to draft the rules so that they are no more complex than reasonably necessary to accomplish their purpose. The rules have not been found to be redundant.

4) Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations and local government regulations

Because the EQC has been authorized the sole authority to adopt administrative rules regulating on-site sewage disposal methods, there are no overlaps, duplicates or conflicts with the rules of other state agencies. The federal government has not yet promulgated regulations pertaining to on-site sewage disposal systems or methods. The rules in Division 72 establish maximum fees several counties may charge for on-site actions they perform and may be duplicated in the local county ordinance that establishes the activity fees for the county.

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5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

On-site technologies are evolving continually throughout the nation. The rules specify permitting criteria and are technology specific. For the rules to remain "state of the art," it is necessary to have staff and resources available to review and analyze the technical advancements being reported by other states and, when warranted, incorporate the proven new concepts into the rules.

6) Statutory citation or legal basis for the rule

ORS 454.605 through ORS 454.780
ORS 468.020
ORS 468.065
ORS 468.070
ORS 468.090
ORS 468.100
ORS 468.115
ORS 468.135

ORS 468.140 ORS 468B.005 through ORS 468B.025

ORS 468B.075 through ORS 468B.080

7) Potential for job-producing enterprises

Other than the homeowner and the homeowner's family having the authority to construct their own on-site sewage disposal system, only persons or businesses holding a valid sewage disposal service license are lawfully authorized to participate in the construction of on-site systems, or the pumping or cleaning of these systems. Each permit issued (there are approximately 4,000 to 6,000 or more issued each year) represents a potential job for a license holder. In addition, basic materials used within on-site systems (septic tanks, pipe, gravel, pumps, etc.) represent additional jobs associated with the on-site program activities.

8) Internal consistency of the rules

No inconsistencies within the rules were noted in the review.

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DIVISION 81

STATE FINANCIAL ASSISTANCE TO PUBLIC AGENCIES FOR WATER POLLUTION CONTROL FACILITIES

The rules within this Division establish and describe the procedures and requirements for obtaining state financial assistance for construction of water pollution control facilities pursuant to Article XI-H of the Oregon Constitution and ORS 468.195 et. seq.

1) Economic impact of the rule

The State Financial Assistance rules have a beneficial economic effect on municipal corporations by reducing their borrowing costs for the acquisition of water pollution control facilities. Since general obligation bonds pledge the "full faith and credit" of the state to the timely payment of principal and interest to bond owners, a detrimental economic effect would be felt by the state if public agencies borrowing through this program do not make their scheduled payments to the State or do something that compromises the tax exempt nature of the financing. Should it prove necessary, a state wide ad valorem property tax could be levied to repay bonds.

2) Continued need for rule

The purpose of these rules is to establish procedures and requirements for obtaining state financial assistance for construction of water pollution control facilities pursuant to Article XI-H of the Oregon Constitution. Through the sale of general obligation bonds, the state is able to borrow at very low interest rates, and local governments are interested in obtaining some of this savings by obtaining financing they need through this source (rather than by selling their own debt in the private credit markets). The need for such financing assistance continues.

3) Complexity or redundancy of the rule

The rules are short and an attempt has been made to write them as simply as possible. While other financing programs exist to help municipal corporations acquire water pollution control facilities, this program is not redundant because the level of need is many times the sum of all assistance programs. However, the field of municipal finance is complicated, and the rules reflect this complexity.

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However, public agencies seeking to borrow funds through this Division hire financial professionals to assist them. No guidance documents have been produced to explain the rules, requirements and options that exist within the rules due to lack of demand. Should the need for such guidance be identified, documents will be prepared to address issues that have arisen since the original rules were developed.

4) Extent to which rules overlap, duplicate or conflict with other state rules

The rules were crafted to avoid overlapping, duplicating or conflicting with other rules and regulations. They complement the rules of other financing programs within the DEQ (principally the State Revolving Fund program described in Division 54) and programs of the EDD. The parallel federal program is the EPA's Sewage Treatment Works Construction Grants program which is described in Division 53, and is being phased out (with no new appropriations made after September 30, 1991).

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

Interest rates move up and down as part of normal economic cycles. Currently, interest rates are at close to an all time low for both taxable and tax exempt borrowings. Current economic conditions are much different than they were when these rules were adopted. Never-the-less, demand for this lowest cost unsubsidized financing continues even though the benefit (over what other public agencies could accomplish on their own) is reduced from what it would be in other interest rate environments.

6) Statutory citation or legal basis for the rule

OAR: ORS:

340-81-005 to 110 468.195 to 468.420

7) The rule's potential for enhancement of job producing enterprises

The rules require the development, design and construction of pollution control facilities. These activities are supported by consulting firms which develop plans and designs and construction firms which build the physical pollution control facilities.

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8) Internal consistency of the rule

The rules were developed through advisory committees and public hearings to ensure that internal consistency was maintained. Public comments have not noted any inconsistency problems with the rules.

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HAZARDOUS AND SOLID WASTE PROGRAMS

Hazardous Waste Program

OARs issued and administered by the Hazardous Waste and Toxics Use Reduction program are:

- Hazardous Waste Management System: General 340-100-001 through 022.
- Identification and Listing of Hazardous Waste: 340-101-001 through 034
- Standards Applicable to Hazardous waste Generators: 340-102-010 through 070
- Standards Applicable to Transporters of Hazardous Waste by Air or Water: 340-103-010 through 031.
- Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities: 340-104-001 through 343.
- Management Facility Permits: 340-105-001 through 120.
- Permitting Procedures: 340-106-001 through 012.
- Management of Pesticide Wastes: 340-109-001 through 020.
- PCB's: 340-110 (reviewed in section B)
- Used Oil/Road Oiling Rules: 340-111 (reviewed in section C)
- Hazardous Waste Management: Additional Siting and permitting Requirements for Hazardous Waste and PCB Treatment and Disposal Facilities: 340-120-001 through 025.
- Toxics Use Reduction and Hazardous Waste Reduction: 340-135-000 through 110 and Appendix 1.

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RCRA Authorization, OAR Chapter 340, Divisions: 100, 101, 102, 103, 104, 105, 106, 109, 120, 135

Note: The Hazardous Waste rules are reviewed annually as part of the process of adopting new federal rules by reference in order to maintain federal authorization. The Hazardous Waste Reduction and Toxics Use Reduction and Hazardous Waste Reduction regulations are updated annually according to statutory requirements. The hazardous waste rules and the hazardous waste reduction and toxic use reduction rules were reviewed and updated at the October 1992 EQC meeting.

1) Economic impact of the rules

There is an economic impact of the hazardous waste rules on state agencies, local governments, the public, including small and large businesses. There is a cost to any public or private entity to properly manage hazardous wastes which are created. The major impact is on those entities which create more than 220 pounds of hazardous waste in any one calendar month. The costs include: Conducting hazardous waste determination, record keeping, complying with spill preparedness, prevention and contingency requirements, managing and disposing of hazardous waste as required. DEQ also assesses a fee based on the amount of hazardous waste generated. The fees are dedicated to implementing the hazardous waste program.

In addition, large quantity generators, which create more than 2,200 pounds of hazardous waste in a calendar month, are required to develop a toxic use reduction plan; however, any operating costs incurred by businesses when complying with the state-only Hazardous Waste Reduction and Toxic Use Reduction planning rules are likely offset by savings resulting from the reduction in toxics use and hazardous waste generation and attendant costs.

2) Continued need for the rules

Oregon is currently authorized by the federal government to manage the hazardous waste program mandated by Congress under the Resource Conservation and Recovery Act (RCRA). In order to maintain authorization, the state must adopt new federal rules and repeal any existing state rules which are less stringent, within specified time frames. Loss of authorization would likely result in both EPA and DEQ operating redundant programs within the state. The Oregon legislature and EQC have supported the state's pursuit of authorization and implementation of a single hazardous waste management program in Oregon.

3) Complexity or redundancy of the rules

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The Hazardous Waste Management rules are complex. Simplification is difficult to achieve since the rules are federally driven, although annual reviews reduce redundancy. The Hazardous Waste program develops and distributes factsheets and provides technical assistance and training on the rules to businesses and other government agencies to help clarify the rules.

4) Overlap or conflict with rules by other jurisdictions

The Department is not aware of any conflicts with local government or other agency of the state in implementing these regulations. No similar local government regulations exist.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The cost and liability of disposing of hazardous wastes are economic disincentives to generating the wastes. Emphasis on toxics use reduction resulting in less wastes being produced and on-site management of remaining wastes rather than off site disposal will affect any proposed rule amendments. As industry develops new on-site technologies for treatment and recycling, the rules will need to be reviewed.

6) Legal basis for rules

ORS 465, 466, 468, and 183.

7) Potential for job producing enterprises

As a result of the Hazardous Waste rules jobs are created for consultants, environmental coordinators and hazardous waste management services. In addition jobs are created, at the state level, to oversee the regulated community.

8) Internal consistency of the rules

No inconsistencies within the rules were noted in review.

PCBs: OAR Chapter 340, Division 110

Note: In 1990, DEQ received a grant from EPA to study Oregon's regulation of PCB. As part of the grant, the Hazardous and Solid Waste Division (HSWD) is conducting an in-depth review of the need, complexity and duplication of DEQ's PCB rules. The review is due to be completed by July 1993.

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1) Economic impact of the rule

There is very little if any economic impact of this rule.

2) The continued need for the rule

Although DEQ has never received funding nor has it ever implemented a PCB program, DEQ is required by statute to develop rules to regulate PCB disposal. Please see the response to Criteria No. 4 for further explanation of the continued need for the rule.

3) The complexity of the rule

DEQ's PCB rules are virtually identical to the federal rules. This reduces the complexity of the rule for the regulated community.

