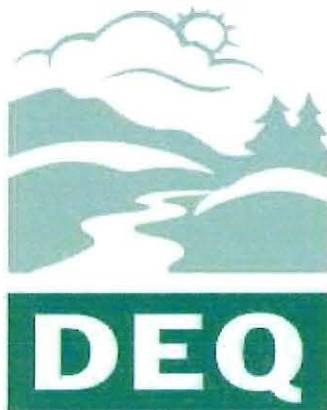


**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS 11/14/1996**



State of Oregon  
**Department of  
Environmental  
Quality**

# **A G E N D A (Revised)**

## **ENVIRONMENTAL QUALITY COMMISSION MEETING**

**November 14-15, 1996**  
**DEQ Conference Room 3A**  
**811 S. W. Sixth Avenue**  
**Portland, Oregon**

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. If a specific time is indicated for an agenda item, an effort will be made to consider that item as close to that time as possible. However, scheduled times may be modified if agreeable with participants. Anyone wishing to listen to the discussion on any item should arrive at the beginning of the meeting to avoid missing the item of interest.

**Public Forum:** The Commission will break the meeting at approximately **11:30 a.m.** for the Public Forum if there are people signed up to speak. The Public Forum is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for this meeting. The public comment period has already closed for the Rule Adoption items and, in accordance with ORS 183.335(13), no comments can be presented to the Commission on those agenda items. 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.

**November 14, 1996**

**Beginning at 9:00 a.m.**

- A. Approval of Minutes
- B. Approval of Tax Credits
- C. **Action Item:** Petition to Amend OAR 340-101-033 (Hazardous Waste Rules)
- D. **Action Item:** Theron Stiehl, Case No. SW-WR-95-083 - Appeal of Hearing Officer's Findings of Fact and Conclusions of Law
- E. †**Rule Adoption:** New Source Review Requirements for Air Quality Maintenance Areas
- F. †**Rule Adoption:** Ten Lane Regional Air Pollution Authority Regulations for Approval as a Revision to the State of Oregon Clean Air Act
- G. †**Rule Adoption:** Portland Area Enhanced Vehicle Emissions Testing
- H. **Action Item:** Petition for Reconsideration or Rehearing in the matter of the Renewal of Smith Frozen Foods, Inc.'s WPCF Permit No. 3533

- I. **Informational Item:** Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180
- J. **Informational Item:** Presentation by the City of Portland Regarding the Combined Sewer Overflow (CSO) Project
- K. **Informational Item:** Report from Fish and Wildlife Regarding Salmon Restoration and Spills
- L. **Informational Item:** Proposal by the Confederated Tribes of the Umatilla Indian Reservation for Disposal of Chemical Weapons at the Umatilla Chemical Depot
- M. Commissioners' Report
- N. Director's Report

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**November 15, 1996**

**8:30 - 11:30 a.m.:** **Worksession:** Discussion of Dioxin Issues and Draft Findings for Umatilla Chemical Depot

**11:30 a.m. - 12:30 p.m.** **Public Forum:** Testimony Regarding Umatilla Chemical Depot Only

**12:30 p.m.** **Notice of Executive Session of the Environmental Quality Commission**

The Environmental Quality Commission will hold an executive session at 12:30 pm. at 811 SW Sixth, Portland, Oregon. The session will consider advice to Counsel regarding potential Umatilla Chemical Depot Permit Appeals. The executive session is to be held pursuant to ORS 192.660(1)(h). The regular meeting of the Environmental Quality Commission will end at 12:30 pm. Representatives of the media will not be allowed to report on any of the deliberations during the session.

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Hearings have already been held on the Rule Adoption items and the public comment period has closed. In accordance with ORS 183.335(13), no comments can be presented by any party to either the Commission or the Department on these items at any time during this meeting.

A special Commission meeting will be held on November 22, 1996, at the Little Vert Theatre in Pendleton, Oregon. This will be a single agenda item meeting regarding the Umatilla Chemical Depot. The Commission has set aside January 9-10, 1997, for their next regular meeting. It will be held in Portland, Oregon.

Copies of staff reports for individual 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.

If special physical, language or other accommodations are needed for this meeting, please advise the Director's Office, (503)229-5395 (voice)/(503)229-6993 (TTY) as soon as possible but at least 48 hours in advance of the meeting.

**Environmental Quality Commission  
Work Session**

**September 27, 1996**

The Environmental Quality Commission work session was convened at 9:00 a.m. on Friday, September 27, 1996 at the Department of Environmental Quality Headquarters Building, 811 S.W. Sixth Avenue, Portland, Oregon. The following members were present:

Henry Lorenzen, Chair  
Carol Whipple, Vice Chair  
Melinda Eden, Member  
Linda McMahan, Member  
Tony Van Vliet, Member

Also present were Larry Knudsen, Assistant Attorney General, Oregon Department of Justice, Langdon Marsh, Director, DEQ, and other DEQ staff.

**Salmon Restoration and Spill**

Russell Harding, Manager of Standards and Assessments, Water Quality Division, introduced this item to the Commission. He presented a brief review of the administrative history of the requests for modifications to the state's total dissolved gas standard from 1994 to the present. Harding then called on invited speakers to address the Commission.

Roy Hemmingway with the Governor's office discussed the State's response to threatened and endangered Snake River Salmon recovery.

Donna Darm with the National Marine Fisheries Service (NMFS) in Seattle (participating via conference call) discussed the role of NMFS in the Snake River Salmon recovery efforts. She also outlined specifics of the proposed recovery plan. Ms. Darm said that communication between the various agencies working on the spill issues is improving and committed NMFS to working towards increased cooperation.

Dr. Tom Bachman, Columbia River Intertribal Fish Commission, presented results of in-reservoir monitoring during the 1996 spill season.

Cindy Hendricksen with the U.S. Army Corps of Engineers answered Commission questions regarding the structure and makeup of groups working with the dissolved gas issues.

Bruce Lovelin, representing the Columbia River Alliance, questioned the methods and results of current gas bubble disease monitoring techniques.

Dr. Margaret Filardo with the Fish Passage Center reviewed 1996 biological monitoring results. She said that heavy runoff and subsequent spill in 1996 resulted in dissolved gas levels far in excess of those approved by the waiver.

Kurt Beiningen with the Oregon Department of Fish and Wildlife was also available to answer the Commission's questions.

Chair Lorenzen called a temporary recess at 12:30 p.m. and the work session resumed at 1:10 p.m.

### **Public Forum**

Joe Walicki, representing the Oregon Environmental Council, discussed alternative technology information with the Commission. He also asked that the Commission encourage businesses to use chlorine-free paper where possible.

Mark Brown, Director of Greenpeace Oregon, expressed concern that data from the Tooele, Utah Chemical Depot trial burns will not be available prior to the time the Commission is scheduled to make a decision regarding the Umatilla Chemical Depot incineration permit.

Jane Haley, member of the Board of Directors of the Oregon Center for Environmental Health, reviewed her concerns regarding problems with the incineration data available for the Johnston Atoll and Tooele, Utah projects. She also discussed President Clinton's recent directive to the Secretary of Defense to explore alternative options for agent destruction.

Lisa Brenner said she was concerned regarding the Department's public process used for the Umatilla permit, specifically that in the past she's seen very few permit changes in response to public comments. She encouraged the Commission to give weight to the comments received during the public comment period.

### **Discussion of Findings and Permits for Umatilla Chemical Depot**

Stephanie Hallock, Eastern Region Administrator, introduced this item to the Commission. The purpose of the work session regarding the Department's draft staff report on ORS 466.055 findings was to propose a format for organizing and presenting information the Commission will need to make its decision regarding Umatilla Chemical Depot.

Sue Oliver, Eastern Region, reviewed the findings that the Commission must make before issuing a hazardous waste permit. Larry Edelman, Assistant Attorney General, was also available to answer questions.

Fredric Moore, Eastern Region, provided a description of proposed conditions which could be added to the permit language in response to earlier inquiries from the

Commission. These included information regarding disposition of the site following completion of the project, questions regarding liability, pollution abatement procedures, and allowances that might be made for adverse weather conditions during the incineration process.

There was no further business and Chair Lorenzen adjourned the work session at 4:15 p.m.

**Environmental Quality Commission  
Work Session**

**October 10, 1996**

The Environmental Quality Commission work session was convened at 10:15 a.m. on Thursday, October 10, 1996 at the Columbia River Maritime Museum, 1792 Marine Drive, Astoria, Oregon. The following members were present:

Henry Lorenzen, Chair  
Carol Whipple, Vice Chair  
Melinda Eden, Member  
Tony Van Vliet, Member  
(Linda McMahan, Member, joined the meeting at 10:35 a.m.)

Also present were Langdon Marsh, Director, DEQ, Lydia Taylor, Deputy Director, DEQ, and other DEQ staff.

Director Marsh reviewed the process the Department followed in developing the Department's Mission/Vision/Value statements and presented the draft document to the Commission for its review and input. Chair Lorenzen indicated he would like to see the Department consider ways to keep the Commission members up-to-date about citizen concerns.

Helen Lottridge, Management Services Division Administrator, and Mitch West, Acting Budget Director, presented an overview of the Department's 1997-1999 budget request to the Commission. Ms. Lottridge discussed possible strategies to deal with the forecasted budget shortfall for the next biennium and emphasized the need for stable, long-term funding sources for the Department.

Chair Lorenzen introduced invited representatives from industry and environmental organizations and asked for their input regarding long-range directions for the Department.

Andy Anderson, Executive Vice President of the Oregon Farm Bureau, said he was impressed with Department's wellhead protection program. He asked that the Department consider keeping the same staff members on through the duration of a project, rather than assigning different staff during various phases.

John Ledger with Associated Oregon Industries (AOI) said he would like to see more DEQ staff involvement in AOI activities. He also noted AOI's concerns with increasing fees and stressed the importance of the Department securing a stable funding base.

Ward Armstrong with Oregon Forest Industry Council discussed concerns of his members regarding potential threats to private lands by federal regulation. He also

spoke about the recently adopted water temperature standards and his concerns that the Department may have created unnecessarily stringent requirements.

**Note:** At this time, Willis Van Deusen, Mayor of the City of Astoria, came before the Commission and presented award plaques to individuals involved with the clean up of the Astoria Plywood site. The Mayor said the City was extremely pleased with the clean up project and thanked the Department, and particularly staff member Karl Morgenstern of the Waste Management and Cleanup Division, for their efforts.

Chair Lorenzen introduced the next panelist, John Charles, outgoing Director of the Oregon Environmental Council. Mr. Charles stressed the importance of using incentives to assure environmental compliance in the future.

Jim Craven with the American Electronics Association noted that the electronics industry is now the largest employer in the state. He said members of his organization were available to offer technical assistance in the areas of process and continuous improvement, and urged the Department to take advantage of members' expertise. He also voiced strong support for the Department's contributions to the annual REMCON conferences.

Janet Gillaspie with the Oregon Association of Clean Water Agencies urged that the Department consider permits written with clear environmental results. She suggested a move to permitting on a watershed basis and recommended the Department investigate the implementation of an effluent trading program.

Joni Low with the League of Oregon Cities said her members want more technical assistance and education with less emphasis on enforcement. She also suggested the Department work through the Oregon Community College system to explore alternative ways of providing needed information to the regulated community.

Carolyn Young, Assistant to the Director, summarized results from several customer service surveys conducted recently. Chair Lorenzen discussed the possible need for more formal customer service feedback mechanisms, and suggested the Department's Vehicle Inspection Program stations distribute cards asking customers to rate the quality of their vehicle inspection experience.

The Commission participated in a dialogue with Department staff regarding the Department's Mission/Vision/Goals. Carolyn Young also briefed the Commission on legislative concepts to be introduced during the upcoming legislative session.

There was no further business and the work session was adjourned at 4:00 p.m.



Approved \_\_\_\_\_  
Approved with Corrections \_\_\_\_\_

Minutes are not final until approved by the EQC

**ENVIRONMENTAL QUALITY COMMISSION**  
Minutes of the Two Hundred and Fifty-Fifth Meeting

**October 11, 1996**  
Regular Meeting

The Environmental Quality Commission meeting was convened at 8:30 a.m. on Friday, October 11, 1996, at the Columbia River Maritime Museum, 1792 Marine Drive, Astoria, Oregon. The following members were present:

Henry Lorenzen, Chair  
Carol Whipple, Vice Chair  
Melinda Eden, Member  
Linda McMahan, Member  
Tony Van Vliet, Member

Also present were Larry Knudsen, Assistant Attorney General, Oregon Department of Justice, Langdon Marsh, 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, 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 in the minutes of the meeting by reference.

Chair Lorenzen called the meeting to order at 8:40 a.m. and announced that certain agenda items would be taken out of order. Commissioner Lorenzen also noted that agenda items D (DEQ v. Russell Henry Jr. dba Henry Dozing and Excavating and Lane Ward - Appeal of Hearing Order Regarding Violation and Assessment of Civil Penalty) and K (Presentation by City of Portland Regarding the Combined Sewer Overflow (CSO) Project) were pulled from this meeting's agenda and would be added to the November 14, 1996 meeting agenda.

Umatilla County Commissioner Bill Hansel addressed the Commission briefly regarding Agenda Item L - Update on Emergency Preparedness at Umatilla Chemical Depot. Mr. Hansel reviewed Umatilla County's progress with emergency planning efforts and told the Commission he supported the destruction of the chemical weapons "the sooner the better."

**A. Approval of Minutes**

Commissioner Van Vliet moved approval of the meeting minutes for the August 22, 1996 work session and the August 23, 1996 regular meeting. Commissioner McMahan seconded the motion and it was unanimously approved.

## B. Approval of Tax Credits

Mike Downs, Water Quality Division Administrator, and Maggie Vandehey, Water Quality Division, presented this item to the Commission. The Department recommended the Commission approve certification for the tax credit applications listed below:

Application No.	Applicant	Description
TC4379	WWDD Partnership \$15,622	A reclaimed plastic facility consisting of 1 screw feed for a plastic extruder
TC 4499	Chevron Products Co \$49,211	Underground storage tank: air quality, stage II vapor recovery equipment
TC 4500	Chevron Products Co \$42,979	Underground storage tank: air quality, stage II vapor recovery equipment
TC 4501	Chevron Products Co \$67,613	Underground storage tank: air quality, stage II vapor recovery equipment
TC 4520	WWDD Partnership \$14,535	A reclaimed plastic facility consisting of 95 plastic storage bins.
TC 4555	Denton Plastics \$15,767	A reclaimed plastic facility consisting of 1 hyster forklift.
TC 4563	Argay Disposal Service \$91,036 / 75%	A solid waste recycling facility consisting of a collection truck with a Leach 20 yard alpha series compactor body used to collect yard debris and old corrugated cardboard.
TC 4568	United Disposal Service, Inc. \$45,759	A solid waste recycling facility consisting of eleven 48.9 yard drop boxes, two 48 yard drop boxes.
TC 4572	United Disposal Service, Inc. \$35,516	A solid waste recycling facility consisting of ten 48.9 yard drop boxes.

TC 4573	United Disposal Service, Inc. \$31,041	A solid waste recycling facility consisting of three pull tarp systems, one hundred thirty 64 gallon Schaefer Compostainers, four 48.9 yard drop boxes, four 1 yard tote bins
TC 4578	WWDD Partnership \$ 8,100	A reclaimed plastic facility consisting of a truck trailer.
TC 4579	United Disposal Service, Inc. \$12,228	A solid waste recycling facility consisting of 3 pulltarp systems, 5 one yard bins, one 20 yard drop box.
TC 4581	United Disposal Service, Inc. \$47,151	A solid waste recycling facility consisting of six 3 yard self dumping hoppers, thirty 1.5 yard tote bins
TC 4588	United Disposal Service, Inc. \$22,191	A solid waste recycling facility consisting of one Yale forklift.
TC 4591	Midtown Gas \$2,242	A solid waste facility to recycle antifreeze.
TC 4594	United Disposal Service, Inc. \$19,888	A solid waste recycling facility consisting of Marathon TC2.5 HD/HF Compactor System.
TC 4599	United Disposal Service, Inc. \$24,568	A solid waste recycling facility consisting of Marathon TC3 Compactor System.
TC 4600	Denton Plastics \$14,167	A reclaimed plastic facility consisting of one hyster forklift.
TC 4613	United Disposal Service, Inc. \$44,406	A solid waste recycling facility consisting of twelve 48.9 yard drop boxes.
TC 4630	United Disposal Service, Inc. \$ 9,643	A solid waste recycling facility consisting of one Marathon Baler.

concurrence with the Variance Officer's findings. Additionally, Commissioner Van Vliet moved that the Commission authorize the Director, Langdon Marsh, to sign the final order. Commissioner Whipple seconded the motion with the addition of the understanding the applicant can make application in future with a revised design, should she wish to do so. The motion, as amended, was unanimously passed.

**M. Informational Item: Report from Fish and Wildlife Regarding Salmon Restoration and Spills**

Russell Harding, Standards and Assessments Manager, Water Quality Division, presented this item to the Commission. Mark Schneider with the National Marine Fisheries Service's Portland office clarified the makeup and roles of various teams within the agency involved in the decision making process for spills and related issues. Russell Harding said the target date for submitting the 1997 waiver requests to the Commission for its consideration is January 15, 1997.

**Note:** The meeting was temporarily recessed at 10:00 a.m. and reconvened at 10:10 a.m.

**L. Informational Item: Update on Emergency Preparedness at Umatilla Chemical Depot**

Stephanie Hallock, Eastern Region Administrator, introduced this item to the Commission. Also presenting information to the Commission were Donna Shandle, Army CSEPP Program, reporting to General Orton, The Honorable Louis Carlson, Morrow County Judge, Myra Lee, Director, Oregon Office of Emergency Management, Lt. Col. Marie Baldo, Umatilla Depot, J.D. Schwarzkopf, Federal Emergency Management Agency (FEMA) Manager with the Army CSEPP Program, and Bob Grow, Special Assistant to the Preparedness and Training Director, FEMA Region 10.

Judge Carlson reviewed Morrow County's progress in emergency planning efforts over the past ten years. Ms. Shandle described the relationship between FEMA, the Army and other groups, clarifying responsibilities of each agency. Myra Lee discussed the role of the Office of Emergency Management in working with the federal agencies and the Army.

The Commission asked a number of questions of the panel, and Commissioner Lorenzen thanked them for their presentations.

**Note:** The meeting was temporarily adjourned at 11:45 a.m. and reconvened at 11:50 a.m. Chair Lorenzen announced that the Commission would go into executive session and asked that all non-Department staff in the audience leave the room. The Executive Session was held from 12:00 p.m. until 12:50 p.m., and Chair Lorenzen called the regular meeting back to order at 12:55 p.m.

TC 4631	Redmond Tallow Co. \$58,408	An air quality facility for odor control associated with cooking and drying meat.
TC 4643	United Disposal Service, Inc. \$ 8,226	A solid waste recycling facility consisting of two thousand 14 gallon recycling bins.
TC 4368	Wacker Siltronic Corporation \$1,704,287	Facility controls the gaseous emissions generated from the manufacture of silicon wafers.

Tax Credit facility number 4368 had costs exceeding \$250,000 and was also recommended for approval.

Application No.	Applicant	Description
Preliminary Certification	Mt Hoods Metals Corp \$533,396	A water pollution control facility consisting of paving improvements, detention basin and oil-water separator to collect and treat stormwater runoff.

Commissioner McMahan moved to approve the tax credits as recommended by the Department. Commissioner Eden seconded the motion. The motion was passed with four yes votes and one no vote (Commissioner Van Vliet).

Mr. Downs introduced Maggie Vandehey, who recently took over coordination of the Department's Pollution Tax Credit Program, to the Commission.

**C. Variance Application of Nona Henkel**

Nona Henkel appeared before the Commission on this item. Martin Loring, Waste Water Control Manager and Sherm Olson, Water Quality Division represented the Department.

Larry Knudsen, Department of Justice, introduced the item, and confirmed the statutory requirements the Commission must consider in making a decision. The Commission had the option to either uphold or reverse either part or all of the Hearings Officer's Preliminary Order and Opinion. The Variance Officer recommended the Commission deny the variance application as per the February 24, 1993 denial letter.

Mrs. Henkel provided information regarding the site and answered questions from the Commission. Following further discussion, Commissioner Van Vliet moved

**J. Action Item: Temporary Rule Adoption to Life Clear Lake Watershed Moratorium by Amending OAR 340-41-270, OAR 340-71-400(2) and OAR 340-71-460**

Lydia Taylor, Deputy Director, Steve Greenwood, Western Region Administrator and Barbara Burton, Water Quality Manager, Western Region, presented this item to the Commission. The Department recommended the necessary rules be amended that would have the effect of lifting the moratorium in the Clear Lake watershed.

**Public Forum** The one person signed up for Public Forum asked to address the Commission regarding Agenda Item J. Chair Lorenzen read Walter Drew's written statement dated October 11, 1996, and entered Mr. Drew's prepared statement dated September 25, 1996, into the official meeting record. Mr. Drew's statement recommended that the Commission leave the current moratorium intact and appeal Judge Coffin's order.

The Commission expressed concerns regarding the effect of the recommendation on water quality standards in the area. Mr. Greenwood noted that Total Maximum Daily Load (TMDL) requirements will still be in effect regardless of the status of the moratorium.

Commissioner Eden moved approval of the Department's recommendation that OAR 340-41-270 be amended, and sections 5 through 10 be deleted. In addition, OAR 340-71-460(6) should be deleted. OAR 340-71-400(2) should be modified to delete the reference to OAR 340-71-460(6) and to add a metes and bounds description of the Clear Lake watershed. Commissioner Whipple seconded the motion, and it was approved unanimously after a roll call vote.

For Agenda Items E, F, G and H, Chair Lorenzen suggested that each staff member present his or her rule adoption item, and that the Commission would then vote on the rule adoptions as a whole. The Commission agreed.

Greg Green, Air Quality Administrator, introduced Benjamin Allen, John Kinney, Mark Fisher and Dave Collier of the Air Quality Division, and Don Arkell, Director of the Lane Regional Air Pollution Authority.

**E. Rule Adoption: Adoption of Newly Promulgated federal National Emission Standards for Hazardous Air Pollutants (NESHAP) standards for the following source categories: chromium electroplating and anodizing, wood furniture coating, ship building and repair, aerospace, marine vessel loading and unloading, polymers and resins production, secondary lead smelters, and coke oven batteries. This adoption is limited to major (OAR 340-32-0120) sources only.**

Mr. Kinney presented this item to the Commission. The proposed rule adoption will amend OAR 340 Division 32 with maximum achievable emission (MACT) standards for affected source categories. The rulemaking is also part of a continuing effort to

amend the Division 32 rules with new regulations as promulgated by the federal government.

**F. Rule Adoption: Air Quality Industrial Rules (Odor, Typically Achievable Control Technology, Grain Loading, Specific Emission Standards, and Housekeeping)**

Mr. Allen presented this item to the Commission. He noted the package was in effect a clean-up of unrelated rules, including:

Odor - Mr. Allen first asked the Commission to note that the Department had amended its recommendation for adoption, and was no longer recommending the previously proposed odor rules be adopted. The odor rules were nuisance-based and intended to replace an obsolete "scentometer" measurement standard. Mr. Allen explained that in the process of drafting guidance for the rules, the Department had decided that the nuisance language was not sufficiently specific. The Department withdrew the proposal for the odor rules, and plans to reconsider the language.

Typically Achievable Control Technology - Mr. Allen said that the current Typically Achievable Control Technology (TACT) rule required many sources to install TACT for sources not covered by specific emission standards. The rule exempted sources covered by any standard in Division 30 of the Department's rules. However, Division 30 contains some area specific general emission standards, such as odor rules. The Department maintained that such standards should not preclude application of TACT, and suggested that the TACT rule be modified to exclude only the Division 30 rules containing specific standards.

Grain Loading - Mr. Allen said the Department proposed the repeal of two grain loading standards that had been superseded by incinerator rules. Chair Lorenzen asked how the rules related to incinerators. Mr. Allen replied that the two rules contained emission standards for fuel and refuse burning equipment which were now covered by the incinerator rules. The two rules were effectively redundant.

Specific Emission Standards - Mr. Allen said the Department had recently adopted a rule exempting sources from the less stringent of two applicable rules (when one rule was in Division 21). The Department found that the new rule was difficult to apply because it was not always possible to determine which of the two rules was more stringent. The Department's proposed rule would implement a prior policy: that the more *specific* of two rules would apply. Commissioner Van Vliet asked whether there had been any comment from environmentalists on this proposal. Mr. Allen replied that the only comment on the package had been on the odor rules.

In addition, the Department proposed a number of minor revisions to rules which were outdated, unclear or incorrect.

**G. Rule Adoption: Proposed New Source Performance Standards (NSPS) and Emission Guidelines for Municipal Waste Combustors**

Mr. Fisher presented this item to the Commission. He summarized the purpose, applicability and content of the proposed municipal waste combustor rules. This included a summary of the public comments received and the Department's response to these comments.

**H. Rule Adoption: PM<sub>10</sub> Control Strategy for PM<sub>10</sub> Nonattainment Area**

Don Arkell, Director of the Lane Regional Air Pollution Authority (LRAPA), presented this item to the Commission. Ambient air quality in Oakridge, Oregon exceeded the 24-hour national ambient air quality health standard for respirable particulate (PM<sub>10</sub>) twelve times since 1990. As a result, Oakridge has been designated by EPA as a moderate PM<sub>10</sub> nonattainment area. The redesignation of Oakridge to nonattainment has required LRAPA to develop a PM<sub>10</sub> emission control strategy which will reduce emissions and demonstrate compliance with standards by the Clean Air Act deadline of December 31, 2000. The EQC must adopt LRAPA's plan as a revision to the State Implementation Plan (SIP) before it can be submitted to the EPA for approval. The Department recommended the Commission adopt the Oakridge PM<sub>10</sub> Control plan as presented as a revision to the SIP.

Commissioner Van Vliet moved approval of the Department's recommendation on Agenda Items E, F, G and H. Commissioner Eden seconded the motion and it was unanimously approved.

Chair Lorenzen expressed appreciation for Mr. Arkell's "many fine years in charge of LRAPA."

**I. Action Item: Temporary Rules Regarding Clarification of Tank Vessel Per Trip Fees and Oil Spill Contingency Planning Requirements**

Mary Wahl, Waste Management and Cleanup Division Administrator, and Paul Slyman, Waste Management Division, presented this item to the Commission. Ms. Wahl explained that the temporary rule changes proposed would allow small self-propelled tank vessels to operate within Oregon waters under an appropriate fee (\$28 instead of \$650), and also allow for the cross border movement of spill response equipment to offer assistance to neighboring jurisdictions. The proposed changes would permit Oregon to sign the West Coast States/British Columbia Oil Spill Task Force Mutual Aid Agreement which entitles Oregon to receive reciprocal equipment transfers from other signatories (namely Alaska, British Columbia and California, all of which have far more equipment than Oregon).

Mr. Slyman noted that although an advisory committee was not used, the proposed rules are supported by other west coast states and British Columbia, as well as the steamship and barge industry. The Department will conduct permanent rulemaking prior to the expiration of the temporary rule. Responding to questions, Mr. Slyman discussed the spill risk from small tankers and the opportunities for Oregon to benefit by signing the Equipment Mutual Aid Agreement.



Commissioner Eden moved approval of the Department's recommendation to adopt the temporary rules. Commissioner Van Vliet seconded the motion and it was unanimously approved.

**N. Informational Item: Presentation of Recommendations from the Industrial Wastewater Permit Advisory Committee**

Mike Downs, Water Quality Division Manager, and Jan Renfro, Water Quality Division, presented this item to the Commission. In addition, Advisory Committee Co-Chair Lolita Carter and Committee Member Terry Drever-Gee were present to address the Commission.

Ms. Renfro reviewed the recommendations of the Industrial Wastewater Permit Advisory Committee and requested that the Commission take action to accept the recommendations and direct the Department to implement them as appropriate.

Ms. Carter indicated her support for continuing this type of interaction with the Department on an ongoing basis. Ms. Drever-Gee emphasized the importance of various agencies working together to leverage available funds for projects.

Commissioner Van Vliet moved to accept the recommendations in the Department's staff report. Commissioner McMahan seconded the motion and it was unanimously approved.

**O. Informational Item: Department of Environmental Quality Solid Waste/Recycling "Budget Note" Review Process**

Mary Wahl, Waste Management and Cleanup Division Administrator, and Deanna Mueller-Crispin, Acting Manager of Solid Waste Program, presented this item to the Commission.

Ms. Mueller-Crispin described the public involvement process used in the budget note process which reviewed the solid waste recycling laws and programs. She gave an overview of the data on which the Department's recommendations were based. Commissioners discussed the state's recovery rates and additional materials remaining in the wastestream which might be recovered. The Department's recommendations are to be included in a report to the 1997 Legislature. This was an information item, and no Commission action was required.

**P. Commissioners' Reports**

Commissioner Eden reported that she attended the most recent Citizens Advisory Committee meeting in Umatilla regarding the proposed incineration permit for the Umatilla Army Depot. She indicated she was impressed with the interested audience and the issues they raised.

**Q. Director's Report**

Director Marsh gave a brief update to the Commission on recent court cases of interest, and provided a document prepared by counsel with additional details.

He reviewed the progress of the Governor's Coastal Salmon Recovery Initiative. Department senior managers attended seven public meetings throughout the state. The final community briefing is planned for October 17, 1996 in Portland. Governor Kitzhaber and National Marine Fisheries Service Regional Director Will Stelle will attend that session.

Director Marsh announced that Deputy Director Lydia Taylor has been appointed to serve as a member of the National EPA Advisory Committee on the Total Maximum Daily Load (TMDL) program. He also updated the Commission on recent efforts of the Department's Pollution Prevention Core Committee to develop the framework of a program which would provide regulatory incentives for companies which demonstrate environmental performance beyond that which is required by law.

There was no further business and Chair Lorenzen adjourned the meeting at 3:10 p.m.

**Phone In December Environmental Quality Commission Meeting  
Proposed Dates**

December 31, 1996  
December 30, 1996  
December 19, 1996  
December 17, 1996

A date and time will need to be established at the November 14, 1996 EQC Meeting.

## Amendments

Please exchange the **first page of the Memorandum** in Agenda Item B with this updated version.

Also, please exchange **Application No T-4660** in Agenda Item B with this updated version.

State of Oregon  
 Department of Environmental Quality

Memorandum†

**Date:** October 29, 1996  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh, Director  
**Subject:** Agenda Item B, November 14, 1996 EQC Meeting  
 Approval of Tax Credit Applications

**Statement of the Need for Action**

This staff report presents the staff analysis of pollution prevention and control facilities tax credit applications and the Department's recommendation for Commission action on these applications. The following is a summary of the applications presented in this report:

**Applications for Pollution Prevention Pilot Program: Air Quality**

All equipment is used in the normal course of doing business. However, the owners would not have replaced their existing systems at this time or with this particular equipment had it not been required by the National Emission Standards for Hazardous Pollutants (NESHAP) and to avoid monitoring and record-keeping requirements.

TC No.	Applicant	Description	Cost	Percent Allocable
4655	Dallas City Cleaners	Non venting dry-to-dry perc dry-cleaning machine. Installed as a replacement for an old perc machine which vented emissions to the atmosphere during drying cycle.	\$ 29,000	
4656	Riverside Cleaners, Inc.	Non venting dry-to-dry perc dry-cleaning machine. Installed as a replacement for an old perc machine which vented emissions to the atmosphere during drying cycle.	\$ 37,000	
4657	Rejuvenation, Inc.	An ultrasonic aqueous cleaning system. Installed as a replacement for a vapor degreaser which used Trichloroethylene.	\$ 45,205	
4658	Oldham's Classic Cleaners	New, large washing machine. Installed as a replacement for an old perc machine which vented emissions to the atmosphere during drying cycle.	\$ 32,993	
4660	Hubbard Cleaners and Laundromat	A multiprocess wet cleaning system. Installed as a replacement for a production capacity perc dry cleaning machine which vented emissions to the atmosphere during drying cycle.	\$ 23,068	
<b>Total Prevention</b>			<b>\$ 167,266</b>	

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

### Applications for Pollution Control Tax Credit

**Division 16 - UST:** Underground Storage Tanks are used in the normal course of doing business. However, the owners would not have replaced or upgraded their existing systems at this time or with this particular equipment had it not been required by EPA and Chapter 340, Division 150.

TC No.	Applicant	Description	Cost	Percent Allocable
4595	Harold & Jim Pliska	UST system replacement.	\$ 133,031	95
4601	G.S. Company, INC.	UST system replacement.	\$ 4,735	100
4603	Wilco Farmers	UST system replacement.	\$ 189,438	88
4606	Cain Petroleum Inc.	UST system replacement.	\$ 157,933	91
4607	Jersey Development Corp.	UST System replacement.	\$ 117,207	91
4614	Cain Petroleum Inc.	UST system upgrade.	\$ 93,664	98
4621	Western Stations Co.	UST system upgrade.	\$ 62,468	99
4622	Western Stations Co.	UST system replacement.	\$ 114,218	89
4623	Cain Petroleum Inc.	UST system replacement.	\$ 193,491	91
4641	Western Stations Co.	UST system upgrade.	\$ 160,125	99
4645	Cain Petroleum Inc.	UST system replacement.	\$ 197,342	93
4646	Younger Oil Co.	UST system upgrade.	\$ 8,676	100
4647	Younger Oil Company	UST system upgrade.	\$ 8,375	100
4652	Truax Harris Energy LLC	UST system replacement.	\$ 199,735	96
4659	Fisher Corporation	UST system replacement.	\$ 109,420	83
4661	Leathers Oil Company	UST system upgrade.	\$ 117,611	99
4662	Leathers Oil Company	UST system upgrade.	\$ 144,117	99
4663	Leathers Oil Company	UST system replacement.	\$ 143,779	87
4664	Leathers Oil Company	UST system upgrade.	\$ 86,056	99
4665	Leathers Oil Company	UST system upgrade.	\$ 112,928	99
4666	Leathers Oil Company	UST system replacement.	\$ 231,991	92
<b>Subtotal UST:</b>			<b>\$ 2,586,340</b>	

**Other Division 16**

4649	Briggs Farm, Inc.	Air Quality: Field Burning. Sole purpose. New 130 HP Massey Ferguson Tractor. Used in the normal course of business.	\$ 60,000	62
4564	B & C Leasing	Solid Waste. Sole Purpose. 1993 International truck, Lely-pac 3500 gallon tank, 1995 International truck, 1993 26' WABO trailer and grease container. Used in the normal course of business.	\$ 196,080	97
4667	Quantum Resource Recovery	Solid Waste, sole purpose. Electrical panel upgrade for plastic granulator; and heavy duty plastic boxes for collection and transport of scrap plastic and metal. Used in the normal course of business.	\$ 21,976	100
4668	Quantum Resource Recovery	Solid Waste, sole purpose. Flatbed truck, semi truck, Hyster forklift, Morris scales, and five collection trailers. Used in the normal course of business.	\$ 46,835	100

**Subtotal Other           \$ 324,891**  
**Total Pollution Control   \$2,911,231**

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT  
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

Dennis Peterson Equipment Co.  
d.b.a. Hubbard Cleaners & Laundromat  
151 N. Front Street  
Woodburn, Oregon 97071

The applicant owns and operates a clothes cleaning shop located at 3362 D Street, Hubbard, Oregon.

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

2. Description of Facility

The claimed facility is a multiprocess wet cleaning system which was installed as a replacement for production capacity of a perc drycleaning machine. The wet cleaning system reduces the emissions of perc by wet cleaning (using water and detergents) 65% of the facility's total volume in lieu of drycleaning 100% of the clothes processed.

Claimed Facility Cost:       \$ 23,068

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the facility was substantially completed on January 25, 1996. The application for final certification was received by the Department on September 20, 1996. The application was found to be complete on October 3, 1996, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

- (1) The facility is eligible because it meets the requirement of avoiding the substantive requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

- (2) The facility installed a multiprocess wet cleaning system as a partial replacement for the production capacity of a perc dry-cleaning machine.
- (3) The facility was registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

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 it meets the definition of a pollution prevention facility for this pilot program.
- c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of \$ 23,068 be issued for the facility claimed in Tax Credit Application No. T-4660.

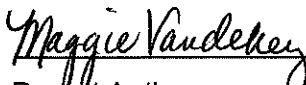

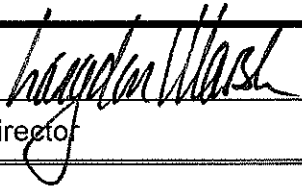
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# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item B  
November 16, 1996 Meeting

<b>Title:</b> Approval of Tax Credit Applications		
<b>Summary:</b>  Staff recommends approval of thirty six (36) new tax credit applications with a total facility cost of \$3,518,645 and one certificate transfer as follows:		
<b>5</b>	<b>Pollution Prevention Chapter 340, Division 100</b>	<b>\$ 167,266</b>
<b>25</b>	<b>Pollution Control Chapter 340, Division 16</b>	
21	UST Facilities	\$2,586,340
1	Field Burning Facility	\$60,000
3	Solid Waste: Recycling Facilities	<u>\$264,891</u>
	<b>Total Division 16 .....</b>	<b>\$2,911,231</b>
<b>6</b>	<b>Reclaimed Plastics Chapter 340, Division 17</b>	<b>\$ 440,148</b>
<b>36</b>	<b>Total Tax Credits</b>	<b>\$3,518,645</b>
<b>0</b>	<b>Applications with costs exceeding \$250,000</b>	
<b>0</b>	<b>Applications for Pre-certification</b>	
<b>1</b>	<b>Request for certificate transfer</b>	
 Approve issuance of tax credit certificates for applications as presented in Attachment A of the staff report.  Approve tax credit certificate transfer as presented in Attachment B of the staff report.		
 Report Author	 Jr. Division Administrator	 Director

October 29, 1996  
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†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon  
 Department of Environmental Quality

Memorandum†

**Date:** October 29, 1996  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh, Director  
**Subject:** Agenda Item B, November 14, 1996 EQC Meeting  
 Approval of Tax Credit Applications

**Statement of the Need for Action**

This staff report presents the staff analysis of pollution prevention and control facilities tax credit applications and the Department's recommendation for Commission action on these applications. The following is a summary of the applications presented in this report:

**Applications for Pollution Prevention Pilot Program: Air Quality**

All equipment is used in the normal course of doing business. However, the owners would not have replaced their existing systems at this time or with this particular equipment had it not been required by the National Emission Standards for Hazardous Pollutants (NESHAP) and to avoid monitoring and record-keeping requirements.

TC No.	Applicant	Description	Cost	Percent Allocable
4655	Dallas City Cleaners	Non venting dry-to-dry perc dry-cleaning machine. Installed as a replacement for an old perc machine which vented emissions to the atmosphere during drying cycle.	\$ 29,000	
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4657	Rejuvenation, Inc.	An ultrasonic aqueous cleaning system. Installed as a replacement for a vapor degreaser which used Trichloroethylene.	\$ 45,205	
4658	Oldham's Classic Cleaners	New, large washing machine. Installed as a <u>replacement</u> for an old perc machine which vented emissions to the atmosphere during drying cycle.	\$ 32,993	
4660	Hubbard Cleaners and Laundromat	A multiprocess wet cleaning system. Installed as a replacement for an old perc machine which vented emissions to the atmosphere during drying cycle.	\$ 23,068	
<b>Total Prevention</b>			<b>\$ 167,266</b>	

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

**Applications for Pollution Control Tax Credit**

**Division 16 - UST:** Underground Storage Tanks are used in the normal course of doing business. However, the owners would not have replaced or upgraded their existing systems at this time or with this particular equipment had it not been required by EPA and Chapter 340, Division 150.

TC No.	Applicant	Description	Cost	Percent Allocable
4595	Harold & Jim Pliska	UST system replacement.	\$ 133,031	95
4601	G.S. Company, INC.	UST system replacement.	\$ 4,735	100
4603	Wilco Farmers	UST system replacement.	\$ 189,438	88
4606	Cain Petroleum Inc.	UST system replacement.	\$ 157,933	91
4607	Jersey Development Corp.	UST System replacement.	\$ 117,207	91
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4622	Western Stations Co.	UST system replacement.	\$ 114,218	89
4623	Cain Petroleum Inc.	UST system replacement.	\$ 193,491	91
4641	Western Stations Co.	UST system upgrade.	\$ 160,125	99
4645	Cain Petroleum Inc.	UST system replacement.	\$ 197,342	93
4646	Younger Oil Co.	UST system upgrade.	\$ 8,676	100
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4652	Truax Harris Energy LLC	UST system replacement.	\$ 199,735	96
4659	Fisher Corporation	UST system replacement.	\$ 109,420	83
4661	Leathers Oil Company	UST system upgrade.	\$ 117,611	99
4662	Leathers Oil Company	UST system upgrade.	\$ 144,117	99
4663	Leathers Oil Company	UST system replacement.	\$ 143,779	87
4664	Leathers Oil Company	UST system upgrade.	\$ 86,056	99
4665	Leathers Oil Company	UST system upgrade.	\$ 112,928	99
4666	Leathers Oil Company	UST system replacement.	\$ 231,991	92

**Subtotal UST: \$ 2,586,340**

**Other Division 16**

4649	Briggs Farm, Inc.	Air Quality: Field Burning. Sole purpose. New 130 HP Massey Ferguson Tractor. Used in the normal course of business.	\$ 60,000	62
4564	B & C Leasing	Solid Waste. Sole Purpose. 1993 International truck, Lely-pac 3500 gallon tank, 1995 International truck, 1993 26' WABO trailer and grease container. Used in the normal course of business.	\$ 196,080	97
4667	Quantum Resource Recovery	Solid Waste, sole purpose. Electrical panel upgrade for plastic granulator; and heavy duty plastic boxes for collection and transport of scrap plastic and metal. Used in the normal course of business.	\$ 21,976	100
4668	Quantum Resource Recovery	Solid Waste, sole purpose. Flatbed truck, semi truck, Hyster forklift, Morris scales, and five collection trailers. Used in the normal course of business.	\$ 46,835	100

**Subtotal Other \$ 324,891**

**Total Pollution Control \$2,911,231**

## Applications for Reclaimed Plastic Tax Credit

All facilities are a normal part of doing business. It is unknown if the applicant would have installed these particular facilities at this particular time without the incentive provided by the Reclaimed Plastic Tax Credit.

TC No.	Applicant	Description	Cost	Percent Allocable
4188	Gage Industries, Inc.	Thermoforming mold, 3 sets of mold cavities, a trim die set, and stacker tooling for manufacture of nursery flat inserts.	\$ 178,668	100
4377	Lane International	Double Cavity molding die for production of a 10 inch reclaimed plastic manhole access step.	\$ 26,937	100
4387	Resco Plastics, Inc.	Nelmor Granulator will be used to recycle relatively large waste plastic items, like one gallon milk jugs.	\$ 18,500	100
4582	The Richwine Company	Cumberland Granulator, Toyota forklift truck and an air handling system.	\$ 64,761	100
4612	WWDD Partnership	Conair shredder.	\$ 87,282	100
4616	Recycled Plastic Marketing	Cumberland Grinder, hydraulic ramp, Ball Jewel Grinder, 200 amp electrical subpanel, 8'X 10' grinder vault, (1) 1986 & (1) 1983 Yale forklift, (2) 5000 lb.. digital scales; two rotary box staplers, and (1) 2HP vacuum dust collector.	\$ 64,000	100

**Total Reclaimed Plastic \$ 440,148**

### Certificate Transfer

On October 14, 1996, McCall Heating Co. requested the remaining value of Certificate No. 2676 issued 9/18/91 be transferred to McCall Oil & Chemical Corporation, a related company at the same address. The request was signed by a corporate officer of McCall Heating Company. The Department erroneously issued the certificate under McCall Heating "Oil". However, all supporting documents, including the application and the review report name McCall Heating "Company". The Department of Revenue is not able verify the amount of tax relief taken without an audit of McCall Heating Company's past five years' tax returns. Supporting documents may be found in Attachment B.

### Background and Discussion of Issues

There are no issues presented for discussion in this report.

### Summary of Any Prior Public Input Opportunity

The Department does not solicit public comment on individual tax credit applications during the staff application review process. Opportunity for public comment exists during the Commission meeting when the applications are considered for action.

**Conclusions**

The recommendations for action on the attached applications are consistent with statutory provisions and administrative rules related to the pollution control facilities and reclaimed plastic product tax credit programs.

**Recommendation for Commission Action**

- A) The Department recommends the Commission approve certification for the tax credit applications as presented in Attachment A of the Department Staff Report.
- B) The Department recommends the Commission approve the transfer of the remaining value of Tax Credit Certificate number 2676 from McCall Heating Oil to McCall Oil & Chemical Corporation as presented in Attachment B of the Department Staff Report.

**Intended Follow-up Actions**

Notify applicants of Environmental Quality Commission actions.

**Tax Credit Program Overview**

Certificates	1/1/96 - 10/11/96			11/14/96 Recommendation		
	Certified Costs <sup>1</sup>	Certified Allocable Costs <sup>2</sup>	App. Count	Certified Costs <sup>1</sup>	Certified Allocable Costs <sup>2</sup>	App. Count
Pollution Prevention	0	0	0	167,266	167,266	5
<b>Pollution Control</b>						
Air Quality	3,974,977	3,974,977	4	0	0	0
CFC	9,342	9,342	5	0	0	0
Field Burning	667,545	590,492	10	60,000	37,200	1
Noise	32,751	32,751	2	0	0	0
Hazardous Waste	25,095	25,095	2	0	0	0
SW - Recycling	508,259	485,500	15	264,891	259,009	3
SW - Landfill	0	0	0	0	0	0
Water Quality	840,225	840,225	3	0	0	0
UST	891,757	823,532	8	2,586,340	2,415,854	21
<b>Total</b>	<b>6,949,951</b>	<b>6,781,914</b>	<b>49</b>	<b>2,911,231</b>	<b>2,712,063</b>	<b>25</b>
Reclaimed Plastics	137,252	137,252	10	440,148	440,148	6
<b>TOTALS</b>	<b>\$ 7,087,203</b>	<b>\$ 6,919,166</b>	<b>59</b>	<b>\$ 3,518,645</b>	<b>\$ 3,319,477</b>	<b>36</b>

<sup>1</sup> Certified Costs represent the total facility costs the Department determined to be eligible under the tax credit program.

<sup>2</sup> Certified Allocable Costs represent the Certified Costs multiplied by percentage allocable to pollution control. The actual dollars that can be applied as credit are 50 percent of the Certified Allocable Costs.

Memo To: Environmental Quality Commission  
Agenda Item B  
November 16, 1996  
Page 5

**Attachments**

- A. Pollution Control Tax Credit Application Review Reports.
- B. Request for Certificate Transfer.

**Reference Documents (available upon request)**

- 1. ORS 468.150 through 468.190.
- 2. OAR 340-16-100 through 340-16-125.
- 3. OAR 340-16-005 through 340-16-050.
- 4. ORS 468.925 through 468.965.
- 5. OAR 340-17-010 through 340-17-055.