4) The extent to which the rule overlaps, duplicates or conflicts with other state rules or federal regulations

DEQ's PCB disposal rules overlap with federal PCB rules; however, the legislature made a decision to provide state authority to regulate PCB in addition to EPA's oversight. In some cases, Oregon has decided to regulate PCB more stringently than EPA which is the case for siting PCB disposal facilities. Another reason for maintaining state authority is that EPA may focus only on the larger problems based on its regional perspective, while the DEQ may place a higher priority on certain environmental problems in Oregon, than would EPA.

There is internal duplication and conflict of DEQ's rules covering PCB spill cleanup. The rules regarding PCB spill cleanup are confusing since there are three different divisions which may apply. The three rules which may apply to PCB spills are: Division 108, Spills and Releases; Division 110, PCBs; and Division 122 Environmental Cleanup rules. Staff will be proposing possible solutions by July 1993.

5) The degree to which technology, economic conditions or other factors have changed

There have been no substantial changes in economic or technological factors affecting this rule.

6) The statutory citation or legal basis for the rule

ORS 466.005 to 466.385 and ORS 466.505 to 466.530

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7) Potential for job-producing enterprises

This rule has very little potential for producing jobs beyond those which were produced through federal rules. As a result of federal PCB rules, some utilities have hired and trained workers to carry out PCB regulations.

8) Internal consistency of the rules

As mentioned in response to Criteria No. 4, there are internal inconsistencies regarding spill cleanup levels. The Department is well aware of this problem and is working on a resolution.

Used Oil/Road Oiling Rules: OAR Chapter 340, Division 111

<u>Note:</u> Adoption of federal used oil rules in September 1992 has made it necessary to readdress the Department's rules on this subject. The Department intends to amend or replace these rules at the time new state used oil rules, based on the new federal rules, are adopted. This new rule adoption is scheduled for mid-1993.

1) Economic impact of the rules

When adopted in 1990, these rules essentially put an end to the environmentally risky practice of spreading untested used oil for dust control. Most companies that spread used oil either switched to other dust control products or quit business. Other products used for dust control are more expensive, at least initially, than used oil, since used oil can often be obtained for free (plus the cost of collection). However, the other products do not pose the risk to the environment that used oil poses.

2) Continued need for the rules

Restrictions on spreading of untested used oil need to be continued. However, new federal rules will necessitate amending or replacing the existing Division 111 rules.

3) Complexity or redundancy of the rules

The new federal rules prohibit use of used oil for dust control, except in certain states that have an EPA-approved program for regulating dust control. The Department does not intend to ask for this exemption, but instead will just prohibit the use of used oil for dust control as set forth in the new federal rules. This will simplify the existing rules.

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4) Overlap or conflict with rules of other jurisdictions

The Department is not aware of any local government or any other agency of the State that regulates the spreading of used oil in the environment for dust control. Any conflict with new federal rules will be corrected at such time as the new used oil rules are considered for adoption.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

There has been no substantial change in economic or technological factors affecting the use of used oil for dust control.

6) Legal basis for the rules

ORS 469.869 to 468.870.

7) Potential for job producing enterprises

The rules have had virtually no impact on employment. Some new jobs may have been created in production and distribution of alternative dust control substances, offsetting loss of jobs from persons formerly spreading used oil for dust control.

8) Internal consistency of the rules

No inconsistencies within the rules were noted in review.

SOLID WASTE PROGRAMS

Solid Waste Management: OAR Chapter 340, Division 61

Note: On October 9, 1991, the EPA adopted minimum national performance standards for municipal solid waste landfills under Subtitle D of the Resource Recovery and Conservation Act. States with EPA-approved programs benefit from considerable flexibility in implementing these performance standards. In response, the Department undertook revision of 340, Division 61 to incorporate the EPA rules by reference and, in general, to update the entire Division. This process is underway, with adoption of the revised rules (to be renumbered in Divisions 93 through 97) planned for March 1993. This is an important part of receiving "approval" for Oregon's solid waste program from EPA.

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1) Economic impact of the rules

The economic impact of the rules is substantial. They not only cover siting, design and operation of all solid waste disposal facilities, but also set solid waste fees for these facilities. The federal Subtitle D criteria will add significantly to the cost of operating municipal solid waste landfills, but the federal criteria are effective whether or not the Department adopts them into its rule. The flexibility that DEQ will have as an "approved" state would lessen the economic impact of Subtitle D on many landfill permittees by allowing alternative designs and procedures. Permit fees are set at a level determined by DEQ's legislatively approved budget.

2) Continued need for the rules

Regulation of solid waste disposal sites is required by statute and is essential in protecting the groundwater of the State. The rules implement the Department's current, ongoing program regulating the disposal of solid waste. Continuation of the rules is needed as the framework for this program.

3) Complexity or redundancy of the rules

The current rulemaking attempts to reduce the complexity of the rules by clarifying and streamlining them, rearranging sections into a more logical order, deleting obsolete provisions and, in general, updating the rules to reflect current practices and technologies. Division 61 applied to all types of solid waste disposal facilities. Three of the new divisions apply only to certain kinds of facilities: Division 94 to municipal solid waste landfills, Division 95 to non-municipal solid waste land disposal sites, and Division 96 to other facilities including energy recovery facilities, compost facilities and transfer stations. A rule change in April 1992 simplified the solid waste permit fee structure.

4) Overlap or conflict with rules by other jurisdictions

There is some overlap between the provisions of federal Subtitle D and proposed Division 94. However, the Subtitle D criteria are phased in over time, and some municipal solid waste landfills are exempt from some of those criteria. State regulations need to be in place to cover those cases. A new clause in the rule notes that where conflicts between state and federal regulations may occur, the more protective standard shall apply. There are also a few conflicts between Subtitle D requirements and state law. Although Subtitle D is being adopted by reference (and municipal solid waste landfills are subject to the requirements of

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federal law in any case), the current rule revisions retain the conflicting state provisions. The Department is requesting necessary legislative changes be made by the 1993 Oregon legislature so state law will be consistent with the federal criteria. After that happens, the rules will be further revised to reflect legislative changes (anticipated to be carried out in fall/winter 1993).

The EQC is required by statute to adopt rules governing, among other things, the collection and transportation of solid wastes. Local governments also often have ordinances or contract agreements with garbage haulers governing such matters. In the current rule revision the Department has tried to remove provisions in its rules that might conflict with local ordinances, in general, by allowing flexibility.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The Department's solid waste rules have been modified over time to reflect advances in technology and practices and are flexible enough to accommodate new technology. The Subtitle D criteria represent, in general, an increase in landfill design and operating standards over current state rules. Solid waste disposal site operators are required to meet a non-degradation groundwater protection standard. Meeting this standard usually requires use of best available technology (e.g., composite liners for landfills). Increased costs associated with higher, more environmentally protective landfill design standards should help avoid the considerable costs of remediating contaminated groundwater. The rule is being updated to accommodate new solid waste disposal technologies such as bioremediation of petroleum contaminated soils.

6) Legal basis for rules

ORS 459.045, 459.235, 459A.110, 459A.115 (in general 459.005 to 459.405)

7) Potential for job producing enterprises

The higher Subtitle D criteria for municipal solid waste landfills will likely result in a need for more highly trained (and perhaps more numbers of) workers at landfills to meet new screening and other operational requirements. The criteria will also likely encourage other small, often unattended, landfills to close. This could create additional jobs in transferring solid waste to other, larger sites. Broader requirements for groundwater monitoring and landfill gas monitoring could lead to additional economic activity for suppliers of such items.

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8) Internal consistency of rules

The rule revision now underway examined the rules for internal inconsistencies, and text has been changed accordingly in the few cases noted.

The solid waste rules have in their entirety undergone close scrutiny by staff and by an advisory committee over the past year. Changes have been proposed to improve their format and generally update them in conjunction with adopting federal solid waste criteria. The Department intends further future rule updates to accommodate changes in legislation during the 1993 legislative session, and perhaps to incorporate further guidance from EPA.

Waste Tire Program Administrative Rules: OAR 340-64-005 to 340-64-170

1) Economic impact of the rule

The 1987 Oregon legislature passed House Bill (HB) 2022 intended to mitigate the environmental dangers associated with Oregon's stockpiles of waste tires and to stimulate the recycling market for the stockpiles as well as the waste tire stream of approximately two million additional waste tires annually. A fee of \$1 on the sale of new replacement tires was initiated, on January 1, 1988 to fund the program. The Department administered a 1 cent per pound reimbursement program to users of rubber from waste tires beginning in November 1988. In 1991, an advisory committee and members of the tire associated regulated community decided the economic stimulus of 1 cent per pound reimbursement subsidy to the end user of Oregon recycled tire rubber ran the risk of sustaining a "false" market. Since the stimulus had worked well, the market could now function without a subsidy. HB 2246, passed by the 1990 legislature, prohibits the use of funds from the Waste Tire Recycling Account for a reimbursement subsidy after June 30, 1992, and ended the collection of the \$1 fee on new replacement tires as of September 30, 1992.

2) Continued need for the rule

A number of features of the Waste Tire program have continued. DEQ will continue cleanup and abatement of waste tire piles, permitting and regulation of waste tire storage sites, and the regulation of commercial waste tire haulers. Although the collection of the \$1 fee on all new replacement tires sold has ended, monies remain to continue cleanup and abatement, and regulation of storage sites and haulers. The rule is needed to allow the continued regulation, cleanup and enforcement activities. Portions of the rule affecting reimbursement to recyclers of waste tires need not be continued. Specifically, these are OAR 340-64-100 through 340-64-135(13c). Other sections of the rule should be modified to eliminate the reimbursement provisions.

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3) Complexity and redundancy of the rule

Waste Tire program rules have been updated and revised on numerous occasions, both to clarify existing parts and to add new parts to facilitate the effective administration of the rule.