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_

Report Prepared By: Margaret Vandehey  
Phone: 229-6878  
Date Prepared: October 16, 1996

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State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Gage Industries, Inc.  
6710 S. W. McEwan Road  
Lake Oswego, Oregon 97035

Gage industries, Inc. is a plastic manufacturing company. The claimed equipment will be used to manufacture a reclaimed plastic product.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a thermoforming mold, three sets of mold cavities, a trim die set, and stacker tooling for the manufacture of nursery flat inserts known as "Gage Dura-pot Tray Packs". This product is manufactured from reclaimed high density polyethylene.

The claimed facility investment costs: \$178,668

The claimed cost of the facility was certified by an independent accountant.

3. Procedural Requirements

The investment is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on November 30, 1993. The preliminary certification was issued, effective December 30, 1993, on June 14, 1996.
- b. The investment was made on February 24, 1994.
- c. The request for final certification was submitted on October 3, 1996 and was filed complete on October 4, 1996.

4. Evaluation of Application

- a. The investment is eligible because the equipment is used to manufacture a reclaimed plastic product.
- 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 468.486 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.

The equipment is to be used 100% of the time for manufacture of a reclaimed plastic product.

- 2) 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.

No other factors were considered relevant.

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 manufacture a reclaimed plastic product.
- 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. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$178,668 with 100% allocated to reclaimed plastic recycling, be issued for the investment claimed in Tax Credit Application No. TC-4188.



Application No. TC-4377

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Lane T. Robertson  
4514 S. W. Trail Road  
Tualatin, Oregon 97063

Lane Robertson is a principal of and leases equipment to Lane International Inc. Lane International is a plastic product manufacturing company located at 18076 S. W. Lower Boones Ferry Road, Tualatin, Oregon 97062. The claimed equipment will be used to manufacture a reclaimed plastic product.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a double cavity molding die used in the manufacture of a 10 inch manhole access step from reclaimed plastic.

The claimed facility investment costs:                      \$26,937

The cost of the facility was certified by an independent accountant.

3. Procedural Requirements

The investment is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on April 3, 1995. The preliminary certification, effective June 4, 1995 was issued on July 23, 1996.
- b. The investment was made on March 22, 1996.
- c. The request for final certification was submitted on September 17, 1996 and was filed complete on October 1, 1996.

4. Evaluation of Application

- a. The investment is eligible for tax credit because the equipment is used to manufacture a reclaimed plastic product.
- 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 468.486 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.

The equipment is to be used 100% of the time for manufacture of a reclaimed plastic product.

- 2) 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.

No other factors were considered relevant.

The actual cost of the investment properly allocable to manufacture of a reclaimed product 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 manufacture a reclaimed plastic product.
- 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. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$26,937 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4377.

Application No. TC-4387

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Resco Plastics, Inc.  
Rt 1 Box 1700  
Bandon, Oregon 97411

Resco Plastics, Inc. is a plastic recycling company. The claimed equipment will be used to recycle relatively large waste plastic items, like one gallon milk jugs.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a Nelmor 50 HP Granulator, model G1830M, serial # 80-07-14092. This equipment is used to granulate post consumer and post manufacturing waste plastics.

The claimed facility investment costs: \$18,500

A copy of the purchase invoice was provided to document the cost of the facility.

3. Procedural Requirements

The investment is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on April 26, 1995. The preliminary certification was issued on May 5, 1995.
- b. The investment was made on May 5, 1995.
- c. The request for final certification was submitted on October 2, 1996 and was filed complete on October 4, 1996.

4. Evaluation of Application

- a. The investment is eligible because the equipment is used to recycle 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 468.486 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.

The equipment is to be used 100% of the time for processing reclaimed plastic.

- 2) 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.

No other factors were considered relevant.

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. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$18,500 with 100% allocated to reclaimed plastic recycling, be issued for the investment claimed in Tax Credit Application No. TC-4387.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

B & C Leasing, Inc.  
P O Box 14788  
Portland, Oregon 97214

The applicant is a leasing company which has common ownership with a solid waste collection company, Trashco, and a waste cooking oil and grease collection company, Oregon Oils, Inc.

2. **Description of Facility**

The facility consists of the following equipment: 1993 International truck, Model 9200, serial # 2hsfma656pco71448; Lely-pac 3500 gallon tank, serial # 93,2175-1387; 1995 International truck, Model 8300, serial # 1hskdpr7rh591894; 1993 26 foot WABO trailer, serial # 1b9102d0gp1310010; and, grease collection containers with no serial numbers.

Claimed equipment costs are listed below:

1993 International truck and Lely-pac tank	\$ 84,500
1995 International truck and 1993 WABO trailer	65,850
Grease collection containers	<u>45,730</u>
Total cost	\$196,080

The actual cost of the facility was certified by an independent public accountant.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The components were purchased between December 11, 1993 and October 31 1995.
- b. The final elements of the facility were placed into operation on October 31, 1995.
- c. The application for tax credit was submitted to the Department on December 7, 1995, within two years of substantial completion of the facility.
- d. The application was filed complete on October 3, 1996

4. **Evaluation of Application**

- a. The sole purpose of the facility is to provide collection of waste cooking oil and grease for recycling. This recycling collection service is a part of a material recovery process which obtains useful resources from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d).
- 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 is used 100% of the time for collection of oil and grease, a material recovery process.

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

A) The Applicant originally claimed a facility cost of \$248,230. This cost has been adjusted to remove all ineligible equipment and costs and the adjusted cost is \$196,080.

B) Annual Percentage Return on Investment

The applicant has calculate the average annual cash flow for this recycling equipment as the cash flow resulting from the lease of this equipment to the company that operates the equipment, Oregon Oils. The average annual cash flow is \$2,433. The useful life of the equipment is as 10 years. The annual percentage return on investment is 0.13%.

The portion of the adjusted cost of the facility properly allocable to pollution control as determined by using these factors is 97%.

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 the trucks is collection and recycling of waste oil and grease.
- 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 97%

6. **Director's Recommendation**

Based upon the findings, it is recommended that Pollution Control Facility tax credit certificate bearing the cost of \$196,080 with 97% allocable to pollution control be issues for the facility claimed in Tax Credit Application TC-4564.

Application No. TC-4582

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

The Richwine Company  
2501 S. E. Gladstone St.  
Portland, Oregon 97202

The Richwine Company is a plastic recycling company specializing in foam plastic recycling. The claimed equipment will be used to recycle foam polyethylene.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a Cumberland model 1936 granulator; a 1977 Toyota forklift; and an air handling system. This equipment is components of a foam plastic recycling system. Other portions of the system are not claimed in this tax credit application.

Cumberland granulator	\$36,364
Toyota lift truck	5,375
Air handlig system	11,484
Electrict panel and controls	<u>11,538</u>
Total facility costs:	\$64,761

The claimed cost of the facility was certified by an independent accountant.

3. Procedural Requirements

The investment is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on January 24, 1996. The preliminary certification was issued on February 2, 1996.
- b. The investment was made on May 15, 1996.
- c. The request for final certification was submitted on October 2, 1996 and was filed complete on October 4, 1996.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to recycle 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 468.486 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.

The equipment is to be used 100% of the time for processing reclaimed plastic.

- 2) 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.

No other factors were considered relevant.

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. **Director's Recommendation**

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$64,761 with 100% allocated to reclaiming plastic material recycling, be issued for the investment claimed in Tax Credit Application No. TC-4582.



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Harold and Jim Pliska  
P O Box 607  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 1011 N. Main, Gresham, OR, Facility ID No. 7249.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and Stage II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two fiberglass tanks and doublewall fiberglass piping, epoxy lining and cathodic protection anodes for three tanks, spill containment basins, tank gauge system, line leak detectors, overfill alarm, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost	\$133,324
(Accountant's certification was provided)	

The Department concludes that the total facility cost for the project is \$133,031. This represents a difference of \$293 from the applicant's claimed cost of \$133,324 due to the inclusion by the applicant of the cost of monitoring wells related to site cleanup work not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on December 1, 1994 and placed into operation on December 1, 1994. The application for certification was submitted to the Department on March 1, 1996, and was considered to be complete and filed on March 30, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment. One of these tanks was decommissioned during the project.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Fiberglass tanks, doublewall fiberglass piping, epoxy tank lining and anodes for cathodic protection.
- 2) For spill and overfill prevention - Spill containment basins, sumps and an overfill alarm.
- 3) For leak detection - Tank gauge system and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Fiberglass tanks and piping	\$14,400	60% (1)	\$ 8,640
Epoxy tanklining	22,590	100	22,590
Cathodic protection anodes	486	100	486
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,302	100	1,302
Overfill alarm	385	100	385
Sumps	2,125	100	2,125
<u>Leak Detection:</u>			
Tank gauge system	8,447	90% (2)	7,602
Line leak detectors	1,310	100	1,310
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	7,674	100	7,674
Labor and materials	74,312	100	74,312
Total	\$133,031	95%	\$126,426

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$14,400 and the bare steel system is \$5,800, the resulting portion of the eligible tank and piping cost allocable to pollution control is 60%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 95%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$133,031 with 95% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4595.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

G. S. Company, Inc.  
220 Main St.  
Mt. Angel, OR 97362

The applicant owns and operates a retail gas station at 220 N. Main, Mt. Angel, OR 97362, Facility ID No. 5071.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are one fiberglass coated steel tank, fiberglass piping, spill containment basin, sumps and automatic shutoff valves.

Claimed facility cost \$4,735  
(Documentation of cost was provided)

3. Procedural Requirements

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

The facility was substantially completed on January 28, 1995 and placed into operation on January 28, 1995. The application for certification was submitted to the Department on March 11, 1996, and was considered to be complete and filed on March 30, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal

Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Fiberglass coated tank and piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps and automatic shutoff valves.

The Department concludes that the costs claimed by the applicant (\$4,735) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant did not indicate that alternative methods were considered. The methods chosen are acceptable for meeting the requirements of

federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Fiberglass tank and piping	\$ 547*	100%	\$ 547
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	176	100	176
Automatic shutoff valves	426	100	426
Sumps	549	100	549
Labor and materials	3,037	100	3,037
Total	\$ 4,735	100%	\$ 4,735

\*Tank and piping cost is low because tank was acquired by applicant at no charge.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.



- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- 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 \$4,735 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4601.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Wilco Farmers  
P O Box 258  
Mt. Angel, OR 97362

The applicant owns and operates a retail/commercial fueling station at 490 S. Pacific Hwy, Woodburn, OR 97071, Facility ID No. 2355.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four fiberglass/steel doublewall tanks (one tank has two compartments) and doublewall flexible plastic piping, spill containment basins, tank gauge system with overflow alarm and line/turbine leak detection, sumps, oil/water separator and automatic shutoff valves.

Claimed facility cost \$189,438  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on August 1, 1994 and placed into operation on August 1, 1994. The application for certification was submitted to the Department on March 14, 1996, and was considered to be complete and filed on March 30, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air.

This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass/steel tanks and doublewall flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves, an oil/water separator and an overfill alarm.
- 3) For leak detection - Monitoring wells and tank gauge system with line/turbine leak detectors.

The Department concludes that the costs claimed by the applicant (\$189,438) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Doublewall fiberglass/steel tanks and flexible plastic piping	\$55,030	62% (1)	\$34,119
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	2,200	100	2,200
Automatic shutoff valves	1,952	100	1,952
Sumps	6,231	100	6,231
Oil/water separator	3,446	100	3,446
<u>Leak Detection:</u>			
Tank gauge system w/alarm and line/turbine leak detection	11,301	90% (2)	10,171
Monitoring wells	2,045	100	2,045
Labor and materials	107,233	100	107,233
	_____	_____	_____
Total	\$189,438	88%	\$167,397

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$55,030 and the bare steel system is \$20,741, the resulting portion of the eligible tank and piping cost allocable to pollution control is 62%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 88%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$189,438 with 88% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4603.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Cain Petroleum Inc.  
2624 Pacific Avenue  
Forest Grove, OR 97116

The applicant owns and operates a retail gas station at 18560 SW Tualatin Valley Hwy, Aloha, OR 97006, Facility ID No. 1899.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and Stage II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four STI-P3 tanks and doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overflow alarm, sumps, oil/water separator, monitoring wells, automatic shutoff valves and Stage I and II vapor recovery equipment.

Claimed facility cost \$157,933  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on April 22, 1994 and placed into operation on April 23, 1994. The application for certification was submitted to the Department on March 29, 1996, and was considered to be complete and filed on March 30, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection, spill and overflow prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks and doublewall flexible plastic piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, oil/water separator, automatic shutoff valves and an overflow alarm.
- 3) For leak detection - Tank gauge system, line leak detectors and monitoring wells.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

The Department concludes that the costs claimed by the applicant (\$157,933) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:



	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
STI-P3 tanks and flexible plastic piping	\$32,567	59% (1)	\$19,215
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	928	100	928
Overfill alarm	214	100	214
Sumps	1,980	100	1,980
Oil/water separator	6,473	100	6,473
Automatic shutoff valves	740	100	740
<u>Leak Detection:</u>			
Tank gauge system	9,145	90% (2)	8,231
Line leak detectors	1,316	100	1,316
Monitoring wells	287	100	287
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	14,790	100	14,790
Labor and materials	89,493	100	89,493
	-----	-----	-----
Total	\$157,933	91%	\$143,667

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$32,567 and the bare steel system is \$13,482, the resulting portion of the eligible tank and piping cost allocable to pollution control is 59%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 91%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$157,933 with 91% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4606.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Jersey Development Corporation  
801 East Third Street  
The Dalles, OR 97058

The applicant owns and operates a retail station at 801 East Third St., The Dalles, OR 97058, Facility ID No. 11507.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two fiberglass/steel doublewall tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, overflow alarm, turbine leak detectors, sumps, oil/water separator, monitoring wells and automatic shutoff valves.

Claimed facility cost \$117,207  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on January 20, 1996 and placed into operation on January 20, 1996. The application for certification was submitted to the Department on April 1, 1996, and was considered to be complete and filed on April 28, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air.

This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

This is a new facility installed at a location previously without underground storage tanks. There is no prior facility condition to report.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass/steel tanks and doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves, an oil/water separator and an overfill alarm.
- 3) For leak detection - Monitoring wells, tank gauge system and turbine leak detectors.

The Department concludes that the costs claimed by the applicant (\$117,207) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.  

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.
- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not indicate that alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Doublewall fiberglass/steel tanks and fiberglass piping	\$20,828	53% (1)	\$11,039
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	440	100	440
Automatic shutoff valves	187	100	187
Sumps	2,016	100	2,016
Oil/water separator	1,975	100	1,975
Overfill alarm	282	100	282
<u>Leak Detection:</u>			
Tank gauge system	7,236	90% (2)	6,512
Monitoring wells	70	100	70
Turbine leak detectors	474	100	474
Labor and materials	83,699	100	83,699
	_____	_____	_____
Total	\$117,207	91%	\$106,694

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$20,828 and the bare steel system is \$9,699, the resulting portion of the eligible tank and piping cost allocable to pollution control is 53%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 91%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$117,207 with 91% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4607.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

Application No. TC-4612

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

WWDD Partnership  
230 NW 10th  
Portland, OR 97209

The applicant is an investment partnership associate with Denton Plastics, which is a plastic recycling company located at 4427 NE 158th, Portland Oregon 97230. The claimed equipment will be used at the Denton Plastics facility.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of a Conair model 1200-E shredder, serial # 60931-1200E, that is used to process scrap plastic for recycling.

The claimed facility investment costs:                      \$87,282

An independent accountant's certification of the equipment cost was provided.

3. Procedural Requirements

The investment is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on April 16, 1996. The request for preliminary certification was approved and the 30 day waiting period was waived on April 30, 1996.
- b. The investment was made on September 1, 1996
- c. The request for final certification was submitted on September 30, 1996 and was filed complete October 8, 1996.

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 468.486 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.

The equipment is to be used 100% of the time for processing scrap plastic for reclaiming.

- 2) 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.

No other factors were considered relevant.

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. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$87,282 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4612.



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Cain Petroleum Inc.  
2624 Pacific Avenue  
Forest Grove, OR 97116

The applicant owns and operates a retail gas station at 120 NW Murray Rd., Portland, OR 97229, Facility ID No. 1900.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall flexible plastic piping, spill containment basins, tank gauge system, overfill alarm, sumps, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$93,664  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on May 20, 1994 and placed into operation on May 20, 1994. The application for certification was submitted to the Department on April 25, 1996, and was considered to be complete and filed on May 15, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of corrosion protected tanks, steel piping with no corrosion protection, and no spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage II vapor recovery equipment.

The Department concludes that the costs claimed by the applicant (\$93,664) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

- b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Flexible plastic piping	\$10,338	92% (1)	\$ 9,511
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,638	100	1,638
Overfill alarm	219	100	219
Sumps	1,614	100	1,614
Automatic shutoff valves	540	100	540
<u>Leak Detection:</u>			
Tank gauge system	8,040	90% (2)	7,236
<u>VOC Reduction:</u>			
Stage II vapor recovery	12,612	100	12,612
Labor and materials	58,663	100	58,663
Total	\$93,664	98%	\$92,033

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$10,338 and the bare steel system is \$827, the resulting portion of the eligible tank and piping cost allocable to pollution control is 92%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$93,664 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4614.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Recycled Plastics Marketing  
2829 152nd Ave, N. E.  
Redmond, Washington 98052

Recycled Plastics Marketing is a plastic manufacturing company which both process waste plastic for recycling and manufactures reclaimed plastic products. Their Oregon recycling facility is located at 4631 S. E. 17th, Portland, Oregon 97202. The claimed equipment will be used to recycle waste plastic.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consists of: a Model M28 Cumberland Grinder, Serial # 00610; 25' hydraulic ramp; Model 1220X; Ball Jewell Grinder, serial # 987f4473; 200 amp electrical subpanel; 8' X 10' grinder vault; 1986 GLC 030CB Yale Forklift, serial # 428021; 1983 GTC 030UA Yale Forklift; two 5000 lbs digital scales; two rotary box staplers; and, a 2HP vacuum dust collector.

The claimed facility investment costs: \$64,000

The cost of the facility was certified by an independent accountant.

3. Procedural Requirements

The investment is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on March 26, 1996. The preliminary certification was issues on May 14, 1996.
- b. The investment was made on September 1, 1996.
- c. The request for final certification was submitted on September 30, 1996 and was filed complete on October 9, 1996.

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 468.486 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.

The equipment is to be used 100% of the time for processing reclaimed plastic.

- 2) 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.

No other factors were considered relevant.

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. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$64,000 with 100% allocated to reclaiming plastic material recycling, be issued for the investment claimed in Tax Credit Application No. TC-4616.

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Western Stations Co.  
2929 NW 29th Ave.  
Portland, OR 97210-1705

The applicant owns and operates a retail gas station at 28600 Salmon River Hwy, Grand Ronde, OR 97340, Facility ID No. 6186.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on two steel tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, turbine leak detectors, overflow alarm, sumps, automatic shutoff valves and Stage I vapor recovery equipment.

Claimed facility cost \$62,268  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$62,468. This represents a difference of \$200 from the applicant's claimed cost of \$62,268 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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



The facility was substantially completed on March 15, 1995 and placed into operation on March 15, 1995. The application for certification was submitted to the Department on May 28, 1996, and was considered to be complete and filed on June 15, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of two steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Impressed current cathodic protection on two tanks and flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system and turbine leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most economical alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Tank cathodic protection	\$10,941	100%	\$10,941
Flexible plastic piping	4,300	95(1)	4,085
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	835	100	835
Overfill alarm	201	100	201
Sumps	2,440	100	2,440
Automatic shutoff valves	484	100	484
<u>Leak Detection:</u>			
Tank gauge system	5,780	90% (2)	5,202
Turbine leak detectors	650	100	650
<u>VOC Reduction:</u>			
Stage I vapor recovery	300	100	300
Labor and materials	36,537	100	36,537
Total	\$62,468	99%	\$61,675

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$4,300 and the bare steel system is \$200, the resulting portion of the eligible piping cost allocable to pollution control is 95%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$62,468 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4621.

Barbara J. Anderson  
(503) 229-5870  
September 23, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Western Stations Co.  
2929 NW 29th Ave.  
Portland, OR 97210-1705

The applicant owns and operates a retail gas station at 2914 W. 6th St., The Dalles, OR, Facility ID No. 1541.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall composite tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, turbine leak detectors, overflow alarm, sumps, automatic shutoff valves and Stage I vapor recovery equipment.

Claimed facility cost \$102,958  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$114,218. This represents a difference of \$11,260 from the applicant's claimed cost of \$102,958 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on December 18, 1995 and placed into operation on December 22, 1995. The application for certification was submitted to the Department on May 30, 1996, and was considered to be complete and filed on June 15, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall composite tanks and flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system and turbine leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most economical alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Doublewall composite tank and flexible plastic piping	\$35,499	68%	24,139
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,064	100	1,064
Overfill alarm	277	100	277
Sumps	4,571	100	4,571
Automatic shutoff valves	813	100	813
<u>Leak Detection:</u>			
Tank gauge system	7,827	90% (2)	7,044
Turbine leak detectors	975	100	975
<u>VOC Reduction:</u>			
Stage I vapor recovery	381	100	381
Labor and materials	62,811	100	62,811
	_____	_____	_____
Total	\$114,218	89%	\$102,075

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$35,499 and the bare steel system is \$11,260, the resulting portion of the eligible piping cost allocable to pollution control is 68%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.



5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 89%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$114,218 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4622.

Barbara J. Anderson  
(503) 229-5870  
September 23, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Cain Petroleum Inc.  
2624 Pacific Avenue  
Forest Grove, OR 97116

The applicant owns and operates a retail gas station at 2339 Pacific Ave., Forest Grove, OR 97116, Facility ID No. 1894.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four doublewall fiberglass coated steel tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, overfill alarm, sumps, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$193,491  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on July 22, 1994 and placed into operation on July 22, 1994. The application for certification was submitted to the Department on May 30, 1996, and was considered to be complete and filed on June 15, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of seven steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass coated steel tanks, doublewall flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage II vapor recovery equipment.

The Department concludes that the costs claimed by the applicant (\$193,491) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Fiberglass coated steel tanks and flexible plastic piping	\$41,770	60% (1)	\$25,062
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,624	100	1,624
Overfill alarm	219	100	219
Sumps	2,960	100	2,960
Automatic shutoff valves	430	100	430
<u>Leak Detection:</u>			
Tank gauge system	8,473	90% (2)	7,626
<u>VOC Reduction:</u>			
Stage II vapor recovery	12,178	100	12,178
Labor and materials	125,837	100	125,837
	_____	_____	_____
Total	\$193,491	91%	\$175,936

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$41,770 and the bare steel system is \$16,544, the resulting portion of the eligible tank and piping cost allocable to pollution control is 60%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 91%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$193,491 with 91% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4623.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Western Stations Co.  
2929 NW 29th Ave.  
Portland, OR 97210-1705

The applicant owns and operates a retail gas station at 997 Newmark, Coos Bay, OR, Facility ID No. 6222.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining and impressed current cathodic protection on three steel tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, turbine leak detectors, overflow alarm, sumps, oil/water separator, automatic shutoff valves and Stage I vapor recovery equipment.

Claimed facility cost	\$159,825
(Accountant's certification was provided)	

The Department concludes that the total facility cost for the project is \$160,125. This represents a difference of \$300 from the applicant's claimed cost of \$159,825 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on December 22, 1995 and placed into operation on December 22, 1995. The application for certification was submitted to the Department on July 30, 1996, and was considered to be complete and filed on August 15, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Epoxy tanklining, impressed current cathodic protection on three tanks and flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, oil/water separator, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system and turbine leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most economical alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Tank cathodic protection	\$7,000	100%	\$7,000
Epoxy tanklining	25,805	100	25,805
Flexible plastic piping	8,000	96(1)	7,680
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,044	100	1,044
Overfill alarm	277	100	277
Oil/water separator	5,400	100	5,400
Sumps	5,099	100	5,099
Automatic shutoff valves	1,027	100	1,027
<u>Leak Detection:</u>			
Tank gauge system	8,586	90% (2)	7,727
Turbine leak detectors	975	100	975
<u>VOC Reduction:</u>			
Stage I vapor recovery	269	100	269
Labor and materials	96,643	100	96,643
Total	\$160,125	99%	\$158,946

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$8,000 and the bare steel system is \$300, the resulting portion of the eligible piping cost allocable to pollution control is 96%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$160,125 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4641.

Barbara J. Anderson  
(503) 229-5870  
September 23, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Cain Petroleum Inc.  
2624 Pacific Avenue  
Forest Grove, OR 97116

The applicant owns and operates a retail gas station at 833 East Baseline, Hillsboro, OR 97123, Facility ID No. 1905.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass coated steel tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, overfill alarm, turbine leak detectors, sumps, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$197,342  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on October 27, 1994 and placed into operation on October 27, 1994. The application for certification was submitted to the Department on August 7, 1996, and was considered to be complete and filed on September 3, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection, spill and overflow prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass coated steel tanks and doublewall flexible plastic piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, automatic shutoff valves and an overflow alarm.
- 3) For leak detection - Tank gauge system and turbine leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage II vapor recovery equipment.

The Department concludes that the costs claimed by the applicant (\$197,342) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
Fiberglass coated steel tanks and flexible plastic piping	\$37,563	63% (1)	\$23,665
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,392	100	1,392
Overfill alarm	224	100	224
Sumps	2,156	100	2,156
Automatic shutoff valves	574	100	574
<u>Leak Detection:</u>			
Tank gauge system	8,571	90% (2)	7,714
Turbine leak detectors	987	100	987
<u>VOC Reduction:</u>			
Stage II vapor recovery	16,048	100	16,048
Labor and materials	129,827	100	129,827
	-----	-----	-----
Total	\$197,342	93%	\$182,587

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$37,563 and the bare steel system is \$13,833, the resulting portion of the eligible tank and piping cost allocable to pollution control is 63%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 93%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$197,342 with 93% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4645.

Barbara J. Anderson  
(503) 229-5870  
September 21, 1996



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Younger Oil Co.  
P. O . Box 87  
Albany, OR 97321

The applicant owns and operates a retail gas station and cardlock at 1810 Main Street, Sweet Home, OR 97386, Facility ID No. 7065.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on five steel underground storage tanks.

Claimed facility cost	\$8,676
(Documentation of cost provided)	

3. Procedural Requirements

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

The facility was substantially completed on September 23, 1994 and placed into operation on September 23, 1994. The application for certification was submitted to the Department on August 14, 1996, and was considered to be complete and filed on August 30, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to installation of pollution control the facility consisted of five non-corrosion protected steel tanks.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Impressed current cathodic protection.

The Department concludes that the costs claimed by the applicant (\$8,676) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the only acceptable alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Impressed current cathodic protection on tanks	\$8,676	100%	\$8,676
Total	\$8,676	100%	\$8,676

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- 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 \$8,676 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4646.

Barbara J. Anderson  
(503) 229-5870  
September 25, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Younger Oil Co.  
P. O . Box 87  
Albany, OR 97321

The applicant owns and operates a retail gas station at 522 S. Pacific Blvd., Albany, OR 97321, Facility ID No. 3555.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on three steel underground storage tanks.

Claimed facility cost	\$8,375
(Documentation of cost provided)	

3. Procedural Requirements

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

The facility was substantially completed on July 18, 1995 and placed into operation on July 21, 1995. The application for certification was submitted to the Department on August 14, 1996, and was considered to be complete and filed on August 30, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to installation of pollution control the facility consisted of three non-corrosion protected steel tanks.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Impressed current cathodic protection.

The Department concludes that the costs claimed by the applicant (\$8,375) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the only acceptable alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Impressed current cathodic protection on tanks	\$8,375	100%	\$8,375
Total	\$8,375	100%	\$8,375

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- 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 \$8,375 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4647.

Barbara J. Anderson  
(503) 229-5870  
September 25, 1996



State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Briggs Farms, Inc.  
91593 North Coburg Rd  
Eugene, Oregon 97401

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

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

2. Description of Claimed Facility

The equipment described in this application is a 130 hp Massey-Ferguson tractor, located at 91593 North Coburg Road, Eugene, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$60,000  
(Accountant's Certification was provided.)

3. Description of Farm Operation Plan to Reduce Open Field Burning.

The applicant has 300 acres of annual grass seed under cultivation. Prior to investigating alternatives, the applicant open field burned as many acres as the weather and smoke management program permitted.

Several years ago the applicant began to plow down about half of his acreage and open field burned as much of the remaining acres as he could. The applicant now flail chops, plows, harrows and rolls all of his acreage. With the purchase of the tractor, the applicant states that he will be able to prepare the land for replanting without any open field burning, in a reasonable length of time.

4. Procedural Requirements

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 July 20, 1996. The application was submitted on August 14, 1996; and the application for final certification was found to be complete on September 5, 1996. The application was filed within two years of substantial completion 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 does not recover or convert waste products into a salable or usable commodity.

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 gross annual income.

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 \$2,000 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.

The established average annual 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:

Implement	Acres worked	Acres per Hour	Annual Operating Hours
Flail Chopper	300	5	60
Plow	300	6	50
Harrow/Roller	1200 (300x4)	7	<u>171</u>
Total Annual Operating Hours			281

The total annual operating hours of 281 divided by the average annual operating hours of 450 produces a percent allocable of 62%.

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 62%.

6. Summation

- a. The equipment was constructed 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 62%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$60,000, with 62% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4649.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 986-4701  
FAX: (503) 986-4730

JB:rc  
September 6, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy LLC  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 2795 Market Street NE, Salem, OR, Facility ID No. 6108.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two doublewall brine-filled fiberglass tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, turbine leak detectors, overflow alarm, sumps, monitoring wells, oil/water separator, automatic shutoff valves and Stage I vapor recovery equipment.

Claimed facility cost \$199,735  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on January 1, 1996 and placed into operation on January 1, 1996. The application for certification was submitted to the Department on September 4, 1996, and was considered to be complete and filed on September 25, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall brine-filled fiberglass tanks and doublewall flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, oil/water separator, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system, turbine leak detectors and monitoring wells.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I vapor recovery equipment.

The Department concludes that the costs claimed by the applicant (\$199,735) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall brine-filled fiberglass tanks and flexible plastic piping	\$32,954	71% (1)	\$25,527
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	426	100	426
Overfill alarm	223	100	223
Sumps	2,673	100	2,673
Oil/water separator	3,364	100	3,364
Automatic shutoff valves	1,483	100	1,483
<u>Leak Detection:</u>			
Tank gauge system	7,116	90% (2)	6,404
Turbine leak detectors	763	100	763
Monitoring wells	199	100	199
<u>VOC Reduction:</u>			
Stage I vapor recovery	429	100	429
Labor and materials	150,105	100	150,105
Total	\$199,735	96%	\$191,596

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$32,954 and the bare steel system is \$9,420, the resulting portion of the eligible tank and piping cost allocable to pollution control is 71%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$199,735 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4652.

Barbara J. Anderson  
(503) 229-5870  
September 25, 1996



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT  
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

Dallas City Cleaners  
144 SW Washington Street  
Dallas, Oregon 97338

The applicant owns and operates a perchloroethylene dry cleaning shop located at 144 SW Washington Street, Dallas, Oregon.

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

2. Description of Facility

The claimed facility is a new none venting dry-to-dry perc dry-cleaning machine which was installed as a replacement for an old perc machine which vented emissions to the atmosphere during the drying cycle. The new perc machine reduces the creation of emissions by maintaining them within the machine.

Claimed Facility Cost:       \$ 29,000

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the facility was substantially completed on January 26, 1996. The application for final certification was received by the Department on September 12, 1996. The application was found to be complete on October 3, 1996, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

- (1) The facility is eligible because it meets the requirement of avoiding the substantive requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

- (2) The facility installed equipment which resulted in perchloroethylene use of less than 140 gallons per year and the facility qualifies as a small area source under the NESHAP.
- (3) The facility was registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

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 it meets the definition of a pollution prevention facility for this pilot program.
- c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of \$ 29,000, be issued for the facility claimed in Tax Credit Application No. T-4655.

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT  
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

Riverside Cleaners, Inc.  
PO Box 1033  
Clackamas, Oregon 97015

The applicant owns and operates a perchloroethylene dry cleaning shop located at 202-B SW 8th Ave. West Linn, Oregon.

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

2. Description of Facility

The claimed facility is a new none venting dry-to-dry perc dry-cleaning machine which was installed as a replacement for an old perc machine which vented emissions to the atmosphere during the drying cycle. The new perc machine reduces the creation of emissions by maintaining them within the machine.

Claimed Facility Cost:       \$ 37,000

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the facility was substantially completed on June 17, 1996. The application for final certification was received by the Department on September 12, 1996. The application was found to be complete on October 3, 1996, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

- (1) The facility is eligible because it meets the requirement of avoiding the substantive requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

- (2) The facility installed equipment which resulted in perchloroethylene use of less than 140 gallons per year and the facility qualifies as a small area source under the NESHAP,
- (3) The facility was registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

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 it meets the definition of a pollution prevention facility for this pilot program.
- c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of \$ 37,000, be issued for the facility claimed in Tax Credit Application No. T-4656.

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State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT  
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

Rejuvenation, Inc.  
1100 SE Grand Ave.  
Portland, Oregon 97214

The applicant owns and operates a parts cleaning facility for cleaning lamp parts after the buffing process and prior to other finishing operations.

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

2. Description of Facility

The claimed facility is an Ultrasonic aqueous cleaning system which was installed as a replacement for a vapor degreaser which used Trichloroethylene. The new cleaning process eliminates the use, and emission to the atmosphere, of Trichloroethylene.

Claimed Facility Cost:       \$ 45,205

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the facility was substantially completed on January 19, 1996. The application for final certification was received by the Department on September 12, 1996. The application was found to be complete on September 24, 1996, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

- (1) The facility is eligible because it meets the requirement of avoiding the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.460 to 63.469 national emission standards for halogenated solvent cleaning.

The facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

- (2) The facility installed an ultrasonic cleaner as a replacement for their vapor degreaser.
- (3) The facility was registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

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 it meets the definition of a pollution prevention facility for this pilot program.
- c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of \$45,205 be issued for the facility claimed in Tax Credit Application No. T-4657.

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT  
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

George W. & Lois E. Oldham  
d.b.a. Oldham's Classic Cleaners  
2010 NW Michelbook Lane  
McMinnville, Oregon 97128

The applicant owns and operates a clothes cleaning shop located at 102 S Baker Street, McMinnville, Oregon.

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

2. Description of Facility

The claimed facility is a new large washing machine which was installed as a replacement for an old perc machine which vented emissions to the atmosphere during the drying cycle. The washing machine eliminates the emissions of perc by replacing the process with one using water and detergents.

Claimed Facility Cost:       \$ 32,993

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the facility was substantially completed on March 28, 1996. The application for final certification was received by the Department on September 17, 1996. The application was found to be complete on October 3, 1996, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

- (1) The facility is eligible because it meets the requirement of avoiding the substantive requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

- (2) The facility installed large washing machine as a replacement for an old perc dry-cleaning machine.
- (3) The facility was registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

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 it meets the definition of a pollution prevention facility for this pilot program.
- c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of \$ 32,993 be issued for the facility claimed in Tax Credit Application No. T-4658.

DPK

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State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Fisher Corporation  
2115 8th Court  
West Linn, OR 97068

The applicant owns and operates a retail gas station and convenience store at 2115 8th Court, West Linn, OR 97068, Facility ID No. 11526.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three fiberglass/steel doublewall tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, turbine leak detectors, sumps, oil/water separator, monitoring wells and automatic shutoff valves and Stage I and II vapor recovery equipment.

Claimed facility cost \$109,420  
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on March 31, 1996 and placed into operation on April 1, 1996. The application for certification was submitted to the Department on September 17, 1996, and was considered to be complete and filed on September 25, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

This is a new facility installed at a location previously without underground storage tanks. There is no prior facility condition to report.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass/steel tanks and doublewall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, automatic shutoff valves, an oil/water separator and an overflow alarm.
- 3) For leak detection - Monitoring wells, tank gauge system and turbine leak detectors.

The Department concludes that the costs claimed by the applicant (\$109,420) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant did not indicate that alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass/steel tanks and fiberglass piping	\$54,274	68% (1)	\$36,906
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,430	100	1,430
Automatic shutoff valves	1,385	100	1,385
Sumps	4,234	100	4,234
Oil/water separator	2,312	100	2,312
Overfill alarm	279	100	279
<u>Leak Detection:</u>			
Tank gauge system	8,903	90% (2)	8,013
Monitoring wells	286	100	286
Turbine leak detectors	1,031	100	1,031
Stage I & II vapor recovery	4,788	100	4,788
Labor, materials & parts	30,498	100	30,498
Total	\$109,420	83%	\$91,162

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$54,274 and the bare steel system is \$17,150, the resulting portion of the eligible tank and piping cost allocable to pollution control is 68%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 83%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$109,420 with 83% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4659.

Barbara J. Anderson  
(503) 229-5870  
September 25, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT  
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

Dennis Peterson Equipment Co.  
d.b.a. Hubbard Cleaners & Laundromat  
151 N. Front Street  
Woodburn, Oregon 97071

The applicant owns and operates a clothes cleaning shop located at 3362 D Street, Hubbard, Oregon.

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

2. Description of Facility

The claimed facility is a multiprocess wet cleaning system to which was installed as a replacement for an old perc machine which vented emissions to the atmosphere during the drying cycle. The wet cleaning system eliminates the emissions of perc by replacing the process with one using water and detergents.

Claimed Facility Cost:       \$ 23,068

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the facility was substantially completed on January 25, 1996. The application for final certification was received by the Department on September 20, 1996. The application was found to be complete on October 3, 1996, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

- (1) The facility is eligible because it meets the requirement of avoiding the substantive requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

- (2) The facility installed a multiprocess wet cleaning system as a replacement for an old perc dry-cleaning machine.
- (3) The facility was registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

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 it meets the definition of a pollution prevention facility for this pilot program.
- c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of \$ 23,068 be issued for the facility claimed in Tax Credit Application No. T-4660.

DPK

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Leathers Oil Company  
22300 SE Stark  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 16331 SE Powell, Portland, OR 97236, Facility ID No. 4260.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on four tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overfill alarm, sumps, automatic shutoff valves, monitoring wells and Stage I and II vapor recovery equipment.

Claimed facility cost \$117,361  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$117,611. This represents a difference of \$250 from the applicant's claimed cost of \$117,361 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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



The facility was substantially completed on July 7, 1995 and placed into operation on July 7, 1995. The application for certification was submitted to the Department on September 23, 1996, and was considered to be complete and filed on October 4, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Impressed current cathodic protection on tanks and flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost-effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Tank cathodic protection	\$11,391	100%	\$11,391
Flexible plastic piping	7,772	97(1)	7,539
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,462	100	1,462
Sumps	6,280	100	6,280
Automatic shutoff valves	1,143	100	1,143
<u>Leak Detection:</u>			
Tank gauge system w/alarm	11,703	90% (2)	10,533
Line leak detectors	3,702	100	3,702
Monitoring wells	2,042	100	2,042
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	7,281	100	7,281
Labor and materials	64,835	100	64,835
Total	\$117,611	99%	\$116,208

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$7,772 and the bare steel system is \$250, the resulting portion of the eligible piping cost allocable to pollution control is 97%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$117,661 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4661.

Barbara J. Anderson  
(503) 229-5870  
October 4, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Leathers Oil Company  
22300 SE Stark  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 1002 Mollala Ave., Oregon City, OR 97045, Facility ID No. 4273.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are cathodic protection anodes for four tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overfill alarm, sumps, automatic shutoff valves, monitoring wells and Stage I and II vapor recovery equipment.

Claimed facility cost	\$143,592
(Accountant's certification was provided)	

The Department concludes that the total facility cost for the project is \$144,117. This represents a difference of \$525 from the applicant's claimed cost of \$143,592 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on October 20, 1994 and placed into operation on October 21, 1994. The application for certification was submitted to the Department on September 23, 1996, and was considered to be complete and filed on October 4, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Cathodic protection anodes on tanks and flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost-effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Cathodic protection anodes	\$19,642	100%	\$19,642
Flexible plastic piping	4,000	87(1)	3,480
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,671	100	1,671
Overfill alarm	277	100	277
Sumps	5,144	100	5,144
Automatic shutoff valves	1,072	100	1,072
<u>Leak Detection:</u>			
Tank gauge system	12,122	90% (2)	10,910
Line leak detectors	675	100	675
Monitoring wells	3,027	100	3,027
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	16,530	100	16,530
Labor and materials	79,957	100	79,957
Total	\$144,117	99%	\$142,385

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$4,000 and the bare steel system is \$525, the resulting portion of the eligible piping cost allocable to pollution control is 87%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.



5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$144,117 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4662.

Barbara J. Anderson  
(503) 229-5870  
October 4, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Leathers Oil Company  
22300 SE Stark  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 22300 SE Stark, Gresham, OR 97030, Facility ID No. 4242.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three STI-P3 tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overfill alarm, sumps, automatic shutoff valves, monitoring wells and Stage I and II vapor recovery equipment.

Claimed facility cost \$126,423  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$143,779. This represents a difference of \$17,356 from the applicant's claimed cost of \$126,423 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on September 14, 1995 and placed into operation on September 15, 1995. The application for certification was submitted to the Department on September 23, 1996, and was considered to be complete and filed on October 4, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks and doublewall flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost-effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
STI-P3 tanks and doublewall flexible plastic piping	\$34,988	50%(1)	\$17,494
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,489	100	1,489
Sumps	6,883	100	6,883
Automatic shutoff valves	517	100	517
<u>Leak Detection:</u>			
Tank gauge system w/alarm	11,688	90% (2)	10,519
Line leak detectors	1,396	100	1,396
Monitoring wells	104	100	104
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	3,193	100	3,193
Labor and materials	83,521	100	83,521
Total	\$143,779	87%	\$125,116

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$34,988 and the bare steel system is \$17,356, the resulting portion of the eligible tank and piping cost allocable to pollution control is 50%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 87%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$143,779 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4663.

Barbara J. Anderson  
(503) 229-5870  
October 4, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Leathers Oil Company  
22300 SE Stark  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 11421 SE Powell, Portland, OR 97266, Facility ID No. 4287.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on three tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overflow alarm, sumps, automatic shutoff valves, monitoring wells and Stage I and II vapor recovery equipment.

Claimed facility cost \$85,719  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$86,056. This represents a difference of \$337 from the applicant's claimed cost of \$85,719 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on July 7, 1995 and placed into operation on July 8, 1995. The application for certification was submitted to the Department on September 23, 1996, and was considered to be complete and filed on October 7, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection, spill and overflow prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Impressed current cathodic protection on tanks and flexible plastic piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, automatic shutoff valves and an overflow alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost-effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Tank cathodic protection	\$ 9,316	100%	\$ 9,316
Flexible plastic piping	7,524	96(1)	7,223
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,485	100	1,485
Sumps	5,536	100	5,536
Overfill alarm	241	100	241
Automatic shutoff valves	549	100	549
<u>Leak Detection:</u>			
Tank gauge system	7,731	90% (2)	6,958
Line leak detectors	1,107	100	1,107
Monitoring wells	354	100	354
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	8,771	100	8,771
Labor and materials	43,442	100	43,442
	_____	_____	_____
Total	\$86,056	99%	\$84,982

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$7,524 and the bare steel system is \$337, the resulting portion of the eligible piping cost allocable to pollution control is 96%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$86,056 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4664.

Barbara J. Anderson  
(503) 229-5870  
October 7, 1996

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Leathers Oil Company  
22300 SE Stark  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 5434 SE 72nd, Portland, OR 97206, Facility ID No. 4254.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on three tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overflow alarm, sumps, automatic shutoff valves, monitoring wells, oil/water separator and Stage I and II vapor recovery equipment.

Claimed facility cost	\$112,678
(Accountant's certification was provided)	

The Department concludes that the total facility cost for the project is \$112,928. This represents a difference of \$250 from the applicant's claimed cost of \$112,678 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on June 16, 1995 and placed into operation on June 17, 1995. The application for certification was submitted to the Department on September 23, 1996, and was considered to be complete and filed on October 7, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Impressed current cathodic protection on tanks and flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves, oil/water separator and an overfill alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery equipment.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost-effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Tank cathodic protection	\$ 9,425	100%	\$ 9,425
Flexible plastic piping	6,462	96(1)	6,204
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,462	100	1,462
Sumps	4,169	100	4,169
Overfill alarm	241	100	241
Automatic shutoff valves	575	100	575
Oil/water separator	2,190	100	2,190
<u>Leak Detection:</u>			
Tank gauge system	8,546	90% (2)	7,691
Line leak detectors	999	100	999
Monitoring wells	3,017	100	3,017
<u>VOC Reduction:</u>			
Stage I & II vapor recovery	6,612	100	6,612
Labor and materials	69,230	100	69,230
Total	\$112,928	99%	\$111,815

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$6,462 and the bare steel system is \$250, the resulting portion of the eligible piping cost allocable to pollution control is 96%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$112,928 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4665.

Barbara J. Anderson  
(503) 229-5870  
October 7, 1996



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Leathers Oil Company  
22300 SE Stark  
Gresham, OR 97030

The applicant owns and operates a retail gas station at 300 North Main, Lebanon, OR 97355, Facility ID No. 4265.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I and II vapor recovery piping.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four STI-P3 tanks, doublewall flexible plastic piping, spill containment basins, tank gauge system, line leak detectors, overfill alarm, sumps, automatic shutoff valves, monitoring wells and Stage I and II vapor recovery piping.

Claimed facility cost \$216,424  
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$231,991. This represents a difference of \$15,567 from the applicant's claimed cost of \$216,424 due to the correction by the Department of an adjustment error made by the applicant in calculating the actual cost of the project.

3. Procedural Requirements

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

The facility was substantially completed on May 8, 1996 and placed into operation on May 8, 1996. The application for certification was submitted to the Department on September 23, 1996, and was considered to be complete and filed on October 7, 1996, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks and doublewall flexible plastic piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, automatic shutoff valves and an overfill alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

In addition, the following equipment was installed to reduce air quality emissions:

- 1) For VOC reduction - Stage I and II vapor recovery piping.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant considers the methods chosen to be the most cost-effective alternative available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

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

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
STI-P3 tanks and doublewall flexible plastic piping	\$34,661	55%(1)	\$19,064
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,004	100	1,004
Sumps	5,389	100	5,389
Automatic shutoff valves	686	100	686
Overfill alarm	277	100	277
<u>Leak Detection:</u>			
Tank gauge system	22,329	90% (2)	20,096
Line leak detectors	1,184	100	1,184
Monitoring wells	1,432	100	1,432
<u>VOC Reduction:</u>			
Stage I vapor recovery	703	100	703
Stage II vap. rec. piping	2,404	100	2,404
Labor and materials	161,922	100	161,921
Total	\$231,991	92%	\$214,161

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$34,661 and the bare steel system is \$15,567, the resulting portion of the eligible tank and piping cost allocable to pollution control is 55%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that the appropriate compliance documents relating to the project have been submitted.
- d. The portion of the facility cost that is properly allocable to pollution control is 92%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$231,991 with 92% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4666.

Barbara J. Anderson  
(503) 229-5870  
October 7, 1996

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

Quantum Resource Recovery  
14041-B N.E. Sandy Blvd.  
Portland, Oregon 97230

The applicant operates a waste plastic and scrap processing company.

Application was made for a pollution control facility tax credit.