4) Overlap or conflict with rules by other jurisdictions

Federal waste tire regulations have been under consideration for a number of years. The most commonly mentioned provisions of federal regulations are generally consistent with Oregon's. Local regulations, such as those concerned with land use planning, fire and vector control, are taken into account before permits are issued. A process of inter-governmental coordination and agreements was established to facilitate cooperation with other government agencies in the cleanup of tire piles. There are no definite or obvious conflicts or duplications of other Oregon laws or regulations.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The Department believes that the reimbursement subsidy has created a sufficiently stable market for the recycling of waste tires that the recycling of Oregon's two million annual generation of waste tires can be sustained without government subsidy. The economic stimulus also helped motivate cement kilns and pulp mills, which burn 84 percent of Oregon's annual waste tire stream, to install modern air pollution control mechanisms to permit the burning of waste tires. The further installation and use of innovative technologies are assumed not to be necessary to sustain the tire recycling market. A number of demonstration projects entailed the design of rubberized asphalt specifications for Oregon's climate and the paving of roads in both urban and rural areas of Oregon to assess the cost effectiveness, safety and durability of rubberized asphalt. The Oregon Highway Division will continue to monitor the demonstration pavements and, if the rubberized asphalt proves to be both safe and cost effective, may permit the state to use a large percentage of Oregon waste tires in rubberized asphalt.

6) Statutory citation or legal basis for the rule

ORS 459.504 to ORS 459.790.

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7) The rule's potential for enhancement of job producing enterprises

The cleanup of waste tires has served to provide employment, albeit temporary, in the labor necessary for the cleanup of waste tire piles. The regulation of hauling waste tires allows those carriers permitted under the waste tire program to commercially solicit the hauling of waste tires from others as a business enterprise and serves as a major job activity for some permittees and as supplemental employment for others. With a sustainable tire recycling market, processors of waste tires will need laborers for those features of processing not provided by machinery, as well as machine operators. Widespread use of rubberized asphalt has great potential for jobs in the making and laying of rubberized asphalt, and the repair of highways and roads.

8) Internal consistency of the rule

The Waste Tire rule is consistent with other features of the Solid Waste rule.

Solid Waste Reduction and Recycling Rules: OAR Chapter 340, Divisions 90 and 91

Note: These rules have just recently (December, 1992) been amended and renumbered from OAR Chapter 340, Division 60 and 61. The amendments are a result of 1991 legislation.

1) Economic impact of the rule

When initially adopted in 1985, these rules impacted the private recycling collection industry and local governments by requiring, for the first time, that recycling programs be established in communities over 4,000 in population. Garbage service rates increased in most instances to pay for the additional collection costs associated with curbside collection of recyclables and the promotion/education requirements necessary for local recycling programs.

In 1989, these rules were amended to require recycling certifications and approval of waste reduction programs for those communities wishing to send 1,000 and 75,000 tons of waste a year, respectively, to Oregon landfills. The economic impact of this was that landfills had the additional work of seeking approval for their customers through an application process, and local governments meeting these waste disposal conditions had to implement waste reduction and recycling programs. The economic impact was primarily on out-of-state waste generators.

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The rules, as recently amended, expand the requirements for local recycling programs in communities of 4,000 in population or more and expand reporting requirements for local government and private recycling industry. These expanded requirements will likely result in solid waste collection rate increases to citizens and businesses between \$1.50 and \$5 per month.

2) Continued need for the rule

The rules help insure that solid waste is recycled and the amount of waste disposed is reduced. The state has a 50 percent recycling goal for the year 2000. Until that goal is achieved, these rules will be necessary to insure recycling programs are available to the citizens of Oregon and that waste being disposed in Oregon from other states is reduced as much as possible before it comes here for disposal.

3) Complexity or redundancy of the rules

These state rules are the only rules addressing recycling and waste reduction in Oregon. The federal government does not have parallel programs or regulations. In the recent amendment and renumbering process, existing rules which were unnecessary or inconsistent with new legislation were deleted.

4) Overlap or conflict with rules by other jurisdictions

The Department is not aware of any overlap or conflict.

5) Degree to which technology, economic conditions, or other factors have changed in the affected subject area

The demand by citizens of Oregon for improved recycling collection and markets for recyclable materials has grown significantly in the past five years. The economics and the technology of solid waste management is dramatically changing. Solid waste recycling has become "big business" and the costs of establishing effective collection programs have grown in the last few years. Market development has not kept pace with the collection of materials and, therefore, the use of secondary materials in manufacturing has not contributed significantly to balance the collection costs. The next decade will continue to see major changes in the solid waste industry.

6) Legal basis for the rule

ORS 459A.025, 459.045 and 468.020

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7) Potential for job producing enterprises

There is insufficient data to support statements regarding the impact of state recycling programs on the job and business market. However, these rules are aimed at increasing the amount of material recovered for use in remanufacturing of products. If the result is an increased stable supply of certain materials, one could logically expect to see new businesses develop that are centered on using this supply of material in new manufacturing processes. There is likely to be increased or more stable employment in the solid waste collection industry also.

8) Internal consistency of the rules

No inconsistencies in the rules are noted. The recent amendments eliminated inconsistencies with past existing rules.

UNDERGROUND STORAGE TANK PROGRAM

- UST Reimbursement Grant Program (OAR 340-170-005 through -080)
- UST Financial Assistance Program Rules (OAR 340-172-005 through -140)
- UST Insurance Co-payment Rules (OAR 340-174-005 through -090)
- UST Grant Program Rules (OAR 340-175-005 through -110)
- UST Loan Guarantee Rules (OAR 340-176-005 through -090)
- UST Reduced Interest Rate Loan Rules (OAR 340-178-005 through -080)
- UST Loan Guarantee and Interest Rate Subsidy Program (OAR 340-180-005 through 120)
- Registration and Licensing Requirements for UST Service Providers and UST Supervisors (OAR 340-160-005 through -150)
- Registration and Licensing Requirements for UST Soil Matrix Cleanup Service Providers and Supervisors (OAR 340-162-005 through -150)
- Registration and Licensing Requirements for Heating Oil Tank Soil Matrix Cleanup Service Providers and Supervisors (OAR 340-163-005 through -150)

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- Underground Storage Tank Rules (OAR 340-150-001 through -150)
- Federal Underground Storage Tank Regulations (40 CFR 280 Amended by OAR 340-150-003 and -004)

Background

In 1984, Congress determined that spills and releases from underground storage tanks holding petroleum and hazardous substances posed a threat to the Nation's groundwater and associated vapors created threats of fire and explosion. Congress passed Subtitle I of the RCRA that directed the EPA to adopt technical and financial responsibility standards. Congress also provided the opportunity for states to obtain approval to operate the federal program in lieu of EPA. EPA passed the technical standards in December, 1988 with a tenyear phase-in schedule. EPA passed the financial responsibility rules in January, 1989 with a two-year phase-in schedule.

The 1987 legislature gave authority to the DEQ to develop a state underground storage tank program and seek approval from EPA. In addition to technical and financial responsibility standards, the legislature also gave DEQ authority to implement a contractor licensing and supervisor certification program. In 1989 and 1991, the legislature passed a financial assistance program for persons with underground storage tanks holding motor fuel for resale.

1) Economic impact of the rules

An economic impact study prepared for EPA estimated that full compliance with federal standards adopted in December, 1988 would result in the closure of as many as 50 percent of the retail businesses with underground storage tanks due to the costs of compliance. In its testimony to the 1989 and 1991 legislature, the DEQ predicted that the closures would more likely occur with smaller retail stations in rural areas and that as many as 1,000 of Oregon's 2,130 stations may close. An average cost of compliance is estimated at \$100,000 to upgrade a three-tank station's equipment to new tank standards and to cleanup contaminated soil and groundwater. In addition, insurance to meet the financial responsibility requirement may cost as much as \$25,000 to \$35,000 per site with old tanks, if it is available at all. Stations with new equipment should see insurance costs in the range of \$2,500 to \$3,500.

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At the same time that businesses with tanks are experiencing significant costs to meet national tank standards, other businesses that remove and install tanks will realize substantial new business opportunities over the next ten years. Equipment manufacturers and distributors and excavation, electrical and plumbing contractors will see new jobs at up to 5,000 business locations. In addition, environmental consultants and testing laboratories will see new businesses as a result of the need to clean up contaminated soil and groundwater at many, if not most, of these same locations.

As a result of the estimated \$100,000 impact, the legislature passed a financial assistance program for persons with underground storage tanks holding motor fuels for resale. Depending on financial need, number of tanks owned and location, the legislature established programs to provide:

- Loan guarantees of 80 percent not to exceed \$80,000
- Lower interest rate to between 1.5 to 7.5 percent
- Grants of \$50,000 or \$85,000
- Insurance premium co-payments of 50, 75 or 90 percent
- Previously the legislature also passed a pollution control tax credit program providing for a 50 percent tax credit over a ten-year period.

2) Continued need for the rules

The federal program is just entering its fifth year of its ten year phase-in program. Because of the high cost of compliance, many businesses will be waiting until the last minute to upgrade or replace their tanks. Because of the state's financial assistance and tax credit program, some tank work is being undertaken in the early years but substantial work remains to be done.

3) Complexity or redundancy of the rules

In adopting national rules, EPA relied heavily on existing industry standards as published by the Petroleum Equipment Institute, American Petroleum Institute, Steel Tank Institute, fiberglass manufacturers and existing fire codes. Its financial responsibility rules closely parallel similar rules and financial instruments as promulgated by EPA for the hazardous waste program in 1980.

In adopting technical and financial responsibility rules, DEQ adopted the federal rules by reference with only slight amendments to comply with state law (i.e., adding a permit requirement that does not exist at the federal level).

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4) Overlap or conflicts with rules by other jurisdictions

Oregon law preempts local programs unless otherwise approved by the Department to operate in lieu of the state program. The Oregon law, however, does not preempt laws administered by land use and fire agencies. However, since EPA adopted rules consistent with the national fire codes, the Department is not aware of conflicts with the Oregon Uniform Fire Code. Further, the Department is not aware of any conflicts with land use laws at this time. In adopting these rules, the Department did not receive any comments on its statement that the rules were inconsistent or incompatible with state land use laws.

5) Degree to which technology, economic conditions or other factors have changed in the affected subject area

As a result of contaminated soil and groundwater from single-wall steel tanks and piping that corroded, the standard industry practice now involves steel tanks with cathodic protection (corrosion control), double wall tanks and piping or fiberglass tanks and piping. Innovation continues with corrosion resistant flexible piping, automatic tank gauges to monitor inventory, soil vapor and groundwater monitoring wells and spill and overfill protection manholes and reservoirs being developed and becoming industry standards.

The new generation of equipment has substantially lowered financial responsibility or insurance costs from the \$25,000 to \$35,000 area to one-tenth that amount. And there are competing insurance companies ready to write policies at these competitive prices.

6) Legal basis for the rules

ORS 466.705 to 466.835 for the technical, financial responsibility, contractor licensing and supervisor certification programs, Chapter 1071, Oregon Laws 1989 and Chapter 863, Oregon Laws 1991 for the financial assistance rules.

7) Potential for job producing enterprises

It is clear that small marginal operations will be closing as a result of marketplace price competition exacerbated by the cost of complying with the national tank rules. On the other hand, it is estimated that some \$200 million will be invested in new tank equipment, interest rate payments to commercial lenders and insurance premium co-payments to insurance companies by the facilities that remain in business. Approximately \$100 million will be paid

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for by the state program, while owners and operators of tanks will have to arrange the other \$100 million. In addition, the State General Fund will see a loss of revenue of some \$33 million as a result of the Pollution Control Facility Tax Credit program. That represents some \$66 million in investments over and above the grants that may be given based on financial need.

Therefore, these investments will produce or sustain many manufacturing, shipping, wholesale and retail equipment sales and construction jobs through the compliance deadline in late 1998.

8) Internal consistency of the rule

No inconsistencies within the rules were noted in review.

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ENVIRONMENTAL CLEANUP PROGRAMS

OARs issued and administered by Environmental Cleanup Division (ECD) are:

- Environmental Cleanup Rules (EC Rules): 340-122-010 through 110.
- Cleanup Rules for Leaking Petroleum Underground Storage Tank (UST) Systems (UST Cleanup Rules): 340-122-205 through 360.
- Site Discovery and Ranking Rules: 340-122-410 through 470.
- Oil and Hazardous Materials Spills and Releases: 340-108-001 through 080.
- Illegal Drug Lab Cleanup Assistance: 340-140-010 through 100.

The ECD recommends that these rules be continued without change.

1) Continued need for the rule

Cleanup of Oregon's environment is a high priority to the legislature. Environmental cleanup laws specify that rules will be developed to implement environmental cleanup programs. The initial EC rules are four years old. Site Discovery and Ranking rules are only two years old. During the past two years, amendments to both the EC and UST Cleanup rules have been adopted. The amendments clarify and streamline the existing rules. Amendments to the Illegal Drug Lab Cleanup Assistance rules became effective in January 1992. ECD rules are relatively new and have been amended when the need for clarification or change arises.

All ECD rules implement current, ongoing environmental cleanup programs, which, therefore, justifies their continuance.

2) The complexity or redundancy of the rule

Since the adoption of its rules, the Division has consistently looked for ways to clarify standards and simplify procedures wherever possible. Amendments to both the EC rules and UST Cleanup rules as described above streamline the cleanup process for sites which qualify as soil-only cleanups and petroleum in groundwater cleanups respectively. The Illegal Drug Lab Cleanup Assistance rules were amended in March 1992 to simplify the funding of drug lab cleanups by eliminating provisions regarding the sharing of costs among agencies.

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Regulations to clarify the potential liability of lenders, fiduciaries and government agencies are scheduled for public hearings in October 1992 with rule adoption planned for December 1992. In addition, the ECD, HSWD and Solid Waste Orphan Site Account Work Group are currently developing regulations for use of the Solid Waste Orphan Site Account. These proposed amendments will further clarify portions of the EC rules.

ECD rules have consistently been reviewed for clarification and simplification as evidenced by the recently adopted amendments and current rule development.

3) Overlaps or conflicts with rules by other jurisdictions

Parallel federal regulations exist both for the EC rules and the UST Cleanup rules. The federal Superfund program implemented by the EPA regulates the cleanup of sites in Oregon that are on the National Priorities List. While Oregon's EC law and rules are patterned after the federal program, state cleanup standards are more stringent. In addition, the state program has refinements such as the soil cleanup standards process which is absent in the federal program. The State UST cleanup program was also patterned after the federal Leaking UST program, and is also more stringent. The State program has sole jurisdiction over UST cleanups in Oregon.

The cleanup rules do overlap to some degree with other state cleanup regulations, primarily those of the HSWD. However, the regulations do not conflict, but rather, provide various cleanup options to better address unique problems. For example, solid waste landfills may be cleaned up under a solid waste permit issued by the HSWD or under the EC rules (for hazardous substance cleanups) depending on the nature of the contamination. Oil and Hazardous Materials Spills and Releases rules are written to allow emergency spills the flexibility to be cleaned up under the program that provides the best protection.

No similar local government regulations exist.

4) The degree to which technology, economic conditions or other factors have changed in the subject area affected by the rule

New technology occurs continually in the field of hazardous waste cleanup. ECD rules are flexible enough to accommodate new technology which may cause changes in investigation and cleanup methods.

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Hazardous waste cleanup is expensive and may be an economic drain on responsible parties. Public comment has indicated that greater certainty in the cleanup process is needed so that responsible parties can determine costs and schedules with sufficient confidence. Greater clarity concerning cleanup goals and the cleanup process has been attained with the addition of soil cleanup standards to the EC rules and petroleum groundwater cleanup standards to the UST Cleanup rules.

Proposed amendments addressing lender and fiduciary liability will further clarify the EC rules by providing a degree of certainty regarding the potential liability of certain lending and fiduciary activities. This will enable lenders to consider loans which were formerly viewed as being too risky. The proposed rule amendment is expected to free up credit and reduce transaction costs.

Changes in technology and economic conditions have been considered in the original rules and in the recently adopted and proposed rule amendments.

5) Statutory citation or legal basis for the rule

OAR:	<u>ORS:</u>
340-122-010 through 110	465.420
340-122-205 through 360	466.746
340-122-410 through 470	465.405 and 465.410
340-108-001 through 080	466.625
340-140-010 through 100	475.425

6) The rules' potential for enhancement of job producing enterprises.

The environmental cleanup law and regulations have greatly expanded the environmental consulting and contracting industry. The Underground Storage Tank Cleanup program has approximately 1700 contractors on its service provider list certified to conduct decommissioning and cleanup of leaking underground storage tanks. The ECD published a Directory of Environmental Consultants in March 1992 listing over 80 environmental investigation and cleanup consultants and contractors in Oregon and the Pacific Northwest.

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In response to the increasing number of environmental firms in Oregon, Oregon Environmental Technology Association (OETA), a private, non-profit professional organization was formed last year. One of OETA's major goals is to help develop Oregon's environmental industry. In addition, the Pacific NorthWest Economic Region, a coalition of legislators from Oregon, Idaho, Washington, Alaska, Montana and the Canadian provinces of Alberta and British Columbia, recently joined to develop strategies to help environmental firms in these areas compete regionally and worldwide.

Oregon's burgeoning environmental consulting and contracting industry is largely a result of strong environmental cleanup legislation and implementing regulations.

Summary

Cleanup of Oregon's environment is a high priority to the legislature and citizens. All ECD rules deal with environmental cleanup in one form or another. All cleanup programs are active and ongoing. ECD rules and cleanup programs are relatively new. Even so, during the past four years, the rules have been reviewed and revised as the need for clarification and process simplification has arisen. Citizen concerns have also triggered rule review. While some rules overlap to a degree with other state cleanup regulations, more options are available to better address unique cleanup problems. The rules are flexible enough to accommodate changes in technology and economic conditions. All ECD rules are authorized by statute.

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AIR QUALITY PROGRAMS

Air quality programs are covered in OAR Chapter 340, Divisions 20-35.

The Air Quality Division (AQD) conducted a rule-by-rule evaluation of its rules for the current periodic rule review. Each rule was assigned for review to the staff person who has the most direct programmatic involvement with the rule, a process which involved staff from every section of the AQD. A checklist was developed to provide a uniform format for evaluation of the rules. Instructions were developed for the checklist and each reviewer received training to ensure that the reviews would be accurate and complete. The reviews were conducted during January and February, 1992. A copy of the checklist is included in exhibit A-1.

The checklist was designed for two purposes. First, a series of items on the checklist identified clean-up issues. These included typographical and grammatical errors, incorrect citations, unclear applicability, missing references to test methods, and administrative issues in rules submitted to the EPA as State Implementation Plan (SIP) revisions. Second, a series of items on the checklist identified issues related to the factors required to be considered during the periodic rule review under ORS 183.545 and 183.550. These included evaluating whether the rule:

- is still needed:
- could be simplified;
- conflicts with or unnecessarily duplicates other law;
- could be revised to reduce economic impact or enhance job producing enterprises without undermining its purpose or violating federal or state law;
- needs revisions due to changes in technology or other factors; and
- is based on appropriate legislative authority.

Staff were instructed to determine if the rule needed revisions or needed further evaluation to determine if a revision was needed. In conducting the reviews, staff were provided with comments from the public pertaining to air quality rules which were received in response to the rule review public notice. Particular emphasis was placed on identifying opportunities to minimize the economic effect of rules on small businesses consistent with statutory and program requirements.

The completed checklists were compiled and reviewed by management. Issues identified on the checklists were divided into two categories:

- non-substantive changes needed to clean-up, simplify and clarify the rules; and
- substantive issues requiring further evaluation, analysis or direction.