2. **Description of Facility**

The facility consists of an electrical panel upgrade for a plastic granulator, which is not included in this tax credit application, and heavy duty plastic boxes for collection and transportation of scrap plastic and metal with no serial numbers.

The claimed facility cost is \$21,976

The actual cost of the facility was certified by an independent public accountant.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The components were purchased between June 6, 1995 and April 29, 1996.
- b. The facility was placed into operation on June 6, 1995.
- c. The application for tax credit was submitted to the Department on October 3, 1996, within two years of substantial completion of the facility.
- d. The application was filed complete on October 4, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to handle scrap plastic and metal as part of a material recovery process which obtains useful resources from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d).

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 is used 100% of the time for processing scrap metal and plastic, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$ 21,976. The Department has not identified any ineligible costs relating to the claimed equipment.

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable 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 equipment is recycling of scrap metal and plastic.
- 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 the findings, it is recommended that Pollution Control Facility tax credit certificate bearing the cost of \$21,967 with 100% allocable to pollution control be issues for the facility claimed in Tax Credit Application TC-4667.

**STATE OF OREGON**  
**Department of Environmental Quality**

**TAX RELIEF APPLICATION REVIEW REPORT**

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1. **Applicant**

Quantum Resource Recovery  
14041-B N.E. Sandy Blvd.  
Portland, Oregon 97230

The applicant operates a waste plastic and scrap metal processing company.

Application was made for pollution control facility tax credit certification.

2. **Description of Facility**

The facility consists of a flatbed truck, serial # VG6M113X7EB062953; semi truck, serial # 1WUADCM6HN123972; Hyster forklift, serial # C004002556X; Morris scales, serial # 95222532/HCED4003; AAA scales, serial # 6666/940071; five collection trailers, T-1, serial # HQ08803, T-2, serial # 1PKV2710XBS000106, T-3, serial # B14381, t-4, serial # H250040, T-5, serial number T-5, serial number LHSV02711CM000273.

Flatbed truck	\$ 7,500
Semi truck	17,750
Hyster forklift	7,500
Morris scales and AAA scales	3,765
Five collection trailers	8,620
Total facility cost	\$ 45,135

The actual cost of the facility was certified by an independent public accountant.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. The components were purchased between December 7, 1994 and July 31, 1996.
- b. The facility was placed into operation on December 7, 1994.
- c. The application for tax credit was submitted to the Department on October 3, 1996, within two years of substantial completion of the facility.
- d. The application was filed complete on October 4, 1996.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to handle scrap plastic and metal as part of a material recovery process which obtains useful resources from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d).



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 is used 100% of the time for processing scrap metal and plastic, a material recovery process.

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

A) The Applicant has claimed a facility cost of \$ 45,135. The Department has not identified any ineligible costs relating to the claimed equipment.

B) Annual Percentage Return on Investment

The facility falls under the provisions of ORS 468.190(3). The portion of the actual costs properly allocable to pollution control is calculated as the proportion that the ratio of the time the facility is used for recycling bears to the entire time the facility is used for any purpose. The facility is used 100% of the time as part of a material recovery process and so the portion of cost properly allocable 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 equipment is scrap metal and plastic 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. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility Tax Credit Certificate bearing the cost of \$45,135 with 100% allocable to pollution control be issues for the facility claimed in Tax Credit Application TC-4668.

# McCall

HEATING COMPANY

808 S.W. Fifteenth Avenue  
Portland, Oregon 97205  
(503) 228-2600

October 14, 1996

Department of Environmental Quality  
Ms. Maggie Vandehey  
811 SW 6th Avenue  
Portland, OR 97204

Dear Ms. Vandehey:

I am writing in regards to the transfer of a Pollution Facility Credit Certification. The facts are as follows.

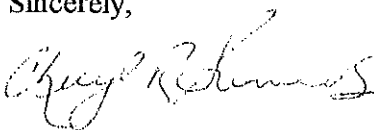
In July, 1991 McCall Heating Company made an application to DEQ for Certification of a Pollution Control Facility. The application was approved for credit in September, 1991 and issued Certificate No. 2676. The application and approval are attached for your reference.

On August 1, 1994 McCall Heating Company sold the underlying assets for this credit to McCall Oil & Chemical Corporation (MOCC)-a related company. Most of the remaining assets of McCall Heating Company were sold to a new company, McCall Heating and Cooling Company. As the underlying assets originally owned by McCall Heating company were sold to MOCC and are, in fact, being used by MOCC, the credit needs to be transferred to MOCC for their use. It is my understanding that we need to go through the certification process once again. Please let me know if you need additional information to accomplish this. Please note that although the Certification certificate shows McCall Heating Oil as the owner, all applications and correspondence were submitted under the name of McCall Heating Company.

Also, once the credit is transferred to MOCC, do we start taking the credit again as of the effective date or can we go back to when the assets were sold?

Please contact me or Lisa Krieger at (503) 228-2644 ext.212 or 213, respectively if you need anything further.

Sincerely,



Cheryl R. Summers  
Assistant Secretary

**RECEIVED**  
OCT 17 1996

Water Quality Division  
Dept. of Environmental Quality

POLLUTION CONTROL FACILITY CERTIFICATE

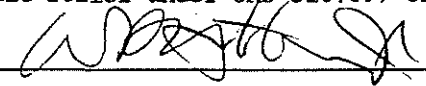
Issued To: McCall Heating Oil 808 SW 15th Ave. Portland, Or 97205	Location of Pollution Control Facility: 1650 NE Lombard Portland, OR
As:    ( ) Lessee    (x) Owner	
Description of Pollution Control Facility: Installation of three fiberglass tanks and piping, spill containment basins, tank monitor, monitoring wells, sumps, oil/water separator, automatic shutoff valves and line leak detectors.	
Type of Pollution Control Facility: ( ) Air    ( ) Noise    (x) Water    ( ) Solid Waste    ( ) Hazardous Waste    ( ) Used Oil	
Date Facility was Completed: 9/89      Placed into Operation: 9/89	
Actual Cost of Pollution Control Facility: \$123,846.00	
Percent of Actual Cost Properly Allocable to Pollution Control: 84%	

sed upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed:   
Title: William P. Hutchison, Jr., Chairman

Approved by the Environmental Quality Commission  
on the 18th day of September, 1991.

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

McCall Heating Co.  
808 SW 15th Ave.  
Portland, OR 97205

The applicant owns and operates a heating oil distribution center at 1650 NE Lombard, Portland OR, facility no. 5439.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are the installation of three fiberglass tanks and piping, spill containment basins, tank monitor, monitoring wells, sumps, oil/water separator, automatic shutoff valves and line leak detectors.

Claimed facility cost	\$123,846
(Accountant's certification was provided)	

Percent allocable to pollution control	100%
--	------

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 installation of the facility was substantially completed in September, 1989 and the application for certification was found to be complete within two years of substantial completion of the facility. The facility was placed into operation in September, 1989.

State of Oregon  
Department of Environmental Quality

Memorandum

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**Date:** November 14, 1996

**To:** Environmental Quality Commission

**From:** Langdon Marsh, Director

**Subject:** Agenda Item "C", Petition to Amend Oregon Administrative Rule 340-101-033, EQC Meeting: November 14, 1996

**Background**

The petitioner is requesting that DEQ amend the Oregon Hazardous Waste Rules by adding dioxin and dioxin-like compounds (a total of 28 chemicals) to the list of commercial chemical products that are currently identified as hazardous wastes under the federal Resource Conservation and Recovery Act ("RCRA") regulations (see 40 CFR 261.33(e)) which have been adopted by reference in Oregon (see OAR 340-100-102).

In conversations with DEQ staff, the petitioner indicated that the general intent of the petition is to correct a perceived gap in Oregon's hazardous waste regulatory framework as it pertains to wastes containing dioxin and dioxin-like compounds. The petitioner did not identify any specific waste stream or waste-generating industry as the focus of his concern; rather, he expressed a general interest in ensuring that any such wastes are adequately regulated under Oregon's hazardous waste program, regardless of their origins.

**Authority of the Commission with Respect to the Issue**

Under ORS 183.390, an interested person may petition an agency to adopt or amend rules. The rules governing submission, consideration and disposition of the petition are set forth in the Attorney General's Uniform Rule 137-01-070. Oral presentations by other affected parties are within the Commission's discretion.

**Alternatives and Evaluation**

The Commission must either deny the petition in writing or initiate rulemaking within 30 days of submission. When the petitioner submitted his petition, he requested that the submission be considered timely for the November Commission meeting. If the Commission decides not to adopt the rule exactly as proposed, it may nonetheless grant the petition and begin rulemaking.

### Conclusions

DEQ shares the petitioner's concern over the potential for environmental and human health risks that can result from exposure to dioxin and dioxin-like compounds. However, we believe that the specific regulatory "fix" requested in the petition is flawed, and would have no actual regulatory effect. With regard to the petitioner's general concern regarding possible loopholes in the current hazardous waste regulatory system, we believe that an Oregon initiative to regulate dioxins more stringently than the current federal RCRA regulations, as adopted by Oregon, is premature in the absence of information that indicates such regulation would provide useful additional controls on wastes.

### Evaluation of Petitioner's Specific Rulemaking Proposal

The petition specifically would add 28 dioxin and dioxin-like compounds to the list of hazardous wastes in 40 CFR 261.33 as adopted by Oregon. This particular regulatory listing is comprised only of commercial chemical products which, if discarded, become hazardous wastes. However, the dioxin compounds proposed to be listed by the petitioner are not commercial chemical products -- rather they are primarily formed in minute quantities as by-products of certain chemical and combustion processes. Thus, amending this particular list of hazardous wastes would have no actual regulatory effect.

### Consideration of Alternative Regulatory Approaches

Two alternative approaches could be used to broaden RCRA's coverage of dioxin compounds. The first approach would be to add certain specific waste streams which are known to contain dioxins to the lists of hazardous wastes that are currently specified in the federal regulations. The second approach would be to develop a hazardous waste characteristic test for dioxins. These approaches reflect the two ways hazardous wastes become regulated under the federal RCRA regulations -- through listing or through characteristic testing. Each of these approaches is discussed below

The federal hazardous waste regulations already address the fact that the primary way in which dioxin-compounds are generated is as a by-product in a waste stream from specific chemical and combustion processes. Currently, certain waste streams are listed as hazardous because they contain dioxins or dioxin-like compounds -- an example is chlorophenolic wood preserving wastes (waste code F032). The U.S. Environmental Protection Agency has a continuing effort underway to examine the risks posed by a variety of industrial waste streams and chemical products and to determine which additional wastes should be regulated under the hazardous waste management system. Any future additions to the federal hazardous waste listings -- including those listed because they are contaminated with dioxin compounds -- will be adopted by Oregon.

If Oregon were to proceed with a state-only rulemaking effort to list waste streams which consistently contain dioxins or dioxin-like compounds, this effort would overwhelm the Hazardous Waste Program. The initial step of identifying these waste streams could take years of research. Resources would need to be diverted from the base implementation of the Hazardous Waste Program. There is no clear indication that dioxin-containing waste streams present major human health or ecological risks in Oregon that merit such priority action, given the diversity of wastes and facilities regulated under the Hazardous Waste Program in Oregon..

It should also be noted that dioxin emissions from hazardous waste incinerators and municipal waste combustors are currently regulated under both RCRA and the Clean Air Act. Oregon has adopted these regulations.

The second approach -- developing a new hazardous waste characteristic for dioxins -- would also be an extraordinarily challenging task for DEQ, particularly in light of the continuing national controversy over the health effects of dioxin and dioxin-like compounds. The existing Toxicity Characteristic Leaching Procedure (TCLP), would likely be unsuitable for this purpose, since dioxins typically do not leach (i.e., dissolve) in water. Therefore, a new testing procedure for wastes would have to be developed to specify concentration levels for each dioxin constituent (or alternatively, a single "toxicity equivalent" level for all dioxin compounds) that, if exceeded, would require the waste to be regulated as hazardous waste.

This approach is not advisable for several reasons. First, the actual development of a new testing procedure would be contentious and extremely resource intensive (the TCLP took years to develop and is still controversial). Numerous issues would need to be resolved, such as: for which dioxin compounds should levels be set, what does each level represent (e.g., a cancer or other level risk), what testing methods produce reliable results, what is the impact to the regulated community (e.g., ease and expense of testing), and which wastes would need to be tested. In addition, the volumes and types of wastes that would become regulated as hazardous wastes under this type of approach are unknown.

Although it may be feasible to broaden the hazardous waste characteristic tests in some way to address dioxins, these issues have perplexed regulators at the national level for years. The approach is currently being studied as part of the U.S. EPA's broad-based effort to reassess the current regulatory scheme for identifying hazardous waste characteristics. DEQ will monitor that effort, and will adopt any regulatory changes that may result from it.

At the core of the issue of regulating dioxins as hazardous wastes is the fact that the science of assessing the human health risks from exposure to dioxin is still evolving. It is the subject of a major research effort by the EPA's Office of Research and Development. A revised assessment

Memo To: Environmental Quality Commission

**Agenda Item "C", Petition to Amend Oregon Administrative Rule 340-101-033, EQC Meeting:**  
November 14, 1996                      Page 4

of dioxin health risks is scheduled for release in 1997, and will likely influence national policy for regulating dioxins under all environmental programs into the next century.

In summary, DEQ believes that the petitioner's request for additional regulation of dioxins under the hazardous waste program is premature, and should await further developments at the national level.

**Department Recommendation**

It is recommended that the Commission deny the petition. At the Commission's request, the Department could provide an update on national developments pertaining to regulation of dioxins under RCRA within the next year.

**Attachments**

Petition to Amend OAR 340-101-033 received August 20, 1996

**Reference Documents (available upon request)**

ORS 183.390; Uniform Rule 137-01-070; OAR 340-100-002.

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_

Report Prepared By: Dave Fagan

Phone: 503 229-6915

Date Prepared: 10/15/96



TESTIMONY ABOUT THE PETITION TO AMEND OAR 340-101-033  
(RE: ADDING DIOXIN-LIKE COMPOUNDS TO THE LIST OF  
HAZARDOUS WASTES)

November 14, 1996

There are a number of comments that I could make about the DEQ staff report to the EQC regarding this petition. I will only make some general comments at this time and save the details for what I hope will be a continuing dialog with DEQ staff on this subject.

When Mr. Schreiner wrote this petition, he was expressing the wishes of a group of us from Salem who are concerned about the omission from the hazardous waste list of one of the most toxic substances known to mankind. We are aware, for example, that a relatively large quantity of dioxin-like compounds are deposited in a very large pile of incinerator ash right next to Interstate 5 not far from Woodburn. Mr. Schreiner consulted with members of the staff at DEQ so he would be able to develop and present his petition in the proper form and meet all of the agency's criteria. It is therefore disappointing that this same agency is now recommending that the petition be denied because it is flawed, directed at the wrong portion of the regulations, and would have no actual regulatory effect. It seems that we could all have been saved a lot of effort if that had been made clear much sooner.

Our goal is to get some new regulations put into effect that will help contain the creation and spread of dioxin-like compounds within Oregon. We have no objection to doing it in the prescribed manner. We just need the help of DEQ staff to get it done correctly. We request and welcome the direction and influence of the Commissioners to help make this happen.

Given the comment in DEQ's report to the EQC that "DEQ shares the petitioner's concern", it appears that we are all headed in the same direction. The DEQ report suggests, however, that the petition is premature and should await further developments at the national level. Furthermore, the report expresses concern that some of the actions to implement the petition would overwhelm the Hazardous Waste Program. I appreciate the fact that DEQ's resources are limited and stretched to meet current obligations, but I believe their concern about the implementation of this petition taking too much time and effort could be addressed by some intermediate measures. We would be glad to see at least some steps taken now while postponing others until they could be added without unduly straining DEQ's resources. I have some specific suggestions along those lines that I would be willing to share with DEQ staff.

With regard to awaiting developments at the national level, Oregon has not been reluctant in the past to be a pioneer in the protection of the environment (for example, with the Bottle Bill). I see no reason to avoid stepping out ahead of the Federal regulators on this matter either. They have been delaying final publication of their Dioxin Reassessment document year after year. In the meantime our citizens continue to suffer from a steady flow of dioxin-like compounds into our environment. Anyone who takes the time to read the ongoing publication of new research studies can see that dioxins have clearly been identified as a health hazard, and it is now time to begin treating them as such to a greater extent than has been done so far.

I take exception to the first paragraph on page 3 of the DEQ report about this petition where it says: "There is no clear indication that dioxin-containing waste streams present major human health or ecological risks in Oregon...." I would suggest that the only reason this is not "clear" is because not enough looking has been done by those who believe that statement. I hope that will change. Toward that end, I invite DEQ staff and members of the EQC to our second annual "Dioxins and Health Conference" at the Salem Public Library Auditorium all day on Saturday, March 1, 1997. We will have numerous national experts to bring you up to date on ground-breaking research about the health effects of dioxin-like compounds. I also refer you to written testimony and several attached documents that I submitted to a DEQ hearings officer in August 1996 regarding proposed rules for Oregon's municipal waste incinerators.

I was absolutely dumbfounded when I first learned that dioxin-like compounds were not included on the U. S. EPA's list of substances that are used in making hazardous waste determinations. No one seems to disagree that dioxins are among the most toxic substances on earth. Therefore, to not even consider them when deciding whether a pile of ash or load of other waste is hazardous seems totally illogical at best. It is a flaw in our regulations that cries out for correction. I ask that the Environmental Quality Commission put its weight fully behind that effort.

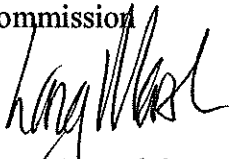
Carroll D. Johnston  
1747 Sonya Drive SE  
Salem, Oregon 97301-8913

Telephone: (503) 364-1394  
E-mail: [hsvm60a@prodigy.com](mailto:hsvm60a@prodigy.com)

State of Oregon  
Department of Environmental Quality

Memorandum

Date: November 1, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director   
Subject: Agenda Item "C", Petition to Amend Oregon Administrative Rule 340-101-033,  
EQC Meeting: November 14, 1996

**Background**

The petitioner is requesting that DEQ amend the Oregon Hazardous Waste Rules by adding dioxin and dioxin-like compounds (a total of 28 chemicals) to the list of commercial chemical products that are currently identified as hazardous wastes under the federal Resource Conservation and Recovery Act ("RCRA") regulations (see 40 CFR 261.33(e)) which have been adopted by reference in Oregon (see OAR 340-100-102).

In conversations with DEQ staff, the petitioner indicated that the general intent of the petition is to correct a perceived gap in Oregon's hazardous waste regulatory framework as it pertains to wastes containing dioxin and dioxin-like compounds. The petitioner did not identify any specific waste stream or waste-generating industry as the focus of his concern; rather, he expressed a general interest in ensuring that any such wastes are adequately regulated under Oregon's hazardous waste program, regardless of their origins.

**Authority of the Commission with Respect to the Issue**

Under ORS 183.390, an interested person may petition an agency to adopt or amend rules. The rules governing submission, consideration and disposition of the petition are set forth in the Attorney General's Uniform Rule 137-01-070. Oral presentations by other affected parties are within the Commission's discretion.

**Alternatives and Evaluation**

The Commission must either deny the petition in writing or initiate rulemaking within 30 days of submission. When the petitioner submitted his petition, he requested that the submission be considered timely for the November Commission meeting. If the Commission decides not to adopt the rule exactly as proposed, it may nonetheless grant the petition and begin rulemaking.

Memo To: Environmental Quality Commission

Agenda Item "C", Petition to Amend Oregon Administrative Rule 340-101-033, EQC Meeting:

November 14, 1996

Page 2

### Conclusions

DEQ shares the petitioner's concern over the potential for environmental and human health risks that can result from exposure to dioxin and dioxin-like compounds. However, we believe that the specific regulatory "fix" requested in the petition is flawed, and would have no actual regulatory effect. With regard to the petitioner's general concern regarding possible loopholes in the current hazardous waste regulatory system, we believe that an Oregon initiative to regulate dioxins more stringently than the current federal RCRA regulations, as adopted by Oregon, is premature in the absence of information that indicates such regulation would provide useful additional controls on wastes.

### Evaluation of Petitioner's Specific Rulemaking Proposal

The petition specifically would add 28 dioxin and dioxin-like compounds to the list of hazardous wastes in 40 CFR 261.33 as adopted by Oregon. This particular regulatory listing is comprised only of commercial chemical products which, if discarded, become hazardous wastes. However, the dioxin compounds proposed to be listed by the petitioner are not commercial chemical products -- rather they are primarily formed in minute quantities as by-products of certain chemical and combustion processes. Thus, amending this particular list of hazardous wastes would have no actual regulatory effect.

### Consideration of Alternative Regulatory Approaches

Two alternative approaches could be used to broaden RCRA's coverage of dioxin compounds. The first approach would be to add certain specific waste streams which are known to contain dioxins to the lists of hazardous wastes that are currently specified in the federal regulations. The second approach would be to develop a hazardous waste characteristic test for dioxins. These approaches reflect the two ways hazardous wastes become regulated under the federal RCRA regulations -- through listing or through characteristic testing. Each of these approaches is discussed below

The federal hazardous waste regulations already address the fact that the primary way in which dioxin-compounds are generated is as a by-product in a waste stream from specific chemical and combustion processes. Currently, certain waste streams are listed as hazardous because they contain dioxins or dioxin-like compounds -- an example is chlorophenolic wood preserving wastes (waste code F032). The U.S. Environmental Protection Agency has a continuing effort underway to examine the risks posed by a variety of industrial waste streams and chemical products and to determine which additional wastes should be regulated under the hazardous waste management system. Any future additions to the federal hazardous waste listings -- including those listed because they are contaminated with dioxin compounds -- will be adopted by Oregon.

Memo To: Environmental Quality Commission

Agenda Item "C", Petition to Amend Oregon Administrative Rule 340-101-033, EQC Meeting:

November 14, 1996

Page 3

If Oregon were to proceed with a state-only rulemaking effort to list waste streams which consistently contain dioxins or dioxin-like compounds, this effort would overwhelm the Hazardous Waste Program. The initial step of identifying these waste streams could take years of research. Resources would need to be diverted from the base implementation of the Hazardous Waste Program. There is no clear indication that dioxin-containing waste streams present major human health or ecological risks in Oregon that merit such priority action, given the diversity of wastes and facilities regulated under the Hazardous Waste Program in Oregon..

It should also be noted that dioxin emissions from hazardous waste incinerators and municipal waste combustors are currently regulated under both RCRA and the Clean Air Act. Oregon has adopted these regulations.

The second approach -- developing a new hazardous waste characteristic for dioxins -- would also be an extraordinarily challenging task for DEQ, particularly in light of the continuing national controversy over the health effects of dioxin and dioxin-like compounds. The existing Toxicity Characteristic Leaching Procedure (TCLP), would likely be unsuitable for this purpose, since dioxins typically do not leach (i.e., dissolve) in water. Therefore, a new testing procedure for wastes would have to be developed to specify concentration levels for each dioxin constituent (or alternatively, a single "toxicity equivalent" level for all dioxin compounds) that, if exceeded, would require the waste to be regulated as hazardous waste.

This approach is not advisable for several reasons. First, the actual development of a new testing procedure would be contentious and extremely resource intensive (the TCLP took years to develop and is still controversial). Numerous issues would need to be resolved, such as: for which dioxin compounds should levels be set, what does each level represent (e.g., a cancer or other level risk), what testing methods produce reliable results, what is the impact to the regulated community (e.g., ease and expense of testing), and which wastes would need to be tested. In addition, the volumes and types of wastes that would become regulated as hazardous wastes under this type of approach are unknown.

Although it may be feasible to broaden the hazardous waste characteristic tests in some way to address dioxins, these issues have perplexed regulators at the national level for years. The approach is currently being studied as part of the U.S. EPA's broad-based effort to reassess the current regulatory scheme for identifying hazardous waste characteristics. DEQ will monitor that effort, and will adopt any regulatory changes that may result from it.

At the core of the issue of regulating dioxins as hazardous wastes is the fact that the science of assessing the human health risks from exposure to dioxin is still evolving. It is the subject of a major research effort by the EPA's Office of Research and Development. A revised assessment

of dioxin health risks is scheduled for release in 1997, and will likely influence national policy for regulating dioxins under all environmental programs into the next century.

In summary, DEQ believes that the petitioner's request for additional regulation of dioxins under the hazardous waste program is premature, and should await further developments at the national level.

**Department Recommendation**

It is recommended that the Commission deny the petition. At the Commission's request, the Department could provide an update on national developments pertaining to regulation of dioxins under RCRA within the next year.

**Attachments**

Petition to Amend OAR 340-101-033 received August 20, 1996

**Reference Documents (available upon request)**

ORS 183.390; Uniform Rule 137-01-070; OAR 340-100-002.

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_

Report Prepared By: Dave Fagan

Phone: 503 229-6915

Date Prepared: 10/15/96

Petition to Amend a Rule

State of Oregon  
Department of Environmental Quality

RECEIVED

AUG 20 1996

Department of Environmental Quality OFFICE OF THE DEPUTY DIRECTOR  
of the State of Oregon

IN THE MATTER OF THE	)	
AMENDMENT OF OAR	)	Petition to Amend
340-101-033 IDENTIFYING	)	OAR 340-101-033
AND LISTING HAZARDOUS	)	(Hazardous Wastes)
WASTES.	)	

1. Petitioner's name and address is David Schreiner, 6233 13th Avenue, N.E. Keizer, Oregon.
2. Petitioner has been a continuous resident and taxpayer of the State of Oregon since January 1, 1976.
3. Petitioner asserts he has been affected by dioxins, furans and dioxin-like polychlorinated biphenyls (PCBs) created by various industrial processes and released into the environment of the State of Oregon.
4. Petitioner contends that exposure to dioxins, furans and dioxin-like PCBs is harmful to human health, even in small quantities over a long period of time.
5. Petitioner proposes that OAR 340-101-033 be amended to add a new paragraph which would list the most toxic forms of dioxins, furans and PBCs.
6. OAR 340-101-033 as petitioner proposes to amend it would read as follows:

OAR 340-101-033. Additional Hazardous Wastes

- (1) The residues identified in sections (2) and (3) of this rule are hazardous wastes and are added to and made part of the list of hazardous wastes in 40 CFR 261.33.
- (2) Any residue, including but not limited to manufacturing process wastes and unused chemicals that has either:
  - (a) A three percent or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(e), except those substances or mixtures of substances containing only those toxic contaminants listed in 40 CFR 261.24 in Table 1; or
  - (b) A ten percent or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(f), except U075 (Dichlorodifluoro-methane) and U121 (Trichloromonofluoromethane) when they are intended to be recycled, and except those substances containing only those toxic contaminants listed in 40 CFR 261.24 in Table 1.
- (3) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water, of either:
  - (a) A residue identified in subsection (2)(a) of this rule; or
  - (b) A residue identified in subsection (2)(b) of this rule;
  - (c) A residue identified in subsections (2)(a) or (b) of this rule as a hazardous waste has the hazardous waste letters "OR" followed by the corresponding hazardous waste number(s) in 40 CFR 261.33(e) and (f).
- (4) The wastes identified in subsections (2)(a) and (3)(a) of this rule are identified as acutely hazardous wastes (H) and are subject to the small quantity exclusion defined in CFR 261.5(e).

NOTE: Sections (2) and (3) of this rule shall be applied to a manufacturing process waste only in the event it is not identified elsewhere in this Division, but prior to application of section (5) of this rule.

(5)(a) Pursuant to "Department of Environmental Quality Hazardous Waste Aquatic Toxicity Testing Procedures", a pesticide residue or pesticide manufacturing residue is a toxic hazardous waste if a representative sample of the residue exhibits a 96-hour aquatic LC50 equal

to or less than 250 mg/l, except for residues listed in Table 1 of 40 CFR 261.24 which pass the evaluation requirement of 40 CFR 261.24(a);

(b) A pesticide residue or pesticide manufacturing residue identified in subsection (5)(a) of this rule but not in 40 CFR 261.24 or listed elsewhere in Subpart D of 40 CFR 261, has the Hazardous Waste Number X001 and is added to and made a part of list of hazardous wastes in 40 CFR 261.31, until a representative sample of the residue no longer exhibits an LC50 equal to or less than 250 mg/l.

(6)(a) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products or manufacturing chemical intermediates identified in subsection (6)(b) of this rule are added to and made a part of the list in 40 CFR 261.33(e);

(b) P999 . . . Nerve agents (such as GB (Sarin) and VX).

(7) The following dioxins, furans and polychlorinated biphenyls are hazardous wastes and are added to and made a part of the list of hazardous wastes in 40 CFR 261.33:

- (a) 2,3,7,8-tetrachlorodibenzodioxin;
- (b) 2,3,7,8-tetrachlorodibenzofuran;
- (c) 1,2,3,7,8-pentachlorodibenzodioxin;
- (d) 1,2,3,7,8-pentachlorodibenzofuran;
- (e) 2,3,4,7,8-pentachlorodibenzofuran;
- (f) 1,2,3,4,7,8-hexachlorodibenzodioxin;
- (g) 1,2,3,6,7,8-hexachlorodibenzodioxin;
- (h) 1,2,3,7,8,9-hexachlorodibenzodioxin;
- (i) 1,2,3,4,7,8-hexachlorodibenzofuran;
- (j) 1,2,3,6,7,8-hexachlorodibenzofuran;
- (k) 1,2,3,7,8,9-hexachlorodibenzofuran;
- (l) 2,3,4,6,7,8-hexachlorodibenzofuran;
- (m) 1,2,3,4,6,7,8-heptachlorodibenzodioxin;
- (n) 1,2,3,4,6,7,8-heptachlorodibenzofuran;
- (o) 1,2,3,4,7,8,9-heptachlorodibenzofuran;
- (p) octachlorodibenzodioxin;
- (q) octachlorodibenzofuran;
- (r) 3,3',4,4'-tetrachlorobiphenyl;
- (s) 3,4,4',5-tetrachlorobiphenyl;
- (t) 2,3,3',4,4'-pentachlorobiphenyl;
- (u) 2,3,4,4',5-pentachlorobiphenyl;
- (v) 2,3',4,4',5-pentachlorobiphenyl;
- (w) 3,3',4,4',5-pentachlorobiphenyl;
- (x) 2,3,3',4,4',5-hexachlorobiphenyl;
- (y) 2,3,3',4,4',5'-hexachlorobiphenyl;
- (z) 2,3',4,4',5,5'-hexachlorobiphenyl;
- (a') 3,3',4,4',5,5'-hexachlorobiphenyl; and
- (b') 2,3,3',4,4',5,5'-heptachlorobiphenyl.

~~(7)(8)~~ Hazardous waste identified in this section is not subject to 40 CFR Part 268.

7. Petitioner has no knowledge of any person who may have a particular interest in the proposed amendment of OAR 340-101-033.

Wherefore, petitioner requests the Department of Environmental Quality to adopt the proposed amendment to OAR 340-101-033.

Dated August 15, 1996.



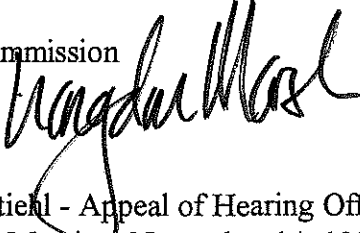
/s/ David Schreiner  
Petitioner



State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 30, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director   
Subject: Agenda Item D, Theron Stiehl - Appeal of Hearing Officer's Findings of Fact and Conclusions of Law, EQC Meeting: November 14, 1996

**Statement of Purpose**

Theron Stiehl (hereinafter "appellant") is appealing from the Hearing Officer's Findings of Fact and Conclusions of Law, dated February 15, 1996. In that order, he was found to be in violation of ORS 459.205(1) and OAR 340-93-050(1) for establishing and maintaining a solid waste disposal site without a permit.

**Background**

In 1994, Robert Guerra of the Department's Medford office, received a tip that there was an illegal solid waste dump located on the appellant's property, located at 1980 Hilltop Drive, Rogue River, Oregon. On October 11, 1994, Mr. Guerra visited the property and observed an estimated 100 cubic yards of miscellaneous waste including appliances, furniture, window blinds, demolition debris, car parts, garden hoses and bags of concrete at the bottom of a ravine. The ravine is located approximately 200 feet from the appellant's house. Appellant does not have a solid waste disposal permit for the site.

On October 26, 1994, Mr. Guerra met with the appellant in the Department's Medford office. At this meeting, the Department's rules were explained in detail and appellant agreed to clean up the site by December 11, 1994. On December 19, 1994, Mr. Guerra conducted another inspection of the site and discovered that the waste had not been removed. The Department issued a Notice of Noncompliance on January 11, 1995. The Notice directed appellant to submit a cleanup plan to the Department within seven days and to clean up the site within 30 days.

The Notice was sent to appellant by certified mail but the appellant refused to claim it. On February 17, 1995, the Notice was personally served on appellant by Mr. Guerra. During his visit to deliver the Notice, Mr. Guerra noticed that the site had not been cleaned up. A cleanup plan was not submitted to the Department.

A Notice of Violation and Department Order was issued on April 21, 1995. The Order was personally served on the appellant, through his son, on May 6, 1995 by the Jackson County Sheriff's Department. Appellant appealed the NOV on May 9, 1995. Although the appellant denied all the allegations in the NOV, in a newspaper article in the *Sneak Preview* dated July 5,

Memo To: Environmental Quality Commission

**Agenda Item D, Theron Stiehl - Appeal of Hearing Officer's Findings of Fact and Conclusions of Law, EQC Meeting: November 14, 1996**

Page 2

1995, the appellant admitted that his family had been dumping their waste in the ravine. Appellant further claimed that Department staff had entered his land in violation of posted 'No Trespassing' signs. Mr. Guerra denies that there were any trespassing signs. If there had been any signs, he states that he would have requested permission to view the site, and if permission had been denied, the Department would have gotten a search warrant.

The case was forwarded to the Employment Department and assigned to Melvin Menegat, a hearing officer for conducting a contested case hearing. In a telephone conversation between Mr. Menegat and the appellant on July 8, 1995, the appellant indicated that he would not accept service of any hearing notice and would return any mail from the Department. He indicated that he felt findings could not be made against him if he were not at the hearing.

A hearing was originally scheduled for September 6, 1995. Repeated attempts to serve the appellant by personal service through the Jackson County Sheriff's office, registered mail and regular mail were unsuccessful and the hearing was postponed until October 25, 1995. Attempts by both the Jackson County and Josephine County Sheriff's offices to serve notice of the rescheduled hearing were also unsuccessful. Regular mail sent to the appellant's home was returned as refused and certified mail was returned unclaimed.

The hearing was held on October 25, 1995 by telephone with Larry Cwik representing the Department and Mr. Guerra as a witness. Based on the Department presentation of evidence, Mr. Menegat reached the following conclusions:

- (1) Although ORS 183.415 provides that all parties shall be given notice either personally or by registered or certified mail, sending of the notice, if correctly addressed and properly certified or registered, constitutes effective notice. Receipt is not required. The appellant was given sufficient notice of the hearing and he cannot avoid an adverse decision by refusing service of the notice.
- (2) The appellant created a solid waste disposal site on property owned or controlled by him without first obtaining a solid waste disposal site permit. Furthermore, he has failed/refused to remove the solid waste as directed by the Department. There was adequate evidence that the appellant created the site including that the waste was a short distance from his home, he first agreed to clean up the waste, and he made statements that he had dumped waste in the ravine. His continued failure to cooperate with the Department and to participate in the hearing indicated that he was attempting to avoid taking responsibility for the waste.
- (3) The solid waste in the ravine is creating a potential hazard to ground and surface waters which could be used for drinking water supply.

The hearings officer then ordered the appellant to submit a cleanup plan to the Department within 10 days of the order, and remove all solid waste from the site within 45 days of the order. He was further ordered to obtain receipts from an authorized landfill accepting the waste, take

Memo To: Environmental Quality Commission

**Agenda Item D, Theron Stiehl - Appeal of Hearing Officer's Findings of Fact and Conclusions of Law, EQC Meeting: November 14, 1996**

Page 3

photographs of the removal and the site after removal, and to submit that documentation to the Department within 50 days of the order. The Findings of Fact and Conclusions of Law were personally served on the appellant and a Notice of Appeal was received on March 12, 1996.

When the Department had not received the required exceptions and brief within the thirty days of filing the Notice of Appeal, Susan Greco sent the appellant a letter stating that the Department could not consider his appeal until the documents were received. He was granted another 30 days to file the documents. When the required documents were, once again, not received within the set timeframe, the Department set this appeal for Commission consideration, with the recommendation that the Commission dismiss the appeal for failure to file the required exceptions and brief. When the appellant received notice of the meeting, he contacted the Department and requested an extension to file the exceptions and brief. An extension was granted until August 15, 1996.

The appellant objected to the hearings officer's findings as follows:

- (1) The solid waste site was not located on property owned or controlled by the appellant.
- (2) The site has been cleaned up by either removal of the waste or burning of the waste.

The Department's answering brief states that the Department presented at the hearing sufficient evidence to prove that the appellant was operating a solid waste landfill without a permit, on property owned or controlled by him. Although the Department made numerous attempts to inform the appellant of the hearing date and time, appellant refused that notice. Appellant presented no evidence to refute the Department's assertions at the hearing. Matters not raised before the Department's hearing officer shall not be considered in a subsequent appeal except when necessary to prevent manifest injustice. OAR 340-11-132(4)(a). The Commission may take additional evidence if the evidence is supported by a reason for the failure to present the evidence at the hearing.

If the Commission should decide to reopen the record, then the Department is prepared to offer evidence that the site has not been cleaned up. Specifically, on April 11, 1996, a flyover of the appellant's property indicated that the waste was still present. The Department has attempted to contact the appellant to establish a time for a site visit to determine if the waste has been removed from the property, but the appellant has not responded to either a letter or a telephone call.

#### **Authority of the Commission with Respect to the Issue**

The Commission has the authority to hear this appeal under OAR 340-11-132.

#### **Department Recommendation**

Memo To: Environmental Quality Commission

**Agenda Item D, Theron Stiehl - Appeal of Hearing Officer's Findings of Fact and Conclusions of Law, EQC Meeting: November 14, 1996**

Page 4

The Department recommends that the Commission uphold the hearing officer's Findings of Fact and Conclusions of Law and order the appellant to :

- (1) Submit to the Department's Medford office proof that the site has been cleaned up within 10 days, including photographic documentation and landfill receipts indicating proper disposal of the waste, or
- (2) Submit a cleanup plan to the Department's Medford office within 10 days and clean up the waste within 45 days, and submit photographic documentation and landfill receipts indicating proper disposal of the waste.

**Attachments**

1. Letter dated October 23, 1996 from Susan Greco to Theron Stiehl and Larry Cwik
2. Letter dated September 19, 1996 from Susan Greco to Theron Stiehl
3. Department of Environmental Quality's Answering Brief, dated September 17, 1996
4. Letter dated August 26, 1996 from Susan Greco to Theron Stiehl
5. Theron Stiehl's Exceptions to the Hearing Officer's Findings of Facts and Conclusions of Law, dated August 15, 1996
6. Letter dated July 15, 1996 from Susan Greco to Theron Stiehl
7. Letter dated July 11, 1996 from Susan Greco to Theron Stiehl and Larry Cwik
8. Letter dated May 15, 1996 from Susan Greco to Theron Stiehl
9. Notice of Appeal, dated March 12, 1996
10. Hearing Officer's Findings of Fact and Conclusions of Law and Hearing Officer's Final Order, dated February 15, 1996
11. Letter dated August 18, 1995 from Hearing Officer Mel Menegat to Theron Stiehl and Larry Cwik
12. Article from *Sneak Preview*, dated July 5, 1995
13. Appeal of Notice of Violation, dated May 8, 1995
14. Notice of Violation and Department Order, dated April 21, 1995
15. *Stroh v. SAIF*, 261 Or 117 (1972)
16. Various documents showing the Department's attempts to serve Theron Stiehl with Notice of Hearing, including returned envelopes and certificates of attempted service from Josephine and Jackson County Sheriff's offices.

**Reference Documents (available upon request)**

OAR Chapter 340, Division 11; OAR Chapter 340, Division 93; ORS 459.205

Report Prepared By: Susan M. Greco

Phone: (503) 229-5213

Date Prepared: October 30, 1996

October 23, 1996

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Larry Cwik  
Department of Environmental Quality  
2020 S.W. 4th Avenue, Suite 400  
Portland OR 97201

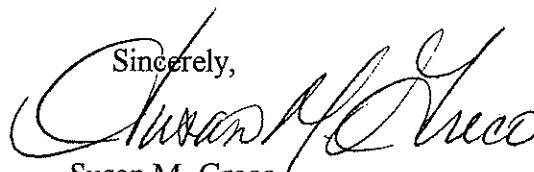
RE: Case No. SW-WR-95-083

Dear Mr. Stiehl and Mr. Cwik:

The appeal by Mr. Stiehl has been set for the regularly scheduled Environmental Quality Commission meeting on Thursday, November 14, 1996. The meeting will convene at 9:00 a.m. and the appeal will be heard in the regular course of the meeting. The meeting will be held at the Department's headquarters at 811 S.W. 6th Avenue, Room 3A, Portland, Oregon. Each party will be allowed 5 minutes to address the Commission. As soon as the agenda and record is available, I will forward the same to you.

If you should have any questions or if you will be unavailable for the meeting on November 14, 1996, please feel free to call me at (503) 229-5213 or (800) 452-4011 ex. 5213 within the state of Oregon.

Sincerely,



Susan M. Greco  
Rules Coordinator



*1 page  
Attachment 1*

September 19, 1996

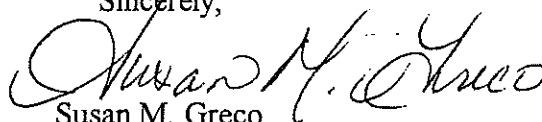
Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

RE: Case No. SW-WR-95-083

Dear Mr. Stiehl:

On September 18, 1996, the Environmental Quality Commission received the Department's Answering Brief. You are entitled to file a reply brief within 20 days of the filing of the brief. A copy of your reply brief should also be forwarded to Larry Cwik. After I receive your reply brief or the 20 days has expired (October 7, 1996), I will set this appeal for Commission consideration at a regularly scheduled Commission meeting. Please feel free to call me if you should have any questions, or require any assistance at (503) 229-5213.

Sincerely,



Susan M. Greco  
Rules Coordinator

cc: Larry Cwik, NWR Enforcement



*Attachment 2*

*1 page*



State of Oregon  
Department of Environmental Quality

RECEIVED

SEP 18 1996

September 17, 1996  
OFFICE OF THE DEPUTY DIRECTOR

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

ENFORCEMENT SECTION

Environmental Quality Commission  
c/o Susan Greco, Rules Coordinator  
Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, OR 97204

Re: Department's Answering Brief to  
Theron Stiehl's Appeal to the  
Environmental Quality Commission  
Case No. SW-WR-95-083

Dear Ms. Greco:

Enclosed is the Department's Answering Brief in response to Theron Stiehl's Appeal to the Environmental Quality Commission of the Hearings Officer's Final Order and Judgment in Case No. SW-WR-95-083.

I am the Department's representative in this case. Please notify me at 229-5728 when this matter will be on the EQC's agenda. Thank you for your assistance.

Sincerely,



Larry Cwik  
Environmental Law Specialist  
Enforcement Section

E:\WINWORD\STIEHLTL.DOC

cc: Theron Stiehl

Mel Menegat, EQC Hearings Officer  
Bob Guerra, Western Region-Medford Office, DEQ  
Chuck Donaldson, Western Region-Salem Office, DEQ  
Van Kollias, Enforcement Section, DEQ  
Kurt Burkholder, Department of Justice



2020 SW Fourth Avenue  
Suite 400  
Portland, OR 97201-4987  
(503) 229-5528  
TTY (503) 229-5471  
DEQ-1

*Attachment 3*

*10 pages*

State of Oregon  
Department of Environmental Quality  
BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

RECEIVED

SEP 18 1996

1  
2  
3 IN THE MATTER OF:  
THERON STIEHL, Respondent.

) DEPARTMENT'S ANSWERING  
) BRIEF TO THERON STIEHL'S  
) APPEAL TO THE  
) OFFICE OF THE DEPUTY DIRECTOR  
) ENVIRONMENTAL QUALITY  
) COMMISSION  
) No. SW-WR-95-083

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6  
7 The Department of Environmental Quality (DEQ) requests that the  
8 Environmental Quality Commission (EQC) uphold the Hearings Officer's Final Order  
9 and Judgment regarding Notice of Violation and Department Order No. SW-WR-95-  
10 083.  
11

12 I. BACKGROUND

13 1. On October 11, 1994, staff of the Department of Environmental  
14 Quality's Western Region office in Medford responded to a complaint and observed an  
15 estimated 100 cubic yards of appliances, furniture, window blinds, old roofing  
16 shingles, construction/demolition debris, garden hoses, bags of concrete, pipes,  
17 buckets, car parts, trash, wood waste and miscellaneous waste in a wooded area of  
18 property owned by Respondent Theron Stiehl at 1980 Hilltop Drive, Rogue River,  
19 Oregon. The waste is in a drainageway through which water flows during rainfalls.  
20

21 2. On April 21, 1995, DEQ issued Notice of Violation and Department Order  
22 No. SW-WR-95-083 to Respondent. The Order directed that Respondent remove all  
23 solid waste from the site within 30 days of receipt of the Order.  
24

25 3. On May 8, 1995, Respondent appealed the Order.  
26  
27

///



1           4.     A contested case hearing was held by telephone on October 25, 1995.  
2     On February 15, 1996, the EQC Hearings Officer, Melvin M. Menegat issued Hearings  
3     Officer Findings of Fact and Conclusions of Law finding that Respondent was in  
4     violation of Oregon Revised Statutes (ORS) 459.205(1) and Oregon Administrative  
5     Rule (OAR) 340-93-050(1). The Hearings Officer's Final Order ordered Respondent to  
6     submit a cleanup plan within 10 days of receipt of the Order and to remove all solid  
7     waste to a Department authorized disposal site within 45 days.

9           5.     On March 12, 1996, Respondent appealed the Hearings Officer's Order  
10    and requested oral argument.

11           6.     On April 11, 1996 a fly-over by staff of DEQ confirmed that the solid  
12    waste was still present on Respondent's property.

13           7.     On August 15, 1996, Respondent submitted his appeal of the Hearings  
14    Officer's Findings of Fact with Alternative Proposed Findings. Respondent's appeal  
15    stated that the solid waste was on property owned or controlled by someone else and  
16    that all of the solid waste had been cleaned up.

17           8.     Respondent has refused to communicate with the Department in 1995  
18    and 1996 and has been difficult to work with. A history of Department contacts with  
19    Respondent is attached as Exhibit A and is incorporated herein.  
20  
21

22    ///

23    ///

24    ///

25    ///

26    ///

1 II. EVIDENCE PRESENTED AT HEARING AND FINDING OF FACTS

2 At the contested case hearing, the Department presented testimony from  
3 Bob Guerra of the Department's Western Region - Medford Office. Based on this  
4 testimony and other evidence presented, the Hearings Officer made the following  
5 findings of facts:

6 1. Respondent created a solid waste disposal site on his property described  
7 as Tax Lot 1602, Section 15, Township 36 South, Range 4 West, Jackson County,  
8 Oregon, without first obtaining a solid waste disposal site permit and has failed to  
9 remove the solid waste as directed, in violation of ORS 459.205(1) and OAR 340-93-  
10 050(1).  
11

12 2. The Department established that Respondent did create and is  
13 maintaining a solid waste disposal site without a permit.  
14

15 3. Respondent's property is hilly and runoff from winter rains flowing  
16 through the solid waste could contaminate public waters and create a potential hazard  
17 to the ground and surface waters beneath or surrounding the site.  
18

19 III. VIOLATIONS

20 1. The Hearings Officer found that Respondent is in continuing violation of  
21 ORS 459.205(1) and OAR 340-93-050(1).