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Non-substantive changes

The non-substantive changes were compiled into a comprehensive housekeeping amendment package for the air quality rules. Many of the factors identified in the statute were addressed in this package. For example, rules specifying compliance schedules which had expired were determined to be no longer needed and were proposed to be eliminated. A number of rules were proposed to be simplified by clarifying regulatory language, correcting citations and renumbering. Potential conflicts with federal law were proposed to be eliminated by updating citations where federal rules are incorporated by reference. The statutory authority for all rules was proposed to be updated by correcting citations to the ORS. This package received hearing authorization on October 22, 1992, a hearing was held on November 24, 1992, and the revised package is proposed for adoption in a separate agenda item (Agenda Item J) for today's meeting.

Substantive Issues

Several substantive issues were identified during the public review and internal review. Because each of these issues requires separate analysis and affects different sources, the AQD decided to address them separately during rulemaking actions occurring over the next 12 to 18 months. The issues raised during public review are included in Attachment B. The following issues were identified during the internal review.

1) Should the Noise Control rules be modified to eliminate reporting requirements?

The Department dropped the Noise program in 1991 as a response to Measure 5 budget cuts. However, the noise control rules remain state law and are being enforced by many local governments. The continued viability of the rules is also necessary to allow citizens to file lawsuits against sources which are in violation.

However, when the Department eliminated the Noise program, Division 35, the noise rules, were not modified. This lack of modification has created confusion for the regulated community and local authorities charged with enforcing the standards. This is due in part to the fact that the rules contain not only noise standards, but also requirements for source submittals to the Department and Commission. Under the current version of the rules, the Commission has an oversight role and specifically reviews requests for variances from noise standards.

These rules require substantial revision in order to clarify what, if any, submittals are required and to which authority such submittals are to be made. The Department seeks guidance from the Commission on the extent to which the Department and Commission should retain any oversight role.

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2) Should the Woodstove Efficiency Certification be eliminated and the EPA program used instead?

The Department is currently considering eliminating its independent Woodstove Efficiency Certification program in response to budget cuts. The Department eliminated its independent emission certification program several years ago and adopted EPA's program. Therefore, to replace the Department's efficiency certification program, the Department suggests adopting the rest of the EPA program. Woodstove manufacturers would apply directly to EPA for emission and efficiency certification, not the Department. Thus, manufacturers would have to obtain certification from EPA before their woodstoves could be sold in Oregon.

The Department's and EPA's programs are very similar. ORS 468A.480 requires that efficiency certification be based on test data. While the Department has required each manufacturer to actually test woodstoves and submit the results of these tests, the EPA program references test data to determine default values for stoves. If a manufacturer submits data which demonstrates a woodstove falls within this range, then the woodstove is certified for efficiency.

3) Should the 40 percent opacity and 0.2 grain loading standards for existing Sources be phased Out (340-21-015 and 340-21-020)?

Staff raised the issue of whether the 40 percent opacity and 0.2 grain per standard cubic foot standards for existing sources should be eliminated or phased out. This standard applies to existing sources, that is, air pollution sources in existence prior to the New Source Review and New Source Performance Standards rules of June 1, 1970. The sources to which the old standard applies are older and many may no longer be in existence. Others may be approaching the end of their useful life. Elimination of the standard may cause some existing sources to violate the stricter standard unless new control equipment is added or other measures are implemented. For older sources, this would likely not be cost effective and could result in the shut down of the source. Imposition of the stricter standard on existing sources covered by Title V of the Clean Air Act may also be counter to the language of ORS 468A.310 (HB 2175). A phase out of the standard could potentially allow existing sources to continue until the useful life of the source had ended. The Department will examine this issue in light of the limitations of ORS 468A.310, the potential number of sources effected, and the possibility of phasing out the standards over a reasonable length of time.

Agenda Item N ATTACHMENT B

PUBLIC COMMENT ON RULE REVIEW

This is a summary of the comments received that relate to particular rules and the agency response to the comments. Other general comments that did not relate to rules are available upon request.

Paul L. Pfaff
 Bonneville Power Administration
 PO Box 3621
 Portland, OR 97208-3621

Comment: Mr. Pfaff commented that DEQ's waste PCB rules overlap federal regulations in certain areas.

Response: The Hazardous Waste section at DEQ is reviewing its PCB rules as part of an EPA grant. This review will address the problem raised by Mr. Pfaff. Please see attachment A for further information about the PCB rules.

Bill Briggs
 President
 Oil Re-Refining Co. Inc.
 4150 N. Suttle Rd.
 Portland, OR 97217

Comment: Mr. Briggs suggests that all departments should agree upon one rule (DEQ, OSHA, Fire Marshall, etc...) and apply it the same.

Response: It is not feasible for many agencies to agree on one rule when the scope of their responsibilities are so different. Where there is overlap, the agencies do work out agreements for making rules complementary. For the most part, though, there is not overlap and there is a need for agency-specific rules.

Comment: All departments should be required to give written response to written requests within 30 working days or the department should receive a penalty.

Response: The Department makes an effort to respond to requests in a timely manner. In some instances, the complexity of the matter may lead to a longer response time. This type of time limit belongs in an agency policy rather than in a rule.

Comment: When complaints or orders are issued by the various agencies and, upon appeal, the appealing party wins, the agency should pay the expenses.

Response: The legislature has not provided authority to reimburse successful appellants for legal costs. This change would have to be made in statute rather than in rules.

Comment: There needs to be a better way to get proposed laws and rule changes to the people that are to be affected.

Response: The Department places a high value on public input and does more than is required by law. All programs have a public information component for this purpose. ORS 183 and OAR Chapter 340 Division 11 (Rules of Practice and Procedure) already require that the Department inform interested parties of rulemaking action. As mailing lists are refined, there will be greater assurance that the interested parties are all receiving the information they need. The Department values extensive use of advisory committees when developing rules. Presently, the Department has approximately 30 committees with a total of over 400 members. This is done voluntarily.

Alan Maxwell
 2560 Frontier Dr.
 Eugene, Oregon 97440

Comment: Mr. Maxwell suggested that flexibility be used on cleanup standards for underground storage tanks. He also commented that there are many individuals who are not complying with the rules and the rules should be applied consistently.

Response: Cleanup standards can currently be proposed by tank owners as part of a Corrective Action Plan. Also, the agency strives for consistency in application of rules by bringing regional staff together for quarterly training.

Lynne A. Perry
 Miller, Nash, Wiener, Hager & Carlsen
 111 SW 5th
 Portland, OR 97204

Comment: Revise OAR Chapter 340 Division 122 (Hazardous Substance Remedial Action Rules). The rules in Division 122 are written in a way that make them applicable to ORS 466.540 through 466.590. These have been renumbered and made part of Chapter 465. Make Division 122 consistent with that change.

Response: The Department's rules have been revised to make them consistent with the renumbering of the Oregon Revised Statutes. The changes identified by Ms. Perry have been made, along with many others.

Patrick LaCrosse
 Portland Development Commission
 1120 SW 5th
 Portland, OR 97204

Comment: Mr. LaCrosse commented that OAR 340-122-040 (Hazardous Substance Remedial Action Rules) uses a background contaminant level as the applicable standard for site restoration. Difficultly arises in determining such a background level for sites that have been exposed to several generations of development over a long period of time. Overall parameters should be developed that permit applicants to make predictions as to how the process proceeds.

Response: OAR 340-122-040 is not a "background contaminant level." More accurately it, and the balance of the environmental cleanup law, describes a process for achieving a "background level or lowest concentration level." Due to the complexity of environmental cleanup projects, this leaves a great deal of uncertainty for the private sector and developers about actual cleanup requirements. Guidance documents for determining background are under development and should prove to alleviate some of the ambiguity.

Comment: The DEQ Director has complete discretion in selecting the required activities leading to cleanup and the sequencing thereof. The ability of interested parties to predict and develop corresponding cost estimates becomes difficult with such undefined latitude. There is a wide variety of existing contaminants and a broad spectrum of cleanup options available. It seems that a categorization of contaminants and corresponding general procedures for their cleanup would lend some predictability to the process. More objective criteria for determining courses of action to be taken would enhance the process's and the Department's credibility.

Response: The discretion of the Director to select and/or conduct remedial activities is explicitly authorized in ORS 465.200 to 465.420, the enabling legislation for environmental cleanup activities. Where practical, the Department is interested in increasing the certainly of the environmental cleanup process. As far as categorization of contaminants is concerned, very few responsible parties would be well served by a "one size fits all" rule applied equally at all sites. The potential rigidity of numeric standards must be tempered with discretion and flexibility.

Christopher Wohlers
 Century West Engineering
 825 NE Multnomah, Suite 425
 Portland, OR 97232

Comment: Mr. Wohlers had comments about the sampling and analysis activities at LUST sites as prescribed by the LUST groundwater policy guidance. The concern is that the new

sampling/analysis activities may be very costly. There was also concern that the guidelines would not get sufficient public scrutiny.

Response: The groundwater cleanup guidance does not supersede current administrative rules (OAR 340-122-205 through 360) which allow responsible parties to propose cleanup levels. Those cleanup levels may be proposed in a corrective action plan. The guidance was issued to provide a framework for evaluating groundwater investigations and cleanups until rules were formally adopted. Since Mr. Wohlers' comment was received, public comment on the proposed cleanup rules were solicited and the rule was adopted in June, 1992 and became effective in October, 1992.

7. Mark Morford Stoel Rives Boley Jones & Grey 900 SW Fifth Ave Suite 2300 Portland, Oregon 97204-1268

Comment: Mr. Morford submitted a comment on behalf of several clients concerning the growing conflict over the interpretation of the meaning of the "Highest and Best Practicable Controls" standard. Mr. Morford argued that the rule was originally adopted before specific control standards for a number of air pollution sources were established. Later on, DEQ adopted source specific standards. However, public interest groups have used the "Highest and Best" standard to challenge permits arguing that "highest and best" is a substantive standard which may, in some cases, require a source to control emissions more than is required by a source specific standard articulated elsewhere in the rules. Mr. Morford suggested that the "highest and best" standard be made clear that it is a policy statement the Department uses to guide its program.

Response: The issue of the interpretation of "Highest and Best" is currently part of citizen suit by the Oregon Environmental Council and the Sierra Club Legal Defense Fund against the Department. The comment recognizes this suit as an example of the conflict in how the rule is interpreted. When the lawsuit has been resolved, the Department will review this rule to assure that it is consistent with the court's decision.

Comment: Mr. Morford also commented on the appropriateness of requiring all sources to have short term plant site emission limits (PSELs). Mr. Morford believes the Department is strictly interpreting this rule to require all sources to have short term PSELs. However, Mr. Morford believes that the language of the rule allows, rather than requires, sources to have PSELs shorter than annually if it is "compatible with source operations". If source operations dictate that only an annual PSEL is appropriate, a short term PSEL should not be required.

Response: This issue is also part of the citizen suit mentioned above. Again, the Department, once the lawsuit has been resolved, will review this rule to assure that it is consistent with the court's decision.

Ms. Theresa A. Parrone
Air Quality Programs Manager
Tektronix, Inc.
PO Box 500
Beaverton, OR 97077

Comment: Should Notice of Construction and Approval of Plan Rules Allow for De Minimis Changes to Industrial Sources (OAR 340-20-020 through 340-20-030)?

Tektronix submitted a comment on the lack of a "de minimis" exception from the Notice of Construction program, OAR 340-20-020 through 340-20-032. Tektronix argues that the program requires that the Department be notified each time a source "constructs, installs, or establishes a new source of . . . emission . . . " Thus, a source is required to notify the Department each time it engages in any activity which leads to an increase in emissions, no matter how small. Tektronix suggests that the Department establish de minimis levels for different air contaminants. Any increase in emissions less than the de minimis level would not be required to go through Notice of Construction.

Response: The Department does not believe that a "de minimis" exception to this rule is appropriate. The Notice of Construction program is an extremely important tool for the Department. It allows the Department to identify new air pollution sources and to determine requirements that apply to the sources. It is also important for compliance assurance purposes for existing sources. It allows the Department to keep track of changes at existing sources and assure that permit requirements are not being violated. The Department also requires sources to go through this process even if the source changes result in a net emission reduction. For many of the smaller changes at sources, it is also used in lieu of the more complicated and costly permit modification process.

Comment: Should Sources be Permitted to Maintain Air Pollution Emergencies Source Emission Reduction Plans only at the Source (OAR 340-27-015)?

Tektronix also commented that this section is stricter than federal requirements and does not recognize the practical limitations of maintaining current reduction plans and the operations manual in Department files as well as on source sites. Tektronix requests that the Department consider amending the requirement so that the plans and manual only have to be maintained at source sites.

Response: Division 27 contains the Department's Air Pollution Emergency rules. These rules have been reviewed and approved by the U.S. Environmental Protection Agency (EPA) as part of the State of Oregon Clean Air Act State Implementation Plan. The Department has the latitude to be stricter than federal requirements in this area. Requiring sources to maintain a current copy of Source Emission Reduction Plans (SERP) with the Department as well as on plant sites is necessary for the Department to assure that proper approved procedures are being followed during emergency episodes, regardless of the rarity of those episodes.

Steven Lindland
 Engineering Supervisor
 Highway Division, Oregon Department of Transportation 324 Capitol St. NE
 Salem, OR 97310

Comment: Should the Indirect Source Permit Requirement be Eliminated for Highway Project (OAR 340-20-100 through 340-20-135)?

The Oregon Department of Transportation (ODOT) submitted comments regarding the Department's Indirect Source program, OAR 340-20-100 through 340-20-135, as it affects the construction of highway projects. ODOT sees a need to amend the rules to be more consistent with the objectives of Title I of federal Clean Air Act (amended 1990). Because of the requirement to revise the State Implementation Plan (SIP) with regard to nonattainment areas, SIP requirements are likely to be much more stringent than the existing indirect source rules. This makes the rules' requirements redundant. Other parts of the rules that require analysis of total suspended particulate and lead emissions are no longer needed.

Response: As a result of the Clean Air Act amendments of 1990, the Environmental Protection Agency will be proposing new conformity rules affecting the Indirect Source program. When these regulations have been released, the Department will examine them and make the appropriate changes to assure that Oregon's Indirect Source rules are consistent with federal requirements.

10. Galen MayNorthwest Aluminum Company, Inc.3313 W. Second St.The Dalles, OR 97058

Comment: Should the 28 Day Litmus Test be Eliminated from Reporting Requirements for Primary Aluminum Plants (OAR 340-25-285)?

Northwest Aluminum Company commented that a specific test required under OAR 340-25-285, source specific standards for primary aluminum plants, was technologically out of date, inaccurate and repetitive. Northwest Aluminum pointed out that the same rule also requires 12 hour sampling of ambient air which is more accurate. The company requested that the Department consider eliminating the 28 day litmus test from the reporting requirements.

Response: Department staff has discussed this requirement with numerous people. The conclusion was that the test was out of date and inaccurate. The state of Washington stopped requiring this test 20 years ago. The conclusion is to eliminate the requirement from our rules. This change is proposed as part of the housekeeping amendments to the air quality rules in a separate agenda item today.

Jerry Van Scoy
 Executive Director
 Associated Floor Covering Contractors
 13807 SE McLoughlin, Suite 608
 Portland, OR 97222

Comment: Should the Commission Adopt the Recommended Work Practices of the Resilient Floor Institute for the Removal, Repair and Installation of Vinyl Asbestos Tile and Flooring (OAR 340-25-450 through 340-25-469)?

The Associated Floor Covering Contractors (AFCC) requested that the Department consider incorporating the Resilient Floor Covering Institute recommended work practices into the Department's asbestos abatement project rules, OAR 340-25-455 through 340-25-469. AFCC argues that the Department's current rules prohibit floor covering contractors from economically providing services to homeowners in terms of the removal and installation of vinyl floor covering. Floor covering contractors may not remove existing vinyl floors if they contain asbestos unless the floor covering contractor is also an asbestos abatement contractor. The cost of an asbestos abatement contractor removing vinyl flooring from a residence may be prohibitive. Therefore, the homeowner is forced either not to remove the floor, remove the floor one's self, or hire an illegal contractor. AFCC argues that the recommended work practices of the Resilient Floor Covering Institute have been determined to be protective under OSHA standards. AFCC also argues that if these work practices were adopted by the Department for these cases, it would give homeowners a legal and economic way to replace vinyl flooring.

Response: The Department has considered the recommended work practices of the Resilient Floor Covering Institute in the past. The Department recognizes that these work practices establish limits which are in compliance with OSHA standards. However, the Department also recognizes that these standards are those established to regulate worker exposure. The

Department is primarily responsible for protecting the general public from exposure to asbestos. The Oregon Legislature clearly charged the Department with this responsibility. Thus, the Department strongly believes that the standards it has set for asbestos abatement projects are reasonable and necessary to protect the general public. In terms of forcing homeowners into using illegal contractors, the Department also believes as the general public becomes more aware of asbestos abatement requirements and the purpose behind the requirements, they will see little incentive to use illegal contractors.

12. Harold L. Ball, President Orenco Systems, Inc.2826 Colonial Road Roseburg, OR 97204

Comment: Revise rules for on-site sewage disposal to reflect new technologies. The widely used sand filter typically costs more than \$8,000. Revised rules could reduce that cost to the \$5,000 range.

Response: The agency recognizes that there is a need to revise the rules to accommodate new technologies. The Water Quality Division would like to establish a technical review committee to initiate rulemaking activity by Fall 1993. Mr. Ball's comment will be forwarded to the committee as soon as it is established.

13. Steve Wert
Wert and Associates
9480 Garden Valley Rd.
Roseburg, OR 97470

Comment: Mr. Wert suggest changes to Division 71 (On Site Sewage Disposal). He suggests that narrow trenches (less than 24 inches) need to be allowed at the discretion of the local sanitarian without a variance. He suggests many technical guidelines to make this feasible.

Response: The agency recognizes that there is a need to revise the rules to accommodate new technologies. The Water Quality Division would like to establish a technical review committee to initiate rulemaking activity by Fall 1993. Mr. Wert's comment will be forwarded to the committee as soon as it is established.

14. Stuart Matzke
Wm. A. Matzke Co., Inc.
1804 S. Bush Pl.
Seattle, WA 98144

Comment: Mr. Matzke represents a product manufacturer that would like to market a new product to be used in on-site systems in Oregon. The product would be used in lieu of gravel disposal trenches.

Response: The concept needs to be reviewed by the on-site technical review committee as soon as it is established. Mr. Matzke's comment will be forwarded to the committee.

Dennis HolloranNorthwest Soil ConsultingPO Box 206Idleyld Park, OR 97447

Comment: Mr. Holloran had many technical suggestions related to Divisions 71 (On Site Sewage Disposal), 72 (Fee Schedule), and 73 (Construction Standards). He has suggestions regarding trenches, filters and tile-dewatering systems. He would also impose a 20 day limit for site evaluations.

Response: As with the previous technical suggestions regarding the on-site rules, Mr. Holloran's comments need to be forwarded to the technical review committee prior to and rulemaking changes. The 20 day limit would require many more staff than currently available to accommodate the workload.

16. Thom Seal
PO Box 547
Prairie City, OR 97869

Comment: Mr. Seal questioned why agricultural land clearing and forestry slash burning are exempt from regulation when woodstoves are not. Mr. Seal specifically cited the regulation outlining air contaminant sources exempt from Department regulation.