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#### IV. DISCUSSION

In his appeal to the EQC of the Hearings Officer's Final Order, Respondent argues primarily that the waste was not on Respondent's property and that the waste has been cleaned up and that as a result, Respondent is not in violation of any law.

At the hearing, the Department presented evidence that the waste was on Respondent's property. The evidence was credible and the Hearings Officer included a finding that the waste was on Respondent's property.

At the hearing, the Department also presented evidence that the waste still remained on the property. The Hearings Officer found that the evidence was credible and made a finding of fact that the waste remained on the property.

The ongoing violation of ORS 459.205(1) and OAR 340-93-050(1) has continued since October 1994, a period of two years.

#### V. CONCLUSION

The record contains evidence sufficient to demonstrate that Respondent committed and is continuing to commit a violation of the Department's solid waste statutes and administrative rules. The Department requests that the Environmental Quality Commission uphold the Hearings Officer's Final Order and Judgment and order that: 1) Respondent submit to the Department's Western Region-Medford office satisfactory proof that the site has been cleaned up properly within 10 days including photographic documentation and landfill receipts, or, alternatively, 2) Respondent: a) submit a cleanup plan to the Department's Western Region - Medford Office within 10 days, and b) clean up the waste within 45 days, and c) submit photographic

1 documentation and landfill receipts indicating proper disposal of all of the waste to the  
2 Department's Western Region - Medford Office within 50 days.

3  
4  
5 SEP 17 1996

6 Date

*Larry Cwik*

7 Larry Cwik  
8 Environmental Law Specialist  
9 Enforcement Section  
10 Department of Environmental Quality  
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EXHIBIT A

History of DEQ Contacts with Respondent Theron Stiehl

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3       1.     On October 11, 1994, staff of the Department of Environmental  
4 Quality's Western Region office in Medford responded to a complaint and observed an  
5 estimated 100 cubic yards of appliances, furniture, window blinds, old roofing  
6 shingles, construction/demolition debris, garden hoses, bags of concrete, pipes,  
7 buckets, car parts, trash, wood waste and miscellaneous waste in a wooded area of  
8 property owned by Respondent at 1980 Hilltop Drive, Rogue River, Oregon. The  
9 waste is in a drainageway through which water flows during rainfalls.  
10

11       2.     DEQ staff discussed the solid waste on the property with Respondent on  
12 October 26, 1994. Specifically, DEQ staff told Respondent that the waste could not  
13 remain there and needed to be removed. Respondent was given a copy of the  
14 Department's applicable solid waste regulations during the meeting. Respondent  
15 agreed to clean up the waste by December 11, 1994.  
16

17       3.     On December 19, 1994 and January 2, 1995, DEQ staff inspected the  
18 site. The waste had not been cleaned up.  
19

20       4.     On January 11, 1995, DEQ issued a Notice of Noncompliance (NON) to  
21 Respondent advising him that the unpermitted solid waste on his property violated  
22 Oregon law and needed to be cleaned up. The post office returned the NON to the  
23 Department unclaimed. DEQ staff reissued the NON on February 17, 1995 and  
24 personally served the NON to Respondent on February 17, 1995. The NON required  
25 submittal of a cleanup plan by February 24, 1995 and cleanup of the waste by  
26  
27

1 March 18, 1995. Respondent did not respond to the NON.

2 5. On April 21, 1995, DEQ issued Notice of Violation and Department Order  
3 No. SW-WR-95-083 to Respondent. The Order directed that Respondent remove all  
4 solid waste from the site within 30 days of receipt of the Order.

5 6. On May 8, 1995, Respondent appealed the Order and denied the Notice  
6 of Violation in its entirety by letter to Lydia Taylor, Interim Director, DEQ.

7 7. In a telephone conversation on July 8, 1995, Respondent told the EQC  
8 Hearings Officer in this case that he would not accept service of and would return any  
9 mail attempting to give notice of a contested case hearing.

10 8. The Hearings Officer set a hearing date of September 6, 1995 for a  
11 contested case hearing.

12 9. The contested case hearing for this case was subsequently rescheduled  
13 for October 25, 1995. Respondent had effective notice of the hearing. The hearing  
14 was held by telephone on October 25, 1995, as scheduled. The Department was  
15 represented by Larry Cwik, Environmental Law Specialist, as lay representative for the  
16 Department, with witness Robert Guerra from DEQ's Western Region - Medford  
17 Office. Respondent did not appear at the hearing.

18 10. On February 15, 1996, the EQC Hearings Officer, Melvin M. Menegat  
19 issued Hearings Officer Findings of Fact and Conclusions of Law finding that  
20 Respondent was in violation of Oregon Revised Statutes (ORS) 459.205(1) and  
21 Oregon Administrative Rule (OAR) 340-93-050(1). The Hearings Officer's Final Order  
22  
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1 ordered Respondent to submit a cleanup plan within 10 days of receipt of the Order  
2 and to remove all solid waste to a Department authorized disposal site within 45 days.

3 11. On March 12, 1996, Respondent appealed the Hearings Officer's Order  
4 and requested oral argument.

5 12. On April 11, 1996 a fly-over by staff of DEQ confirmed that the solid  
6 waste was still present on Respondent's property.

7 13. On May 15, 1996, Susan Greco, DEQ Rules Coordinator informed  
8 Respondent by letter that Respondent was required to file exceptions and brief to the  
9 Hearings Officer's Findings Fact and Conclusions of Law in the case within 30 days of  
10 the filing of the Notice of Appeal. Ms. Greco directed Respondent to submit those  
11 documents by June 15, 1996.  
12

13 14. On August 15, 1996, Respondent submitted his appeal of the Hearings  
14 Officer's Findings of Fact with Alternative Proposed Findings. Respondent's appeal  
15 stated that the solid waste was on property owned or controlled by someone else and  
16 that all of the solid waste had been cleaned up.  
17

18 15. On August 22, 1996, Larry Cwik of DEQ wrote Respondent and  
19 requested a date and time for a site visit to determine if the solid waste had been  
20 removed from the property. This letter was served on Respondent through  
21 Respondent's wife on August 27, 1996. The letter requested that Respondent  
22 contact Mr. Cwik by September 4, 1996 concerning dates and times for a site visit.  
23  
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1           16.    On September 10, 1996, Mr. Cwik of the DEQ telephoned Respondent's  
2 residence in Rogue River, Oregon and left a telephone message on Respondent's  
3 answering machine requesting that Respondent return the telephone call.

4           17.    Respondent has not responded to the August 22, 1996 letter or  
5 September 10, 1996 phone call to date. DEQ staff have been unable to obtain  
6 permission to go on the property to confirm whether or not the solid waste still  
7 remains on the property.  
8



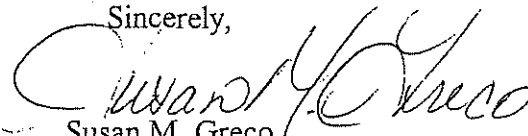
August 26, 1996

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Dear Mr. Stiehl:

On August 20, 1996, the Environmental Quality Commission received Mr. Stiehl's Objections and Proposed Alternative Findings of Fact. The Department has 30 days (September 19, 1996) to file an answering brief. A copy of the answering brief will be forwarded to you. Mr. Stiehl will then be entitled to file a reply brief within 20 days of the filing of the answering brief. After all briefs have been received, I will set this appeal for Commission consideration at a regularly scheduled Commission meeting. Please free feel to call me if you should have any questions, or require any assistance at (503) 229-5213.

Sincerely,




Susan M. Greco  
Rules Coordinator

cc: Larry Cwik, NWR Enforcement



---

811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1 

*Attachment 4  
1 page*

Aug 15, 1996

STATEWIDE ENFORCEMENT SECTION  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
AUG 20 1996  
State of Oregon  
Department of Environmental Quality

APPEAL OF HEARINGS OFFICER FINDINGS OF FACTS CASE # SWWR95-083

**RECEIVED**  
AUG 22 1996

I object to the following findings of fact of hearings officer.

OFFICE OF THE DEPUTY DIRECTOR

1. The alleged dump site is not situated on any property owned or controlled by me. The property described in findings of fact is owned by me but the site of alleged dump is hundreds of feet away on someone's else's property. Mr Guera was informed of this fact but did not attempt to prove who's property it was on.

The reason he didn't is that he trespassed over my land to get to this site, even though there were 'No Trespassing signs posted'.

He could have gotten a court order to go over my land but chose to break the law.

2. The only reason I ever agreed to clean up the site is I had dumped some trash paper at the site, and a family member who owned the site and I conferred and decided that since Mr. Guera had broken the law to get to the site, that his findings were null and void. He also exaggerated the quantity and type of debris, we would ignore his findings until the issue of his trespass was resolved.

I have since cleaned up the papers and removed all noxious odor causing material and another family member has burned the remaining wood material and paper as much as was possible. We have not disposed of any trash since that time.

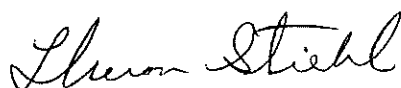
#### Conclusions of Law

Theron Stiehl is not in violation of any law (other than dumping paper which he cleaned up).

#### ALTERNATIVE PROPOSED FINDINGS

The site has been removed of all noxious material prior to burning what was left. It presents no further potential hazards and has berry briar's growing over most of it and should be laid to rest and forgotten.

Sincerely, Theron Stiehl



Attachment 5  
1 page

July 15, 1996

Theron Stiehl  
1980 Hilltop Drive  
Rogue River OR 97538

RE: Appeal to Environmental Quality Commission

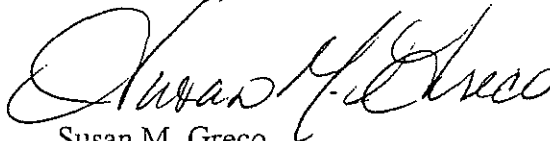
Dear Mr. Stiehl:

Per our telephone conversation today, you have until August 15, 1996 to file your exceptions and brief regarding the "Hearing Officer's Findings of Fact and Conclusions of Law" and "Final Order" in Case No. SW-WR-95-083. The exceptions must specify those findings and conclusions that you object to and include alternative proposed findings. The Commission cannot consider your appeal until such documents have been received. If the documents are not received prior to August 15, 1996, the Department will recommend to the Commission that your appeal be dismissed. Once your exceptions and brief have been received, the Department will file an answer brief.

I have enclosed a copy of the applicable administrative rules. To file exceptions and brief, please send to Susan Greco, on behalf of the Environmental Quality Commission, at 811 S.W. 6th Avenue, 7th Floor, Portland, Oregon, 97204, with a copy to Larry Cwik, Department of Environmental Quality, 2020 SW 4th Avenue, Suite 400, Portland, Oregon, 97201.

After the parties file exceptions and briefs, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and the parties will be notified of the date and location. If you have any questions on this process, or need additional time to file exceptions and briefs, please call me at 229-5213 or (800) 452-4011 ext. 5213.

Sincerely,



Susan M. Greco  
Rules Coordinator

cc: Larry Cwik, Enforcement Section



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1

*Attachment 6*

*1 page*



July 11, 1996

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Larry Cwik  
Department of Environmental Quality  
2020 SW 4th, Suite 400  
Portland OR 97201

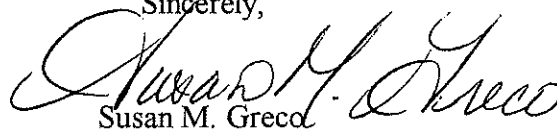
RE: Appeal to Environmental Quality Commission  
Case No. SW-WR-95-083

Dear Mr. Stiehl and Mr. Cwik:

The appeal by Mr. Stiehl has been set for the regularly scheduled Environmental Quality Commission meeting on Friday, August 23, 1996. The meeting will convene at 8:30 a.m. and the appeal will be heard in the regular course of the meeting. The meeting will be held at the Hermiston Community Center, 415 Highway 395-S, Hermiston, Oregon in the Altrusa Room. At this meeting, the Department will be recommending to the Commission that the appeal by Mr. Stiehl be dismissed. As soon as the agenda and staff report are available, I will forward the same to you.

If you should have any questions or need special accommodations, please feel free to call me at (503) 229-5213 or (800) 452-4011 ext. 5213 within the state of Oregon.


Sincerely,



Susan M. Greco  
Rules Coordinator



---

811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1 

*Attachment 7*  
*1 page*

May 15, 1996

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

RE: Appeal to Environmental Quality Commission

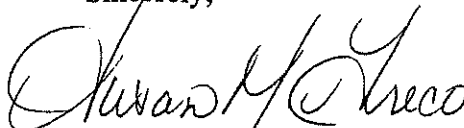
Dear Mr. Stiehl:

The Department received your timely request for administrative review by the Environmental Quality Commission of the "Hearing Officer's Findings of Fact and Conclusions of Law" in Case No. SW-WR-95-083.

Pursuant to OAR 340-11-132(4)(a), you are required to file exceptions and brief within thirty days from the filing of the Notice of Appeal. The exceptions must specify those findings and conclusions that you object to and include alternative proposed findings. As of this date, the Department has not received such exceptions and brief. The Commission can not consider your appeal until such documents have been filed. To file exceptions and brief, please send to Susan Greco, on behalf of the Environmental Quality Commission, at 811 S.W. 6th Avenue, 7th Floor, Portland, Oregon, 97204, with a copy to Larry Cwik, Department of Environmental Quality, 2020 SW 4th Avenue, Suite 400, Portland, Oregon, 97201. The Department needs to receive these documents within 30 days from the date of this letter (June 15, 1996).

Once you have filed your exceptions and brief, the Department will file an answering brief and a copy of the same will be forwarded to you. After both parties file exceptions and briefs, this item will be set for Commission consideration at a regularly scheduled Commission meeting, and the parties will be notified of the date and location. If you have any questions on this process, please call me at 229-5213 or (800) 452-4011 ext. 5213.

Sincerely,



Susan M. Greco  
Rules Coordinator

cc: Larry Cwik, Enforcement Section



Attachment 8  
1 page

811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1



March 12, 1996

I would like to appeal the hearings officers findings of fact  
and conclusions of law No. SW-WR-95-083.  
I would request oral argument.

Sincerely Theron Stiehl

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED  
MAR 15 1996

OFFICE OF THE DIRECTOR

5

Attachment 9  
1 page

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF: )  
 )  
THERON STIEHL, )  
Respondent. )  
 )  
 ) HEARING OFFICER'S  
 ) FINDINGS OF FACT AND  
 ) CONCLUSIONS OF LAW  
 ) NO. SW-WR-95-083  
 ) JACKSON COUNTY

BACKGROUND

Theron Stiehl, hereinafter called respondent, has appealed from an April 21, 1995 Notice of Violation and Department Order issued pursuant to Oregon Revised Statutes (ORS) 468.126 through 468.140, ORS Chapter 183, and Oregon Administrative Rules (OAR) Chapter 340, Divisions 11 and 12. The Department of Environmental Quality (Department, DEQ) alleged that respondent violated ORS 459.205(1) and OAR 340-93-050(1) by establishing and maintaining a solid waste disposal site on his property without a permit.

The Department ordered that respondent submit a cleanup plan and then remove all solid waste from the site and confirm the removal of the waste and the fact it was deposited in an authorized solid waste disposal site.

The above Notice of Violation and Department Order was served on respondent on May 6, 1995. Theron Stiehl appealed the Notice of Violation and Department Order on May 9, 1995.

A hearing was held by telephone on October 25, 1995. Present were Lawrence Cwik, Environmental Law Specialist, representing the Department with witness Robert Guerra. Theron Stiehl did not appear at the hearing.

RESPONDENT'S CONTENTIONS

Respondent, Theron Stiehl denied all of the allegations of the Department and that the Department had the authority to issue the notice and order.

FINDINGS OF FACT

(1) On or before October 11, 1994, Robert Guerra, an Environmental Specialist, with the Medford Office of the Department received information that there was an illegal solid waste dump site located at the property described as 1980 Hilltop Drive, Rogue River, Jackson County, Oregon. (2) The property is more particularly described as Tax Lot 1602, Section 15, Township 36 South, Range 4 West, in Jackson County, Oregon. (3) The property is owned or controlled by Theron Stiehl.

(4) On October 11, 1995, Guerra visited the site. (5) Guerra observed approximately 100 cubic yards of waste and debris including appliances, construction/demolition debris, bags of concrete, old roofing shingles, wood waste, household garbage, and miscellaneous waste at the bottom of a ravine on the property owned or controlled by respondent. (6) Respondent does not have a solid waste disposal permit for the site.

(7) Guerra met with respondent on October 26, 1994. (8) Respondent agreed to clean up the site by December 11, 1994. (9) The site was not cleaned up by December 19, 1994 and attempts to contact respondent after that were unsuccessful.

(10) On January 11, 1995, a Notice of Noncompliance (NON) was issued to respondent. (11) The NON cited respondent's operation of a solid waste disposal site without a permit and directed him to clean it up within 30 days. (11) Respondent did not claim the NON when it was mailed to him. (12) He was served the NON personally on February 17, 1995. (13) Respondent did not respond to the NON and the Notice of Violation herein was issued.

(13) Respondent's property is hilly. (14) Runoff from the winter rains flowing through the solid waste and into the ground water or surface waters could contaminate drinking water supplies.

(15) Hearing in this matter was originally set for September 6, 1995. (16) Attempts to serve respondent with the notice of hearing by personal service through the Jackson County Sheriff's office and by regular mail and registered letter were unsuccessful and the hearing was continued. (17) Respondent had, in a conversation of July 8, 1995 stated that he would not accept service and return any mail attempting to give him notice of a hearing. (18) The hearing was rescheduled to October 25, 1995. (19) Attempts to serve respondent personally were made by the Jackson County Sheriff's office at his residence and by the Josephine County Sheriff's office at his place of employment. (20) Neither attempts were successful. (21) Regular mail sent to respondent's home address with the hearing date written on the outside of the envelope were returned as refused and return to sender with the date of the hearing crossed out. (22) Certified mail containing the notice of hearing was returned unclaimed.

#### CONCLUSIONS OF LAW

1. The Commission has jurisdiction.
2. Theron Stiehl is in violation of ORS 459.205(1) and OAR 340-93-050(1) and is ordered to remove the solid waste disposal site and the solid waste therein.

#### OPINION

NOTICE OF HEARING: Respondent stated and has demonstrated that he would not accept notification of the hearing date and time. He took the position that if he were not at hearing findings could not be made against him or sanctions taken. Respondent's attempt to avoid responsibility or liability for his actions is understandable, however his avoidance of service or receipt of the notice of hearing does not prevent the hearing from being conducted in his absence and an order being entered.

ORS 183.415 provides that in a contested case, all parties shall be afforded an opportunity for hearing after reasonable notice, served personally or by registered or certified mail.



OAR 340-11-097 provides that the notice or final order shall be personally delivered or sent by registered or certified mail and that the service of a written notice is perfected when the noticed is posted, addressed to, or personally delivered to the party.

A notice sent by certified or registered mail constitutes effective notice even though it is not received by the person to be notified, if the notice has been correctly addressed and properly certified or registered. See Stroh v. SAIF, 261 OR 117, 492 P2d 472 (1972). Also, such notice is effective even though the addressee fails or refuses to respond to a postal service "mail arrival notice" that indicates that certified or registered mail is being held at the post office. 58 Am Jur 2nd topic 34.

Theron Stiehl was given sufficient notice of hearing.

SOLID WASTE DISPOSAL SITE: Theron Stiehl created a solid waste disposal site on his property described as Tax Lot 1602, Section 15, Township 36 South, Range 4 West, Jackson County, Oregon with out first obtaining a solid waste disposal site permit and has failed and refused to remove the solid waste as directed. He is in violation of ORS 459.205(1) and OAR 340-93-050(1).

ORS 459.205(1) provides that a disposal site shall not be established, operated, maintained or substantially altered, expanded or improved until the person owning or controlling the disposal site obtains a permit therefor from the Department.

OAR 340-93-050(1) sets forth the same requirements.

Theron Stiehl is maintaining a solid waste disposal site without a permit. He created the site by dumping or allowing to be dumped, the waste that is at the site. It is not necessary to establish that Theron Stiehl actually dumped the waste. He is in violation by maintaining the disposal site and not removing the solid waste at the site.

The solid waste disposal site and the waste therein has and is creating a potential hazard to the ground and surface waters beneath or surrounding the site.

Theron Stiehl has avoided service, refused and returned notices of hearing and has not appeared at hearing to give testimony or evidence to refute or rebut the Department's allegations and testimony.

It is clear, first from the physical facts testified to, that respondent created and/or maintained a solid waste disposal site on property he owns or controls. The waste is at a site on the property where it would not be unreasonable to attempt to dispose of it there rather than take it to an approved or authorized solid waste disposal site. There would be no disposal fees involved and also it is just a short distance from respondent's home. The further evidence that respondent did create and is now maintaining the site is that he first agreed to clean it up, and is now avoiding any contact that might cause him to clean it up. Further, in a statement attributed to him reported in a newspaper article he said "Yes, we've been dumping some of our trash down that ravine, but there's not a farm in Oregon that doesn't have

some sort of place to put their trash." Respondent did not participate in the hearing so he could offer sworn testimony that would rebut the Department's allegations. Respondent's actions in this matter cause his denial of the allegations to be viewed a delaying tactic rather than an honest and sincere disagreement with the position of the Department.

The Department has established that respondent did create and is maintaining a solid waste disposal site without a permit.

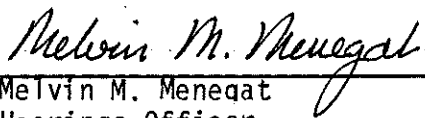
Respondent is ordered to submit a cleanup plan to the Department's Western Region Medford Office within 10 days of the receipt of this order for approval. The plan shall include the name, address and telephone number of the Department-authorized solid waste disposal site to which respondent's waste will be hauled.

Respondent is ordered, pursuant to the approved plan, to remove all solid waste from the site in a manner acceptable to the Department and take it to the Department-authorized solid waste disposal site identified in the plan within 45 days of the receipt of this order.

Respondent shall obtain detailed documentation and receipts from the landfill accepting the waste confirming the disposal, and shall take photographs of both the removal operation and the site after removal and within 50 days of the receipt of this order, submit that documentation to the Department.

Dated this 15th day of February, 1996.

Environmental Quality Commission

  
\_\_\_\_\_  
Melvin M. Meneqat  
Hearings Officer

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

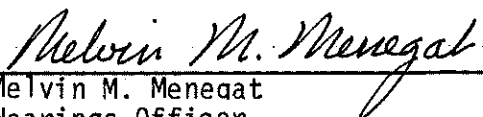
IN THE MATTER OF:	)	HEARING OFFICER'S
	)	FINAL ORDER
Theron Stiehl,	)	
Respondent.	)	NO. SW-WR-95-083
	)	JACKSON COUNTY

The Commission, through its hearings officer, finds that Theron Stiehl, created and maintained a solid waste disposal site on his property without a permit in violation of ORS 459.205(1) and OAR 340-93-050(1). Theron Stiehl is ordered to close the site and remove all solid waste on the site. He is ordered to submit a cleanup plan within 10 days of the receipt of this order, remove all solid waste to a Department authorized disposal site within 45 days, and submit documentation of the removal and cleanup within 50 days of the receipt of this order.

Review of this order is by appeal to the Environmental Quality Commission pursuant to OAR 340-11-132. A request for review must be filed within 30 days of the date of this order.

Dated this 15th day of February, 1996.

Environmental Quality Commission

  
Melvin M. Meneat  
Hearings Officer

NOTICE: If you disagree with this Order you may request review by the Environmental Quality Commission. Your request must be in writing directed to the Environmental Quality Commission, 811 S.W. Sixth Avenue, Portland, Oregon 97204. The request must be received by the Environmental Quality Commission within 30 days of the date of mailing or personal service of this Order. If you do not file a request for review within the time allowed, this order will become final and thereafter shall not be subject to review by any agency or court.

A full statement of what you must do to appeal a hearings officer's order is in Oregon Administrative Rule (OAR) 340-11-132. That rule is enclosed.

STATEMENT OF MAILING

HEARINGS CASE NO. 95-DEQ-010  
AGENCY CASE NO. SW-WR-95-083

I certify that the attached Order was served through the mail to the following parties in envelopes addressed to each at their respective addresses, with postage fully prepaid:

Larry Cwik  
DEQ Enforcement Section  
2020 SW 4th Ave., Ste 400  
Portland, OR 97204

Department of Environmental Quality  
201 W Main St., Ste 2-D  
Medford, OR 97501

Susan Greco  
DEQ Rules Coordinator  
Management Services Division  
811 S.W. 6th Ave.  
Portland, OR 97204

Mailing/Delivery Date: February 15, 1996

Hearings Clerk: BGS

STATE OF OREGON/EMPLOYMENT DEPARTMENT

0500b

February 15, 1996

Cleveland Investigation Company  
P.O. Box 230  
Talent, OR 97540

Re: Theron Stiehl  
Hearings Case No. 95-DEQ-010  
Agency Case No. SW-WR-95-083

Please serve the enclosed Hearing Officer's Findings of Fact and Conclusions of Law and Hearing Officer's Final Order on Theron Stiehl.

I have completed your service information form and enclosed a newspaper article with Mr. Stiehl's photograph in it.

I have enclosed two sets of documents for service. Mr. Stiehl lives in Jackson County and works in Josephine County. I have included his home address and his work address on the form.

Attempts to serve Mr. Stiehl earlier in these proceedings have been unsuccessful. He has stated that he will avoid service and has done so to this point.

Current information is that he still resides at the above address and that his wife works for the Rogue River schools. He does work in Josephine County.

I have requested a check for \$20 from the administrative office in Salem and will forward that as soon as it is received. If you would bill this office for the second service fee I will forward your statement for payment as soon as it is received.

I will leave it to your judgment as to whether attempts to serve Mr. Stiehl should be made in both counties at the same time. He only needs to be served with one set of the papers.

Thank you for your assistance in this matter.

*Melvin M. Meneagat*  
Melvin M. Meneagat  
Hearings Officer.

2225e

enclosures:

cc: Larry Cwik DEQ

John A. Kitzhaber  
Governor



875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

August 18, 1995

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Larry Cwik  
Department of Environmental Quality  
Enforcement Section  
2020 SW 4th Ave., Suite 400  
Portland, OR 97204

Re: DEQ v. Theron Stiehl  
Hearings Case No. 95-DEQ-0010  
DEQ Case No. SW-WR-95-083  
July 8, 1995 telephone conversation with Theron Stiehl.

Gentlemen:

I have been assigned to conduct the contested case hearing in the above matter.

On July 8, 1995, I contacted Mr. Stiehl at his home telephone number to discuss his availability for hearing so that a convenient hearing date could be set. Mr. Stiehl requested that I convey to the Department of Environmental Quality his position regarding the contested case hearing.

Mr. Stiehl's primary position is that DEQ did not and does not have the authority to issue the Notice of Violation and Department Order that was served in this case and that he will resist DEQ's action when the matter gets into court.

He feels that his May 8, 1995 letter was not a request for hearing and he does not plan to participate in a hearing based on a notice and order that DEQ had no authority to issue.

He does not believe that a hearings officer can issue an order in this matter without both parties being present at hearing and he does not plan on attending any hearing. He further indicated that if a hearing notice is sent by mail he will either not accept the letter or return it unopened.

John A. Kitzhaber  
Governor



*Attachment 11*  
*2 pages*

875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

He is concerned that DEQ has the wrong party because he does not own the land and also that DEQ could be subject to a lawsuit because they are going after the wrong person.

I indicated to Mr. Stiehl that failure to pursue administrative remedies could result in administrative action being taken that could not be undone once the matter got to court. I further indicated that a decision could be reached with the hearings officer or decision maker only hearing one side of the case.


I told Mr. Stiehl when I was initially talking to him that I would schedule the hearing to be held in Medford, Oregon. In view of Mr. Stiehl's position to not attend a hearing, I am going to set the hearing to be held by telephone unless one of the parties object.

I am going to send a hearing notice by regular mail to each of the parties. In addition to the regular mailing, I am going to request that the notice of hearing and accompanying documents be served on Mr. Stiehl in person.

Each of the parties are being forwarded a copy of this letter.

I have set September 6, 1995 at 10:00 a.m. as the date and time of hearing. I will send out or serve the official notice of hearing at a date closer to the actual hearing. The hearing will be held by telephone unless objections are received by August 28, 1995.

If you have any questions, please call me at 503-686-7960.

  
MELVIN M. MENEGAT  
Hearings Officer

Sneak P. view, <sup>EXHIBIT 8</sup> get it, OR

NEXT ISSUE: JULY 5, 1995

Postal Delivery Point

Post-It® Fax Note	7671	Date	6-1	# of pages	3
To	Larry Cunk	From	Bob		
Co./Dept.		Co.			
Phone #	929-6945	Phone #			
Fax #		Fax #			

BOB GUERRA  
 DEQ  
 201 W. MAIN, SUITE  
 MENDOCINO, CA 95628  
 USA 1995  
 Robert H. Hunt © 1995

# Land Waste War in Rogue River



Theron Stiehl, left, wants the DEQ to just leave him alone, p. 8-9

Plus: Rogue Music Theatre opens with *The Music Man* (picture below) on June 30! See our CALENDAR OF EVENTS on p. 16



Attachment 12 3 pages



# Solid Waste War in Rogue River

## Theron Stiehl wants the DEQ to leave him alone

by Curtis Hayden

*"He said, kid, we found your name on an envelope at the bottom of a half-ton of garbage, and I just wanted to know if you had any information about it."*

—Arlo Guthrie  
1960s song *Alice's Restaurant*

Theron Stiehl probably felt a lot like Arlo Guthrie last October when Bob Guerra, an agent for the state Department of Environmental Quality (DEQ), showed up complaining about a huge solid waste dump on his property. Acting on a tip from a confidential source, the agent has investigated the dump site and concluded that, yes, it was in violation of state law.

It wasn't hard to determine who the probable culprit was. The site was located just off a gravel driveway 200 feet from Theron Stiehl's house, and the agent had recovered an envelope from the pile with Stiehl's name on it.

Stiehl freely admitted that the site had been used by him and his family (including some not living on the property) for a number of years as a solid waste disposal site. At the time, he promised the agent that he'd get the site cleaned up, but as time dragged on, he began to show signs of intransigence.

At the end of October he requested a meeting with Guerra at the DEQ office in Medford, where the rules and requirements were explained to him in greater detail. By December, however, Stiehl still hadn't complied, and the DEQ sent a Notice of Noncompliance by certified mail.

When the post office returned the letter unclaimed, Guerra personally delivered the notice on February 17. Stiehl ripped the notice into little pieces and demanded that Guerra get off the property. Guerra complied, and on April 21, 1995, the DEQ filed a Notice of

Violation against Theron Stiehl for "establishing and maintaining a solid waste disposal site without a permit," in effect circumventing Oregon state law.

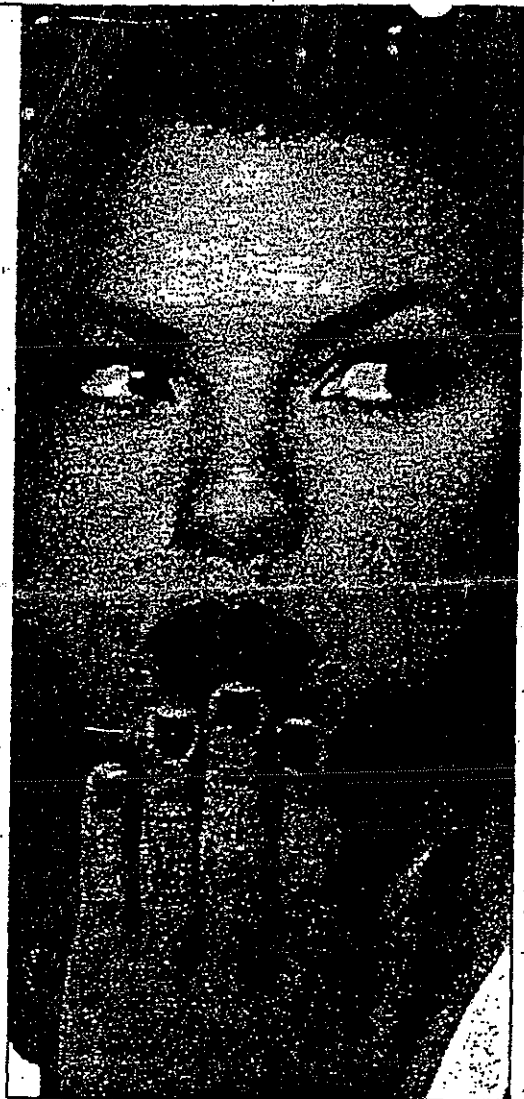
### A short history

The story of the Stiehl family in Rogue River goes back to 1919, when Theron Stiehl's grandparents passed through on their way to homestead in the Willamette Valley. An unscrupulous loan shark informed the homesteaders that the land they bought was actually located up in the Evans Valley, so the Stiehls settled down there.

Unfortunately, the land was dry and unproductive, and the experienced berry farmers never recovered. Theron Stiehl's father, however, knew the value of land, and the 1933 graduate of Rogue River High School spent his high school years working odd jobs and buying land. By the time he returned from the war in 1945 (with an Hawaiian bride), Stiehl's father owned hundreds of acres of land around Rogue River, and the family used it to their advantage.

Part of the acreage was a five-acre plot atop Hilltop Drive which Theron Stiehl purchased from his father in 1980 to build a home. Stiehl, a 1962 graduate of Rogue River High School, worked 23 years for a plywood mill until an injury in 1985 forced him out. He has been selling real estate since 1990 and has had his share of tangles with the City of Rogue River.

"All of the problems I'm having now with the DEQ go back to the City of Rogue River," Stiehl said in an interview at his home. "It all started in the early 70s when a new group of people took over the local politics. They tried to blackmail my father into building a road for them, and when he turned them down they've been after us ever since."



**E. NORMAN**  
TIC STUDIOS  
h St. • Grants Pass  
179-0018

*Weekend Getaway!*  
*all day or Stay all night!*

### COUNTRY MUSIC

urday 5pm - 9pm  
4pm - 8pm

### forgettable BBQ Buffet

Rotisserie Chicken and  
Ribs and more!

...it'll be coming back  
more, and more...

Can Eat \$9<sup>95</sup>

l from 4 pm



### Growth Through Karate

by Del Saito

### Karate... The Search For Meaning

*"I hear and I forget... I see and I remember... I do and I understand."*

fluences around him or her, but each must stand on their own.

Stiehl enumerated a number of run-ins with the City, but his biggest complaint, as a native Oregonian, was government interference with property rights. "If you own land, you should be able to develop it orderly without people complaining about it," he said. "Yes, we've been dumping some of our trash down that ravine, but there's not a farm in Oregon that doesn't have some sort of place to put their trash."

Stiehl is also incensed about the obvious trespassing that has taken place on his property. "There are only two roads to get to my house and both have 'No Trespassing' signs on them," he said. "You can't even see the trash unless you walk to the side of the road and look down. The DEQ got a complaint from someone who was trespassing on my property, and then the DEQ trespassed to come check it out."

According to Stiehl, he was willing to cooperate with the DEQ, but when they came on his property a second and third time without his permission, he decided to fight them on it.

"First of all, the dump site is not even on my property," he said. "It's my father's. Secondly, when I asked for an application to get the site approved, they told me they wouldn't approve it. Well, they can just take me to court then"

#### It's off to court we go

And taking him to court is exactly what the DEQ has in mind. According to Chuck Donaldson, manager of the solid waste program for the DEQ's Western Region, the state's law are fairly specific.

"Oregon Revised Statute 429.205 prohibits the establishment or operation of any solid waste disposal site without a permit from the Department," Donaldson said in a phone interview from Salem. "The law is in effect to protect ground water, and the requirements to obtain a permit are strict. If a person really wanted to meet the time and money into meeting all the requirements, he could, but it would be difficult and expensive."

Instead, Donaldson said, most people

just cooperate with the DEQ and clean up their mess. "Most complaints we get are from neighbors," he said. "We drive out to the site and inspect it, and then we attempt to negotiate a settlement. If the site isn't harmful, the simplest and cheapest way is to just push dirt over it. We almost always come up with an informal arrangement."

In Theron Stiehl's case, however, the arrangement won't be so easy. In his reply to the April 21 Notice of Violation, Stiehl wrote, "I don't believe you have the authority to trespass on my land with posted no trespassing signs to determine whether there was a violation or not. Only in a court of law will this be determined. Your enforcement officer illegally trespassed over my land to observe this site."

When I called Bob Guerra at the DEQ's Medford office, he strongly denied the allegation.

"I've followed up on over 700 leads in the last four years, and I have never encountered anything like this," Guerra said. "The complaint was forwarded to us by a private citizen, and I drove up there to take a look. There weren't any 'No Trespassing' signs on the back road to Mr. Stiehl's house. If there had been, I would've knocked on his door for permission. If he'd denied me permission, I could easily have gotten a search warrant."

And what about Stiehl's contention that the site doesn't lie on his property? "We think it's his property," Guerra said. "We went to the Jackson County Planning Department and checked out the deed and the map."

Guerra is frustrated with the entire mess. "I give everyone the benefit of the doubt," he said. "If there's no immediate environmental impact, I give the people plenty of time to clean the mess up. But I've been dealing with Mr. Stiehl since last October, and he's still not cooperating. Now I hear from the Rogue River Fire Department that he burned the site, and he's going to be in even bigger trouble if that's true."

**COUPON**

(Air comp brushes, trimmer)

Tom Ba

**E**  
**Ever**  
**10**  
**Petal**  
752

(503) 471-4445  
FAX: 471-2077

#### YOUR CHOICE OF MEATS:

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2 Meat Enchiladas served with Rice, Beans and salad.
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Flour Tortilla filled with Cheese, Rice, Beans, and your choice of Meat. Guacamole, Sour Cream and Salsa.
- Jr. Big Burrito . . . . . \$3.95**  
Same as above - just not as big.
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- Chile Relleno Plate . . . . . \$5.95**  
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- Fajita Plate . . . . . \$5.95**  
Your choice of Beef or Chicken sautéed with Bell Peppers, Onions and Tomatoes.
- Carne Asada . . . . . \$5.95**  
Lean Beef Steak, marinated and charbroiled

K-Mart  
Dine  
Vegetar  
**Cheese Enchil**  
2 Cheese Enchil Rice, Beans and  
**Veggie Burrito**  
Flour Tortilla filled with Beans, Lettuce, and Salsa.  
**Jr. Veggie Bur**  
Same as above  
**Bean & Cheese**  
Flour Tortilla filled with Beans and Salsa

RECEIVED  
MAY 12 1995

May 8, 1995

Dear Lydia Taylor

In regards to your letter dated April 21, 1995, I deny the information contained in this letter.

In your notice of violation dated April 21, 1995, order # sw wr 95 083. I deny your notice of violation in its entirety and your department order.

I don't believe that you have the authority to trespass on my land with posted no trespassing signs to determine whether there was a violation or not. Only in a court of law will this be determined. your enforcement officer illegally trespassed over my land to observe this site. Without a court order he had no right to do so.

Sincerely , Theron Stiehl

*Theron Stiehl*

Attachment 13  
1 page

(2)

APR 21 1995

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Re: Notice of Violation and Department Order  
No. SW-WR-95-083  
Jackson County

On October 11, 1994, Mr. Bob Guerra of the Department's Western Region, Medford Office, responded to a complaint of an unauthorized solid waste disposal site by visiting your property at 1980 Hilltop Drive, Rogue River, Oregon. Mr. Guerra observed an estimated 100 cubic yards of appliances, furniture, window blinds, construction/demolition debris, garden hoses, bags of concrete, pipes, buckets, car parts, trash, wood waste, and miscellaneous waste at the bottom of a ravine in a wooded area on your property. Oregon Revised Statute (ORS) 459.205 prohibits the establishment or operation of any solid waste disposal site without a permit from the Department. Your site is not permitted and is an illegal landfill.

Mr. Guerra telephoned you and discussed the solid waste. You confirmed that you had placed the waste where it was observed and that no one else had placed waste there. On October 26, you came to the Department's Western Region Medford Office and met with Mr. Guerra. You indicated during the meeting that you would clean up the site properly by December 11, 1994. Mr. Guerra gave you a copy of the Department's applicable solid waste regulations during your meeting.

On December 19, 1994, Mr. Guerra reinspected the site. No waste had been removed. Mr. Guerra then left several phone messages on your answering machine. There was no response to these messages. On January 2, 1995, another inspection showed the waste still there, unchanged.

On January 11, 1995, the Department issued you a Notice of Noncompliance (NON). This directed you to clean up the site and requested that a clean-up plan be submitted to the Department's Western Region Medford Office within seven days of receipt of the letter. The post office returned the NON to the Department unclaimed, so Mr. Guerra visited and hand-delivered the NON to you on February 17, 1995. Mr. Guerra observed then that no



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1

*Attachment 14  
7 pages*



Theron Stiehl  
Case No. SW-WR-95-083  
Page 2

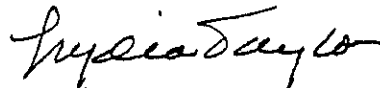
cleanup of any waste had been conducted, even though you committed to clean up the site more than three months earlier.

Since you have failed to clean up the illegal solid waste site, I have enclosed a Notice of Violation and Department Order. This cites your continuing violation of ORS 459.205 and orders you to correct the violation within a specified time period. Appeal procedures are outlined in the Notice. You may also request an informal discussion as outlined in the Notice.

Also enclosed is a copy of Oregon Administrative Rules, Division 12, Civil Penalties. Please note that any person violating certain rules, statutes or orders is liable for a civil penalty for each day of each violation.

If you have any questions with regard to the Notice, or any other matter concerning compliance with Oregon's laws, please contact Mr. Larry Cwik of the Department's Enforcement Section, in Portland at 229-5728, or toll-free within Oregon at 1-800-452-4011, Enforcement Section extension 5728.

Sincerely,



Lydia Taylor  
Interim Director

LT:lc:b  
U:\ENF\ORDERS\GB13344L  
Enclosure(s)

cc: Western Region, Medford Office, DEQ  
Waste Management and Cleanup Division, DEQ  
U.S. Environmental Protection Agency  
Oregon Department of Justice  
Jackson County  
City of Rogue River

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
2 OF THE STATE OF OREGON

3 IN THE MATTER OF:  
4 THERON STIEHL,

5 Respondent.

)  
) NOTICE OF VIOLATION  
) AND DEPARTMENT ORDER  
) NO. SW-WR-95-083  
) JACKSON COUNTY  
)

6  
7 I. AUTHORITY

8 This Notice of Violation and Department Order (Notice & Order) is issued by the  
9 Department of Environmental Quality (Department) pursuant to Oregon Revised Statutes (ORS)  
10 ORS 459.376, ORS Chapter 183; and Oregon Administrative Rules (OAR) Chapter 340,  
11 Divisions 11 and 12.

12 II. FINDINGS

13 1. On or before October 11, 1994, Respondent, Theron Stiehl, deposited  
14 approximately 100 cubic yards of appliances, furniture, window blinds, construction/demolition  
15 debris, garden hoses, bags of concrete, pipes, buckets, car parts, trash, wood waste and  
16 miscellaneous waste at the bottom of a ravine in a wooded area on property owned by Mr. Stiehl  
17 described as 1980 Hilltop Drive, Rogue River, Jackson County, Oregon, otherwise described as  
18 Tax Lot 1602, Section 15, Township 36 South, Range 4 West, hereinafter referred to as the  
19 Site.

20 2. Mr. Bob Guerra of the Department's Western Region Medford Office visited the  
21 Site on October 11, 1991. He confirmed the presence of the waste described above on the  
22 property.

23 3. Respondent does not have a solid waste disposal permit for the Site.

24 4. On October 26, 1994, Respondent met with Mr. Guerra at the Department's  
25 Western Region Medford Office. Respondent committed to cleaning up the Site properly and  
26 removing all of the solid waste by December 11, 1994.

1 5. On December 19, 1994, Mr. Guerra conducted a follow-up inspection of the Site.  
2 He observed that the waste had not been removed.

3 6. Mr. Guerra left several telephone answering machine messages for Mr. Stiehl in  
4 December 1994. None of these messages were returned.

5 7. On January 2, 1995, Mr. Guerra visited the Site. None of the waste had been  
6 removed.

7 8. On January 11, 1995, the Department's Western Region Medford Office issued a  
8 Notice of Noncompliance (NON) to Respondent. This cited Respondent's operation of a solid  
9 waste disposal site without a permit. It directed Respondent to submit a clean up plan for the  
10 Site to the Department within seven days with cleanup to be completed within 30 days.

11 9. The post office returned the NON to the Department as unclaimed. Mr. Guerra  
12 delivered the NON in person to Respondent on February 17, 1995. During the February 17 visit  
13 to the site, Mr. Guerra observed that the waste had not been cleaned up.

14 10. Since Respondent received the NON on February 17, 1995, Respondent has not  
15 submitted a clean-up plan to the Department.

### 16 III. VIOLATIONS

17 Based upon the above noted FINDINGS, Respondent has violated provisions of Oregon's  
18 laws and rules as follows:

19 1. Since on or about October 11, 1994, through the present, Respondent has violated  
20 ORS 459.205(1) and OAR 340-93-050(1) by establishing and maintaining a solid waste disposal  
21 site on the Site without a permit.

### 22 IV. DEPARTMENT ORDER

23 Based upon the foregoing FINDINGS and VIOLATIONS, Respondent is hereby  
24 ORDERED TO:

25 1. Immediately initiate actions necessary to correct all of the above cited violations  
26 and come into full compliance with Oregon's laws and rules.

1           2.     Within five days of receipt of this Order, submit a cleanup plan to the  
2 Department's Western Region Medford Office. This plan shall include the name, address and  
3 telephone number of the Department-authorized solid waste disposal site to which Respondent's  
4 waste will be hauled.

5           3.     Within 30 days of receipt of this Order, remove all solid waste from the site in a  
6 manner acceptable to the Department and take it to the Department-authorized solid waste  
7 disposal site identified in the plan. Respondent shall obtain detailed documentation and receipts  
8 from the landfill accepting the waste confirming the disposal, and shall take photographs of both  
9 the removal operation and the site after the removal.

10          4.     Within 35 days of receipt of this Order, submit the written documentation from  
11 the landfill of the proper disposal of the waste along with the photographic documentation that  
12 all the waste has been removed from the Site.