Response: The Oregon Legislature charged the Department with regulation of emissions from residential woodstoves. Such regulation has become necessary due to the concentration of woodstove emissions in populated areas. In areas which are nonattainment for PM_{10} (fine particulate matter), woodstove emissions are a major contributor to the problem. Generally, the Department's authority to regulate woodstove emissions primarily focuses on requirements that

woodstoves sold in Oregon to be certified. DEQ participates in the regulation of slash burning through the adoption of the state Smoke Management Plan and Visibility Plan. Both plans are part of the DEQ's Clean Air Act State Implementation Plan.

The exemptions from Division 20 cited by Mr. Seal in OAR 340-20-003 simply codify exemptions in the statute (ORS 468A.020) adopted by the legislature. DEQ is specifically restricted by statute from regulating agricultural operations except field burning. Field burning is regulated by DEQ under Division 26. The Department of Forestry regulated slash burning. To avoid confusion, the Air Quality Division is proposing in a separate housekeeping item on today's agenda that the exemptions in OAR 340-20-003 be revised to more exactly follow the language in the statute.

Mr. Seal also had several comments on water quality related rules.

Comment: In 340-45-010(21) he would insert the underlined phrases so it would read "Toxic Waste" means any waste which will cause or can at the concentration in the waste above background to be expected to cause hazard. . .

Response: Insertion of the above language would require the Department to perform an extensive evaluation of background toxicity levels of various compounds at the point of discharge before taking any compliance/enforcement action. The Department believes that the definition as written is clear, enforceable and consistent with our mandate to protect the environment from toxic waste discharges.

Comment: 340-45-030 should establish specific timelines for the Department to respond and documentation of responses to applicants. Also, 340-45-055 should establish application timelines.

Response: The Department processes applications as rapidly as resources allow. The Department cannot issue a permit to discharge treated wastes until it is satisfied that water quality standards and treatment requirements will be met and the environment protected. The ability to process applications quickly and thoroughly depends more on available resources than on established timelines.

Comment: 340-45-033. Further streamline general permits and do not charge for them. Also, at a hearing on a general permit the Department should keep commitments made at the hearing and not change the permit without another hearing.

Response: It is difficult to comment on general permits without more specific information. The charges for permits are set to cover the agency's cost to issue them. The processing fees for new general permits range from \$50 to \$150. The purpose of the hearing is to gather

information based on the draft permit that may be taken into account when writing the final permit. The comments gathered at hearings are considered in addition to written comments. If a permit is changed based on comments, all individuals involved in the process are informed.

Comment: OAR 340-45-010 (23) should read:

"wastes" means sewage, industrial wastes and all other liquid, gaseous, solid, radioactive, or other substances which will or can be proven to or may cause pollution at the concentration of the toxic substance in the waste to any of the waters of the state above background levels. (Underlined text is proposed.)

Response: The water quality laws are not based on the Department proving that substances added to water cause pollution. The laws are based on establishing the beneficial uses of a waterbody and then adopting numeric and narrative criteria that protect that specific use. The criteria are determined from extensive reviews of existing information and data on the potential adverse effects wastes have on the chemical, physical and biological character of the waters of the state.

Comment: Mr. Seal also suggested changing the reference to silver in 340-40-080 (5) (Groundwater Quality Protection) as it is not proven to be harmful.

Response: This suggestion will be considered during the current water quality standards review process.

Comment: 340-40-010 should quantify changes in temperature, taste, color, turbidity, silt to a reference level at which it is proven to be harmful.

Response: The numeric criteria is in the tables following the narrative rules that Mr. Seal has commented upon.

Comment: 340-40-020 should add above background levels and use surrounding area reference points and seasonal variations.

Response: This is taken somewhat out of context. The rules describe a very detailed process for determining pollutant parameters in following sections.

17. Gary Krahmer
General Manager
Unified Sewerage Agency
155 N. First Avenue, Suite 270
Hillsboro, OR 97124

Mr. Krahmer had several comments. Please see the end of this attachment for his letter and the agency evaluation.



UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY

November 1, 1991

SENT BY FACSIMILE 229-6124

Rules Coordinator/MSD
Department of Environmental Quality
811 S.W. Sixth
Portland, OR 97204

To Whom It May Concern:

The following are the Unified Sewerage Agency's comments on the Department of Environmental Quality Administrative Rules as requested by a DEQ Notice of Periodic Rule Review in September 1991.

We provide both overall comments on your rule package and comments on specific rules.

OVERALL COMMENTS

- 1) The DEQ has a triennial standards review process for water quality standards as required by law. We will not comment on specific standards here but expect to make comments on standards as they are offered for review by DEQ at other times. An example is the dissolved oxygen standard review that will be dealt with via formation of a special committee.
- 2) Oregon rules should reflect the latest and most accurate scientific information available and rely to the maximum extent appropriate on Environmental Protection Agency (EPA) technical guidance. In this regard, we feel it is important that deviations from the federal guidance be identified and examined based upon need or clear policy choices by the DEQ. A discussion of the findings should be part of the rule making documentation.
- 3) We believe that DEQ rules should establish clear and detailed criteria by which economic impact statements should be developed. Too often, very limited information has been included in the Department's economic impact statements accompanying the rule making process. These criteria, and resultant improved economic impact statements, would greatly benefit the decision-makes and the public during their deliberations.
- 4) Because of often unforeseen cross-media implications of rule making, it would be beneficial to review proposed rules for cross-media impacts as part of the rule making documentation provided to the public and decision-makers.

- 5) The wastewater treatment plant design criteria, within basins such as the Willamette River basin including the Tualatin River, appears to have been applied as permit limits within NPDES permits which is contrary to their intent as stated in the staff report establishing such criteria. The staff report supporting the adoption of the design criteria for the Willamette basin clearly indicates that the criteria was not intended to be applied as permit limits due to variations expected in biological processes demanding a higher not to exceed number.
- 6) DEQ should make its rules available in codified form. We purchased a complete set of rules from the Department to aid in this review. That package was not clear on several points. More than one document or amendment is included identified as "DRAFT RULES" or "PROPOSED RULES", so that it cannot be determined whether or not the rules were adopted and are in effect. (See, for example, Chapter 340, Division 25; OAR 340-45-075). Other sections contain added and deleted text. The text of new or revised rules may not indicate that the new provisions are intended to supersede prior rules having the same section numbers. The Department should make additional efforts to maintain its rules in a more clear, consistent format.

SPECIFIC COMMENTS

Issuance of a Permit 340-14-025 (2)

"All comments must be submitted in writing 14 days from the commencement of the public notice period if such comments are to receive consideration prior to final action on the application."

COMMENT: Limiting the review period to fourteen days does not allow sufficient time if the subject and content of the application is of a substantive nature as it would be in most cases. At minimum, a 30 days review period would be more appropriate.

This rule should also include an implementation period. Once a permit is issued and there is no request for a hearing, the permittee should have at minimum, a 60 day implementation period.

Modification of a Permit 340-14-040

"The modification shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative."

Modification of a Permit 340-14-040 (Continued)

COMMENT: Implementation of a permit modification could very well entail substantial changes in operations or acquisition of the necessary equipment, software, and etc. At minimum, a 60 day implementation period or effective date would be more realistic and less burdensome on the permittee, unless greater or different time is allowed through a compliance schedule in the permit.

Chapter 340, Division 45, Regulations Pertaining to NPDES and WPCF

Issuance of NPDES Permits 340-45-035 (4)

"A fact sheet shall be prepared for each draft NPDES permit for a major industrial facility and each NPDES general permit."

COMMENT: A fact sheet should be required for any draft NPDES permit and not be limited to the major industrial or general classification. Although the rules specify certain items the fact sheet should contain, it needs to go further than requiring the identification of the "applicable standards and guidelines used as a basis for effluent limits" and "an explanation of any proposed variances." The explanation needs to be in enough detail to show what specific criteria or site specific research was used.

Issuance of NPDES Permits 340-45-035 (5)

" After the public notice has been drafted and the fact sheet and proposed NPDES permit provisions have been prepared by the Department, they will be forwarded to the applicant for review and comment. All comments must be submitted in writing within 14 days after mailing of the proposed materials if such comments are to receive consideration prior to final actin on the application."

COMMENT: Same comment as in Issuance of a Permit 340-14-025 (2).

This rule also should include an implementation period or provision for the Department to specify a later effective date, if the permit contains new or additional conditions for the permittee to meet. Once a permit is issued and there is no request for a hearing, the permittee should have at minimum, a 60 day implementation period.

Chapter 340, Division 41, State-wide Water Quality Management Plan; Beneficial Uses, Policies, Standards, and Treatment Criteria for Oregon

COMMENT: Regarding 340-41-015, and -065. Existing rules require application for a permit and approval by the Department prior to commencement of construction of treatment facilities or discharge of treated waste. Nothing in these rules, however, requires the Department to act upon a complete application within a stated time. The Department should consider adopting a time limit for action upon applications for permits to construct facilities. In this way, applicants can more effectively plan their activities and reasonably anticipate when requested actions or approvals will occur.

Minimum Design Criteria for Treatment and Control of Wastes 340-41-455 (1)(b)(A)(B)

Prescribes the operating limits for BOD and SS during May 1 to October 31 and November 1 to April 30.

COMMENT: Rather than the criteria being specified by calendar dates, the criteria should be based on water quality needs of the receiving waters.

We also suggest that the application of the rule be clarified by amending the rule to state that design criteria are general guidelines for design of treatment facilities and are not intended to substitute for a factual water quality assessment of receiving waters, establishment of carrying capacity for a particular pollutant, adoption of Total Maximum Daily Loads, or NPDES permit parameters.

Department Initiated Modification of an NPDES Permit 340-45-055

"The modification shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative or unless the Director determines that significant public interest merits a public hearing or a change in the proposed modification, or if there are written requests for a hearing from ten (10) persons or from any organization representing at least ten persons."