13                                   V. OPPORTUNITY FOR CONTESTED CASE HEARING

14           This Notice & Order becomes final unless Respondent requests a hearing before the  
15 Environmental Quality Commission. **The request must be in writing, must be received by the**  
16 **Department's Rules Coordinator within 21 days after the date of issuance of this Notice and**  
17 **Order, and must be accompanied by a written "Answer" to the allegations contained in this**  
18 **Notice and Order.**

19           In the written Answer, Respondent shall admit or deny each allegation of fact contained  
20 in this Notice & Order, and shall affirmatively allege any and all affirmative claims or defenses  
21 to violations and assessment of any civil penalty that Respondent may have and the reasoning in  
22 support thereof. Except for good cause shown:

- 23           1.     Factual matters not controverted shall be presumed admitted;
- 24           2.     Failure to raise a claim or defense shall be presumed to be a waiver of such claim  
25 or defense;

26 ///



1 3. New matters alleged in the Answer shall be presumed to be denied unless admitted  
2 in subsequent pleading or stipulation by the Department or Commission.

3 Send the request for hearing and Answer to: **DEQ Rules Coordinator, Management**  
4 **Services Division, 811 S.W. Sixth Avenue, Portland, Oregon 97204.** Following receipt of a  
5 request for hearing and an Answer, Respondent will be notified of the date, time and place of  
6 the hearing.

7 Failure to file a timely request for hearing and Answer may result in the entry of a  
8 Default Order for the relief sought in this Notice and Order.

9 Failure to appear at a scheduled hearing or meet a required deadline may result in a  
10 dismissal of the request for hearing and also an entry of a Default Order.

11 The Department's case file at the time the Notice and Order was issued may serve as the  
12 record for purposes of entering the Default Order.

13 VI. OPPORTUNITY FOR INFORMAL DISCUSSION

14 In addition to filing a request for a contested case hearing, Respondent may also request  
15 an informal discussion with the Department by attaching a written request to the hearing request  
16 and Answer.

17  
18 4/21/95  
19 Date

Lydia Taylor  
Lydia Taylor, Interim Director

REGIONAL OPERATIONS DIVISION  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
MAY 17 1995

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE, PERSONAL DELIVERY

I, Deputy Larry Walters, being a competent person over the age of eighteen (18) years, do hereby certify that on the 6 day of May, 1995, I served Theron Stiehl  
(Name of party)

by personally delivering to Hunter Stiehl,  
(Name of person to whom document delivered)  
son of Theron Stiehl  
(and if not the Party, his/her relationship)

the following:

Notice of Violation and Department Order, Case No. SW-WR-95-083 and  
(Type of notice, case number, and date of notice)

Letter to Theron Stiehl, 1980 Hilltop Drive, Rogue River, OR 97537

DATED this 11 day of May, 1995.

PLEASE RETURN TO:

Enforcement Section  
Dept. of Environmental Quality  
2020 SW Fourth Avenue  
Suite 400  
Portland, OR 97201-4987

[Signature]  
(Signature of person who delivered document)

Attn: ~~Larry Cwik~~ → JK

GIGS.2 (01/91)

CC: Bob Buena, WR,  
Medford Office

-----  
Document: OR\1970\261\261.ZIP (261\_0117) (Page 117)  
-----

West's ORLAW Oregon Reports Query: 261Or117  
Stroh v. SAIF  
Cite as 261 Or 117 Year1972

Jan. '72] Stroh v. SAIF 117

Argued December 6, 1971, reversed and remanded  
January 12, 1972

STROH, Petitioner, v. STATE ACCIDENT  
INSURANCE FUND, Respondent.

492 P2d 472

\*\*\*\*\*  
[Syllabi and synopses not included]  
\*\*\*\*\*

118 Stroh v. SAIF [261 Or.

On Review from the Court of Appeals.

Larry O. Gildea, Eugene, argued the cause for petitioner. On the  
briefs were Gildea, Speer & Allison, Eugene.

Al J. Laue, Assistant Attorney General, Salem, argued the cause for  
respondent. With him on the brief were Lee Johnson, Attorney General, and  
Jacob B. Tanzer, Solicitor General, Salem.

Before O'CONNELL, Chief Justice, and DENECKE, HOLMAN, TONGUE, HOWELL  
and BRYSON, Justices.

REVERSED AND REMANDED.

O'CONNELL, C.J.

This is a petition for review of the judgment of the Court of Appeals  
which approved the judgment of the trial court. 6 Or App 628, 488 P2d 844 (1971).

The only question presented on appeal and review is whether the  
circuit court acquires jurisdiction if the notice required by ORS 656.298 (3) is sent and received by ordinary mail rather than by registered or certified mail. ORS 656.298(3) provides as follows:

"(3) The judicial review shall be commenced by serving, by registered or certified mail, a copy of a notice of appeal on the board and on the other parties who appeared in the review proceedings, and by filing with the clerk of the circuit court the original notice of appeal with proof of

To Mel  
1/3

Attachment 15  
3 pages

service indorsed thereon. The notice of appeal shall state:

"(a) The name of the person appealing and of all other parties.

"(b) The date the order appealed from was filed.

"(c) A statement that the order is being appealed to the circuit court.

Jan. '72) Stroh v. SAIF 119  
Cite as 261 Or. 117

"(d) A brief statement of the relief requested and the reasons the relief should be granted."

On November 6, 1970 claimant filed his request for judicial review and sent by regular mail a copy of notice of appeal to the board and to the other parties who appeared in the review proceedings. It is conceded that the addressees received copies of the notice of appeal.

The Court of Appeals, relying upon *Demitro v. State Industrial Accident Comm.*, 110 Or 110, 223 P 238 (1924) and *McCain v. State Tax Comm.*, 227 Or 486, 360 P2d 778, 363 P2d 775 (1961) (which the Court of Appeals characterized as "harsh"), held that the circuit court does not acquire jurisdiction unless copies of the notice of appeal are sent by certified or registered mail.

It is clear that *Demitro* and *McCain* compelled the conclusion reached by the Court of Appeals. We are now of the opinion, however, that those cases incorrectly interpreted the statutes comparable to ORS 656.298 (3) specifying that service of notice of appeal is to be effected by certified or registered mail.

In the absence of statute the deposit of a notification in the mail is not effective as notice unless the notification is received.<sup>1</sup> However, statutes commonly provide for notification by mail and where this is the case the deposit of the notification in the mails satisfies the requirement of notice, even though the notification is not received.<sup>2</sup>

We assume that ORS 656.298 (3) was enacted to give this latter effect to a notification deposited in the

-----  
1 Merrill on Notice § 627, p. 707 (1952).

2 Merrill on Notice § 633, p. 716 (1952). See for example, *Meierdierck v. Miller*, 394 Pa 484, 147 A2d 406, 407 (1959).

120 Stroh v. SAIF [261 Or.

mails. The effect of the statute is to make a notification by registered or certified mail effective even though it is not received. But it does not follow that the failure to certify or register the notification renders it ineffective where it is actually received by the noticee. If the statute is not complied with, the rule is the same as it is where there is no statute providing for notice, by mail.<sup>3</sup> As we noted above, in such case, although the deposit of the notification in the mail is not effective in itself, the receipt of the notification constitutes legal

2/3

notice.

In the present case if the interested parties had not actually received the mailed notification, plaintiff's failure to send by certified or registered mail would have conclusively established that legal notice had not been given. Proof that plaintiff had mailed the notification would be irrelevant. But the evidence establishes that the notification sent by plaintiff was actually received. Under these circumstances the notice requirement was satisfied.

*Demitro v. State Industrial Accident Comm, supra, and McCain v. State Tax Comm, supra, are overruled.*

The judgment of the trial court is reversed and the cause remanded for further proceedings.

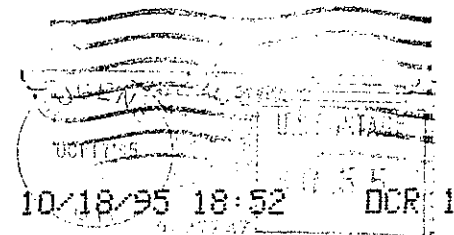
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3 See 1 Merrill on Notice § 636, p. 723, noting that if a statute calls for notification by registered mail, notification is ineffective "unless it actually is received." See also, *Fleisher Engineering & Construction Co. v. United States*, 311 US 15, 61 S Ct 81, 85 L Ed 12 (1940); *United States v. Kagan*, 129 F Supp 331 (D Mass 1955); *Chirico v. Kings County Sav. Bank et al.*, 168 Misc 207, 4 NYS2d 723 (1938); *Volandri v. Taylor*, 124 Cal App 356, 12 P2d 462 (1932).

3/3

Oregon

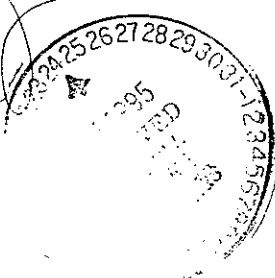
DEPARTMENT OF HUMAN RESOURCES

Employment Division  
Hearings Section  
PO Box 1027  
Eugene, OR 97440



*Return to sender*  
RETURN TO SENDER  
UNDELIVERED  
NO SUCH STREET  
NO SUCH NUMBER  
UNCLAIMED, NOT KNOWN  
DISORDERED LEFT NO ADDRESS  
UNDELIVERED ADDRESS  
POSTAGE ORDER EXPIRED

*sender*



Theron Stieh  
1980 Hilltop Drive  
Rogue River, OR 97537



*Attachment 16  
17 pages*

Oregon

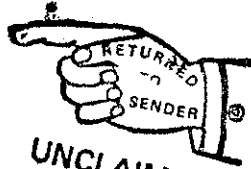
DEPARTMENT OF HUMAN R  
Employment Division  
Hearings Section  
PO Box 1027  
Eugene, OR 97440

CERTIFIED

P 564 747 2835

MAIL

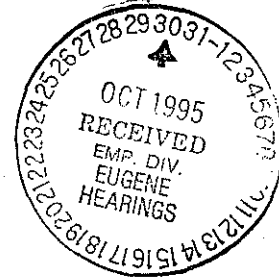
10-25



UNCLAIMED

~~Theron Stiehl  
1980 Hilltop Drive  
Roque River, OR 97537~~

Noted 10/17/95  
1st Notice  
2nd Notice 10-17  
Return



Re: DEQ v. Theron Stiel

*[Handwritten signature]*

10:00 Am

P 564 747 835

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Oregon

DEPARTMENT OF HUMAN RES

Employment Division  
Hearings Section  
PO Box 1027  
Eugene, OR 97440

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

\*U.S.G.P.O. 1985-234-555

PS Form 3800, June 1985

Sent to	Theron Stiehl	
Street and No.	1980 Hilltop DR.	
P.O. State and ZIP Code	Rogue River, OR 97537	
Postage	\$	.55
Certified Fee		1.10
Special Delivery Fee		1.10
Restricted Delivery Fee		2.75
Return Receipt showing to whom and Date Delivered		
Return Receipt showing to whom, Date, and Address of Delivery		
TOTAL Postage and Fees	\$	5.50
Postmark or Date		

Re: DEQ v. Theron

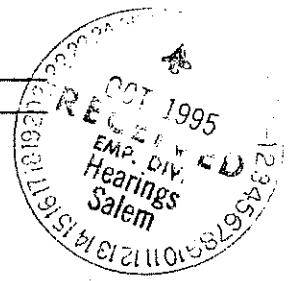
Hearing: Oct 25, 1995 10:00 Am



*M. Negat*

OFFICE OF THE SHERIFF

IN THE \_\_\_\_\_ COURT OF THE STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_ : COURT CASE # \_\_\_\_\_



DEQ )  
VS )  
THERON STIEHL )

AFFIDAVIT/PROOF OF SERVICE

STATE OF OREGON )  
 ) ss.  
County of Jackson )

NOTICE, LETTER, COPY  
OF LAW

NOT FOUND RETURN

I hereby certify that on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, at the hour of \_\_\_\_\_,  
I served \_\_\_\_\_ by:

- \_\_\_\_\_ Personal Service (Personally and in Person)
- \_\_\_\_\_ Substitute Service (By serving a person over the age of 14 years, who resides at the usual place of abode of the within named)
- \_\_\_\_\_ Office Service (By serving the person apparently in charge)
- \_\_\_\_\_ By posting (Said residence)

A certified/true copy of:

- |                    |                           |                    |
|--------------------|---------------------------|--------------------|
| _____ Summons      | _____ Writ of Garnishment | _____ Small Claims |
| _____ Motion       | _____ Order               | _____ Affidavit    |
| _____ Complaint    | _____ Citation            | _____ Subpoena     |
| _____ Petition     | _____ Notice              | _____ Decree       |
| _____ Other: _____ |                           |                    |

together with a copy of \_\_\_\_\_

To \_\_\_\_\_ at \_\_\_\_\_

NOT FOUND: I certify that I received the within document for service on the 9 day of OCTOBER, 1995, and after due and diligent search and inquiry, I have been unable to locate THERON STIEHL\*\*\*\*\* within the County of Jackson. Dated this 26 day of OCTOBER, 1995.

I being first duly sworn on oath, depose and state that I, now and at times herein mentioned, am a citizen of the United States of America, a Deputy Sheriff of Jackson County, Oregon, over the age of 18 years, not a party to the above-entitled action, and am competent to be a witness therein.

*[Signature]*  
Officer, ~~DEPT. OF CORRECTIONS~~ ~~SHERIFF'S OFFICE~~

NOTARY NOT APPLICABLE  
Subscribed to and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\*I certify that this is a true copy of the original return of service.  
\_\_\_\_\_, Deputy

NOTARY PUBLIC FOR THE STATE OF OREGON  
My Commission Expires: \_\_\_\_\_

\*\*\*\*\*ATTEMPTED SERVICE SEVERAL TIMES. SUBJECT IS AVOIDING SERVICE. HIS VEHICLE HAS BEEN THERE BUT NO ANSWER AT THE DOOR. PER ROGUE RIVER POLICE DEPARTMENT HE HAS BEEN STAYING AT UNKNOWN ADDRESS IN GRANT'S PASS.

Papers  
Received From: PLAINTIFF  
\_\_\_\_\_  
\_\_\_\_\_

Statement Date: 10-26-95  
Amount Received \$20. Amount Charged \_\_\_\_\_  
Check # 5219 Cash \_\_\_\_\_ Refund Due \_\_\_\_\_  
Receipt # 22098 Balance Due \_\_\_\_\_  
JCSO # 95-3573

JOSEPHINE COUNTY SHERIFF'S OFFICE

RETURN OF SERVICE

State of Oregon            )                            Court Case No.   95-DEQ-010  
                                  ) ss.                    Sheriff's Case No. 95-28549  
County of Josephine    )

I hereby certify that on 10/09/95 I received the within:

NOTICE OF HEARING  
LETTER, EXPLANATION, COPY OF LAW

for service upon:

STIEHL, THERON

After due and diligent search and inquiry I was unable to locate subject within Josephine County. I hereby return this process as Non Found, on 10/18/95.

All search and service was made within Josephine County, State of Oregon.

Daniel B. Calvert, Sheriff  
Josephine County, Oregon

By Deputy

  
GRAVES, MARSHA

Copy to:

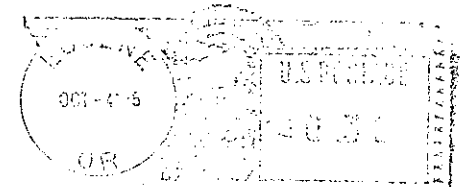
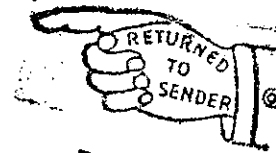
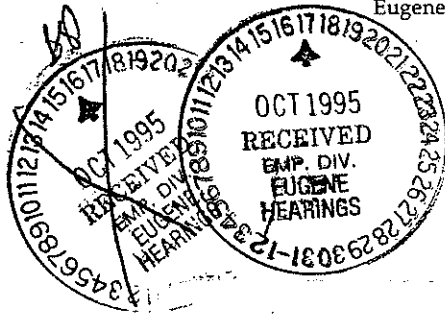
STATE EMPLOYMENT DIVISION HEARINGS SECTI  
PO BOX 1027  
EUGENE                                    OR   97440

Service Attempts:  
10-12-95 / 11:35 am  
10-18-95 / 9:50 am  
10-23-95 / 10:00 am

Oregon

DEPARTMENT OF HUMAN RESOURCES

Employment Division  
Hearings Section  
PO Box 1027  
Eugene, OR 97440



Refused  
Return To  
sender

POSTAGE DUE 23  
OCT 14 1995

OCT 17 1995

97537-9566 03

Hearing Date: 10/25/95 10:00 AM

October 4, 1995

Josephine County Sheriff  
Civil Department  
500 N.W. 6th  
Grants Pass, Oregon 97526

Re: Theron Stiehl 95-DEQ-010

Please serve the enclosed notice of hearing, letter, explanation, and copy of the law on Theron Stiehl. His current work address is:

Theron Stiehl  
c/o Coldwell Banker Realtors,  
55 N.E. "E" Street,  
Grants Pass, Oregon 97526  
(503) 479-8331

Mr. Theron refuses to accept official mail delivered to his home address and has indicated that he will attempt to avoid any form of knowledge of the hearing date in this matter.

An earlier attempt to serve Mr. Stiehl at his home in Jackson County was unsuccessful. Thank you for your assistance.

Enclosed is the \$20.00 service fee.

*Melvin M. Menegat*

Melvin M. Menegat  
Hearings Officer.

enclosures:

cc: Larry Cwik DEQ

1929ep3

John A. Kitzhaber  
Governor



875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

*file*

# Oregon

EMPLOYMENT  
DEPARTMENT

October 4, 1995

Jackson County Sheriff  
Civil Department  
10 S. Oakdale Ave.  
Medford, Oregon 97501

Re: Theron Stiehl 95-DEQ-010

Please serve the enclosed notice, letter, explanation, and copy of the law on Theron Stiehl. His address is:

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, Oregon 97537  
(503) 582-3997

Mr. Theron refuses to accept official mail delivered to that address and has indicated that he will attempt to avoid any form of knowledge of the hearing date in this matter.

An earlier attempt to serve Mr. Stiehl was unsuccessful. Current information is that he still resides at the above address and that his wife works for the Rogue River schools. He does work in Josephine County. Thank you for your assistance.

A \$20.00 service fee is enclosed.

*Melvin M. Menegat*

Melvin M. Menegat  
Hearings Officer.

enclosures:

cc: Larry Cwik DEQ

1929ep2

John A. Kitzhaber  
Governor



875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

*Ex. 6*

File

# Oregon

October 4, 1995

EMPLOYMENT  
DEPARTMENT

Theron Stiehl  
1980 Hilltop Drive  
Roque River, OR 97537

Re: DEQ v. Theron Stiehl  
Hearings Case No. 95-DEQ-010  
DEQ Case No. SW-WR-95-083

This contested case hearing has been scheduled as follows:

Date: WEDNESDAY, OCTOBER 25, 1995  
Time: 10:00 AM PDT  
Location: The hearing will be held by telephone.  
The parties will be called at the time for hearing and  
conferenced together. All participants will be able to  
speak to and hear each other. The parties will be called  
at the telephone number following their name.

Theron Stiehl - 503-582-3997  
Larry Cwik (DEQ) - 503-229-5728

Any objections to the hearing being conducted by telephone shall be  
filed by mail postmarked no later than October 18, 1995. A copy of  
the objection should be mailed to the other party.

Lawrence Cwik of the Department of Environmental Quality will be  
representing DEQ at this hearing.

I have enclosed a copy of agency rules of practice and procedure and  
an information sheet to assist you in preparing for your hearing.

If you have questions, please call me at 503-686-7960.

*Melvin M. Menegat*  
MELVIN M. MENEGAT  
Hearings Officer

John A. Kitzhaber  
Governor



1929e

Enclosures

cc: Lawrence Cwik, Environmental Law Specialist, DEQ  
Western Region, Medford Office, DEQ  
Waste Management and Cleanup Division, DEQ

875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

DEPARTMENT OF ENVIRONMENTAL QUALITY HEARINGS

IMPORTANT INFORMATION FOR PREPARING FOR YOUR HEARING  
Notice of Contested Case Rights and Procedures

Under ORS 183.413(2), you must be informed of the following:

1. Law that applies. The hearing is a contested case and it will be conducted under ORS Chapter 183 (the Oregon Administrative Procedures Act) and Oregon Administrative Rules (OAR) of the Department of Environmental Quality (DEQ), Chapters 137 and 340.
2. Right to an attorney. You may represent yourself at the hearing, or be represented by an attorney or other representative, such as a partner, officer, or an employee. A representative must provide a written statement of authorization. If you choose to represent yourself, but decide during the hearing that an attorney is necessary, you may request a recess. The hearings officer will decide whether to grant such a request. About half of the parties are not represented by an attorney. DEQ will be represented by an Assistant Attorney General or an Environmental Law Specialist.
3. Presiding officer. The person presiding at the hearing is known as the hearings officer. The hearings officer will rule on all matters that arise at the hearing. The hearings officer is Melvin M. Menegat, an administrative law judge for the Employment Department, under contract with the Environmental Quality Commission to perform this service. Hearings Officer Menegat is not an employee, officer or representative of the agency. He does have the authority to make a final independent determination, based only on the evidence at the hearing.
4. Witnesses. All witnesses will be under oath or affirmation to tell the truth. All parties and the hearings officer will have the opportunity to ask questions of all witnesses. DEQ will issue subpoenas for witnesses on your behalf if you show that their testimony is relevant to the case and is reasonably needed to establish your position. If you are represented by an attorney, your attorney may issue subpoenas. Payment of witness fees and mileage is your responsibility.
5. Order of evidence. A hearing is similar to a court trial but less formal. The purpose of the hearing is to determine the facts and whether DEQ's action is appropriate. In most cases, DEQ will offer its evidence first in support of its action. You will then have an opportunity to present evidence to oppose DEQ's evidence. Finally, DEQ and you will have an opportunity to rebut any evidence.
6. Burden of presenting evidence. The party who proposes a fact or position has the burden of proving that fact or position. You should be prepared to present evidence at the hearing which will support your position. You may present physical or written evidence, as well as your own testimony.
7. Admissible evidence. Only relevant evidence of a type relied upon by reasonably prudent persons in the conduct of their serious affairs will be considered. Hearsay evidence is not automatically excluded. Rather, the fact that it is hearsay generally affects how much the hearings officer will rely on it in reaching a decision.

There are four kinds of evidence:

- a. Knowledge of DEQ. DEQ may take "official notice" of conclusions developed as a result of its knowledge in its specialized field. This includes notice of general, technical or scientific facts. You will be informed should DEQ take "official notice" of any fact and you will be given an opportunity to contest any such facts.
  - b. Testimony of witnesses. Testimony of witnesses, including you, who have knowledge of facts may be received in evidence.
  - c. Writings. Written documents including letters, maps, diagrams and other written material may be received in evidence.
  - d. Experiments, demonstrations and similar means used to prove a fact. The results of experiments and demonstrations may be received in evidence.
8. Objections to evidence. Objections to the consideration of evidence must be made at the time the evidence is offered. Objections are generally made on one of the following grounds:
- a. The evidence is unreliable;
  - b. The evidence is irrelevant or immaterial and has no tendency to prove or disprove any issue involved in the case;
  - c. The evidence is unduly repetitious and duplicates evidence already received.
9. Continuances. There are normally no continuances granted at the end of the hearing for you to present additional testimony or other evidence. Please make sure you have all your evidence ready for the hearing. However, if you can show that the record should remain open for additional evidence, the hearings officer may grant you additional time to submit such evidence.
10. Record. A record will be made of the entire proceeding to preserve the testimony and other evidence for appeal. This will be done by tape recorder. This tape and any exhibits received in the record will be the whole record of the hearing and the only evidence considered by the hearings officer. A copy of the tape is available upon payment of a minimal amount, as established by the Department of Environmental Quality (DEQ). A transcript of the record will not normally be prepared, unless there is an appeal to the Court of Appeals.
11. Appeal. If you are not satisfied with the decision of the Hearings Officer, you have 30 days to appeal his decision to the Environmental Quality Commission. If you wish to appeal its decision, you have 60 days to file a petition for review with the Oregon Court of Appeals from the date of service of the order by the Environmental Quality Commission. See ORS 183.480 et seq.



October 4, 1995

EMPLOYMENT  
DEPARTMENT

Theron Stiehl  
1980 Hilltop Drive  
Roque River, OR 97537

Re: DEQ v. Theron Stiehl  
Hearings Case No. 95-DEQ-010  
DEQ Case No. SW-WR-95-083

This contested case hearing has been scheduled as follows:

Date: WEDNESDAY, OCTOBER 25, 1995  
Time: 10:00 AM PDT  
Location: The hearing will be held by telephone.  
The parties will be called at the time for hearing and  
conferenced together. All participants will be able to  
speak to and hear each other. The parties will be called  
at the telephone number following their name.

Theron Stiehl - 503-582-3997  
Larry Cwik (DEQ) - 503-229-5728

Any objections to the hearing being conducted by telephone shall be  
filed by mail postmarked no later than October 18, 1995. A copy of  
the objection should be mailed to the other party.

Lawrence Cwik of the Department of Environmental Quality will be  
representing DEQ at this hearing.

I have enclosed a copy of agency rules of practice and procedure and  
an information sheet to assist you in preparing for your hearing.

If you have questions, please call me at 503-686-7960.

*Melvin M. Menegat*  
MELVIN M. MENEGAT  
Hearings Officer

John A. Kitzhaber  
Governor

1929e

Enclosures

cc: Lawrence Cwik, Environmental Law Specialist, DEQ  
Western Region, Medford Office, DEQ  
Waste Management and Cleanup Division, DEQ



875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

September 26, 1995

Melvin M. Menegat  
Hearings Officer  
Oregon Employment Department  
875 Union Street, N.E.  
Salem, OR 97311

Re: DEQ v. Theron Stiehl  
Hearings Case No. 95-DEQ-010  
DEQ Case No. SW-WR-95-083

Dear Mr. Menegat:

Thank you for your voice-mail today, stating that there will be no contested case hearing in the Theron Stiehl case tomorrow, as Mr. Stiehl has not to date been served with a notice of the hearing.

In addition to his home address of 1980 Hilltop Drive, Rogue River, OR 97537, you may also consider attempting service on Mr. Stiehl at his work, if you believe appropriate. Bob Guerra of the DEQ Medford Office today talked with Anne Chaupa, of Coldwell Banker Realtors, 55 N.E. "E" Street, Grants Pass, OR 97526, telephone (503) 479-8331. She confirmed that Mr. Stiehl works for her firm. She said she would ensure that any document we wanted to serve through her firm would reach Mr. Stiehl.

The Department would like to have the hearing held as soon as possible, so that a cleanup may take place before the onset of the rainy season. Because of travel and logistical reasons, we would still prefer that a hearing take place by telephone, if Mr. Stiehl does not object.

Sincerely,

Larry Cwik  
Environmental Law Specialist  
Enforcement Section  
229-5728



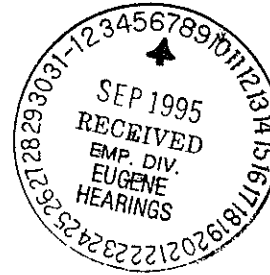
ljc

cc: Van Kollias, Enforcement  
Bob Guerra, Western Region - Medford Office  
Chuck Donaldson, Western Region - Salem Office

811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1



OFFICE OF THE SHERIFF



IN THE \_\_\_\_\_ COURT OF THE STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_ : COURT CASE # \_\_\_\_\_

IN THE MATTER OF THERON STIEHL )  
VS )  
\_\_\_\_\_ )

~~PROOF OF SERVICE~~  
AFFIDAVIT/

LETTER, EXPLANATION; COPY OF LAW NOTICE

STATE OF OREGON )  
 ) ss.  
County of Jackson )

NOT FOUND RETURN

I hereby certify that on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, at the hour of \_\_\_\_\_,  
I served \_\_\_\_\_ by:

- \_\_\_\_\_ Personal Service (Personally and in Person)
- \_\_\_\_\_ Substitute Service (By serving a person over the age of 14 years, who resides at the usual place of abode of the within named)
- \_\_\_\_\_ Office Service (By serving the person apparently in charge)
- \_\_\_\_\_ By posting (Said residence)

A certified/true copy of:

- |                    |                           |                    |
|--------------------|---------------------------|--------------------|
| _____ Summons      | _____ Writ of Garnishment | _____ Small Claims |
| _____ Motion       | _____ Order               | _____ Affidavit    |
| _____ Complaint    | _____ Citation            | _____ Subpoena     |
| _____ Petition     | _____ Notice              | _____ Decree       |
| _____ Other: _____ |                           |                    |

together with a copy of \_\_\_\_\_

To \_\_\_\_\_ at \_\_\_\_\_

NOT FOUND: I certify that I received the within document for service on the 21 day of AUGUST, 1995, and after due and diligent search and inquiry, I have been unable to locate THERON STIEHL\*\*\*\*\* within the County of Jackson. Dated this 5 day of SEPTEMBER, 1995.

I being first duly sworn on oath, depose and state that I, now and at times herein mentioned, am a citizen of the United States of America, a Deputy Sheriff of Jackson County, Oregon, over the age of 18 years, not a party to the above-entitled action, and am competent to be a witness therein.

*[Signature]*  
\_\_\_\_\_  
Officer/ ~~XXXXXXXXXXXXXXXXXXXX~~

NOTARY NOT APPLICABLE  
Subscribed to and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\*I certify that this is a true copy of the original return of service.  
\_\_\_\_\_, Deputy

\_\_\_\_\_  
NOTARY PUBLIC FOR THE STATE OF OREGON  
My Commission Expires: \_\_\_\_\_

\*\*\*\*\*PER ROGUE RIVER POLICE DEPARTMENT, ADVISED STIEHL IS LIVING IN GRANTS PASS AT UNKNOWN ADDRESS. PER PLAINTIFF, RETURN.

_____ apers	Statement Date: <u>9-5-95</u>
Received From: <u>STATE OF OREGON EMPLOYMENT DEPT</u>	Amount Received <u>\$20.</u> Amount Charged _____
_____	Check # <u>4251</u> Cash _____ Refund Due _____
_____	Receipt # <u>10703</u> Balance Due _____
_____	JCSO # _____ 95-2922

August 18, 1995

Jackson Co. Sheriff - Civil Dept.  
10 S. Oakdale Ave.  
Medford, OR 97501

In the matter of: Theron Stiehl  
Hearings Case No. 95-DEQ-010  
DEQ Case No. SW-WR-95-083

Please serve the enclosed notice, letter, explanation and copy of law  
on Theron Stiehl. His address is:

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Telephone No. (503) 582-3997

Enclosed is the \$20.00 service fee.

*Melvin M. Menegat*

Melvin M. Menegat  
Administrative Law Judge

Enclosures

bqs/0113b

cc: L. Cwik

John A. Kitzhaber  
Governor

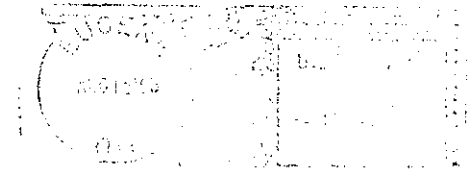


875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

Oregon

DEPARTMENT OF HUMAN RESOURCES

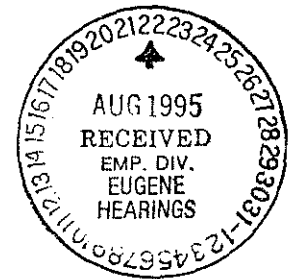
Employment Division  
Hearings Section  
PO Box 1027  
Eugene, OR 97440



Refused, Return to Sender

- Forwarding Order Failed
- Insufficient Address
- Moved, Let No. Address
- Unclaimed
- Attempted, No. Address
- No Such Street
- Vacant
- No. No. Address

~~Theron Stiehl  
980 Hilltop Drive  
Rogue River, OR 97537~~



August 18, 1995

Theron Stiehl  
1980 Hilltop Drive  
Rogue River, OR 97537

Re: DEQ v. Theron Stiehl  
Hearings Case No. 95-DEQ-010  
DEQ Case No. SW-WR-95-083

This contested case hearing has been scheduled as follows:

Date: WEDNESDAY, SEPTEMBER 6, 1995  
Time: 10:00 AM PDT  
Location: The hearing will be held by telephone.  
The parties will be called at the time for hearing and  
conferenced together. All participants will be able to  
speak to and hear each other. The parties will be called  
at the telephone number following their name.

Theron Stiehl - 503-582-3997  
Larry Cwik (DEQ) - 503-229-5728

Any objections to the hearing being conducted by telephone shall be filed by mail postmarked no later than August 28, 1995. A copy of the objection should be mailed to the other party.

Lawrence Cwik of the Department of Environmental Quality will be representing DEQ at this hearing.

I have enclosed a copy of agency rules of practice and procedure and an information sheet to assist you in preparing for your hearing.

If you have questions, please call me at 503-686-7960.

*Melvin M. Menegat*  
MELVIN M. MENEGAT  
Hearings Officer

John A. Kitzhaber  
Governor



1741e

Enclosures

cc: Lawrence Cwik, Environmental Law Specialist, DEQ  
Western Region, Medford Office, DEQ  
Waste Management and Cleanup Division, DEQ

875 Union St. NE  
Salem, OR 97311  
(503) 378-8420

15

## Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

**Agenda Item E**  
**November 14, 1996 Meeting**

**Title:**

New Source Review Requirements for Air Quality Maintenance Areas

**Summary:**

This proposal would establish major New Source Review (NSR) requirements for areas that have been redesignated from nonattainment to attainment with federal ambient air quality standards. The changes are needed for the U.S. Environmental Protection Agency (EPA) to approve maintenance plans recently adopted by the EQC. The changes were described in detail as part of the public notice for the maintenance plans, and were approved in concept by the EQC through adoption of the maintenance plans. This proposal would establish the actual rule language to implement the changes. In addition, the proposal includes miscellaneous amendments needed to ensure EPA approval of the NSR program.

**Department Recommendation:**

It is recommended that the Commission adopt the rules and rule amendments regarding NSR requirements for maintenance areas, as presented in Attachment A of the Department Staff Report, as an amendment to the federal Clean Air Act State Implementation Plan.

  
Report Author

  
Division Administrator

Director



State of Oregon  
Department of Environmental Quality Memorandum

---

**Date:** 10/30/96  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh *Lang Marsh*  
**Subject:** Agenda Item E, November 14, 1996 EQC Meeting

New Source Review Requirements for Air Quality Maintenance Areas

**Background**

On August 8, 1996, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules which would establish New Source Review (NSR) requirements for air quality maintenance areas.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on September 3, 1996. The Hearing Notice and informational materials were 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 August 15, 1996. Supporting procedural documentation for the hearing notice is included in attachment B.

A Public Hearing was held September 17, 1996 with Ben Allen serving as Presiding Officer. Written comment was received through September 23, 1996. The Presiding Officer's Report (Attachment C) summarizes the oral testimony presented at the hearing and lists all the written comments received. (A copy of the comments is available upon request.)

Department staff have evaluated the comments received (Attachment D). 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 E.

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

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Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503) 229-5317 (voice)/(503) 229-6993 (TDD).



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**

A number of nonattainment areas now meet ambient air quality standards, and the EQC adopted maintenance plans and redesignation requests for the first two of these areas. The existing NSR rules include requirements for nonattainment areas and attainment areas but lack procedures for proposed major sources and major modifications in maintenance areas. The Portland area maintenance plans for ozone and carbon monoxide include a description of the maintenance area NSR requirements and a schedule to adopt rule amendments by November, 1996, to implement these requirements. The amendments must be adopted in November in order for EPA to approve the maintenance plans on schedule.

**Relationship to Federal and Adjacent State Rules**

The NSR program is required by the Clean Air Act. DEQ has received delegation from EPA to implement these programs under the State Implementation Plan. Because the maintenance area NSR requirements are relied upon in the Portland area maintenance plans, these amendments must be adopted in order for EPA to approve the maintenance plans. Washington's Southwest Air Pollution Control Authority (SWAPCA) has proposed similar rules for the Washington portion of the Portland/Vancouver Interstate Air Quality Maintenance Area.

**Authority to Address the Issue**

The EQC has the statutory authority to address this issue under Oregon Revised Statutes (ORS) 468A.025, which gives the EQC authority to establish emission standards.

**Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

The initial concept for the NSR revisions was developed through the maintenance plan preparation process. This process included review by a number of advisory committees, the Oregon Legislature, and local governments (see attachment F). The changes to the NSR program were described in detail in the public notice for the Portland area ozone and carbon monoxide maintenance plans, and were approved by the EQC in concept through adoption of the maintenance plans. Attachment H, which provides a description of the NSR program changes, is a copy of Appendix D1-16 from the Portland area ozone maintenance plan.

The Department considered two alternatives for this rulemaking:

1. Adopt the maintenance area NSR requirements as described in the maintenance plans; or
2. Revise the maintenance plans to rely on NSR requirements that apply in attainment areas.

The Department selected alternative one because it was consistent with recent EQC action in adopting the maintenance plans. Alternative two would require rebalancing the maintenance plans and could delay EPA approval of the maintenance plans to beyond the 1997 ozone season. This delay could result in a need to extend the maintenance plans for an additional year. In addition, if a violation of the ozone standard occurs prior to approval of the maintenance plans, the Portland area could be "bumped-up" from a marginal to a moderate ozone nonattainment area.

**Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.**

The NSR program applies to proposed major sources and major modifications to existing sources of regulated air pollutants. Proposed major sources and major modifications are generally industrial sources with emission increases at or above a significant emission rate as defined in existing rules. The proposed changes establish NSR requirements for proposed major sources and major modifications in an ozone or carbon monoxide maintenance area (i.e. former nonattainment area).

Nonattainment area NSR requires Lowest Achievable Emission Rate (LAER) control technology and emission offsets to provide a net air quality benefit. Attainment area NSR, known as Prevention of Significant Deterioration (PSD), requires Best Available Control Technology (BACT) and an air quality assessment. The proposed maintenance area provisions are a hybrid of the two, including BACT and offsets. In addition, the proposal allows use of a growth allowance in lieu of offsets if provided in the applicable maintenance plan. Sources with emissions over 250 tons per year and certain sources with emissions over 100 tons per year would be subject to additional PSD requirements. Finally, the proposal would establish contingency plan requirements and other procedural requirements for NSR in maintenance areas. See Attachment H for a complete description of the NSR program changes.

Although the proposed rules were developed in conjunction with the Portland area maintenance plans, the rules would also apply to other ozone and carbon monoxide areas when they are

redesignated from nonattainment to attainment. The proposed rules do not apply to  $PM_{10}$ , which is the other nonattainment pollutant in Oregon, because the Department has not yet developed redesignation requests for any  $PM_{10}$  nonattainment areas. However, the Department intends to propose maintenance area NSR requirements for  $PM_{10}$  when the first  $PM_{10}$  maintenance plan is developed.

While the proposed rules establish uniform NSR requirements that would apply to all ozone and carbon monoxide maintenance areas, they are designed to accommodate special provisions that may be adopted in conjunction with the maintenance plan for a specific area. Also, the proposed rules leave certain decisions, such as the provision of a growth allowance, to the maintenance planning process where local stakeholders are represented.

In addition to establishing the maintenance area NSR requirements, the proposal includes a number of changes to definitions and other NSR provisions needed to support the maintenance area NSR provisions or needed for EPA approval of the NSR program. In particular, the proposal includes a revision required by EPA to the existing procedure for conducting an alternative analysis under nonattainment area NSR. The proposal also includes an addition to the Significant Emission Rate table required by EPA for emissions from major new and modified municipal solid waste landfills.

#### **Summary of Significant Public Comment and Changes Proposed in Response**

1. David C. Bray, Environmental Protection Agency Region 10, indicated that the rules are approvable as proposed.
2. David Harlan, Mid-Columbia Economic Development District, expressed concern about possible visibility impacts on the Columbia Gorge. As explained in Attachment D, the Department believes that the proposed rules, especially in the context of the recently adopted ozone and carbon monoxide maintenance plans for the Portland area, will not result in visibility impacts on the Columbia Gorge.
3. Sharon Genasci expressed concerns about emissions of air toxics and fine particulates in Northwest Portland. While the proposed rules do not directly address these subjects, the Department's Northwest Regional Office is working with the commentor regarding these concerns.
4. Thomas R. Wood, Stoel Rives, raised a number of technical issues regarding the proposed rules and the Existing New Source Review program. As indicated in attachments D and E, the Department is recommending two changes to the proposed rules

to clarify issues raised by the commentor. Issues related to the existing New Source Review program will be addressed in an upcoming comprehensive review of this and related programs.

5. In addition, the Department has proposed a change (see Attachment E) to clarify that the proposed rules only apply in a maintenance area after EPA approves the Department's request for redesignation from nonattainment to attainment. If a complete permit application is submitted before EPA approval of the redesignation request, NSR requirements for nonattainment areas would apply. If the complete application is submitted after EPA approval, NSR requirements for maintenance areas would apply. An applicant could revise the application after EPA approval in order to be processed under the maintenance area NSR rules. However, this could result in a delay in permit approval because of the additional processing required.

#### **Summary of How the Proposed Rule Will Work and How it Will be Implemented**

The proposed rules will work through the existing NSR program. Once an area is redesignated from nonattainment to attainment, proposed major sources and major modifications that trigger NSR will be subject to the maintenance area NSR requirements instead of the nonattainment area NSR requirements. Implementation will be through the existing ACDP and Title V permit programs. As described in Appendix G, the Air Quality Permitting Manual and related guidance will be updated to incorporate the new procedures for maintenance areas.

#### **Recommendation for Commission Action**

It is recommended that the Commission adopt the rules and rule amendments regarding NSR requirements for maintenance areas, as presented in Attachment A of the Department Staff Report, as an amendment to the federal Clean Air Act State Implementation Plan.

#### **Attachments**

- A. Rule (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
  1. Legal Notice of Hearing
  2. Fiscal and Economic Impact Statement
  3. Land Use Evaluation Statement
  4. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
  5. Cover Memorandum from Public Notice
- C. Presiding Officer's Report on Public Hearing
- D. Department's Evaluation of Public Comment

- E. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- F. Advisory Committee Involvement
- G. Rule Implementation Plan
- H. Portland AQMA Ozone Maintenance Plan, Appendix D1-16, New Source Review Program Changes
- I. Excerpt of Responses to Comments Related to New Source Review from the Industrial Emission Management Rules for the Portland Area Ozone and Carbon Monoxide Maintenance Plans, July 12, 1996 EQC meeting, agenda item H

**Reference Documents (available upon request)**

Written Comments Received (listed in Attachment C)

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_

Report Prepared By: Andrew Ginsburg

Phone: 503/229-5581

Date Prepared: 10/30/96

## Attachment A

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans

### Rule and Rule Amendments Proposed for Adoption

#### Definitions

**340-028-0110** As used in this Division:

- (1) "Act" or "FCAA" means the Federal Clean Air Act, Public Law 88-206 as last amended by Public Law 101-549.
- (2) "Activity" means any process, operation, action, or reaction (e.g., chemical) at a source that emits a regulated pollutant.
- (3) "Actual emissions" means the mass emissions of a pollutant from an emissions source during a specified time period. Actual emissions shall be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.
  - (a) For purposes of determining actual emissions as of the baseline period:
    - (A) Except as provided in paragraph (B) of this subsection, actual emissions 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;
    - (B) The Department may presume the source-specific mass emissions limit included in the permit for a source that was effective on September 8, 1981 is equivalent to the actual emissions of the source during the baseline period if it is within 10% of the actual emissions calculated under paragraph (A) of this subsection.
  - (b) For any source which had not yet begun normal operation in the specified time period, actual emissions shall equal the potential to emit of the source.
  - (c) For purposes of determining actual emissions for Emission Statements under OAR 340-028-1500 through 340-028-1520, Major Source Interim Emission Fees under OAR 340-028-2400 through 340-028-2550, and Oregon Title V Operating Permit Fees under OAR 340-028-2560 through 340-028-2740, actual emissions include, but are not limited to, routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities.

- (4) "Affected source" means a source that includes one or more affected units that are subject to emission reduction requirements or limitations under Title IV of the FCAA.
- (5) "Affected States" mean all States:
- (a) Whose air quality may be affected by a proposed permit, permit modification or permit renewal and that are contiguous to Oregon; or
  - (b) That are within 50 miles of the permitted source.
- (6) "Aggregate insignificant emissions" means the annual actual emissions of any regulated air pollutant from one or more designated activities at a source that are less than or equal to the lowest applicable level specified in this section. The total emissions from each designated activity and the aggregate emissions from all designated activities shall be less than or equal to the lowest applicable level specified in this section. The aggregate insignificant emissions levels are:
- (a) One ton for total reduced sulfur, hydrogen sulfide, sulfuric acid mist, any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act, and each criteria pollutant, except lead;
  - (b) 120 pounds for lead;
  - (c) 600 pounds for fluoride;
  - (d) 500 pounds for PM<sub>10</sub> in a PM<sub>10</sub> nonattainment area;
  - (e) The lesser of the amount established in OAR 340-032-0130, Table 1 or OAR 340-032-5400, Table 3, or 1,000 pounds;
  - (f) An aggregate of 5,000 pounds for all Hazardous Air Pollutants.
- (7) "Air Contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, pollen, soot, carbon, acid or particulate matter, or any combination thereof.
- (8) "Air Contaminant Discharge Permit" or "ACDP" means a written permit issued, renewed, amended, or revised by the Department, pursuant to OAR 340-028-1700 through 340-028-1790 and includes the application review report.
- (9) "Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Department's satisfaction to, in specific cases, produce results adequate for determination of compliance. An alternative method used to meet an applicable federal requirement for which a reference method is specified shall be approved by EPA unless EPA has delegated authority for the approval to the Department.
- (10) "Applicable requirement" means all of the following as they apply to emissions units in an Oregon Title V Operating Permit program source, including requirements that have been promulgated or approved by the EPA through rule making at the time of issuance but have future-effective compliance dates:
- (a) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by the EPA through rulemaking under Title I of the Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in **40 CFR Part 52 (July 1, 1991)**;
  - (b) Any standard or other requirement adopted under OAR 340-020-047 of the State of Oregon Clean Air Act Implementation Plan, that is more stringent than the

- federal standard or requirement which has not yet been approved by the EPA, and other state-only enforceable air pollution control requirements;
- (c) Any term or condition in an ACDP, OAR 340-028-1700 through 340-028-1790, including any term or condition of any preconstruction permits issued pursuant to OAR 340-028-1900 through 340-028-2000, New Source Review, until or unless the Department revokes or modifies the term or condition by a permit modification;
  - (d) Any term or condition in a Notice of Construction and Approval of Plans, OAR 340-028-0800 through 340-028-0820, until or unless the Department revokes or modifies the term or condition by a Notice of Construction and Approval of Plans or a permit modification;
  - (e) Any term or condition in a Notice of Approval, OAR 340-028-2270, until or unless the Department revokes or modifies the term or condition by a Notice of Approval or a permit modification;
  - (f) Any standard or other requirement under section 111 of the Act, including section 111(d);
  - (g) Any standard or other requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7) of the Act;
  - (h) Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder;
  - (i) Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act;
  - (j) Any standard or other requirement governing solid waste incineration, under section 129 of the Act;
  - (k) Any standard or other requirement for consumer and commercial products, under section 183(e) of the Act;
  - (l) Any standard or other requirement for tank vessels, under section 183(f) of the Act;
  - (m) Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the Act;
  - (n) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in an Oregon Title V Operating Permit; and
  - (o) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e) of the Act.
- (11) "Assessable Emission" means a unit of emissions for which the major source owner or operator will be assessed a fee. It includes an emission of a pollutant as specified in OAR 340-28-2420 or OAR 340-28-2610 from one or more emissions devices or activities within a major source.