COMMENT: Same comment as in Modification of a Permit 340-14-040.

Other Requirements 340-45-065 (2)

"Monitoring, recording, and reporting procedures used to meet the requirements of a NPDES permit shall conform with the Federal Act and regulations issued pursuant thereto."

Other Requirements 340-45-065 (2) (Continued)

COMMENT: There is still is a great deal of confusion as to appropriate data report formats. The Department should propose an approved form by rule, or otherwise consult with permittees and negotiate the scope of one or more approved forms for NPDES permittees and their specific reporting requirements.

Permit Fees 340-45-070

COMMENT: USA has appealed the annual compliance fees assessed in the Tualatin River Basin in addition to other NPDES annual permit fees. We renew our earlier comments to the Department and the commission that such fees be based only upon activities to determine the permittee's compliance with the NPDES permit, not upon other activities.

Chapter 340, Division 49, Regulations Pertaining to Certification of Wastewater System Operator Personnel

These rules clearly apply to personnel who may work on collection system or treatment system elements. It is not clear whether or not the rules apply to personnel who only perform construction or maintenance work on the collection system. Within Unified Sewerage Agency boundaries, for example, several cities perform extensive maintenance work on the sanitary sewerage collection system. These personnel perform no work on the treatment system. USA staff have consulted with Department staff on this issue, and we agreed that the rules were not clear on this point.

We appreciate the opportunity to comment. If you have questions about our comments, please contact John Jackson, Planning Division Manager, at 648-8644.

Sincerely,

Gary F. Krahmer

General Manager

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: December 2, 1991

TO:

Elana Stampfer

FROM:

Barbara Burton, Municipal Wastewater Section

Barbara Suiton

SUBJECT: Response to Comments - Periodic Rule Review

Response to Unified Sewerage Agency Letter, Dated 11/1/91

I have responded to the comments that seem to apply to my section. Please note that USA has appealed four of their permits, and several of the points raised have also been raised in the permit appeals. The permit appeal process is expected to drag on for another nine months at least.

Page 2, item 5 - use of wastewater treatment plant design criteria as permit limits.

Department response: We disagree that the Department did not intend to use the basin design criteria as permit limits. The intent always has been, and our practice always has been, to include the design criteria in permits as effluent limits.

The wording in the basin standards may be somewhat confusing. In discussing this with senior staff involved in drafting these rules, the intent was to allow the Department, on a case by case basis, to have higher permit limits than the basin standards. At the time the basin standards were adopted, there was some concern that these "technology forcing" limits might not always be achievable without tertiary treatment, and the Department wanted the flexibility to allow somewhat higher limits if a particular design was not as effective as expected. The rule also gave some level of comfort to permit holders, as an indication that the Department would consider higher permit limits if they in fact could not meet the stringent limits. We are not aware of any instances where the Department has relaxed permit limits based on facilities not capable of achieving basin design criteria.

Page 2, paragraphs 3 through 5 - 14 days are insufficient review time.

Department response - The Department typically allows as much time as is necessary to explore permit issues during the permit drafting process, provided the time is productively spent. For example, with USA, preliminary draft permits were sent April 3, 1991, revised draft permits sent May 6, the formal applicant

Memo to: Elana Stampfer

December 2, 1991

Page 2

review period was extended until May 28, and further comments from USA received up to June 28 of the public comment period. [USA has cited this issue in their permit appeal.]

The Department has a substantial interest in reaching agreement (if possible) prior to permit issuance, as permit appeals are time consuming. We take as much time as is necessary to resolve permit issues. Generally, substantial discussions have already occurred prior to the 14 day comment period.

It should be noted that 90% plus of permits issued get no comments during the applicant review period, and extending the official applicant review period would unnecessarily slow the process down.

Pages 2 and 3 - request for a 60 day effective date rather than 20 day period, when permit is modified.

Department response - The Department now takes into consideration how much time is required to implement the changes. Where necessary, we include a schedule in the permit modification specifically to allow time to implement the changes being required. The Department also responds to requests by permittees to extend the 20 day period.

60 days is a totally arbitrary time frame, and also would not fit a number of circumstances. For example, if a biological study during low flow conditions was included in the permit modification, then 60 days would not be adequate if the modification was issued in the winter. The Department believes the 20 day period is appropriate, provided the demonstrated flexibility to add an implementation schedule continues to be exercised.

Page 3, paragraph 3 and 4 - fact sheets are needed for minor as well as major NPDES permit holders.

Department response - NPDES permits are issued in compliance with both Oregon and federal requirements. While state rules may not require fact sheets for minor NPDES permits, federal rules do require fact sheets and the Department does prepare them for <u>all</u> NPDES permits.

Page 3, last paragraph - an implementation period of at least 60 days should be allowed when permits are issued, for new conditions or requirements.

Department response - See response to similar comment on implementation period for permit modifications.

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Page 3

Page 4, paragraph 1 - time limit for Department to complete plan review and issue permits is needed.

Department response - The Department attempts to have the minimum possible turn around time consistent with staffing levels and project complexity. Due to variations in work load, staff turnover, and other factors, the Department could not guarantee a quality review and permit within a specific time frame. We continue to work towards the best service possible.

Page 4, paragraph 2 through 4 - design criteria should be based on water quality limits of the stream, not time of year.

Department response - This issue is currently under appeal. The Department does not agree with USA's position that design standards should be based only on whether or not the discharge would cause in stream water quality standard violations. Rather, design standards are set based on requiring the highest and best practicable treatment, and minimizing the discharge of pollutants to surface waters. The more stringent standards generally required in the summer are based on two factors - one, sewage treatment plants can produce better effluent in the warmer months, and two, the receiving stream flows are almost always lower in the summer and the streams generally are more sensitive to pollution impacts in the summer.

Page 4, paragraph 5 - Department-initiated permit modifications should not become effective within 20 days, a longer period should be allowed.

Department response - This was answered earlier.

Pages 4 and 5 - the report format should either be adopted by rule, or negotiated with permittees.

Department response - Regarding major NPDES permit holders, the proper format is specified by EPA, and is a nationally adopted EPA form. Regarding minor permit holders, DEQ has a standard permit form that is mailed to each permittee. Permittees can request a different reporting format (for example to allow submission of a computer printout), and the Department routinely approves these on a case by case basis. In summary, it is hard to see what the objection is.

Page 5, paragraph 2 - Objection is made regarding the Tualatin Basin fees.

Department response - USA has filed suit against the Department regarding this issue. Comment is not appropriate at this time.

Memo to: Elana Stampfer

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Page 4

Page 5, paragraph 3 - rules regarding certification are unclear as to how they apply to people who work on collection systems and not treatment systems.

Department response - Chapter 340, Division 49 requires that each collection system and each treatment system be <u>supervised</u> by a properly certified operator, but not that each worker be certified. It is the responsibility of the collection system or treatment system <u>owner</u> to see that the system is supervised by a properly certified operator. In the example cited by USA, USA is responsible for providing properly certified supervisors for both the treatment systems they own, and the portion of the collection system that they own. The individual cities are responsible for providing properly certified operators for the collection systems owned by the cities. This letter is not clear as to what the point of confusion is.

Response to 10/29/91 Letter From Association of Oregon Sewerage Agencies

The letter makes a number of suggestions regarding changes in the "sludge" rules. EPA will be issuing sweeping changes in the federal rules regarding municipal sludges within the next 12 to 24 months, and the Department will be required to substantially re-write our sludge rules at that time. We are proposing to review all the sludge rules at that time, and will consider other changes such as those proposed by AOSA.

cc: Lydia Taylor Neil Mullane

Department of Environmental Quality

Notice of Periodic Rule Review of Department's Administrative Rules and Solicitation of Public Comment Pursuant to ORS 183.550.

1. In accordance with ORS 183.545 and ORS 183.550, the Oregon Department of Environmental Quality will conduct a review of all of its administrative rules. These rules affect all of the Department's programs, including its regulation of air quality, water quality, noise, solid waste, on-site sewage disposal, hazardous substances and waste, underground storage tanks, environmental cleanup of contaminated sites, and the Department's administrative practices.

The review will determine whether the rules should be continued without change or should be amended or rescinded, consistent with the stated objectives of applicable law.

- 2. In reviewing the rules, the Department will consider, among other things:
 - a. Economic impact of the rule;
 - b. Continued need for the rule;
 - c. Complexity or redundancy of the rule;
 - d. Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations, and local government regulations;
 - e. Degree to which technology, economic conditions or other factors have changed in the affected subject area:
 - f. Statutory citation or legal basis for the rule;
 - g. The rule's potential for enhancement of job producing enterprises;
 - h. Internal consistency of the rule.

If you would like to comment on any of the Department's adopted rules, address your comments, no later than November 1, 1991, to:

Rules Coordinator/MSD
Department of Environmental Quality
811 S.W. Sixth
Portland, Oregon 97204

The Department of Environmental Quality staff will review the rules and all of the public comments on the rules in the context of the criteria identified above. The Environmental Quality Commission will consider changes to the rules based on public comments and staff review. Any rulemaking actions resulting from the review will be taken in accordance with the rulemaking requirements in ORS 183.325 through 183.410.

Copies of the Department's rules, Oregon Administrative Rules, Chapter 340, can be purchased from Department of Environmental Quality. The current set, with updates through December 1990 costs \$35, including postage and handling. A subscription update service is also available for \$80 a year. To order a set of rules, send a check or money order made out to DEQ, with your name and address, to:

Oregon Administrative Rules, Chapter 340 Department of Environmental Quality Attention: Management Services Division 811 S.W. Sixth Avenue Portland, Oregon 97204

The Department's administrative rules are available for inspection at the offices listed below during regular business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday.

Headquarters Office 811 S.W. Sixth Ave. Portland, Oregon 97204,

Astoria Branch Office Clatsop County Courthouse 749 Commercial Astoria, Oregon 97103

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