- (12) "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.
- (13) "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.
- (14) "Best Available Control Technology" or "BACT" means an emission limitation, 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 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 pollutant. 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.
- (15) "Calculated Emissions" as used in OAR 340-028-2400 through 340-028-2550 means procedures used to estimate emissions for the 1991 calendar year.
- (16) "Categorically insignificant activity" means any of the following listed pollutant emitting activities principally supporting the source or the major industrial group. Categorically insignificant activities must comply with all applicable requirements.
- (a) constituents of a chemical mixture present at less than 1% by weight of any chemical or compound regulated under Divisions 20 through 32 of this chapter, or less than 0.1% by weight of any carcinogen listed in the U.S. Department of Health and Human Service's Annual Report on Carcinogens when usage of the chemical mixture is less than 100,000 pounds/year;
  - (b) evaporative and tail pipe emissions from on-site motor vehicle operation;
  - (c) distillate oil, kerosene, and gasoline fuel burning equipment rated at less than or equal to 0.4 million Btu/hr;
  - (d) natural gas and propane burning equipment rated at less than or equal to 2.0 million Btu/hr;
  - (e) office activities;
  - (f) food service activities;
  - (g) janitorial activities;
  - (h) personal care activities;
  - (i) groundskeeping activities including, but not limited to building painting and road and parking lot maintenance;
  - (j) on-site laundry activities;
  - (k) on-site recreation facilities

- (l) instrument calibration;
- (m) maintenance and repair shop;
- (n) automotive repair shops or storage garages;
- (o) air cooling or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment;
- (p) refrigeration systems with less than 50 pounds of charge of ozone depleting substances regulated under Title VI, including pressure tanks used in refrigeration systems but excluding any combustion equipment associated with such systems;
- (q) bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum producing devices but excluding research and development facilities;
- (r) temporary construction activities;
- (s) warehouse activities;
- (t) accidental fires;
- (u) air vents from air compressors;
- (v) air purification systems;
- (w) continuous emissions monitoring vent lines;
- (x) demineralized water tanks;
- (y) pre-treatment of municipal water, including use of deionized water purification systems;
- (z) electrical charging stations;
- (aa) fire brigade training;
- (bb) instrument air dryers and distribution;
- (cc) process raw water filtration systems;
- (dd) pharmaceutical packaging;
- (ee) fire suppression;
- (ff) blueprint making;
- (gg) routine maintenance, repair, and replacement such as anticipated activities most often associated with and performed during regularly scheduled equipment outages to maintain a plant and its equipment in good operating condition, including but not limited to steam cleaning, abrasive use, and woodworking;
- (hh) electric motors;
- (ii) storage tanks, reservoirs, transfer and lubricating equipment used for ASTM grade distillate or residual fuels, lubricants, and hydraulic fluids;
- (jj) on-site storage tanks not subject to any New Source Performance Standards (NSPS), including underground storage tanks (UST), storing gasoline or diesel used exclusively for fueling of the facility's fleet of vehicles;
- (kk) natural gas, propane, and liquefied petroleum gas (LPG) storage tanks and transfer equipment;
- (ll) pressurized tanks containing gaseous compounds;
- (mm) vacuum sheet stacker vents;

- (nn) emissions from wastewater discharges to publicly owned treatment works (POTW) provided the source is authorized to discharge to the POTW, not including on-site wastewater treatment and/or holding facilities;
  - (oo) log ponds;
  - (pp) storm water settling basins;
  - (qq) fire suppression and training;
  - (rr) paved roads and paved parking lots within an urban growth boundary;
  - (ss) hazardous air pollutant emissions of fugitive dust from paved and unpaved roads except for those sources that have processes or activities that contribute to the deposition and entrainment of hazardous air pollutants from surface soils;
  - (tt) health, safety, and emergency response activities;
  - (uu) emergency generators and pumps used only during loss of primary equipment or utility service;
  - (vv) non-contact steam vents and leaks and safety and relief valves for boiler steam distribution systems;
  - (ww) non-contact steam condensate flash tanks;
  - (xx) non-contact steam vents on condensate receivers, deaerators and similar equipment;
  - (yy) boiler blowdown tanks;
  - (zz) industrial cooling towers that do not use chromium-based water treatment chemicals;
  - (aaa) ash piles maintained in a wetted condition and associated handling systems and activities;
  - (bbb) oil/water separators in effluent treatment systems;
  - (ccc) combustion source flame safety purging on startup;
  - (ddd) broke beaters, pulp and repulping tanks, stock chests and pulp handling equipment, excluding thickening equipment and repulpers;
  - (eee) stock cleaning and pressurized pulp washing, excluding open stock washing systems; and
  - (fff) white water storage tanks.
- (17) "Certifying individual" means the responsible person or official authorized by the owner or operator of a source who certifies the accuracy of the emission statement.
- (18) "CFR" means Code of Federal Regulations.
- (19) "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 340-031-0120.
- (20) "Commence" or "commencement" means that the owner or operator has obtained all necessary preconstruction approvals required by the 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.

- (21) "Commission" or "EQC" means Environmental Quality Commission.
- (22) "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.
- (23) "Construction":
- (a) except as provided in subsection (b) of this section means any physical change including, but not limited to, fabrication, erection, installation, demolition, or modification of a source or part of a source;
  - (b) as used in OAR 340-028-1900 through 340-028-2000 means any physical change including, but not limited to, fabrication, erection, installation, demolition, or modification of an emissions unit, or change in the method of operation of a source which would result in a change in actual emissions.
- (24) "Continuous Monitoring Systems" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect 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.
- (25) "Criteria Pollutant" means nitrogen oxides, volatile organic compounds, particulate matter, PM<sub>10</sub>, sulfur dioxide, carbon monoxide, or lead.
- (26) "Department"
- (a) as used in OAR 340-028-0100 through 340-028-2000 and OAR 340-028-2400 through 340-028-2550 means Department of Environmental Quality;
  - (b) as used in OAR 340-028-2100 through 340-028-2320 and OAR 340-028-2560 throughout 340-028-2740 means Department of Environmental Quality or in the case of Lane County, Lane Regional Air Pollution Authority.
- (27) "Device" means any machine, equipment, raw material, product, or byproduct at a source that produces or emits a regulated pollutant.
- (28) "Director" means the Director of the Department or the Director's designee.
- (29) "Draft permit" means the version of an Oregon Title V Operating Permit for which the Department or Lane Regional Air Pollution Authority offers public participation under OAR 340-028-2290 or the EPA and affected State review under OAR 340-028-2310.
- (30) "Effective date of the program" means the date that the EPA approves the Oregon Title V Operating Permit program submitted by the Department on a full or interim basis. In case of a partial approval, the "effective date of the program" for each portion of the program is the date of the EPA approval of that portion.
- (31) "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (32) "Emission" means a release into the atmosphere of any regulated pollutant or air contaminant.

- (33) "Emission Estimate Adjustment Factor" or "EEAF" means an adjustment applied to an emission factor to account for the relative inaccuracy of the emission factor.
- (34) "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 emission factor approved by EPA or the Department.
- (35) "Emission Limitation" and "Emission Standard" mean a requirement established by a State, local government, or the EPA 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.
- (36) "Emission Reduction Credit Banking" means to presently reserve, subject to requirements of OAR 340-028-1900 through 340-028-2000, New Source Review, emission reductions for use by the reserver or assignee for future compliance with air pollution reduction requirements.
- (37) "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.
- (38) "Emissions unit" means any part or activity of a source that emits or has the potential to emit any regulated air pollutant.
- (a) A part of a source is any machine, equipment, raw material, product, or byproduct which produces or emits air pollutants. An activity is any process, operation, action, or reaction (e.g., chemical) at a stationary source that emits air pollutants. Except as described in subsection (d) of this section, parts and activities may be grouped for purposes of defining an emissions unit provided the following conditions are met:
- (A) the group used to define the emissions unit may not include discrete parts or activities to which a distinct emissions standard applies or for which different compliance demonstration requirements apply, and
- (B) the emissions from the emissions unit are quantifiable.
- (b) Emissions units may be defined on a pollutant by pollutant basis where applicable.
- (c) The term emissions unit is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.
- (d) Parts and activities shall not be grouped for purposes of determining emissions increases from an emissions unit under OAR 340-028-1930, OAR 340-028-1935, OAR 340-028-1940, or OAR 340-028-2270, or for purposes of determining the applicability of any New Source Performance Standard (NSPS).
- (39) "EPA" or "Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's designee.
- (40) "Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Department's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

An equivalent method used to meet an applicable federal requirement for which a reference method is specified shall be approved by EPA unless EPA has delegated authority for the approval to the Department.

- (41) "Event" means excess emissions which arise from the same condition and which occur during a single calendar day or continue into subsequent calendar days.
- (42) "Excess emissions" means emissions which are in excess of a permit limit or any applicable air quality rule.
- (43) "Federal Land Manager" means with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.
- (44) "Final permit" means the version of an Oregon Title V Operating Permit issued by the Department or Lane Regional Air Pollution Authority that has completed all review procedures required by OAR 340-028-2200 through 340-028-2320.
- (45) "Fugitive Emissions":
  - (a) except as used in subsection (b) of this section, 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.
  - (b) as used to define a major Oregon Title V Operating Permit program source, means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (46) "General permit" means an Oregon Title V Operating Permit that meets the requirements of OAR 340-028-2170.
- (47) "Growth [~~Increment~~] Allowance" means an allocation of some part of an airshed's capacity to accommodate future [~~new~~] proposed major sources and major modifications of sources.
- (48) "Immediately" means as soon as possible but in no case more than one hour after the beginning of the excess emission period.
- (49) "Insignificant Activity" means an activity or emission that the Department has designated as categorically insignificant, or that meets the criteria of aggregate insignificant emissions.
- (50) "Insignificant Change" means an off-permit change defined under OAR 340-028-2220(2)(a) to either a significant or an insignificant activity which:
  - (a) does not result in a redesignation from an insignificant to a significant activity;
  - (b) does not invoke an applicable requirement not included in the permit; and
  - (c) does not result in emission of regulated air pollutants not regulated by the source's permit.
- (51) "Interim Emission Fee" means \$13 per ton for each assessable emission subject to emission fees under OAR 340-028-2420 for calculated, actual or permitted emissions released during calendar years 1991 and 1992.
- (52) "Large Source" as used in OAR 340-028-1400 through 340-028-1450 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 air pollutant, or which is subject to a National Emissions Standard for

Hazardous Air Pollutants (NESHAP). Where PSELs have been incorporated into the ACDP, the PSEL shall be used to determine actual emissions.

- (53) "Late Payment" means a fee payment which is postmarked after the due date.
- (54) "Lowest Achievable Emission Rate" or "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 (NSPS) or standards for hazardous air pollutants.
- (55) "Maintenance Area" means a geographical area of the State that was designated as a nonattainment area, redesignated as an attainment area by EPA, and redesignated as a maintenance area by the Environmental Quality Commission in OAR Chapter 340, Division 31.
- (56) "Maintenance Pollutant" means a pollutant for which a maintenance area was formerly designated a nonattainment area.
- ~~(55)~~(57) "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 regulated air pollutant. This criteria also applies to any pollutants not previously emitted by the source. Calculations of net emission increases shall take into account all accumulated increases and decreases in actual emissions occurring at the source since the baseline period, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations in OAR 340-28-1900 through 340-28-2000 for that pollutant, whichever time is more recent. Emissions from insignificant activities shall be included in the calculation of net emission increases. Emission decreases required by rule shall not be included in the calculation of net emission increases. If accumulation of emission increases results in a net significant emission rate increase, the modifications causing such increases become subject to the New Source Review requirements, including the retrofit of required controls.
- ~~(56)~~(58) "Major Source":
- (a) except as provided in subsections (b) and (c) of this section, means a source which emits, or has the potential to emit, any regulated air pollutant at a Significant Emission Rate, as defined in this rule. Emissions from insignificant activities shall be included in determining if a source is a major source.
- (b) as used in OAR 340-28-2100 through 340-28-2320, Rules Applicable to Sources Required to Have Oregon Title V Operating Permits, 340-28-2560 through 340-28-2740, Oregon Title V Operating Permit Fees, and OAR 340-28-1740, Synthetic Minor Sources, means any stationary source, (or any group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person (or persons under common control)), belonging to a single major industrial grouping or is supporting the major

industrial group and that are described in paragraphs (A), (B), or (C) of this subsection. For the purposes of this subsection, a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual (U.S. Office of Management and Budget, 1987) or support the major industrial group.

- (A) A major source of hazardous air pollutants, which is defined as:
- (i) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutants which has been listed pursuant to OAR 340-32-130, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the Administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well, with its associated equipment, and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
  - (ii) For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.
- (B) A major stationary source of air pollutants, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any regulated air pollutant, including any major source of fugitive emissions of any such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to one of the following categories of stationary source:
- (i) Coal cleaning plants (with thermal dryers);
  - (ii) Kraft pulp mills;
  - (iii) Portland cement plants;
  - (iv) Primary zinc smelters;
  - (v) Iron and steel mills;
  - (vi) Primary aluminum ore reduction plants;
  - (vii) Primary copper smelters;
  - (viii) Municipal incinerators capable of charging more than 250 tons of refuse per day;
  - (ix) Hydrofluoric, sulfuric, or nitric acid plants;
  - (x) Petroleum refineries;



- (xi) Lime plants;
- (xii) Phosphate rock processing plants;
- (xiii) Coke oven batteries;
- (xiv) Sulfur recovery plants;
- (xv) Carbon black plants (furnace process);
- (xvi) Primary lead smelters;
- (xvii) Fuel conversion plants;
- (xviii) Sintering plants;
- (xix) Secondary metal production plants;
- (xx) Chemical process plants;
- (xxi) Fossil-fuel boilers, or combination thereof, totaling more than 250 million British thermal units per hour heat input;
- (xxii) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (xxiii) Taconite ore processing plants;
- (xxiv) Glass fiber processing plants;
- (xxv) Charcoal production plants;
- (xxvi) Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; or
- (xxvii) All other stationary source categories regulated by a standard promulgated under section 111 or 112 of the Act, but only with respect to those air pollutants that have been regulated for that category;

- (C) A major stationary source as defined in part D of Title I of the Act, including:
- (i) For ozone nonattainment areas, sources with the potential to emit 100 tpy or more of VOCs or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and 10 tpy or more in areas classified as "extreme"; except that the references in this paragraph to 100, 50, 25, and 10 tpy of nitrogen oxides shall not apply with respect to any source for which the Administrator has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;
  - (ii) For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit 50 tpy or more of VOCs;
  - (iii) For carbon monoxide nonattainment areas
    - (I) that are classified as "serious," and
    - (II) in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tpy or more of carbon monoxide;

- (iv) For particulate matter (PM<sub>10</sub>) nonattainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM<sub>10</sub>.
- (c) as used in OAR 340-28-2400 through 340-28-2550, Major Source Interim Emission Fees, 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 VOC and is located in a serious ozone nonattainment area.
- (~~57~~59) "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.
- (~~58~~60) "Nitrogen Oxides" or "NO<sub>x</sub>" means all oxides of nitrogen except nitrous oxide.
- (~~59~~61) "Nonattainment Area" means a geographical area of the State ~~[which]~~that exceeds any state or federal primary or secondary ambient air quality standard as designated by the Environmental Quality Commission in OAR Chapter 340, Division 31, or the EPA.
- (62) "Nonattainment Pollutant" means a pollutant for which an area is designated a nonattainment area.
- (~~60~~63) "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.
- (~~61~~64) "Offset" means an equivalent or greater emission reduction which is required prior to allowing an emission increase from a ~~[new]~~proposed major source or major modification of a source.
- (~~62~~65) "Oregon Title V Operating Permit" means any permit covering an Oregon Title V Operating Permit source that is issued, renewed, amended, or revised pursuant to OAR 340-028-2100 through 340-028-2320.
- (~~63~~66) "Oregon Title V Operating Permit program" means a program approved by the Administrator under **40 CFR Part 70 (July 1, 199[3]6)**.
- (~~64~~67) "Oregon Title V Operating Permit program source" means any source subject to the permitting requirements, OAR 340-028-2100 through OAR 340-028-2320, as provided in OAR 340-028-2110.
- (~~65~~68) "Ozone Season" means the contiguous 3 month period of the year during which ozone exceedances typically occur (i.e., June, July, and August).
- (~~66~~69) "Particulate Matter" means all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable reference method in accordance with the **Department's Source Sampling Manual**, (January, 1992).
- (~~67~~70) "Permit" means an Air Contaminant Discharge Permit or an Oregon Title V Operating Permit issued pursuant to this Division.

- (#68)71) "Permit modification" means a revision to a permit that meets the applicable requirements of OAR 340-028-1700 through 340-028-1790, OAR 340-028-1900 through 340-028-2000, or OAR 340-028-2240 through 340-028-2260.
- (#69)72) "Permit revision" means any permit modification or administrative permit amendment.
- (#70)73) "Permitted Emissions" as used in OAR 340-28-2400 through 340-28-2550, and OAR 340-28-2560 through 340-28-2740 means each assessable emission portion of the PSEL, as identified in an ACDP, Oregon Title V Operating Permit, review report, or by the Department pursuant to OAR 340-028-2640.
- (#71)74) "Permittee" means the owner or operator of the facility, in whose name the operation of the source is authorized by the ACDP or the Oregon Title V Operating Permit.
- (#72)75) "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.
- (#73)76) "Plant Site Emission Limit" or "PSEL" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source. The PSEL for a major source may consist of more than one assessable emission.
- (#74)77) "PM<sub>10</sub>":  
(a) when used in the context of emissions, means finely divided solid or liquid material, including condensible particulate, 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 an applicable reference method in accordance with the Department's **Source Sampling Manual** (January, 1992);  
(b) when used in the context of ambient concentration, means airborne finely divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured in accordance with **40 CFR Part 50, Appendix J (July, 1993)**.
- (#75)78) "Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air 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 is enforceable by the Administrator. This definition does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder. Secondary emissions shall not be considered in determining the potential to emit of a source.
- (#76)79) "Process Upset" means a failure or malfunction of a production process or system to operate in a normal and usual manner.
- (#77)80) "Proposed permit" means the version of an Oregon Title V Operating Permit that the Department or Lane Regional Air Pollution Authority proposes to issue and forwards to the Administrator for review in compliance with OAR 340-028-2310.

(~~78~~81) "Reference method" means any method of sampling and analyzing for an air pollutant as specified in **40 CFR Part 60, 61 or 63** (July 1, 199~~3~~).

(~~79~~82) "Regional Authority" means Lane Regional Air Pollution Authority.

(~~80~~83) "Regulated air pollutant" or "Regulated Pollutant":

(a) as used in OAR 340-028-0100 through 340-028-2320 means:

(A) Nitrogen oxides or any VOCs;

(B) Any pollutant for which a national ambient air quality standard has been promulgated;

(C) Any pollutant that is subject to any standard promulgated under section 111 of the Act;

(D) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act; or

(E) Any pollutant listed under OAR 340-032-0130 or OAR 340-032-5400.

(b) as used in OAR 340-028-2400 through 340-028-2550 means PM<sub>10</sub>, Sulfur Dioxide (SO<sub>2</sub>), Oxides of Nitrogen (NO<sub>x</sub>), Lead (Pb), 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.

(c) as used in OAR 340-028-2560 through 340-028-2740 means any regulated air pollutant as defined in 340-028-0110(78) except the following:

(A) Carbon monoxide;

(B) Any pollutant that is a regulated pollutant solely because it is a Class I or Class II substance subject to a standard promulgated under or established by Title VI of the Federal Clean Air Act; or

(C) Any pollutant that is a regulated air pollutant solely because it is subject to a standard or regulation under section 112(r) of the Federal Clean Air Act.

(~~81~~84) "Renewal" means the process by which a permit is reissued at the end of its term.

(~~82~~85) "Responsible official" means one of the following:

(a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(A) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(B) the delegation of authority to such representative is approved in advance by the Department or Lane Regional Air Pollution Authority;

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

(c) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this Division, a principal executive officer of a Federal agency includes the chief executive officer

having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA); or

(d) For affected sources:

(A) The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated thereunder are concerned; and

(B) The designated representative for any other purposes under the Oregon Title V Operating Permit program.

(~~83~~86) "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 shall 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.

(~~84~~87) "Section 111" means that section of the FCAA that includes Standards of Performance for New Stationary Sources (NSPS).

(~~85~~88) "Section 111(d)" means that subsection of the FCAA that requires states to submit plans to the EPA which establish standards of performance for existing sources and provides for the implementation and enforcement of such standards.

(~~86~~89) "Section 112" means that section of the FCAA that contains regulations for Hazardous Air Pollutants (HAP).

(~~87~~90) "Section 112(b)" means that subsection of the FCAA that includes the list of hazardous air pollutants to be regulated.

(~~88~~91) "Section 112(d)" means that subsection of the FCAA that directs the EPA to establish emission standards for sources of hazardous air pollutants. This section also defines the criteria to be used by the EPA when establishing the emission standards.

(~~89~~92) "Section 112(e)" means that subsection of the FCAA that directs the EPA to establish and promulgate emissions standards for categories and subcategories of sources that emit hazardous air pollutants.

(~~90~~93) "Section 112(r)(7)" means that subsection of the FCAA that requires the EPA to promulgate regulations for the prevention of accidental releases and requires owners or operators to prepare risk management plans.

(~~91~~94) "Section 114(a)(3)" means that subsection of the FCAA that requires enhanced monitoring and submission of compliance certifications for major sources.

(~~92~~95) "Section 129" means that section of the FCAA that requires the EPA to establish emission standards and other requirements for solid waste incineration units.

(~~93~~96) "Section 129(e)" means that subsection of the FCAA that requires solid waste incineration units to obtain Oregon Title V Operating Permits.

(~~94~~97) "Section 182(f)" means that subsection of the FCAA that requires states to include plan provisions in the State Implementation Plan for NO<sub>x</sub> in ozone nonattainment areas.

- | (~~95~~98) "Section 182(f)(1)" means that subsection of the FCAA that requires states to apply those plan provisions developed for major VOC sources and major NO<sub>x</sub> sources in ozone nonattainment areas.
- | (~~96~~99) "Section 183(e)" means that subsection of the FCAA that requires the EPA to study and develop regulations for the control of certain VOC sources under federal ozone measures.
- | (~~97~~100) "Section 183(f)" means that subsection of the FCAA that requires the EPA to develop regulations pertaining to tank vessels under federal ozone measures.
- | (~~98~~101) "Section 184" means that section of the FCAA that contains regulations for the control of interstate ozone air pollution.
- | (~~99~~102) "Section 302" means that section of the FCAA that contains definitions for general and administrative purposes in the Act.
- | (~~100~~103) "Section 302(j)" means that subsection of the FCAA that contains definitions of "major stationary source" and "major emitting facility."
- | (~~101~~104) "Section 328" means that section of the FCAA that contains regulations for air pollution from outer continental shelf activities.
- | (~~102~~105) "Section 408(a)" means that subsection of the FCAA that contains regulations for the Title IV permit program.
- | (~~103~~106) "Section 502(b)(10) change" means a change that contravenes an express permit term but is not a change that:
  - (a) would violate applicable requirements;
  - (b) would contravene federally enforceable permit terms and conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements; or
  - (c) is a Title I modification.
- | (~~104~~107) "Section 504(b)" means that subsection of the FCAA that states that the EPA can prescribe by rule procedures and methods for determining compliance and for monitoring.
- | (~~105~~108) "Section 504(e)" means that subsection of the FCAA that contains regulations for permit requirements for temporary sources.
- | (~~106~~109) "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than those set out in **Table 1**. For sources of VOC or NO<sub>x</sub>, 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 or ozone maintenance area and is capable of impacting the nonattainment area or maintenance area.

<b>Table 1</b>					
<b>OAR 340-028-0110</b>					
<b>Significant Ambient Air Quality Impact Which Is Equal to Or Greater Than:</b>					
<b>Pollutant</b>	<b>Pollutant Averaging Time</b>				
	<i>Annual</i>	<i>24-Hour</i>	<i>8-Hour</i>	<i>3-Hour</i>	<i>1-Hour</i>
SO <sub>2</sub>	1.0 ug/m <sup>3</sup>	5 ug/m <sup>3</sup>		25 ug/m <sup>3</sup>	
TSP or PM <sub>10</sub>	0.2 ug/m <sup>3</sup>	1.0 ug/m <sup>3</sup>			

Table 1 OAR 340-028-0110 Significant Ambient Air Quality Impact Which Is Equal to Or Greater Than:					
Pollutant	Pollutant Averaging Time				
	Annual	24-Hour	8-Hour	3-Hour	1-Hour
NO <sub>2</sub>	1.0 ug/m <sup>3</sup>				
CO			0.5 mg/m <sup>3</sup>		2 mg/m <sup>3</sup>

(107) "Significant emission rate", except as provided in subsections (a) through (c) of this section, means emission rates equal to or greater than the rates specified in Table 2.

Table 2 OAR 340-028-0110 Significant Emission Rates for Pollutants Regulated Under the Clean Air Act		
	Significant Pollutant	Emission Rate
(A)	Carbon Monoxide	100 tons/year
(B)	Nitrogen Oxides (NO <sub>x</sub> )	40 tons/year
(C)	Particulate Matter	25 tons/year
(D)	PM <sub>10</sub>	15 tons/year
(E)	Sulfur Dioxide	40 tons/year
(F)	Volatile Organic Compounds (VOC)	40 tons/year
(G)	Lead	0.6 ton/year
(H)	Mercury	0.1 ton/year
(I)	Beryllium	0.0004 ton/year
(J)	Asbestos	0.007 ton/year
(K)	Vinyl Chloride	1 ton/year
(L)	Fluorides	3 tons/year
(M)	Sulfuric Acid Mist	7 tons/year
(N)	Hydrogen Sulfide	10 tons/year
(O)	Total Reduced Sulfur (including hydrogen sulfide)	10 tons/year
(P)	Reduced sulfur compounds (including hydrogen sulfide)	10 tons/year
(Q)	Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	0.0000035 ton/year
(R)	Municipal waste combustor metals (measured as particulate matter)	15 tons/year
(S)	Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40 tons/year
(T)	Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50 tons/year

- (a) For the Medford-Ashland Air Quality Maintenance Area, the Klamath Falls Urban Growth Area, and the Lakeview PM<sub>10</sub> Nonattainment Area, the Significant Emission Rate for particulate matter is defined in **Table 3**. For the Klamath Falls Urban Growth Area, the Significant Emission Rates in Table 3 for particulate matter apply to all new or modified sources for which permit applications have not been submitted prior to June 2, 1989. For the Lakeview PM<sub>10</sub> Nonattainment Area, the Significant Emission Rates in Table 3 for particulate matter apply to all new or modified sources for which complete permit applications have not been submitted to the Department prior to May 1, 1995.

<b>Table 3</b>			
<b>OAR 340-028-0110</b>			
<b>Significant Emission Rates for the Nonattainment Portions of the Medford-Ashland Air Quality Maintenance Area, the Klamath Falls Urban Growth Area, and the Lakeview PM<sub>10</sub> Nonattainment Area</b>			
<i>Air Contaminant</i>	<i>Emission Rate</i>		
	<i>Annual</i>	<i>Day</i>	<i>Hour</i>
Particulate Matter or PM <sub>10</sub>	4,500 Kilograms (5.0 tons)	23 Kilograms (50.0 lbs.)	4.6 Kilograms (10.0 lbs.)

- (b) For regulated air pollutants not listed in Table 2 or 3, the Department shall determine the rate that constitutes a significant emission rate.
- (c) Any new source or modification with an emissions increase less than the rates specified in Table 2 or 3 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/m<sup>3</sup> (24 hour average) shall be deemed to be emitting at a significant emission rate.

| (~~108~~111) "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 shall 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.

| (~~109~~112) "Small Source" means any stationary source with a regular ACDP (not an insignificant discharge permit or a minimal source permit) or an Oregon Title V Operating Permit which is not classified as a large source.

| (~~110~~113) "Source":

(a) except as provided in subsection (b) of this section, 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.

- (b) As used in OAR 340-028-1900 through 340-028-2000, New Source Review, and the definitions of "BACT", "Commenced", "Construction", "Emission Limitation", "Emission Standard", "LAER", "Major Modification", "Major Source", "Potential to Emit", and "Secondary Emissions" as these terms are used for purposes of OAR 340-028-1900 through 340-028-2000, includes all pollutant emitting activities which belong to a single major industrial group (i.e., which have the same two-digit code) as described in the **Standard Industrial Classification Manual**, (U.S. Office of Management and Budget, 1987) or are supporting the major industrial group.
- (~~114~~)114) "Source category":
  - (a) except as provided in subsection (b) of this section, 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 the **Standard Industrial Classification Manual**, (U.S. Office of Management and Budget, 1987).
  - (b) as used in OAR 340-028-2400 through 340-028-2550, Major Source Interim Emission Fees, and OAR 340-028-2560 through 340-028-2740, Oregon Title V Operating Permit Fees, 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.
- (~~112~~)115) "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.
- (~~113~~)116) "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.
- (117) "State Implementation Plan" or "SIP" means the State of Oregon Clean Air Act Implementation Plan as adopted by the Commission under OAR 340-20-047 and approved by EPA.
- (~~114~~)118) "Stationary source" means any building, structure, facility, or installation that emits or may emit any regulated air pollutant.
- (~~115~~)119) "Substantial Underpayment" means the lesser of ten percent (10%) of the total interim emission fee for the major source or five hundred dollars.
- (~~116~~)120) "Synthetic minor source" means a source which would be classified as a major source under OAR 340-028-0110, but for physical or operational limits on its potential to emit air pollutants contained in an ACDP issued by the Department under OAR 340-028-1700 through 340-028-1790.
- (~~117~~)121) "Title I modification" means one of the following modifications pursuant to Title I of the FCAA:
  - (a) a major modification subject to OAR 340-028-1930, Requirements for Sources in Nonattainment Areas;

(b) a major modification subject to OAR 340-028-1935, Requirements for Sources in Maintenance Areas;

(~~(b)~~c) a major modification subject to OAR 340-028-1940, Prevention of Significant Deterioration Requirements for Sources in Attainment or Unclassified Areas;

(~~(e)~~d) a change which is subject to a New Source Performance Standard under Section 111 of the FCAA; or

(~~(e)~~e) a modification under Section 112 of the FCAA.

(~~(118)~~122) "Total Suspended Particulate" or "TSP" means particulate matter as measured by the reference method described in **40 CFR Part 50, Appendix B** (July 1, 199[~~3~~6]).

(~~(119)~~123) "Total Reduced Sulfur" or "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<sub>2</sub>S).

(~~(120)~~124) "Typically Achievable Control Technology" or "TACT" means the emission limit established on a case-by-case basis for a criteria pollutant from a particular emissions unit in accordance with OAR 340-028-0630. For existing sources, the emission limit established shall be typical of the emission level achieved by emissions units similar in type and size. For new and modified sources, the emission limit established shall be typical of the emission level achieved by well controlled new or modified emissions units similar in type and size that were recently installed. TACT determinations shall be based on information known to the Department considering pollution prevention, impacts on other environmental media, energy impacts, capital and operating costs, cost effectiveness, and the age and remaining economic life of existing emission control equipment. The Department may consider emission control technologies typically applied to other types of emissions units where such technologies could be readily applied to the emissions unit. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required.

(~~(121)~~125) "Unavoidable" or "could not be avoided" 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.

(~~(122)~~126) "Upset" or "Breakdown" means any failure or malfunction of any pollution control equipment or operating equipment which may cause an excess emission.

(~~(123)~~127) "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.

(~~(124)~~128) "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.

(~~(125)~~129) "Volatile Organic Compounds" or "VOC" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.

- (a) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113); Trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (CFC-22); trifluoromethane (FC-23); 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); and perfluorocarbon compounds which fall into these classes:
- (A) Cyclic, branched, or linear, completely fluorinated alkanes;
  - (B) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
  - (C) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
  - (D) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- (b) For purposes of determining compliance with emissions limits, VOC will be measured by an applicable reference method in accordance with the Department's Source Sampling Manual, January, 1992. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds, as listed in subsection (a), may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by the Department.
- (c) As a precondition to excluding these compounds, as listed in subsection (a), as VOC or at any time thereafter, the Department may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Department, the amount of negligibly-reactive compounds in the source's emissions.

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 OAR 340-020-0033.04; 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 42-1990, f. 12-13-90, cert. ef. 1-2-91; DEQ 2-1992, f. & ef. 1-30-92; DEQ 27-1992, f. & ef. 11-12-92; Renumbered from OAR 340-020-0145; Renumbered from OAR 340-020-0225; Renumbered from OAR 340-020-0305; Renumbered from OAR 340-020-0355; Renumbered from OAR 340-020-0460; Renumbered from OAR 340-020-0520, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 20-1993(T), f. & ef. 11-4-

93; DEQ 13-1994, f. & ef. 5-19-94; DEQ --1994, f. & ef. 10-28-94; DEQ 12-1995, f. & ef. 5-1-95; DEQ 22-1995, f. & ef. 10-6-95

**[NOTE:** This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

## New Source Review

### Applicability

#### 340-028-1900

- (1) No owner or operator ~~[shall]~~ may begin construction of a major source or a major modification of an air contaminant source without having received an ACDP from the Department and having satisfied OAR 340-028-1900 through 340-028-2000 of these rules.
- (2) Owners or operators of proposed non-major sources or 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 340-028-0600 through 340-028-0640), Notice of Construction and Approval of Plans~~[,]~~ (OAR 340-028-0800 through 340-028-0820), ACDPs~~[,]~~ (OAR 340-028-1700 through 340-028-1790), Emission Standards for Hazardous Air Contaminants~~[,]~~ (OAR Chapter 340~~[,]~~ ~~025-0450 through 340-025-0485~~, Division 32), and Standards of Performance for New Stationary Sources~~[,]~~ (OAR 340-025-0505 through 340-025-0545).

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from OAR 340-020-0220, DEQ 13-1993, f. & ef. 9-24-93

### Procedural Requirements

#### 340-028-1910

- (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]~~ must 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, and yearly rates, showing the calculation procedure;
  - (c) A detailed schedule for construction of the source or modification;
  - (d) A detailed description of the air pollution control equipment and emission reduction processes which are planned for the source or modification, and any other information necessary to determine that BACT or LAER 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.
- (g) The owner or operator of a source for which an Oregon Title V Operating Permit has been issued who applies for a permit to construct or modify under OAR 340-028-1900 through 340-028-2000 may request that an enhanced New Source Review process be used, including the external review procedures required under OAR 340-028-2290 and OAR 340-028-2310 instead of the notice procedures under this rule to allow for subsequent incorporation of the construction permit as an administrative amendment. All information required under OAR 340-028-2120 shall be submitted as part of any such request.

(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 OAR 340-028-1900 through 340-028-2000 or with the terms of any approval to construct, or any owner or operator of a source or modification subject to OAR 340-028-1900 who commences construction without applying for and receiving an ACDP, ~~shall~~ be subject to appropriate enforcement action;
- (b) Approval to construct ~~shall~~ becomes invalid if construction is not commenced within 18 months after receipt of such approval, if construction is 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 shall commence construction within 18 months of the projected and approved commencement date;
- (c) Approval to construct ~~shall~~ does 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.
- (d) Approval to construct a source under an ACDP issued under paragraph (3)(b)(I) of this rule shall authorize construction and operation of the source, except as prohibited in subsection (e) of this rule, until the later of:
  - (A) One year from the date of initial startup of operation of the major source or major modification, or
  - (B) If a timely and complete application for an Oregon Title V Operating Permit is submitted, the date of final action by the Department on the Oregon Title V Operating Permit application.
- (e) Where an existing Oregon Title V Operating Permit would prohibit such construction or change in operation, the owner or operator must obtain a permit revision before commencing operation.

(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 340-014-0020 or OAR 340-028-2120, 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 a preliminary determination whether construction should be approved, approved with conditions, or disapproved;
  - (B) Make available for a 30-day period in at least 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;
  - (C) Notify the public, by advertisement in a newspaper of general circulation in the area in which the proposed source or modification would be constructed, of the application, the preliminary determination, the extent of increment consumption that is expected from the source or modification, the opportunity for a public hearing and for written public comment and, if applicable, that an enhanced New Source Review process, including the external review procedures required under OAR 340-028-2290 and OAR 340-028-2310, is being used to allow for subsequent incorporation of the operating approval into an Oregon Title V Operating Permit as an administrative amendment;
  - (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 Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification, and the EPA;
  - (E) Upon determination that significant interest 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 where 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.
- (I) After the effective date of Oregon's program to implement the Oregon Title V Operating Permit program, the owner or operator of a source subject to OAR 340-028-2110 who has received a permit to construct or modify under OAR 340-028-1900 through 340-028-2000, shall submit an application for an Oregon Title V Operating Permit within one year of initial startup of the construction or modification, unless the Oregon Title V Operating Permit prohibits such construction or change in operation. The Oregon Title V Operating Permit application shall include the following information:
  - (i) information required by OAR 340-028-2120, if not previously included in the ACDP application;
  - (ii) a copy of the existing ACDP;
  - (iii) information on any changes in the construction or operation from the existing ACDP, if applicable; and
  - (iv) any monitoring or source test data obtained during the first year of operation.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

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; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0230, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & ef. 10-6-95



## Review of New Sources and Modifications for Compliance With Regulations

**340-028-1920** The owner or operator of a proposed major source or major modification shall demonstrate the ability of the proposed source or modification to comply with all applicable requirements of the Department, including NSPS~~[ ]~~ (OAR 340-025-0505 through 340-025-0530~~[ ]~~) and NESHAP~~[ ]~~ (OAR ~~Chapter 340-025-0450 through 340-025-0485~~, Division 32) and shall obtain an ACDP pursuant to OAR 340-028-1700 through 340-028-1790.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0235, DEQ 13-1993 f. & ef. 9-24-93

## Requirements for Sources in Nonattainment Areas

**340-028-1930** Proposed ~~new~~ major sources and major modifications ~~which~~ that would emit a nonattainment pollutant within a designated nonattainment area, including VOC or NO<sub>x</sub> in a designated Ozone Nonattainment Area, ~~shall~~ must meet the requirements listed below:

- (1) LAER. The owner or operator of the proposed major source or major modification shall demonstrate that the source or modification will comply with the LAER for each nonattainment pollutant ~~which is~~ emitted at or above the significant emission rate. ~~In the case of~~ For a major modification, the requirement for LAER ~~shall~~ applies only to each new or modified emission unit ~~which~~ that increases emissions. For phased construction projects, the determination of LAER ~~shall~~ must be reviewed at the latest reasonable time ~~prior to~~ before commencement of construction of each independent phase.
- (2) Source Compliance. The owner or operator of the proposed major source or major modification shall 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 Act.
- (3) Offsets. The owner or operator of the proposed major source or major modification shall provide offsets as specified in OAR 340-028-1960 and 340-028-1970.
- (4) Net Air Quality Benefit. ~~For cases in which~~ If emission reductions or offsets are required, the applicant shall demonstrate that a net air quality benefit will be achieved in the affected area as described in OAR 340-028-1970 and that the reductions are consistent with reasonable further progress toward attainment of the air quality standards. Applicants in an ozone nonattainment area shall demonstrate that the proposed VOC or NO<sub>x</sub> offsets will result in a 10% net reduction in emissions, as required by OAR 340-028-1970(3)(c).
- (5) Alternative Analysis:

- (a) Except as provided in Subsection (c) of this Section, ~~the~~ owner or operator of ~~the~~ proposed ~~new~~ major source or major modification shall conduct an alternative analysis ~~for each nonattainment pollutant emitted at or above the significant emission rate, except that no analysis shall be required for TSP~~;
- (b) This analysis ~~shall~~ 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;
- (c) This analysis is not required for a major source or major modification that is subject to this rule solely due to emissions of particulate matter in a designated TSP nonattainment area.
- (6) Special Exemption for the Salem Ozone Nonattainment Area. Proposed ~~new~~ major sources and major modifications which are located in or impact the Salem Ozone Nonattainment Area are exempt from OAR 340-028-1970 and sections (3) through (5) of this rule for VOC and NO<sub>x</sub> emissions with respect to ozone formation in the Salem Ozone Nonattainment area.
- (7) Special requirements for the Klamath Falls Urban Growth Area and the Lakeview PM<sub>10</sub> Nonattainment Area. For the Klamath Falls Urban Growth Area and the Lakeview PM<sub>10</sub> Nonattainment Area, particulate matter or PM<sub>10</sub> emission increases of 5.0 or more tons per year shall be fully offset, but the application of LAER is not required unless the emission increase is 15 or more tons per year. At the option of the owner or operator of a source with particulate matter or PM<sub>10</sub> emissions of 5.0 or more tons per year but less than 15 tons per year, LAER control technology may be applied in lieu of offsets.

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. & ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93, Renumbered from 340-020-0240, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

### **Requirements for Sources in Maintenance Areas**

340-028-1935 Proposed major sources and major modifications that would emit a maintenance pollutant within a designated ozone or carbon monoxide maintenance area, including VOC or NO<sub>x</sub> in a designated ozone maintenance area, must meet the requirements listed below:

- (1) BACT. Except as provided in Section (7) of this rule, the owner or operator of the proposed major source or major modification shall apply BACT for each maintenance pollutant emitted at a significant emission rate. For a major modification, the requirement for BACT applies only to each new or modified emission unit that increases emissions.

- For phased construction projects, the determination of BACT must be reviewed at the latest reasonable time before commencement of construction of each independent phase.
- (2) Source Compliance. The owner or operator of the proposed major source or major modification shall 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 Act.
  - (3) Offsets or Growth Allowance. The owner or operator of the proposed major source or major modification shall provide offsets as specified in OAR 340-028-1960 and 340-028-1970. Except as provided in Section (7) of this rule, the requirements of this Section may be met in whole or in part in an ozone or carbon monoxide maintenance area with an allocation by the Department from a growth allowance, if available, in accordance with Section (8) of this rule and the applicable maintenance plan in the SIP adopted by the Commission and approved by EPA. An allocation from a growth allowance used to meet the requirements of this Section is not subject to OAR 340-028-1960 and 340-028-1970.
  - (4) Net Air Quality Benefit. If emission reductions or offsets are required, the applicant shall demonstrate that a net air quality benefit will be achieved in the affected area as described in OAR 340-028-1970. Applicants in an ozone maintenance area shall demonstrate that the proposed VOC or NO<sub>x</sub> offsets will result in a 10% net reduction in emissions, as required by OAR 340-028-1970(3)(c).
  - (5) Alternative Analysis:
    - (a) Except as provided in Subsection (c) of this Section, the owner or operator of the proposed major source or major modification shall conduct an alternative analysis;
    - (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;
    - (c) This analysis is not required for a major source or major modification that is subject to this rule solely due to emissions of particulate matter in a designated TSP maintenance area.
  - (6) Additional Requirements For Listed Sources. In addition to other requirements of this rule, the following sources must comply with OAR 340-028-1940 for emissions of the maintenance pollutant:
    - (a) sources with potential emissions of any regulated air pollutant equal to or greater than 250 tons/year; and
    - (b) sources with potential emissions of any regulated air pollutant equal to or greater than 100 tons/year in the following source categories:
      - (A) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input;
      - (B) Coal cleaning plants with thermal dryers;
      - (C) Kraft pulp mills;

- (D) Portland cement plants;
- (E) Primary Zinc Smelters;
- (F) Iron and Steel Mill Plants;
- (G) Primary aluminum ore reduction plants;
- (H) Primary copper smelters;
- (I) Municipal Incinerators capable of charging more than 250 tons of refuse per day;
- (J) Hydrofluoric acid plants;
- (K) Sulfuric acid plants;
- (L) Nitric acid plants;
- (M) Petroleum Refineries;
- (N) Lime plants;
- (O) Phosphate rock processing plants;
- (P) Coke oven batteries;
- (Q) Sulfur recovery plants;
- (R) Carbon black plants, furnace process;
- (S) Primary lead smelters;
- (T) Fuel conversion plants;
- (U) Sintering plants;
- (V) Secondary metal production plants;
- (W) Chemical process plants;
- (X) Fossil fuel fired boilers, or combinations thereof, totaling more than 250 million BTU per hour heat input;
- (Y) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (Z) Taconite ore processing plants;
- (AA) Glass fiber processing plants;
- (BB) Charcoal production plants.

(7) Contingency plan requirements. If the contingency plan in an applicable maintenance plan is implemented due to a violation of an ambient air quality standard, this Section applies in addition to other requirements of this rule until the Commission adopts a revised maintenance plan and EPA approves it as a revision to the SIP.

(a) The requirement for BACT in Section (1) of this rule is replaced by a requirement for LAER.

(b) An allocation from a growth allowance may not be used to meet the requirement for offsets in Section (3) of this rule.

(8) Growth Allowance Allocation.

(a) Medford-Ashland Ozone. The growth allowance in the Medford Maintenance Area for Ozone is allocated on a first-come-first-served basis depending on the date of submittal of a complete permit application. No single source shall receive an allocation of more than 50% of any remaining growth allowance. The allocation of emission increases from the growth allowance is calculated based on the ozone season (May 1 to September 30 of each year).

- (b) Portland Ozone and Carbon Monoxide. Procedures for allocating the growth allowances for the Oregon portion of the Portland-Vancouver Interstate Maintenance Area for Ozone and the Portland Maintenance Area for Carbon Monoxide are contained in OAR 340-030-0730 and 340-030-0740.
- (9) Pending Redesignation Requests. This rule does not apply to a proposed major source or major modification for which a complete application to construct was submitted to the Department before the maintenance area was redesignated from nonattainment to attainment by EPA. Such a source is subject to OAR 340-028-1930.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.:

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department.]

#### **Prevention of Significant Deterioration Requirements for Sources in Attainment or Unclassified Areas**

**340-028-1940** New Major Sources or Major Modifications locating in areas designated attainment or unclassifiable ~~[shall]~~must meet the following requirements:

- (1) BACT. The owner or operator of the proposed major source or major modification shall apply BACT for each pollutant ~~[which is]~~ emitted at a significant emission rate. ~~[In the case of]~~For a major modification, the requirement for BACT ~~[shall]~~ applies only to each new or modified emission unit ~~[which]~~ that increases emissions. For phased construction projects, the determination of BACT ~~[shall]~~ must be reviewed at the latest reasonable time ~~[prior to]~~ before 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 emissions of any pollutant at or above a significant emission rate would not cause or contribute to:
    - (A) An impact greater than significant air quality impact levels at any locality that does not or would not meet any state or national ambient air quality standard;
    - (B) An impact in excess of any applicable increment established by the Prevention of Significant Deterioration (PSD) requirements, OAR 340-031-0110; or
    - (C) An impact greater than significant air quality impact levels on a designated nonattainment area or maintenance area. New sources or modifications of sources which would emit VOC or NO<sub>x</sub> which may impact the Salem

ozone nonattainment area are exempt from this demonstration with respect to ozone formation.

- (b) The demonstration under subsection (a) of this section shall include the potential to emit from the proposed major source or major modification, in conjunction with all other applicable emission increases and creditable decreases, and includes secondary emissions.
  - (c) The owner or operator of a source or modification with the potential to emit at rates greater than the significant emission rate but less than 100 tons/year, and which is more than 50 kilometers from a nonattainment area or maintenance area, is not required to assess the impact of the source or modification on the nonattainment area or maintenance area.
  - (d) 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, OAR 340-028-1970, is provided, the Department may consider the requirements of this section 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 proposed major source or major modification is exempt from sections (1), (5) and (6) of this rule if subsections (a) and (b) of this section are satisfied:
- (a) The proposed major source or major modification does not:
    - (A) cause or contribute a significant air quality impact to air quality levels in excess of any state or national ambient air quality standard;
    - (B) cause or contribute to air quality levels in excess of any applicable increment established by the PSD requirements, OAR 340-031-0110; or
    - (C) impact a designated nonattainment area or maintenance area; and
  - (b) The potential emissions of each regulated air pollutant from 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:
    - (A) Fossil fuel-fired steam electric plants of more than 250 million BTU/hour heat input;
    - (B) Coal cleaning plants with thermal dryers;
    - (C) Kraft pulp mills;
    - (D) Portland cement plants;
    - (E) Primary Zinc Smelters;
    - (F) Iron and Steel Mill Plants;
    - (G) Primary aluminum ore reduction plants;
    - (H) Primary copper smelters;
    - (I) Municipal Incinerators capable of charging more than 250 tons of refuse per day;
    - (J) Hydrofluoric acid plants;
    - (K) Sulfuric acid plants,
    - (L) Nitric acid plants;
    - (M) Petroleum Refineries;

- (N) Lime plants;
- (O) Phosphate rock processing plants;
- (P) Coke oven batteries;
- (Q) Sulfur recovery plants;
- (R) Carbon black plants, furnace process;
- (S) Primary lead smelters;
- (T) Fuel conversion plants;
- (U) Sintering plants;
- (V) Secondary metal production plants;
- (W) Chemical process plants;
- (X) Fossil fuel fired boilers, or combinations thereof, totaling more than 250 million BTU per hour heat input;
- (Y) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (Z) Taconite ore processing plants;
- (AA) Glass fiber processing plants;
- (BB) Charcoal production plants.

[**Note:** Owners or operators of proposed sources which are exempted by this provision may be subject to other applicable requirements including, but not limited to, OAR 340-028-0800 through 340-028-0820, Notice of Construction and Approval of Plans, and OAR 340-028-1700 through 340-028-1790, ACDP.]

- (4) Air Quality Models. All estimates of ambient concentrations required under this rule shall be based on the applicable air quality models, data bases, and other requirements specified in **40 CFR Part 51, Appendix W, "Guidelines on Air Quality Models (Revised)"** (~~last amended by 58 FR 38816, July 20, 1993~~). Where an air quality impact model specified in **40 CFR Part 51, Appendix W** is inappropriate, the model may be modified or another model substituted. Such a change shall be subject to notice and opportunity for public comment and shall receive approval of the Department and the EPA. 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:
  - (a)(A) The owner or operator of a proposed major source or major modification shall submit with the application, subject to approval of the Department, an analysis of ambient air quality in the area impacted by the proposed project. This analysis shall be conducted for each pollutant potentially emitted at a significant emission rate by the proposed source or 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 or 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 pollutant increment. Pursuant to the requirements of these rules, the owner or 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"** (July 1, 199[3]6) and with other methods on file with the Department.
- (C) The Department may exempt a proposed major source or major modification from preconstruction 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 the amount specified in **Table 5**:

**Table 5**  
**OAR 340-028-1940**  
**Significant Monitoring Concentrations**

- (i) Carbon monoxide - 575 ug/m<sup>3</sup>, 8 hour average;
  - (ii) Nitrogen dioxide - 14 ug/m<sup>3</sup>, annual average;
  - (iii) Suspended Particulate Matter:
    - (I) TSP - 10 ug/m<sup>3</sup>, 24 hour average;
    - (II) PM<sub>10</sub> - 10 ug/m<sup>3</sup>, 24 hour average;
  - (iv) Sulfur dioxide - 13 ug/m<sup>3</sup>, 24 hour average;
  - (v) Ozone - Any net increase of 100 tons/year or more of VOCs from a source or modification subject to PSD requires an ambient impact analysis, including the gathering of ambient air quality data;
  - (vi) Lead - 0.1 ug/m<sup>3</sup>, 24 hour average;
  - (vii) Mercury - 0.25 ug/m<sup>3</sup>, 24 hour average;
  - (viii) Beryllium - 0.0005 ug/m<sup>3</sup>, 24 hour average;
  - (ix) Fluorides - 0.25 ug/m<sup>3</sup>, 24 hour average;
  - (x) Vinyl chloride - 15 ug/m<sup>3</sup>, 24 hour average;
  - (xi) Total reduced sulfur - 10 ug/m<sup>3</sup>, 1 hour average;
  - (xii) Hydrogen sulfide - 0.04 ug/m<sup>3</sup>, 1 hour average;
  - (xiii) Reduced sulfur compounds - 10 ug/m<sup>3</sup>, 1 hour average.
- (D) When PM<sub>10</sub> preconstruction monitoring is required by this section, at least four months of data shall be collected including the season(s) which the



Department judges to have the highest PM<sub>10</sub> levels. PM<sub>10</sub> shall be measured in accordance with 40 CFR part 50, Appendix J (July 1, 1991[3]6).

- (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. 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 EPA 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;
  - (b) The Federal Land Manager shall be provided an opportunity in accordance with OAR 340-028-1910(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 or modification would not cause or contribute to 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 of a proposed new major source or major modification in the Medford Ashland Maintenance Area which will emit VOCs shall obtain a portion of the growth margin or offsets equal to the amount of any increase in its PSEL. 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.~~ Except as provided in OAR 340-028-1935(6), this rule does not apply to sources of a maintenance pollutant in a designated ozone or carbon monoxide maintenance area with respect to the maintenance pollutant.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department.]

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; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0245, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93

### Exemptions

#### 340-028-1950

- (1) 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 shall comply with OAR 340-028-1930(1) and (2) or OAR 340-028-1940(1), whichever is applicable, but are exempt from the remaining requirements of OAR 340-028-1930 and OAR 340-028-1940 provided that the source or modification would not impact a Class I area or an area where an applicable requirement is known to be violated.
- (2) Proposed increases in hours of operation or production rates which would cause emission increases above the levels allowed in a permit and would not involve a physical change in the source may be exempted from the requirement of OAR 340-028-1940(1) 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.
- (3) Also refer to OAR 340-028-1940(3) for exemptions pertaining to sources smaller than the Federal Size-Cutoff Criteria.
- (4) Emissions of hazardous air pollutants that are subject to a MACT standard under OAR 340-032-0500 or OAR 340-032-4500 shall not be subject to OAR 340-028-1940.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0250, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93; DEQ 22-1995, f. & ef. 10-6-95

### Baseline for Determining Credit for Offsets

### 340-028-1960

- (1) The baseline for determining credit for emission offsets shall be the PSEL established pursuant to OAR 340-028-1000 through 340-028-1040 or, in the absence of a PSEL, 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, or permit condition shall not be used for offsets.
- (4) Approval of offsets shall not exempt the ~~new~~proposed major sources or major modifications from BACT, LAER, NSPS and National Emission Standards for Hazardous Air Pollutants (NESHAPS) where required.
- (5) Offsets, including offsets from mobile and area source categories, shall be quantifiable and enforceable before the ACDP is issued and shall be demonstrated to remain in effect throughout the life of the proposed source or modification.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0255, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93

### Requirements for Net Air Quality Benefit

**340-028-1970** Demonstrations of net air quality benefit for offsets shall include the following:

- (1) A demonstration shall 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 **40 CFR Part 51, Appendix W, "Guideline on Air Quality Models (Revised)"** (~~last amended by 58 FR 38816, July 20, 1993~~).
- (2) Offsets for VOCs or nitrogen oxides shall be within the same nonattainment area or maintenance area as the proposed source. Offsets for particulate matter, PM<sub>10</sub>, sulfur dioxide, carbon monoxide, nitrogen dioxide, lead, and other pollutants shall be within the area of significant air quality impact.
- (3) Except as provided in Section (6) of this rule, ~~new~~ major sources or major modifications shall meet the following offset requirements:
  - (a) within a designated nonattainment area or maintenance area, the offsets shall provide reductions which are equivalent or greater than the proposed increases. The offsets shall 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 or maintenance area, owners or operators of ~~new~~proposed major sources or major modifications which have a significant air

quality impact on the nonattainment area or maintenance area shall provide emission offsets which are sufficient to reduce impacts to levels below the significant air quality impact level within the nonattainment area or maintenance area;

- (c) within an ozone nonattainment area or ozone maintenance area, owners or operators of ~~new~~ proposed major sources or major modifications which emit VOCs 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 or ozone maintenance area, owners or operators of ~~new~~ proposed major sources or major modifications which emit VOCs 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 or maintenance area.
- (4) The emission reductions shall be of the same type of pollutant as the emissions from the new source or modification. Sources of PM<sub>10</sub> shall be offset with particulate in the same size range.
- (5) The emission reductions shall be contemporaneous, that is, the reductions shall 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 340-028-1980, 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.
- (6) Special Requirements for Medford Maintenance Area for Ozone. Requirements for NO<sub>x</sub> offsets in Section (3) of this rule do not apply to proposed major sources or major modifications in the Medford Maintenance Area for Ozone or within 30 kilometers of the Medford Maintenance Area for Ozone. VOC offsets in the Medford Maintenance Area must be equal to or greater than the proposed increase.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 8-1988, f. & cert. ef. 5-19-88 (and corrected 5-31-88); DEQ 27-1992, f. & cert. ef. 11-12-92; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0260, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93

### **Emission Reduction Credit Banking**

**340-028-1980** 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 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 shall 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 PSEL established pursuant to OAR 340-028-1000 through 340-028-1040.
- (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 two years for contemporaneous offsets as provided in OAR 340-028-1970(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 be applicable to those shutdowns or curtailments which are included in an approved specific plan for use as offsets within the same source containing the shutdown or curtailment. Such plan shall be submitted to the Department and receive written approval within two years 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 Division 14 of this Chapter or 340-028-2200 through 340-028-2280.
- (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 shall 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 shall be at least in the amount specified in Table 2 of OAR 340-028-0110
  - (b) In Lane County, LRAPA may adopt lower levels.
- (7) Requests for emission reduction credit banking shall be submitted to the Department and shall 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 permits and, if necessary, 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 shall be notified in writing. Any use of emission reduction credits shall be compatible with local comprehensive plans, 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 EQC under OAR 340-020-047.]

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; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0265, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93

#### **Fugitive and Secondary Emissions**

**340-028-1990** 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 shall 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 EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0270, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93

#### **Visibility Impact**

**340-028-2000** ~~[New]~~ Proposed major sources or major modifications located in Attainment, Unclassified, ~~[or]~~ Nonattainment or Maintenance Areas ~~[shall]~~ must 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 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) Owners or operators of proposed sources which are exempted under OAR 340-028-1940(3) 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 340-028-1910(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 shall 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:
- (a) The owner or operator of a proposed major source or major modification which emit more than 250 tons per year of Particulate Matter, SO<sub>2</sub> or NO<sub>2</sub> shall submit with the application, subject to approval of the Department, an analysis of visibility in or 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 of 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 would be adequate to determine that the source or 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 plan;
  - (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 340-028-1940(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 EPA 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) The Federal Land Manager shall be provided an opportunity in accordance with OAR 340-028-1910(3) to present a demonstration that the emissions from the proposed source or 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 or modification would not cause or contribute to 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 EQC under OAR 340-020-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 18-1984, f. & ef. 10-16-84; DEQ 14-1985, f. & ef. 10-16-85; DEQ 4-1993, f. & cert. ef. 3-10-93; Renumbered from 340-020-0276, DEQ 13-1993, f. & ef. 9-24-93; DEQ 19-1993, f. & ef. 11-4-93



### **Emission Offsets**

**340-030-0111** In the Medford-Ashland AQMA, emission offsets required in accordance with OAR 340-028-1930 or 340-028-1935 for new or modified sources shall provide reductions in emissions equal to 1.2 times the emission increase from the new or modified 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 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 22-1989, f. & cert. ef. 9-26-89; AQ 1-1993, f. & ef. 3-9-93; DEQ 4-1995, f. & ef. 2-17-95

### **Definitions**

**340-032-0120** As used in this Division:

- (1) "Accidental Release" means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.
- (2) "Act" and "FCAA" mean the Federal Clean Air Act, Public Law 88-206 as last amended by Public Law 101-549.
- (3) "Actual Emissions" means the mass emissions of a pollutant from an emissions source during a specified time period.
  - (a) Actual emissions shall equal the average rate at which the source actually emitted the pollutant and which is representative of normal source operation. Actual emissions shall be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor in combination with the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the specified time period.
  - (b) For any source which had not yet begun normal operation in the specified time period, actual emissions shall equal the potential to emit of the source.
  - (c) For purposes of OAR 340-032-0300 through OAR 340-032-0380 actual emissions shall equal the actual rate of emissions of a pollutant, but does not include excess emissions from a malfunction, or startups and shutdowns associated with a malfunction.
- (4) "Area Source" means any stationary source which has the potential to emit hazardous air pollutants but is not a major source of hazardous air pollutants.
- (5) "Artificially or Substantially Greater Emissions" means abnormally high emissions such as could be caused by equipment malfunctions, accidents, unusually high production or operating rates compared to historical rates, or other unusual circumstances.
- (6) "Base Year Emissions" for purposes of Early Reductions only (OAR 340-032-0300), means actual emissions in the calendar year 1987 or later.
- (7) "Commission" means the Oregon Environmental Quality Commission.
- (8) "Department" means the Department of Environmental Quality.

- (9) "Director" means the Director of the Department or Regional authority, and authorized deputies or officers.
- (10) "Early Reductions Unit" means a single emission point or group of emissions points defined as a unit for purposes of an alternative emissions limit issued under OAR 340-032-0300 through 340-032-0380.
- (11) "Effective Date of the Program" means the date that the EPA approves the Oregon Title V Operating Permit program submitted by the Department on a full or interim basis. In case of a partial approval, the "effective date of the program" for each portion of the program is the date of EPA approval of that portion.
- (12) "Emission" means a release into the atmosphere of any regulated pollutant or air contaminant.
- (13) "Emissions Limitation" and "Emissions Standard" mean a requirement adopted by the Department or regional authority, or proposed or promulgated by the Administrator of the EPA, 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.
- (14) "Emissions Unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant.
- (a) A part of a stationary source is any machine, equipment, raw material, product, or by-product that produces or emits air pollutants. An activity is any process, operation, action, or reaction (e.g., chemical) at a stationary source that emits air pollutants. Except as described in subsection (d) of this section, parts and activities may be grouped for purposes of defining an emissions unit provided the following conditions are met:
- (A) The group used to define the emissions unit may not include discrete parts or activities to which a distinct emissions standard applies or for which different compliance demonstration requirements apply; and
- (B) The emissions from the emissions unit are quantifiable.
- (b) Emissions units may be defined on a pollutant by pollutant basis where applicable.
- (c) The term "emissions unit" is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.
- (d) Parts and activities shall not be grouped for purposes of determining emissions increases from an emissions unit under OAR 340-028-1930, 340-028-1935, 340-028-1940, or 340-028-2270, or for purposes of determining the applicability of a New Source Performance Standard (NSPS).
- (15) "EPA" means the Administrator of the United States Environmental Protection Agency or the Administrator's designee.
- (16) "EPA Conditional Method" means any method of sampling and analyzing for air pollutants which has been validated by the EPA but which has not been published as an EPA reference method.
- (17) "EPA Reference Method" means any method of sampling and analyzing for an air pollutant as described in **40 CFR Part 60, 61, or 63** (July 1, 1993).

- (18) "Equipment leaks" means leaks from pumps, compressors, pressure relief devices, sampling connection systems, open ended valves or lines, valves, connectors, agitators, accumulator vessels, and instrumentation systems in hazardous air pollutant service.
- (19) "Existing Source" means any source, the construction of which commenced prior to proposal of an applicable standard under sections 112 or 129 of the FCAA.
- (20) "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel, including but not limited to ships.
- (21) "Fugitive Emissions" means emissions of any air contaminant that escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct or equivalent opening.
- (22) "Generally Available Control Technology (GACT)" means an alternative emission standard promulgated by EPA for non-major sources of hazardous air pollutants which provides for the use of control technology or management practices which are generally available.
- (23) "Hazardous Air Pollutant" (HAP) means an air pollutant listed by the EPA pursuant to section 112(b) of the FCAA or determined by the Commission to cause, or reasonably be anticipated to cause, adverse effects to human health or the environment.
- (24) "High-Risk Pollutant" means any air pollutant listed in Table 2 of OAR 340-032-0340 for which exposure to small quantities may cause a high risk of adverse public health effects.
- (25) "Major Source" means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The EPA may establish a lesser quantity, or in the case of radionuclides different criteria, for a major source on the basis of the potency of the air pollutant, persistence, potential for bioaccumulation, other characteristics of the air pollutant, or other relevant factors.
- (26) "Manufacture" as used in OAR 340-032-0240 means to produce, prepare, compound, or import a substance. This includes the coincidental production of a substance as a byproduct or impurity.
- (27) "Maximum Achievable Control Technology (MACT)" means an emission standard applicable to major sources of hazardous air pollutants that requires the maximum degree of reduction in emissions deemed achievable for either new or existing sources.
- (28) "Modification" means any physical change in, or change in the method of operation of, a major source that increases the actual emissions of any HAP emitted by such source by more than a de minimis amount or which results in the emission of any hazardous air pollutant not previously emitted by more than a de minimis amount.
- (29) "New Source" means a stationary source, the construction of which is commenced after proposal of a federal MACT or the effective date of this Division, whichever is earlier.
- (30) "Not Feasible to Prescribe or Enforce a Numerical Emission Limit" means a situation in which the Department determines that a pollutant or stream of pollutants listed in OAR 340-032-0130 cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any state or federal law or regulation; or the application of measurement technology to a particular source is not practicable due to technological or economic limitations.

- (31) "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 whatsoever.
- (32) "Potential to Emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air 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 is enforceable by the EPA. This section does not alter or affect the use of this section for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations promulgated thereunder. Secondary emissions shall not be considered in determining the potential to emit of a source.
- (33) "Process" as used in OAR 340-032-0240 means the preparation of a substance, including the intentional incorporation of a substance into a product after its manufacture, for distribution in commerce.
- (34) "Regional Authority" means Lane Regional Air Pollution Authority.
- (35) "Regulated Air Pollutant" as used in this Division means:
- (a) Any pollutant listed under OAR 340-032-0130 or OAR 340-032-5400; or
  - (b) Any pollutant that is subject to a standard promulgated pursuant to Section 129 of the Act.
- (36) "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 shall be specific, well defined, and 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 offsite support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a source or modification.
- (37) "Section 111" means that section of the FCAA that includes standards of performance for new stationary sources.
- (38) "Section 112(b)" means that subsection of the FCAA that includes the list of hazardous air pollutants to be regulated.
- (39) "Section 112(d)" means that subsection of the FCAA that directs the EPA to establish emission standards for sources of hazardous air pollutants. This section also defines the criteria to be used by EPA when establishing the emission standards.
- (40) "Section 112(e)" means that subsection of the FCAA that directs the EPA to establish and promulgate emissions standards for categories and subcategories of sources that emit hazardous air pollutants.
- (41) "Section 112(n)" means that subsection of the FCAA that includes requirements for the EPA to conduct studies on the hazards to public health prior to developing emissions standards for specified categories of hazardous air pollutant emission sources.

- (42) "Section 112(r)" means that subsection of the FCAA that includes requirements for the EPA promulgate regulations for the prevention, detection and correction of accidental releases.
- (43) "Section 129" means that section of the FCAA that requires EPA to promulgate regulations for solid waste combustion.
- (44) "Solid Waste Incineration Unit" as used in this Division shall have the same meaning as given in Section 129(g) of the FCAA.
- (45) "Stationary Source":
  - (a) As used in OAR 340-032-0100 through 340-032-5000 and 340-032-5500 through 340-032-5650 means any building, structure, facility, or installation which emits or may emit any regulated air pollutant.
  - (b) As used in OAR 340-032-5400 means any buildings, structures, equipment, installations, or substance emitting stationary activities:
    - (A) That belong to the same industrial group;
    - (B) That are located on one or more contiguous properties;
    - (C) That are under the control of the same person (or persons under common control); and
    - (D) From which an accidental release may occur.
- (46) "Use" as used in OAR 340-032-0240 means the consumption of a chemical that does not fall under the definitions of "manufacture" or "process". This may include the use of a chemical as a manufacturing aid, cleaning or degreasing aid, or waste treatment aid.

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 13-1993, f. & ef. 9-24-93; DEQ 18-1993, f. & ef. 11-4-93; DEQ 24-1994, f. & ef. 10-28-94; DEQ 22-1995, f. & ef. 10-6-95

**Attachment B**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans

Supporting Procedural Documentation

ATTACHMENT B1  
NOTICE OF PROPOSED RULEMAKING HEARING

Department of Environmental Quality

OAR Chapter 340-028, 030, 032

DATE: TIME: LOCATION:

September 17, 1996 4:00 p.m. DEQ Headquarters Room 3A, 811 SW 6th Ave., Portland, OR  
97204

HEARINGS OFFICER(s): Ben Allen

STATUTORY AUTHORITY: ORS 468.020, 468A.025

or OTHER AUTHORITY:

STATUTES IMPLEMENTED: ORS 468A.025

ADOPT: 340-028-1935

AMEND: 340-028-1900, 1910, 1930, 1940, 1960, 1970, 2000; 340-030-0111; 340-032-0120

REPEAL:

RENUMBER: AMEND & RENUMBER:

(prior approval from  
Secretary of State  
REQUIRED)

- This hearing notice is the initial notice given for this rulemaking action.  
 This hearing was requested by interested persons after a previous rulemaking notice.  
 Auxiliary aids for persons with disabilities are available upon advance request.

SUMMARY:

This proposal would establish major New Source Review (NSR) requirements for areas that have been redesignated from nonattainment to attainment with federal ambient air quality standards. The changes are needed for the U.S. Environmental Protection Agency (EPA) to approve maintenance plans recently adopted by the EQC. In addition, the proposal includes miscellaneous amendments needed to ensure EPA approval of the NSR program.

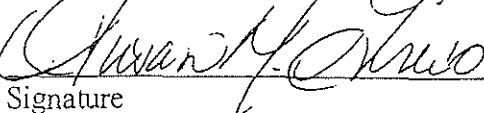
LAST DATE FOR COMMENT: September 23, 1996, 5:00 p.m.

AGENCY RULES COORDINATOR:  
AGENCY CONTACT FOR THIS PROPOSAL:  
ADDRESS:

Susan M. Greco, (503) 229-5213  
Andy Ginsburg  
811 S. W. 6th Avenue  
Portland, Oregon 97204  
(503) 229-5581/1-800-452-4011

TELEPHONE:

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

  
Signature

8/14/96  
Date

**Attachment B2**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans

**Fiscal and Economic Impact Statement**

**Introduction**

The proposed rules and rule amendments would establish major New Source Review (NSR) requirements for areas that have been redesignated from nonattainment to attainment with federal ambient air quality standards. The changes are needed in order for the U.S. Environmental Protection Agency (EPA) to approve maintenance plans recently adopted by the EQC.

Overall, approval of the maintenance plans and redesignation as maintenance areas will result in significant economic savings to businesses in the redesignated areas. Under the proposed rules, control technology costs would be lower in a maintenance area than in a nonattainment area, and an industrial growth allowance could be provided for use in lieu of offsets.

The fiscal and economic impacts of the proposed NSR changes were described in the public notice for the Portland area ozone maintenance plans adopted on July 12, 1996. These impacts are also described below.

**General Public**

The proposed rules do not have direct economic impacts on the general public. However, changes in the major New Source Review program could result in additional employment by making it easier for industrial sources to locate and expand in maintenance areas.

**Small Business**

Some new or expanding small industrial companies, despite their small employee size, may be subject to NSR requirements due to emission increases. The proposed rules would lower costs for those businesses located in a maintenance area. See the large business section.



### **Large Business**

Major new and modified industries in former nonattainment areas are expected to benefit from the change to NSR requirements for maintenance areas in the proposed rules. NSR requirements for nonattainment areas include installation of Lowest Achievable Emission Rate (LAER) control technology and the purchase of emission offsets. LAER can cost over \$10,000 per ton of emission reduced and emission offsets can cost from \$2,000 to \$10,000 per ton. Upon redesignation of an area to maintenance, the LAER requirement will be replaced with Best Available Control Technology (BACT), which generally costs in the range of \$5,000 to \$10,000 per ton reduced. The proposed rules also allow an industrial growth allowance to be provided in a maintenance plan for use in lieu of offsets, which would eliminate the cost of emission offsets. Offsets would be required again if the growth allowance were used up. In addition, LAER and offsets would be required again, at least until a new maintenance plan is approved, if an air quality violation occurs after an area is redesignated from nonattainment to maintenance.

### **Local Governments**

Changes in the major New Source Review program could result in additional employment and tax base by making it easier for industrial sources to locate and expand in the region. These industries may also require utilities and services provided by local governments in the same way that any business locating or expanding in the area would.

### **State Agencies**

Changes in the New Source Review program will not significantly affect the workload of DEQ or other state agencies. No new FTE will be required.

Attachment B 3

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules. The proposed rules and rule amendments would establish major New Source Review (NSR) requirements for areas that have been redesignated from nonattainment to attainment with federal ambient air quality standards. The changes are needed in order for the U.S. Environmental Protection Agency (EPA) to approve maintenance plans recently adopted by the EQC.
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  No

- a. If yes, identify existing program/rule/activity: Air Discharge Permits. Under current procedures, local governments must approve a DEQ land use compatibility statement before an air discharge permit is issued.
- b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes  No  (if no, explain):

- c. If no, 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.

Gregory A. Green  
Division

Supria Taylor  
Intergovernmental Coord.

8/8/96  
Date

**Attachment B4**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

**Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans**

**Questions to be Answered to Reveal  
Potential Justification for Differing from Federal Requirements.**

- 1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?**

Yes. The federal Clean Air Act requires states to adopt major and minor new source review programs. EPA requirements for review of new sources and modifications are codified at 40 CFR Part 51, Subpart I. These rules specify requirements for State Implementation Plan programs addressing nonattainment area new source review (NSR) and attainment area prevention of significant deterioration (PSD).

- 2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?**

The requirements are both performance and technology based with the most stringent controlling.

- 3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?**

The federal NSR and PSD requirements do not directly address one issue that is of concern in Oregon; that is, new source review requirements for maintenance areas. Under the federal requirements, redesignated nonattainment areas are treated like any other attainment area under the PSD program. However, Oregon is relying on the maintenance area new source review requirements to control emission increases from major sources as part of adopted air quality maintenance plans.

- 4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting**

**requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?**

Yes. The proposed rules will clarify applicable requirements for major sources in maintenance areas and those sources that may significantly impact maintenance areas. The maintenance area NSR requirements will reduce emission control technology costs and allow for the use of a growth allowance in lieu of emission offsets in former nonattainment areas.

**5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?**

The maintenance area NSR requirements must be approved by EPA prior to, or concurrently with, redesignation of the Portland area to attainment for ozone and carbon monoxide.

**6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?**

Yes. The proposed rules are a hybrid of the nonattainment area NSR and attainment area PSD programs. The rules will ensure that new major sources and modifications install Best Available Control Technology and that emission increases from these sources do not cause significant air quality impacts. Emission growth will be addressed by including a growth allowance in the applicable maintenance plan or requiring emission offsets.

**7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)**

The maintenance area NSR program establishes uniform requirements for all new major sources and major modifications in a former nonattainment area. These requirements are less stringent than the nonattainment area NSR requirements that apply prior to redesignation, but are more stringent than attainment area NSR requirements.

**8. Would others face increased costs if a more stringent rule is not enacted?**

Yes. Without the maintenance area NSR requirements, emission growth projections for major sources in maintenance areas would be increased and additional emission reductions would be required from other emission sources (e.g. motor vehicles, area sources, existing industry) under the applicable maintenance plans. In addition, major sources in maintenance areas that are below 100 tons/year could be required to comply with a number of PSD requirements (such as pre-construction monitoring) that are unnecessary or inappropriate for maintenance areas.

**9. Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?**

The existing Oregon NSR program contains a number of procedural differences from the federal NSR program, primarily to ensure consistency with Oregon's Plant Site Emission Limit program and to meet federal minor new source review requirements. These differences are maintained in the proposed rules. In addition, like the emission control requirements, the procedural requirements of the proposed maintenance area NSR requirements are a hybrid of the nonattainment area NSR and attainment area PSD programs. For example, new major sources and major modifications in maintenance areas will be required to meet source compliance and alternative analysis provisions of nonattainment area NSR but, in most cases, will not be required to meet monitoring and modeling requirements of attainment area PSD. The reasons for these differences are described in Attachment E.

**10. Is demonstrated technology available to comply with the proposed requirement?**

Yes. The proposed control technology requirements for maintenance areas are the same as existing requirements under attainment area PSD.

**11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?**

Yes. The proposed rules continue to provide an incentive for sources to prevent emission increases in excess of a significant emission rate. The proposed rules also eliminate, in most cases, monitoring and modeling requirements that are not needed in former nonattainment areas. In addition, the proposed rules provide for a growth allowance program, which is more cost-effective than case-by-case emission offsets.

**Attachment B5**

**State of Oregon  
Department of Environmental Quality**

**Memorandum**

**Date:** August 12, 1996  
**To:** Interested and Affected Public  
**Subject:** Rulemaking Proposal and Rulemaking Statements - New Source Review Requirements for Air Quality Maintenance Areas

This memorandum contains information on a proposal by the Department of Environmental Quality (DEQ) to adopt new rules/rule amendments regarding New Source Review requirements for air quality maintenance areas. Pursuant to ORS 183.335, this memorandum also provides information about the Environmental Quality Commission's (EQC) intended action to adopt a rule.

This proposal would establish major New Source Review requirements for areas that have been redesignated from nonattainment to attainment with federal ambient air quality standards. The changes are needed for the U.S. Environmental Protection Agency (EPA) to approve maintenance plans recently adopted by the EQC. The changes were described in detail as part of the public notice for the maintenance plans, and were approved in concept by the EQC through adoption of the maintenance plans. This proposal would establish the actual rule language to implement the changes. In addition, the proposal includes miscellaneous amendments needed to ensure EPA approval of the NSR program.

The Department has the statutory authority to address this issue under Oregon Revised Statutes (ORS) 468A.025, which gives the EQC authority to establish emission standards.

**What's in this Package?**

Attachments to this memorandum provide details on the proposal as follows:

- |              |  |
|--------------|--|
| Attachment A | The official statement describing the fiscal and economic impact of the proposed rule. (required by ORS 183.335)                               |
| Attachment B | A statement providing assurance that the proposed rules are consistent with statewide land use goals and compatible with local land use plans. |
| Attachment C | Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.  |
| Attachment D | A Table of Contents of the proposed rule and rule amendments.  |
| Attachment E | Portland AQMA Ozone Maintenance Plan, Appendix D1-16, New Source Review Program Changes  |

Memo To: Interested and Affected Public  
August 12, 1996

### **Hearing Process Details**

You are invited to review these materials and present written or oral comment in accordance with the following:

**Date:** September 17, 1996

**Time:** 4:00 p.m.

**Place:** DEQ Headquarters  
811 SW 6th Ave.  
Portland, OR 97204

**Deadline for submittal of Written Comments:** September 23, 1996, 5:00 p.m.

In accordance with ORS 183.335(13), no comments from any party can be accepted after the deadline for submission of comments has passed. Thus if you wish for your comments to be considered by the Department in the development of these rules, your comments must be received prior to the close of the comment period. The Department recommends that you submit your comments as early as possible to allow for adequate review and evaluation.

Ben Allen will be the Presiding Officer at the hearing. Following close of the public comment period, the Presiding Officer will prepare a report which summarizes the oral testimony presented and identifies written comments submitted. The Environmental Quality Commission (EQC) will receive a copy of the Presiding Officer's report. The public hearing will be tape recorded, but the tape will not be transcribed.

If you wish to be kept advised of this proceeding and receive a copy of the recommendation that is presented to the EQC for adoption, you should request that your name be placed on the mailing list for this rulemaking proposal.

### **What Happens After the Public Comment Period Closes**

The EQC will consider the Department's recommendation for rule adoption during one of their regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is November 15, 1996. This date may be delayed if needed to provide additional time for evaluation and response to testimony received in the hearing process. You will be notified of the time and place for final EQC action if you present oral testimony at the hearing or submit written comment during the comment period or ask to be notified of the proposed final action on this rulemaking proposal.

Memo To: Interested and Affected Public  
August 12, 1996

The EQC expects testimony and comment on proposed rules to be presented **during** the hearing process so that full consideration by the Department may occur before a final recommendation is made. In accordance with ORS 183.335(13), no comments can be accepted after the public comment period has closed by either the EQC or the Department. Thus the EQC strongly encourages people with concerns regarding the proposed rule to communicate those concerns to the Department prior to the close of the public comment period so that an effort may be made to understand the issues and develop options for resolution where possible.

### **Background on Development of the Rulemaking Proposal**

#### **Why is there a need for the rule?**

A number of nonattainment areas now meet ambient air quality standards, and the EQC adopted maintenance plans and redesignation requests for the first two of these areas. The existing New Source Review (NSR) rules include requirements for nonattainment areas and attainment areas but lack procedures for proposed major sources and major modifications in maintenance areas. The Portland area maintenance plans for ozone and carbon monoxide include a description of the maintenance area NSR requirements and a schedule to adopt rule amendments by November, 1996, to implement these requirements. The amendments must be adopted in November in order for EPA to approve the maintenance plans on schedule.

#### **How was the rule developed**

The initial concept for the NSR revisions was developed through the maintenance plan preparation process. This process included review by a number of advisory committees, the Oregon Legislature, and local governments. The changes to the NSR program were described in detail in the public notice for the Portland area ozone and carbon monoxide maintenance plans, and were approved by the EQC in concept through adoption of the maintenance plans. Attachment E, which provides a description of the NSR program changes, is a copy of Appendix D1-16 from the Portland area ozone maintenance plan.

#### **Whom does this rule affect including the public, regulated community or other agencies, and how does it affect these groups?**

The NSR program applies to proposed major sources and major modifications to existing sources of regulated air pollutants. Proposed major sources and major modifications are generally industrial sources with emission increases at or above a significant emission rate as defined in existing rules. The proposed changes establish NSR requirements for proposed major sources and major modifications in an ozone or carbon monoxide maintenance area (i.e. former nonattainment area).



Memo To: Interested and Affected Public  
August 12, 1996

Nonattainment area NSR requires Lowest Achievable Emission Rate (LAER) control technology and emission offsets to provide a net air quality benefit. Attainment area NSR, known as Prevention of Significant Deterioration (PSD), requires Best Available Control Technology (BACT) and an air quality assessment. The proposed maintenance area provisions are a hybrid of the two, including BACT and offsets. In addition, the proposal allows use of a growth allowance in lieu of offsets if provided in the applicable maintenance plan. Sources with emissions over 250 tons per year and certain sources with emissions over 100 tons per year would be subject to additional PSD requirements. Finally, the proposal would establish contingency plan requirements and other procedural requirements for NSR in maintenance areas. See Attachment E for a complete description of the NSR program changes.

Although the proposed rules were developed in conjunction with the Portland area maintenance plans, the rules will also apply to other ozone and carbon monoxide areas when they are redesignated from nonattainment to attainment. The proposed rules do not apply to  $PM_{10}$ , which is the other nonattainment pollutant in Oregon, because the Department has not yet developed redesignation requests for any  $PM_{10}$  nonattainment areas. However, the Department intends to propose maintenance area NSR requirements for  $PM_{10}$  when the first  $PM_{10}$  maintenance plan is developed.

While the proposed rules establish uniform NSR requirements that would apply to all ozone and carbon monoxide maintenance areas, they are designed to accommodate special provisions that may be adopted in conjunction with the maintenance plan for a specific area. Also, the proposed rules leave certain decisions, such as the provision of a growth allowance, to the maintenance planning process where local stakeholders are represented.

In addition to establishing the maintenance area NSR requirements, the proposal includes a number of changes to definitions and other NSR provisions needed to support the maintenance area NSR provisions or needed for EPA approval of the NSR program. In particular, the proposal includes a revision required by EPA to the existing procedure for conducting an alternative analysis under nonattainment area NSR. The proposal also includes an addition to the Significant Emission Rate table required by EPA for emissions from major new and modified municipal solid waste landfills.

#### **How will the rule be implemented**

Implementation will be through the existing ACDP and Title V permit programs. The air quality rules and the permitting manual will be updated to incorporate the new procedures for maintenance areas.

Memo To: Interested and Affected Public  
August 12, 1996

**Are there time constraints**

The amendments must be adopted in November in order for EPA to approve the Portland area maintenance plans on schedule. Delay would require rebalancing the maintenance plans and could result in a need to extend the maintenance plans for an additional year.

**Contact for more information**

If you would like more information on this rulemaking proposal, obtain a copy of the proposed rule language, or would like to be added to the mailing list, please contact Andy Ginsburg at DEQ, 811 SW 6th Ave., Portland, OR 97204. Telephone: 503/229-5581; Facsimile: 503/229-5675.

**Attachment C**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans  
  
Presiding Officer's Report on Public Hearing

**Date:** September 18, 1996

**To:** Environmental Quality Commission  
**From:** Benjamin Allen *B.M.A.*  
**Subject:** Presiding Officer's Report for Rulemaking Hearing

**Hearing Date and Time:** September 17, 1996, beginning at 4:00 PM

**Hearing Location:** DEQ Headquarters, Portland

**Title of Proposal:** New Source Review Requirements for Maintenance Areas; and  
Requirements for New and Existing Municipal Solid Waste Landfills

The rulemaking hearing on the above titled proposal was convened at 4:15 PM. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

Two people attended. No one signed up to give testimony.

Prior to receiving testimony, Benjamin Allen briefly explained the specific rulemaking proposal, and the reason for the proposal.

**Summary of Testimony**

No one presented oral or written testimony at the hearing.

The hearing was closed at 4:50 PM.

**Index of Written Comments**  
**Received by the Public Comment Deadline (September 23, 1996, 5:00 p.m.)**

1. David C. Bray, Environmental Protection Agency Region 10, received 9/16/96
2. David Harlan, Mid-Columbia Economic Development District, received 9/16/96
3. Sharon Genasci, received 9/23/96
4. Thomas R. Wood, Stoel Rives, received 9/23/96

**Attachment D**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

**Rulemaking Proposal**  
for  
**New Source Review Amendments for Air Quality Maintenance Plans**

**Department's Evaluation of Public Comment**

1. David C. Bray, Environmental Protection Agency (EPA) Region 10

**Comment 1:** EPA finds that the proposed rule would be approvable as revisions to the Oregon SIP provided the following issues are addressed in the final rule:

- a. Ensure coordination between the "additional requirements for listed sources" in OAR 340-028-1935(6) and the exemption from Prevention of Significant Deterioration (PSD) for sources of the maintenance pollutant in OAR 340-028-1940(8).
- b. Revise the alternative analysis in OAR 340-028-1930(5) and 340-028-1935(5) to be consistent with section 173 of the Clean Air Act.

**Response:** These changes were made to the draft rule prior to proposal and will be included in the proposal recommended to the Environmental Quality Commission (EQC) for adoption.

**Comment 2:** The following items should be addressed by the Department in the near future but do not affect the approvability of the proposed rules:

- a. The exemption from NSR for increases in hours of operation or production in OAR 340-028-1950(2) should be clarified to ensure that it is consistent with 40 CFR 51.165(a)5(ii) and 51.166(r)(2). Because this exemption interacts with the Plant Site Emission Limit (PSEL) rules, it can be addressed in the upcoming comprehensive update of the NSR/ PSEL/Emission Trading rules.
- b. The Department should update program guidance to clarify the meaning of OAR 340-028-1940(2)(d) regarding the use of offsets to meet the Air Quality Analysis requirements of PSD. The provision requires a showing that the offset provides a net air quality benefit in accordance with OAR 340-028-1970 which, in turn, requires modeling for particulate matter offsets. Moreover, the provision only applies to OAR 340-028-1940(2) and does not exempt the source from other

requirements which may require modeling, such as the "Additional Impact Analysis" in OAR 340-028-1940(6), "Sources Impacting Class I Areas" in OAR 340-028-1940(7), or visibility requirements in OAR 340-028-2000.

**Response:** The Department will include these issues in the upcoming comprehensive update of the NSR/PSEL/Emission Trading rules and will update program guidance to clarify the meaning of OAR 340-028-1940(2)(d).

2. David Harlan, Mid-Columbia Economic Development District

**Comment:** The Mid-Columbia Economic Development District is concerned about the potential visibility impact in the Columbia Gorge due to transport of pollutants from the Portland metropolitan area under the proposed NSR rule revisions. By lessening requirements for the control of ozone precursors (VOC and NO<sub>x</sub>), and carbon monoxide, increased particulate emissions will occur which will affect visibility. In addition, nitrogen dioxide gas directly absorbs light and VOC and NO<sub>x</sub> form light scattering and absorbing secondary particles in the atmosphere in a time frame commensurate with their transport through the Columbia Gorge. We request that the Department evaluate visibility and economic impacts to the Columbia Gorge before adopting these rules.

**Response:** The Department does not agree that the proposed rules will result in a visibility impact on the Columbia Gorge.

First, the proposed NSR requirements for maintenance areas are a component of the ozone maintenance plan for the Portland-Vancouver Air Quality Maintenance Area (AQMA). This maintenance plan will result in substantial reductions in VOC and NO<sub>x</sub> emissions from the AQMA. Summertime VOC emissions are projected to decline from 307 tons/day in 1996 to 287 tons/day in 2006. NO<sub>x</sub> emissions are projected to decline from 161 tons/day in 1996 to 147 tons/day in 2006. These reductions will result from new emission reduction strategies despite significant population growth in the region. These emission forecasts include a growth allowance for major new and modified industry that would trigger NSR. If the growth allowance is consumed, further emission growth from major new and modified industry would have to be offset by reductions in existing emission sources. Thus, in the context of the maintenance plan, emissions of VOC and NO<sub>x</sub> from the Portland metropolitan area under the proposed rules will be much lower than they are today.

Second, it does not follow that lower control requirements for ozone precursors and carbon monoxide from major sources will result in increased visible emissions. Under the proposed rules, major new and modified sources of ozone precursors and carbon monoxide will be subject to Best Available Control Technology (BACT) instead of the current requirement for Lowest Achievable Emission Rate (LAER) technology. LAER requires the most stringent emission

limitation achievable for the pollutant, and does not consider cost. BACT requires the maximum reduction achievable taking into account energy, environmental and economic impacts and other costs. In some cases, BACT is equal to LAER. In other cases, BACT is less stringent than LAER because of the energy, environmental or economic impacts. Emissions of other pollutants could be one reason that BACT is less stringent than LAER. If, for example, LAER for VOC emissions at a particular facility would require a control technology that would significantly increase visible emissions, the Department might set BACT at a lower level to avoid that impact. While the reverse is also possible, it is clearly not the case that BACT set for ozone precursors or carbon monoxide would necessarily result in higher particulate emissions than would LAER.

Third, sources subject to NSR for maintenance areas will continue to be subject to visibility impact requirements under OAR 340-028-2000. This rule requires the owner or operator to demonstrate that a proposed source or modification does not cause or contribute to significant impairment of visibility within any Class I area. Because of the proximity of the Mt. Hood Wilderness Class I area to the Portland AQMA and to the Columbia Gorge, this provision would prevent the permitting of sources in the Portland AQMA that cause a significant impairment of visibility.

Finally, the Department has not determined that emissions from the Portland area in general are a significant cause of visibility impairment in the Columbia Gorge. The Department is continuing to evaluate the complex causes of visibility impairment in the Gorge, and welcomes the continued participation of the Mid-Columbia Economic Development District and other interested parties in this effort.

3. Sharon Genasci

**Comment:** A report submitted to the Department by Lisa Brenner and Sharon Genasci entitled, "Air Quality in the Northwest District of Portland" summarizes the authors concerns about the airshed in Northwest Portland. The report, submitted to the Department on September 11, 1996, evaluates the Department's 1987-88 Portland Air Toxics Monitoring Study, details concerns about health impacts of air toxics and  $PM_{10}$ , and recommends further analysis.

**Response:** The NSR program is primarily designed to protect criteria pollutant ambient air quality, and not to address air toxics. Air toxics are primarily addressed through the Hazardous Air Pollutants rules in OAR chapter 340, Division 32, as well as the policies and requirements in OAR 340-028-0600(3) and 340-028-0640(5). In addition, the Department is working with its Industrial Source Advisory Committee (ISAC) to evaluate its air toxics program and to recommend short term and long term approaches to controlling air toxics.

While the NSR program does address PM<sub>10</sub>, the proposed maintenance area NSR program only applies to ozone precursors and carbon monoxide. Because the Portland area is classified as attainment for PM<sub>10</sub>, a major new or modified source of PM<sub>10</sub> would be subject to existing PSD requirements. These rules include, among other things, a requirement to demonstrate that PM<sub>10</sub> emissions do not cause or contribute to a significant air quality impact in the area surrounding the proposed source.

The Department's Northwest Regional Office is working directly with the commentors, and will evaluate and respond to the issues raised in their report on Air Quality in the Northwest District of Portland.

4. Thomas R. Wood, Stoel Rives

**Comment 1:** Compliance Demonstration. The requirement for a compliance "demonstration" in proposed OAR 340-028-1935(2) and existing rules OAR 340-028-1920 and 340-028-1930(2) should be replaced with a compliance "certification." Given experience with Title V, it is more appropriate to require that sources only certify compliance. A compliance demonstration would be a monumental task, and the federal language is based on a certification and not a demonstration. It would be bad policy to perpetuate the existing language and this would be an excellent opportunity to bring the existing language back into line with the federal language.

**Response:** Although the Department believes that the compliance demonstration under NSR does not present the same concerns as the compliance demonstration under Title V, the Department is open to evaluating the use of a certification instead of a demonstration. However, because this change could result in SIP approvability issues and is not necessary for approval of the NSR maintenance area rules, the Department believes it would be better to consider this issue as part of the upcoming comprehensive update to the NSR/PSEL/Trading rules. During that process, there will be an opportunity for all affected parties to comment on this issue.

**Comment 2:** Alternatives Analysis. The commentor questions the basis for the two substantive changes proposed to the alternatives analysis in OAR 340-028-1930(5) and proposed to be mirrored in OAR 340-028-1935(5). First, the current language only requires an alternatives analysis for pollutants above the significant emissions rate (SER), whereas the proposed language would require the analysis to address all pollutants, even those that are not nonattainment or maintenance pollutants or that increase by less than the SER. Second, the exemption for sources of TSP is too broad in that it would exempt sources of other pollutants above the SER from conducting an alternatives analysis, and too narrow in that it would require an alternatives analysis for TSP in any portion of the state other than a designated TSP nonattainment area. The original language in OAR 340-



028-1930(5)(a) should be retained and the word “only” should be added to OAR 340-028-1935(5)(c) so that it refers to sources “subject to this rule *only* due to emissions of particulate matter \*\*\*.”

**Response:** This change was made in direct response to a comment from EPA (see David C. Bray, comment 1.b. above). Section 173(a)(5) of the Clean Air Act requires the alternatives analysis for proposed *sources*, not just for emissions above the SER from these sources. The analysis is required to consider alternative sites, sizes, production processes and control techniques to show that the benefits of the proposed *source* outweigh the environmental and social costs. Most of these considerations must be evaluated for the source as a whole, not for certain pollutants individually. EPA has informed the Department that the changes in OAR 340-028-1930(5)(a) are required for the NSR program to be approvable. The exemption in OAR 340-028-1930(5)(c) is reworded from existing language to be consistent with the changes in OAR 340-028-1930(5)(a). Because all of rule OAR 340-028-1930 only applies to nonattainment areas, Subsection (5)(c) could not be interpreted to require an alternatives analysis for a source locating outside of a nonattainment area. However, the Department agrees that the exemption could be interpreted too broadly to exempt sources from the alternatives analysis if they are located in an area that is designated nonattainment for TSP and another pollutant. The Department will make the suggested change to Subsection (5)(c).

**Comment 3:** BACT in Maintenance Areas. OAR 340-028-1935(1) should read “for each maintenance pollutant emitted at or above the-a significant emission rate.”

**Response:** This change is not necessary because “Significant Emission Rate” is defined as “emission rates equal to *or greater than* the rates specified in Table 2” (OAR 340-028-0110).

**Comment 4:** Net Air Quality Benefit. OAR 340-028-1935(4) should not require a source to demonstrate that use of the growth allowance provides a net air quality benefit. Because the growth allowance is based, in part, on emission reductions made long ago, it would be extremely difficult to demonstrate a net air quality benefit. In addition, requiring an extra 10 percent reduction for VOC and NO<sub>x</sub> is wasteful of the growth allowance, and is not required by EPA guidance.

**Response:** The Department intended to require a net air quality benefit only if the offset requirement is met by emission reductions (i.e. reductions generated at the source) or by offsets (i.e. reductions transferred directly from another source) as indicated in OAR 340-028-1935(4). For the reasons stated by the commentor, the Department did not intend to require a net air quality benefit if the offset requirement is met by an allocation from the growth allowance. OAR 340-028-1935(3) requires an *offset* to provide a net air quality benefit and indicates that the

offset requirement may be met by an allocation of a growth allowance if provided in the applicable maintenance plan unless the contingency plan has been triggered. OAR 340-028-1935(3) specifies that use of the growth allowance must comply with the applicable maintenance plan and with OAR 340-028-1935(8), which specifies procedures for allocating the growth allowance. However, the Department agrees that the proposed rule language could be interpreted to require an allocation of the growth allowance to provide a net air quality benefit. OAR 340-028-1935(3) will be revised to clarify that the requirement for a net air quality benefit does not apply to an allocation of the growth allowance.

**Comment 4: Additional Requirements for Listed Sources.** The requirement in OAR 340-028-1935(6) for certain listed sources in maintenance areas to comply with PSD under OAR 340-028-1940 is overly broad and confusing. The requirement for BACT in OAR 340-028-1940 is confusing because it is already required by OAR 340-028-1935. In addition, listed sources should not be required to conduct modeling and monitoring if an offset is already required. The difficulty of modeling urban areas would prohibit growth that the maintenance plan was intended to accommodate.

**Response:** This provision is required by EPA for approval of the NSR maintenance area rules (see David C. Bray, comment 1.a. above). EPA requires the listed sources to comply with PSD, including the monitoring and modeling provisions. Under PSD, offsets may be used to meet the Air Quality Analysis requirements, but modeling may be required to ensure that the offset provides a net air quality benefit (see David C. Bray, comment 2.b. above). Even though there is some overlap in requirements, OAR 340-028-1935(6) can not refer only to specific sections of OAR 340-028-1940 because all of OAR 340-028-1940 is needed to determine which aspects of PSD apply to a given situation.

The Department does not believe that OAR 340-028-1935(6) would prohibit growth in maintenance areas. First, it only applies to new or modified sources with extremely high emissions (over 250 tons/year in most cases, over 100 tons/year in certain cases). The vast majority of new and modified sources will not be affected by extra requirements. Second, the monitoring requirements may be met using all available monitoring data, including data collected by the Department. Because the Department is required to maintain an air quality monitoring network for the maintenance pollutants in a maintenance area, it is likely that this data will be readily available to sources subject to OAR 340-028-1935(6). Third, the difficulties mentioned in the comment for modeling urban areas would be of concern only to ozone because of its nature as a regional pollutant. However, partly for this reason, modeling is not required for ozone under PSD. Instead, the air quality analysis requirement is met by providing an offset and the net air quality benefit requirement is met by meeting the offset ratio requirements in OAR 340-028-1970.

**Attachment E**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans

Detailed Changes to Original Rulemaking Proposal made in  
Response to Public Comment

**Requirements for Sources in Nonattainment Areas**

**340-028-1930**

...

(5) Alternative Analysis:

...

(c) This analysis is not required for a major source or major modification that is subject to this rule solely due to emissions of particulate matter in a designated TSP nonattainment area.

...

**Requirements for Sources in Maintenance Areas**

**340-028-1935**

...

(3) Offsets or Growth Allowance. The owner or operator of the proposed major source or major modification shall provide offsets as specified in OAR 340-028-1960 and 340-028-1970. Except as provided in Section (7) of this rule, the requirements of this Section may be met in whole or in part in an ozone or carbon monoxide maintenance area with an allocation by the Department from a growth allowance, if available, in accordance with Section (8) of this rule and the applicable maintenance plan in the SIP adopted by the Commission and approved by EPA. An allocation from a growth allowance used to meet the requirements of this Section is not subject to OAR 340-028-1960 and 340-028-1970.

...

(5) Alternative Analysis:

...

(c) This analysis is not required for a major source or major modification that is subject to this rule solely due to emissions of particulate matter in a designated TSP maintenance area.

...

(9) Pending Redesignation Requests. This rule does not apply to a proposed major source or major modification for which a complete application to construct was submitted to the Department before the maintenance area was redesignated from nonattainment to attainment by EPA. Such a source is subject to OAR 340-028-1930.

...

## **Attachment F**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

### **Rulemaking Proposal for New Source Review Amendments for Air Quality Maintenance Plans**

## **Advisory Committee Involvement**

The initial concept for the New Source Review (NSR) revisions was developed through the ozone maintenance plan preparation process. The ozone maintenance plan was developed through an extensive public process beginning with the adoption of House Bill (HB) 2175 by the 1991 Oregon Legislature. Section 13a of the bill established the Governor's Task Force on Motor Vehicle Emission Reductions in the Portland Area to make recommendations for the maintenance plan.

The Governor's Task Force consisted of 24 members, including directors/chairs for five state agencies (Environmental Quality, Transportation, Energy, Land Conservation & Development, Energy and Economic Development), an Oregon State Senator and State Representative, a Metro Councilor, a Portland City Councilor, the Mayor of Beaverton, the General Manager of Tri-Met, an energy consultant, and senior representatives from three environmental/citizen organizations (Oregon Environmental Council, 1000 Friends of Oregon, Sensible Transportation Options for People), the Automobile Club of Oregon, two development associations (Sunset Corridor Association and Association for Portland Progress), two business associations (American Automobile Manufacturers' Association and the Oregon Trucking Association), and four large and small businesses.

The Governor's Task Force recommended forecasting assumptions and emission reduction strategies for the ozone maintenance plan after a series of public meetings during 1992. The Task Force based its recommendations on EPA guidance for maintenance plans as well as information presented by the Department, Metro and a number of business, citizen, environmental and governmental organizations.

A key forecasting assumption selected by the Task Force was that an industrial growth allowance of one percent per year should be used in future year ozone modeling. The Department indicated to the Task Force that it would propose to use the growth allowance in lieu of offsets in NSR once the area was redesignated to attainment. In addition, the Department indicated that Best Available Control Technology (BACT) would be substituted for Lowest Achievable Emission Rate (LAER) technology under the maintenance plan. While most members of the Task Force supported this approach, some

members believed that the growth allowance should only be used in modeling, and that LAER and offsets should continue to be required under the maintenance plan.

The findings and recommendations of the Governor's Task Force were reported to the Senate Agriculture and Natural Resources Interim Committee on September 29, 1992. A House Special Task Force on Emissions was established to review the recommendations of the Governor's Task Force. After extensive briefings and deliberations, the House Special Task Force largely endorsed the recommendations of the Governor's Task Force, including the NSR assumptions underlying the emission forecast, although a few emission reduction strategies were changed. HB 2214, which reflected the recommendations of the House Special Task Force, was adopted by the Legislature and signed by the Governor in September, 1993.

During 1994, the Department worked with a number of advisory committees to develop the administrative details of the maintenance plan strategies needed to implement HB 2214. NSR issues were discussed by the Department's Industrial Source Advisory Committee (ISAC), a standing committee with business, environmental and citizen representatives. ISAC discussed procedures for allocating the growth allowance, but did not reach consensus.

During 1995, the Oregon Legislature again reviewed the maintenance plan. A second House Special Task Force was appointed to review the Department's implementation of HB 2214 and to consider amendments to the plan. The 1995 Legislature adopted HB 3448 which was intended to revise some of the emission reduction strategies in the plan, but the bill was vetoed by the Governor. However, because of a shortfall in emission reduction strategies, the Department proposed to reduce the size of the industrial growth allowance to balance the ozone maintenance plan.

During late 1995 and early 1996, the maintenance plan was reviewed by Metro, the designated lead agency for transportation elements of the plan, as well as by several Metro advisory committees representing local jurisdictions in the Portland area. These advisory committees primarily reviewed the transportation elements of the plan, but also strongly supported the industrial growth allowance. The Metro Council adopted final recommendations on the maintenance plan on February 29, 1996. Metro urged the Department to increase the industrial growth allowance at least to its original level. A number of meetings were held with industrial representatives to identify additional emission reductions that could be used to increase the industrial growth allowance.

The public notice period for the maintenance plan and supporting rules began on April 20, 1996 and closed on May 24, 1996. Public hearings were held on May 22 and May 23, 1996. The public notice included a detailed description of the NSR requirements that would apply upon redesignation to attainment, and a schedule indicating that the NSR rules would be proposed for adoption by the Environmental Quality Commission (EQC) in November, 1996. A copy of this description is included in Appendix H. The public notice also

included proposed rules regarding allocation of the industrial growth allowance (now codified as OAR 340-030-0730 and 340-030-0740).

The Department received a number of comments from industry and environmental organizations regarding the NSR maintenance area requirements and the industrial growth allowance allocation program. The Department's evaluation of these comments was included in the staff report for the July 12, 1996 EQC meeting, agenda item H. Comments related to the NSR maintenance area program are excerpted in Attachment I. The EQC adopted the maintenance plan and supporting rules on July 12, 1996, including the NSR program description, an industrial growth allowance restored to nearly its original level, and the industrial growth allowance allocation rules.

The Department then drafted rules to implement the NSR program as described in the maintenance plan. The draft rules were reviewed by a number of interested parties, including EPA and a working group of the Associated Oregon Industries (AOI) Air committee. The rules were also described to ISAC. The public comment period for the proposed rules began on August 15, 1996, and closed on September 23, 1996. A public hearing was held on September 17, 1996.

## **Attachment G**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

### **Rulemaking Proposal for New Source Review Amendments for Air Quality Maintenance Plans**

## **Rule Implementation Plan**

### **Summary of the Proposed Rule**

This proposal would establish major New Source Review (NSR) requirements for areas that have been redesignated from nonattainment to attainment with federal ambient air quality standards. The changes are needed for the U.S. Environmental Protection Agency (EPA) to approve maintenance plans recently adopted by the EQC. The changes were described in detail as part of the public notice for the maintenance plans, and were approved in concept by the EQC through adoption of the maintenance plans. This proposal would establish the actual rule language to implement the changes. In addition, the proposal includes miscellaneous amendments needed to ensure EPA approval of the NSR program.

### **Proposed Effective Date of the Rule**

The rules are proposed to be effective upon filing with the Secretary of State. However, since they only apply to areas that have been redesignated from nonattainment to attainment, they will have no practical effect until EPA approves the redesignation requests for the Portland area ozone and carbon monoxide nonattainment areas. EPA approvals for these redesignation requests are expected in the Spring and Fall of 1997, respectively. The maintenance area NSR rules will affect proposed major sources and major modifications in a maintenance area for which a complete permit application is submitted on or after the date of redesignation by EPA to attainment.

### **Proposal for Notification of Affected Persons**

Affected persons will be notified through the existing NSR program. The NSR program applies to a relatively small number of large industrial sources. The program includes extensive information submittal and permit application procedures that are required before a proposed major source or major modification may be constructed. The maintenance area NSR rules do not change the universe of sources subject to the NSR program; rather, they change the requirements for those affected sources located in maintenance areas. Therefore, no special process is needed to identify sources that would otherwise not be expected to be aware of the NSR program.



In the Portland area, where the maintenance area NSR program will first be implemented, existing industrial sources are generally aware of the new requirements. The Department worked closely with business organizations and major industrial sources during development of the ozone and carbon monoxide maintenance plans, and maintenance area NSR provisions, such as the industrial growth allowance, were major reasons for their support of the plans.

### **Proposed Implementing Actions**

The primary implementing actions will be to update the Department's NSR guidance to incorporate the new procedures for maintenance areas. This includes guidance to applicants for NSR and guidance for the Department's staff in the Air Quality Permitting Manual.

In addition, procedures to track consumption of industrial growth allowances will be established. This will include accounting for allocations from the growth allowance for each maintenance pollutant at the appropriate DEQ regional office, and reporting to EPA consistent with commitments in the applicable maintenance plan.

### **Proposed Training/Assistance Actions**

The Department's Air Quality inspectors have already been briefed on the proposed maintenance area NSR requirements. Additional training will be provided for affected regional staff before EPA approval of a redesignation request.

## **Attachment H**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
New Source Review Amendments for Air Quality Maintenance Plans

**Portland AQMA Ozone Maintenance Plan  
Appendix D1-16**

**New Source Review Program Changes**

The major New Source Review (NSR) program is required by the FCAA to ensure that proposed major sources and major modifications do not cause or contribute to a significant impact on air quality standards, increments or visibility. Oregon's NSR program, originally adopted in 1981, was amended in 1992 to address requirements of the 1990 FCAA Amendments. The revisions eliminated the existing VOC growth allowance, required that offsets come from contemporaneous and actual emission reductions, and established an offset ratio of 1.1 to 1 for VOC and NO<sub>x</sub> (see Section 4.50.4.1.2).

The NSR program contains requirements for sources in nonattainment areas (OAR 340-028-1930) and Prevention of Significant (PSD) requirements for sources in attainment areas (OAR 340-028-1940). Until the Portland/Vancouver AQMA is redesignated to attainment, proposed major sources and major modifications are required to comply with nonattainment area NSR. The major elements of the NSR program are:

- Lowest Achievable Emission Rate (LAER) control technology;
- offsets; and
- an alternatives analysis.

After redesignation, unless further amendments are made to Oregon's NSR program, proposed major sources and major modifications will be subject to PSD. The major elements of the PSD program are:

- Best Available Control Technology (BACT);
- air quality analysis (modeling or offsets);
- air quality monitoring;
- additional impact analysis; and
- notification of federal land managers.

However, for an area that has been redesignated from nonattainment to attainment, some of the PSD requirements are not appropriate. The air quality modeling analysis is inappropriate because there is no PSD increment in a redesignated area. Instead, offsets or an allocation from a growth allowance, if available, are necessary. Air quality monitoring by the applicant is unnecessary because the existing air quality would be thoroughly assessed in the maintenance plan for the area and because DEQ would continue ambient monitoring in redesignated areas. The additional impact analysis (impact of growth on soils and vegetation) is inappropriate because the proposed major source or major modification is one of many major sources in the redesignated area. Instead, the alternatives analysis (alternative sites, sizes, production processes and control techniques) required for nonattainment areas is appropriate for redesignated areas. Finally, an exemption from PSD for proposed sources with emissions below 250 tons/year that meet certain ambient tests is not appropriate for redesignated areas.

DEQ plans to propose amendments to the NSR program to specifically establish NSR requirements for redesignated (maintenance) areas. These requirements will include:

- Best Available Control Technology (BACT);
- offsets
- growth allowance for use in lieu of offsets if provided for in the maintenance plan for the area; and
- an alternatives analysis.

For proposed major sources and major modifications with potential emissions of 250 tons per year or more (100 tons per year or more in certain source categories), the remaining PSD requirements will apply as well. The amendments will also replace BACT with LAER and prohibit the use of a growth allowance to meet offset requirements upon triggering of phase 2 of the contingency plan in the maintenance plan.

The rule adoption schedule is as follows:

- Public notice - 8/20/96 to 9/23/96
- EQC adoption - 11/15/96

## Attachment I

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

### **Rulemaking Proposal** for **New Source Review Amendments for Air Quality Maintenance Plans**

Excerpt of Responses to Comments Related to New Source Review  
from the  
Industrial Emission Management Rules for the Portland Area Ozone  
and Carbon Monoxide Maintenance Plans  
July 12, 1996 EQC meeting, agenda item H

...

**Comment 8: The industrial growth allowance should be larger.** (Commenters Kathleen Dotten, Oregon Metals Industry Council; Jim Whitty, Associated Oregon Industries) Every attempt should be made to reach the original growth allowance goals. This would allow existing industry to expand and new industry to develop, resulting in more high wage jobs. Future emission reductions made by industry should be available for increases in industrial sources, not increases in mobile sources.

**Response:** The growth allowance in the proposed maintenance plan was set at the maximum level possible without unbalancing the plan, which would result in disapproval by EPA. The original goals for the growth allowance were not reached in the proposal because of insufficient unused PSEL donations, and because it was deemed necessary to relax the stringency of other strategies (the Expanded Vehicle Inspection Boundary, Employee Commute Options Program, and Voluntary Parking Ratio Program). Based on expected new additional PSEL donations being made, the Department believes it is possible to restore the original growth allowance (1056 tons for VOC and 438 for NOx) in the final years of the maintenance plan (2004 to 2006), however not enough new donations are expected at this time to increase the growth allowance during the interim years. When all of the donation agreements are completed the Department may be able to increase the growth allowance during the interim years or further increase the growth allowance during the final years of the plan to the original goal, as a specific mechanism has been included in the maintenance plan to allow this without a SIP revision.

As indicated in the maintenance plan, the Department will continue to work to increase the growth allowance during the life of the plan by using new emission reductions or

shutdown credits that were not relied upon in the maintenance demonstration. This could include future reductions made by industry or other source categories, provided the reductions are surplus and federally enforceable. In contrast, the transportation emission budgets for on-road mobile sources can not be increased without an EPA revision to the maintenance plan. This would be considered only if, despite implementation of all identified transportation control measures, Metro is unable to design a transportation system that meets the adopted emissions budgets. Metro has committed to using surplus reductions in transportation emissions to build the industrial growth allowance back to the original goals.

The Department also notes that major new and modified industry may use offsets, as they now do, if the growth allowance is totally allocated in the future. The growth allowance is intended to make it easier for major new industry to locate in the Portland area while protecting air quality. However, the offset program ensures that there will never be a construction moratorium.

**Comment 9: The proposed industrial growth allowance should be eliminated and the current emission offset requirement should be retained.** (Commenter Robert Palzer, Sierra Club) In addition, the current requirement for Lowest Achievable Emission Rate (LAER) technology should not be replaced with Best Available Control Technology (BACT). Most new sources have been able to stay below the level that would subject them to these requirements. The current system has worked well and is not detrimental to industrial sources. It is inequitable to relax industrial requirements while tightening standards on individuals. In addition, new small (minor) sources should be included in the growth allowance.

**Response:** The Department believes that the growth allowance is a more efficient way than offsets to allow economic development while protecting air quality. Rather than require each new major source to obtain offsets, the plan provides for a central pool of offsets, or growth allowance, to accommodate expected new major sources. If the growth allowance is consumed, offsets will again be required. In addition, if the area violates the ozone standard in the future, any remaining growth allowance will be eliminated and offsets will be required again. This ensures that any inaccurate growth forecasts will not create artificial industrial growth allowance. If the growth allowance were eliminated and replaced with an offset requirement, air quality would not be improved because there would be a commensurate reduction in emission control strategies in the maintenance plan.

The Department also believes that it is appropriate to replace LAER with BACT upon redesignation to attainment. BACT is the level of control required for attainment areas under the Prevention of Significant Deterioration Program, and still provides a very high level of control for new major sources. Whether or not LAER and offsets has been detrimental to industrial sources is difficult to assess, since it cannot be known how many new major sources avoided locating in the Portland area due to these more stringent requirements.

The Department believes that the maintenance plan is equitable to all source categories. Industry contributed substantially to the improvement in ozone air quality through compliance with Reasonably Available Control Technology (RACT) and additional voluntary permitted emission reductions. A significant amount of the voluntary reduction has been made permanent through donations of unused permit limits. No requirements for existing industrial sources are being relaxed under the maintenance plan.

Finally, the maintenance plan does include a growth forecast for minor industrial source emissions in addition to the growth allowance for major sources. The plan identifies these separately because the growth allowance for major sources must be tracked under the New Source Review program.

...

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

**Agenda Item F**  
**November 14, 1996, Meeting**

**Title:**

Adoption of Lane Regional Air Pollution Authority rules as a revision to the State Implementation Plan and Approval of New Source Performance Standards

**Summary:**

Lane Regional Air Pollution Authority (LRAPA) requests, through the Department, that the Commission approve LRAPA regulations for adoption as part of the State of Oregon Clean Air Act State Implementation Plan under OAR 340-020-0047. LRAPA also requests Commission approval of their New Source Performance Standards so LRAPA may seek delegation authority of that program from the USEPA. LRAPA regulations included in this package cover definitions, administrative and permitting procedures and requirements for stationary sources, emission standards and open burning. ORS 468A.135 requires that LRAPA regulations be at least as stringent as state regulations and authorizes the Environmental Quality Commission to approve Lane Regional Air Pollution Authority air quality standards prior to their enforcement. Commission approval does not necessarily represent agreement with LRAPA regulation.

**Department Recommendation:**

It is recommended that the Commission approve the LRAPA regulations and adopt them as part of the SIP under OAR 340-020-0047, except for the LRAPA Title 46 (NSPS). It is recommended that the Commission approve the LRAPA Title 46 so that LRAPA may apply to EPA for delegation.

*John Rowanoff*  
Report Author

*Gregory A. Gr*  
Division Administrator

Director *Greg Mars*

State of Oregon  
Department of Environmental Quality Memorandum

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**Date:** October 31, 1996

**To:** Environmental Quality Commission

**From:** Langdon Marsh

**Subject:** Agenda Item F, Adoption of Lane Regional Air Pollution Authority rules as a revision to the State Implementation Plan and Approval of New Source Performance Standards, EQC Meeting, November 14, 1996

**Background**

Section 110 of the federal Clean Air Act requires states to adopt and maintain a State Implementation Plan (SIP). State SIPs and revisions to the SIPs must be submitted to EPA for approval. Once approved, the SIP is federally enforceable. EPA requires that SIPs and their revisions be submitted through the state air quality agency. Local or regional air quality agencies must forward their portions of the SIP through the state. In addition, ORS 468A. requires the Commission to approve regional authority adoption of air quality standards, including emission standards prior to their enforcement by the regional authority.

Lane Regional Air Pollution Authority (LRAPA) is the only remaining regional authority in the state. Within its borders, it has exclusive jurisdiction over the regulation and enforcement of air quality regulations so long as its regulations are at least as stringent as the state's. Its Board exercises many of the same functions within Lane County as the Commission exercises statewide. Pursuant to ORS 468A.135, LRAPA requests Commission approval of the attached rules and their adoption into the SIP so that LRAPA may forward these rules to EPA.

This package contains LRAPA rules, Titles 12, 32, 33, 34 and 47 for adoption as SIP revisions and Title 46 for approval of New Source Performance Standards (NSPS). This approval is necessary prior to submission to EPA for inclusion into the SIP and delegation of authority. This package does not contain any temporary rules that might have effected any specific source in Lane County.

LRAPA properly noticed these rules pursuant to its own process. LRAPA's Board authorized public hearings. Hearings notice were published in the Secretary of State's Bulletin on February 1, March 1, September 1, and October 1, 1994, and August 1, and September 1, 1995. The Hearing Notices

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Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503) 229-5317 (voice)/(503) 229-6993 (TDD).



Memo To: Environmental Quality Commission

**Agenda Item F, Adoption of Lane Regional Air Pollution Authority rules as a revision to the State Implementation Plan and Approval of New Source Performance Standards, EQC Meeting**

November 14, 1996

Page 2

and informational materials were mailed to the mailing list of those persons who have asked to be notified of rulemaking actions pursuant to LRAPA's procedures.

Public Hearings were held March 8, April 12, October 11, and November 8, 1994, and September 12, and October 10, 1995. The LRAPA Board acted as the Presiding Officer at the hearings April 12, and October 11, 1994, and September 12, 1995. Don Arkell acted as Presiding Officer for the hearings held on March 8, and November 8, 1994, and October 10, 1995. Written comment was received through March 8, April 12, October 11, and November 10, 1994, and September 12 and October 17, 1995. Oral testimony is summarized in the minutes of the LRAPA Board's meetings for April 12, and October 11, 1994, and September 12, 1995, and in the Presiding Officer's Report for March 8, and November 8, 1994, and October 10, 1995. A copy of the comments is available from LRAPA upon request.

LRAPA staff and its Board evaluated the comments received. The LRAPA Board adopted the regulations on March 8, April 12, October 11, and November 10, 1994 and September 12, and October 17, 1995.

DEQ Air Quality staff evaluated the rules and have concluded that they comply with ORS 468A.135 in that they are at least as stringent as state air quality rules.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the action taken by LRAPA Board of Directors, and a recommendation for Commission action.

#### **Issue this Proposed Rulemaking Action is Intended to Address**

The issue this rulemaking is intended to address is to bring LRAPA's portion of the SIP up to date with its own rules and with the State's portion of the SIP, and to allow approval of LRAPA's NSPS so that it may seek delegation authority from EPA.

Commission approval of LRAPA regulations demonstrates the Commission's agreement with the LRAPA Board that the regulations meet the requirements of ORS 468A.135 in that the regulations are at least as stringent as state regulations. Commission approval of LRAPA regulations does not necessarily represent the Commission's agreement with any substantive requirements, as such a review would be beyond the Commission's authority under ORS 468A.135.

#### **Relationship to Federal and Adjacent State Rules**

Memo To: Environmental Quality Commission

**Agenda Item F, Adoption** of Lane Regional Air Pollution Authority rules as a revision to the State Implementation Plan and Approval of New Source Performance Standards, EQC Meeting

November 14, 1996

Page 3

LRAPA rules must be at least as stringent as state rules. Any LRAPA rule that is not at least as stringent as a comparable state rule is void because LRAPA would be in conflict with its statutory authority. LRAPA rules which are part of the SIP must be forwarded to EPA for approval.

LRAPA is also requesting delegation of federal NSPS from EPA. Because these are emission standards, they must be approved by the commission pursuant to ORS 468A.135 prior to any delegation request. LRAPA has adopted the NSPS by reference, as has the Commission. As such, LRAPA's NSPS are identical to the state and federal requirements.

#### **Authority to Address the Issue**

ORS 468A.135 authorizes the Commission to approve standards and rules of LRAPA.

#### **Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

LRAPA and its Board are subject to the requirements of ORS Chapters 183 and 192 regarding rulemaking procedures and public meetings. It is not subject to the requirements of ORS Chapter 291, nor are the actions of the Commission subject to ORS Chapter 291 when taking action on behalf of LRAPA.

LRAPA has its own rulemaking process which parallels the Department's. It uses advisory committees in rule development, holds public hearings, often in front of its board, and adopts rules. All the attached rules went through this process.

#### **Summary of Rules Adopted by LRAPA Board of Directors**

March 8, 1994. Amendments to LRAPA Title 12, Definitions. All definitions used by LRAPA were placed under one title.

April 12, 1994. Amendment to LRAPA Title 34, Air Contaminant Discharge Permits. Addition of source categories to fee table in order to bring LRAPA rules in line with DEQ rules (OAR 340-028-1750, Table 4) and addition of enforcement language to cover nonpayment.

October 11, 1994. Amendment to LRAPA Title 34, Air Contaminant Discharge Permits. Increase in fees to bring LRAPA fees in line with DEQ fees and to cover cost of administering the program.

November 10, 1994. Amendment to LRAPA Title 32, Emission Standards. Consolidation of all pollution related emission standards into one title and the addition of definitions. Amendment to Title 33, Control of Special Classes. Addition of several industry specific definitions and update of

Memo To: Environmental Quality Commission

**Agenda Item F, Adoption** of Lane Regional Air Pollution Authority rules as a revision to the State Implementation Plan and Approval of New Source Performance Standards, EQC Meeting

November 14, 1996

Page 4

industry standards. Amendment to Title 34, Air Contaminant Discharge Permits. The consolidation of all permitting rules for ACDPs and Title V permits into one title. The name of Title is changed to "Stationary Source Rules and Permitting Procedures". Amendment to LRAPA Title 46, New Source Performance Standards. Adoption by reference of the federal New Source Performance Standards.

September 12, 1995. Amendment to LRAPA Title 34, Stationary Source Rules and Permitting Procedures. Reduction of fees for "simple" synthetic minor sources and rock crushers processing less than 300,000 pounds. Reduction in fees for these sources reflects permit processing time.

October 17, 1995. Amendment to LRAPA Title 47, Outdoor Open Burning. LRAPA assumes responsibility for slash burning permits in Lane County outside of existing Fire Protection Zones. Residential open burning season start date moves from October 1, to October 15 to reflect usual delays in the start of the season. Definitions for "waste" and "agricultural operations" added to the title.

#### **Recommendation for Commission Action**

It is recommended that the Commission approve the LRAPA regulations and adopt them as part of the SIP under OAR 340-020-0047, except for the LRAPA Title 46 (NSPS). It is recommended that the Commission approve the LRAPA Title 46 so that LRAPA may apply to EPA for delegation.

#### **Attachments**

Attachments for this report are organized by date of adoption by the LRAPA Board of Directors. Each LRAPA attachment includes the adoption report prepared by LRAPA staff, including rulemaking, fiscal and economic impact and land use consistency statements, public notices, hearings officer reports, comment summary and response, rules and LRAPA Board of Directors' meeting minutes verifying the adoption of the rules. In addition, DEQ prepared a "Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements" form to meet the requirements of OAR Chapter 340, Division 011.

- A. March 8, 1994, LRAPA Adoption of Title 12
- B. April 12, 1994, LRAPA Adoption of Title 34
- C. October 11, 1994, LRAPA Adoption of Title 34
- D. November 10, 1994, LRAPA Adoption of Titles 32, 33, 34, and 46
- E. September 12, 1995, LRAPA Adoption of Title 34
- F. October 17, 1995, LRAPA Adoption of Title 47
- G. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements

Memo To: Environmental Quality Commission

**Agenda Item F, Adoption** of Lane Regional Air Pollution Authority rules as a revision to the State Implementation Plan and Approval of New Source Performance Standards, EQC Meeting

November 14, 1996

Page 5

Approved:

Section:

*John F. Kawalazki*

Division:

*Gregory A. Hra*

Report Prepared By: Yone C. McNally

Phone: 229-5143

Date Prepared: October 16, 1996

ycm

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10/19/95

# ATTACHMENT A

LRAPA Adoption of Title 12  
March 8, 1994

Agenda Item No. 7

LRAPA Board of Directors Meeting

March 8, 1994

TO: Board of Directors

FROM: Donald R. Arkell, Director

SUBJ: Public Hearing on Proposed Adoption of New Title 30, "Incinerator Rules," and Rescission of Existing Refuse-Burning Equipment Rules Contained In Section 33-020; and Amendments to Title 12, "Definitions"

**BACKGROUND**

At its January 11, 1994 meeting, the LRAPA board authorized public hearing on proposed amendment of Titles 12 and 33 and adoption of new Title 30. Staff requested and received authorization from DEQ for LRAPA to serve as EQC hearings officer in a joint EQC/LRAPA hearing.

Notice of this public hearing was published in the Cottage Grove Sentinel, the Oakridge Dead Mountain Echo, the Eugene Register-Guard and the Springfield News, and in the February 1, 1994 edition of the Secretary of State's Bulletin. Staff contacted each existing affected incinerator operator to inform them of the new requirements and requested their comments on technical feasibility of compliance. Several comments suggesting minor changes were received and are reflected in this proposed rule. Written comments received, to date, from Gary Buell of Buell Chapel in Springfield, and from DEQ, are addressed in the attached pages. One additional change was made to draft Title 30, subsection 30-045-3, in response to board discussion at the January 11 meeting. It was felt that crematory incinerators should be discouraged from emitting any odors at all which affect neighboring properties, and the word "unreasonably" implies that some odor is acceptable. The word has been removed in this revised draft.

Following public hearing, the board may adopt the rules, either as proposed or with any changes deemed necessary in response to information received at the public hearing.

## PROBLEM STATEMENT

### Title 30, "Incinerator Regulations"

LRAPA's current incinerator and refuse-burning equipment rule (Section 33-020), adopted in 1973, is outdated and is meant to regulate the design of incinerator equipment which would no longer be permitted, today. On-site incineration of refuse is a disposal method which is a less acceptable practice now, generally, than it used to be, due to public concerns about combustion by-products such as hydrogen chloride, sulfur dioxide, and organic compounds (including dioxins and furans). Modern incineration equipment tends to be designed for specific kinds of waste material, rather than general waste categories. Newer incinerators are designed to reduce emission of the worrisome compounds efficiently, through combustion temperature controls and/or scrubbers or other air pollution control devices.

Although these rules would apply to solid waste incinerators, as well as crematoriums and infectious waste incinerators, there are presently no general refuse solid waste incinerators operating in Lane County. The rules would affect five crematoriums and one infectious waste, or hospital, incinerator in the Eugene-Springfield area. The draft rule is similar to state rules adopted in 1990.

### Title 12, "Definitions"

Title 12 currently includes most of the definitions of terms and words used in LRAPA's Rules and Regulations. In addition, each individual title contains definitions specific to the understanding of that title. There are some words and terms which mean slightly different things in the contexts of different rules, and this has caused some confusion when readers of the rules use a definition from one title to interpret the same term in another title. It is proposed to reference specific words and terms in each title but to remove the actual definitions and move them all to Title 12. For users who have copies of the complete set of rules, this will help to avoid the confusion described above. For persons who need only a specific title, a separate sheet (or sheets) containing the definitions cited in that title will be provided. These amendments are being made in conjunction with the proposed rulemaking for Title 30.

## PROPOSAL

It is proposed to rescind Section 33-020 and adopt a new Title 30, "Incinerator Regulations." Essentially, these proposed rules would establish more restrictive emission limits on opacity and specifically limit emissions of certain hazardous air

contaminants. In addition the proposed rules would require operators of affected facilities to ensure that specified operational parameters such as temperature and residence time are maintained during operation, that those parameters be monitored, and that proof of compliance be demonstrated through source tests and periodic reporting.

Once passed, the regulatory requirements for new sources will be included in the Approval to Construct and the Air Contaminant Discharge Permit. Existing sources must demonstrate compliance with the regulatory requirements within one year of the effective date of the regulations.

## **EFFECTS OF PROPOSED RULES**

### Title 30

1. Public. Because of the reduced levels of the combustion by-products listed above, the general public would enjoy cleaner air in the vicinity of incinerator facilities, and reduced concern regarding health effects.
2. Regulated Community. Owners of incinerators and crematoriums in Lane County would be required to operate incineration facilities under more-controlled conditions. Verbal discussion with the operator of the infectious waste incinerator indicates that significant modification would be required for compliance and that optional disposal methods would be considered during the one-year compliance period. Crematory operators would have one year to install auxiliary burner equipment in the secondary chambers to meet the temperature requirements. Estimated cost would be about \$3,000 each.
3. Other Agencies. Adoption of the proposed rule would make LRAPA's rules consistent with state regulations.

### Title 12

The effects on the public, the regulated community and other agencies are the same: consolidation of all definitions into one title makes all definitions available in one place; removal of actual definitions from individual titles helps to avoid confusion between differing definitions for the same terms or words, as applied to different titles.



### OPTIONS FOR BOARD ACTION

1. Do not adopt the rules. LRAPA's incinerator rules would remain outdated and inadequate, and inconsistent with state rules. Title 12 definitions would remain incomplete and somewhat confusing.
2. Postpone action and direct staff to bring back a revised proposal. The rules as proposed are acceptable to affected sources. They are also acceptable to the state, with the incorporation of draft revisions requested by DEQ. Therefore, there is no perceptible advantage to redrafting the proposals.
3. Adopt new Title 30 and amendments to Titles 12 and 33, as proposed. LRAPA would have rules adequate to handle modern incineration equipment, and the definitions section would help to make LRAPA Rules and Regulations more easily understandable.

### DIRECTOR'S RECOMMENDATION

It is the director's recommendation that the board adopt the rules as proposed.

DRA/mjd



MEMORANDUM

To: Record of Adoption Proceedings, LRAPA Titles 12, 30 and 33  
From: Donald R. Arkell, Hearings Officer  
Subject: Public Hearing, March 8, 1994

Summary of Procedure

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority at 12:38 p.m. on March 8, 1994 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed rescission of Section 33-020, "Incinerator and Refuse Burning Equipment," adoption of new Title 30, "Incinerator Rules," and amendments to Title 12, "Definitions." There was no one present who wished to comment on the proposed rules.

Summary of Testimony

There was no oral testimony presented at the hearing.

Written comments were received prior to the hearing date from DEQ and from Gary Buell of Buell Chapel in Springfield. Those comments, along with LRAPA's responses, are detailed in the attached pages. The draft rules presented at the hearing contained revisions made in response to the written comments.

Notice of Proposed Action

Prior to the authorization for hearing, notice of the proposed rulemaking was sent to each of the affected sources currently operating in Lane County. In addition, notice of the hearing and intended action was published in the February 1, 1994 edition of the Secretary of State's Bulletin, and in the Oakridge Dead Mountain Echo, the Cottage Grove Sentinel, the Eugene Register-Guard, and the Springfield News.

Action of the LRAPA Board of Directors

Staff pointed out the need for a few minor corrections in the draft rules, to include some revisions suggested in the comments which did not make it into the final draft version presented at this meeting. Based on the information presented, the board voted unanimously to adopt the amendments to Titles 12 and 33 and to adopt new Title 30, with the corrections noted by staff.

DRA/MJD

Proposed Amendments to LRAPA Titles 12, "Definitions," and  
33, "Prohibited Practices and Control of Special Classes,"  
and Adoption of New Title 30, "Incinerator Regulations"

March 8, 1994

WRITTEN COMMENTS AND LRAPA RESPONSES

Oregon Department of Environmental Quality

A. Title 12

1. In general, the Department supports LRAPA's effort to improve clarity of the Definitions by combining them where feasible in Title 12. However, there are several cases where definitions intended to apply to one Title now apply inappropriately to all Titles, and there are other cases where definitions which should apply to multiple Titles only apply to one Title. In a few cases where a term has more than one meaning, the various definitions of the term may have been applied to the wrong Title. In some cases, this can significantly alter the meaning and stringency of a requirement. While specific examples identified during the Department's review are listed below, LRAPA must carefully trace each definition to ensure that it has the correct applicability.

LRAPA Response: We generally agree with these comments and have taken the actions described in the following responses.

2. The leadin to Title 12, "To aid in the understanding of these rules, the following general definitions are provided." should be replaced with wording such as, "As used in LRAPA Rules and Regulations, Titles 11 through 50, except where otherwise defined for purposes of a specific Title:"

LRAPA Response: Existing wording is retained, except that the word "general" is deleted from the sentence.

3. The first definition of "Actual Emissions" applies only to the baseline period; a general definition for other specified periods is needed. In addition, part B of that definition could be misinterpreted to allow sources to exceed permit limits. See the definition in OAR 340-28-110 which includes recent amendments made by the EQC to address these and other concerns.

LRAPA Response: We agree. The first definition of "Actual Emissions" is deleted from this draft, and DEQ's definition in 340-28-110 is added in its place.

4. The definition of "Air Contaminant Discharge Permit" must include the application review report, or LRAPA must otherwise revise its rules or permits to ensure that the components of the PSEL calculation are enforceable.

LRAPA Response: LRAPA permits will be revised to deal with this on an individual basis.

5. The definition of "Air Contaminant Source" appears to refer to the wrong Title. In addition, the language related to SIC groups relates only to major New Source Review; for other purposes, such as air contaminant discharge permits, the source includes the entire plant site.

LRAPA Response: We agree. Since the terms "Air Contaminant" and "Source" are defined in Title 12, a definition for Air Contaminant Source is not necessary. The definition of "Air Contaminant Source" is deleted from this draft of Title 12.

6. The definitions of "Existing Source" and "New Source" can not apply to the entire set of Titles as written. For example, certain New Source Performance Standards apply to sources prior to the date they were adopted by LRAPA. Use of the term "in existence" is not clear in all cases; it could mean operating, constructed, under construction or modified, depending on the application. Reference to the date of adoption rather than an actual date could create confusion, since LRAPA only publishes the last amendment date in the individual Titles (although an index of amendments is published).

LRAPA Response: The words "in existence" are changed to "constructed" in this draft. Where a date is necessary it will be indicated in the body of the rules, as appropriate.

7. The definition of "Federal Operating Permit Program" should refer to the EPA (not DEQ) Administrator. It should also refer to rules adopted by the EQC (OAR 340-28-2100 through 340-28-2320 and 340-28-2560 through 340-28-2740), since LRAPA will be enforcing EQC rules in Lane County.

LRAPA Response: We agree, and this is added to the draft, as suggested.

8. The definitions of "Fugitive Emissions" need revision. OAR 340-28-110 defines fugitive emissions as those not passing through a stack or vent for most purposes, and as those which could not reasonably pass through a stack or vent for purposes of defining a major source for the Federal Operating Permit Program (FOP). The general definition includes more fugitive emissions. It applies to most cases including New Source Review, since fugitive emissions are not exempt from new Source Review in Oregon as they are in the Federal program. The FOP definition matches the narrower

federal definition because it is used to exempt sources from the FOP. In LRAPA Title 12, the first definition, as revised, should apply to Title 35, and the first definition prior to the current revisions should apply to the remainder of LRAPA rules.

LRAPA Responses: The first definition is changed by taking the word "except" out at the beginning of the definition, so that this is used in reference to Title 35. The second definition in the draft is changed to read as it does in the existing rule, except that the word "functionally" is added before "equivalent opening" at the end of the sentence.

9. The definition of "incineration operation" not referenced in Title 30. If it is not used in title 30 or elsewhere, it should be removed.

LRAPA Response: We agree, and this is deleted from the draft, as suggested.

10. The EQC definition of "Major Modification" was recently revised to clarify that emission decreases required by rule may not be used in netting. This change must be made to the LRAPA rules.

LRAPA Response: We feel that the existing definition already addresses this. The rule, as written, states that mandated decreases cannot be included. We believes that mandated decreases include those which are required by regulation.

11. The first definition of "Major Source" should apply only to the Federal Operating Permit Program (FOP). Because LRAPA will enforce EQC FOP rules, it is unclear why the definition was added. In any case, it should refer to a specific Title and should not apply to Title 38, in particular. The last definition of "Major Source," which applies to Title 38, should reference the definition of "source," not "stationary source," since that term is not defined (see also comment A.17 below).

LRAPA Response: We agree that reference to Title 38 should be deleted from the first definition of "Major Source." We also have further clarified that the first definition of "Major Source" is applicable only to those sources subject to the Federal Operating Permit Program. The second definition of "Major Source," as used in Title 35, is deleted because we are no longer collecting interim fees. The third definition is revised to clarify that it only applies to Title 38, and the word "Stationary" is deleted.

12. The definition of "Non-major source" should apply to Title 38, only.

LRAPA Response: We agree, and this change is included in the draft.

13. The definitions of "Particulate Matter" and "Particulate Matter Emission" need applicability clarified; the first and third definitions apply to all Titles, and the second applies to Title 39. The second definition should also apply to Section 33-060 (wood products industry rules). The third definition needs to specify the applicable test method, or the test method must be specified in the rules where the test is required. For example, the Incinerator rules in Title 30 should refer to Method 5.

LRAPA Response: The first definition of "Particulate Matter" is deleted. The second definition is modified to include Title 33, as well as Title 39. Because the Department's Source Manual contains all the applicable test methods, all of the test methods are deleted from the definition. The last definition clarifies the term "applicable reference methods" to read "applicable EPA reference methods." We disagree with citing the specific test methods in the definition.

14. The definition of "Reference Method" may be objectionable to EPA. EPA has commented that Reference Methods are approved by EPA and may not be revised by local agencies unless that authority is delegated.

LRAPA Response: We agree, and the definition is changed, as suggested.

15. The definition of "Regulated Pollutant" should refer to Title 35, only. For other purposes, there are other regulated pollutants.

LRAPA Response: We agree, and the definition of "Regulated Pollutant" is deleted.

16. The definition of "Solid Waste" is identical to the EQC's definition. For your information, the Department may propose amendments to this definition because it has caused some confusion. For example, the term "mixture" could imply that a waste consisting of only one combustible material is not a solid waste.

LRAPA Response: LRAPA will change the definition when the Department proposes its amendments.

17. The definition of "Source" should be split into two parts. The language related to SIC groups relates only to major New Source Review, and the definition of a major source for purposes of the Federal Operating Permit Program. For other purposes, such as air contaminant discharge permits, the source includes the entire plant site.

LRAPA Response: We agree and feels this is addressed in the draft rules.

18. The definitions of "startup," "shutdown," and "startup/shutdown" overlap in some ways and also leave gaps. These applicabilities should be clarified.

LRAPA Response: The definitions of "startup" and "shutdown," as used in Title 36 are identical to DEQ's; therefore, we see no reason to change them. The definition of "startup," as used in all other titles except Title 46, accurately reflects our intended meaning.

19. The definition of "TSP" should refer to the Reference Method in 40 CFR Part 50, Appendix B.

LRAPA Response: We agree, and the definition is changed as suggested.

20. The definitions of "VOC" must be revised. The EQC definition in OAR Chapter 340, Division 28, was recently revised due to comments from EPA.

LRAPA Response: We agree, and the definition is changed as suggested.

#### B. Titles 30 and 33

1. Title 30 is generally consistent with OAR 340-25-850 through 340-25-905. However, EPA has expressed some concerns with the EQC's rules for solid waste incinerators and infectious waste incinerators as compared to EPA rules for municipal solid waste combustors in 40 CFR Part 60. For your information, the Department may propose amendments to the incinerator rules to address these concerns. The Department recommends that LRAPA ensure that its rules are at least as stringent as 40 CFR Part 60, Subparts Ca and Ea, in addition to EQC rules.

LRAPA Response: If amendments are proposed, LRAPA will consider them for adoption at that time.

2. Section 30-005 is identical to the comparable EQC rule. For your information, the Department may propose amendments to this applicability. The rule was intended to apply to all permitted incinerators, but the language applies to all incinerators. Any non-permitted incinerators and other refuse-burning equipment continue to be subject to OAR 340-21-020 and 340-21-025.

LRAPA Response: If amendments are proposed, LRAPA will consider them for adoption at that time.

3. In Section 30-010, both the definitions of "startup" and "startup/shutdown" are referenced. See comment A18.

LRAPA Response: See LRAPA's response under item A18 (Title 12 comments).



4. In Section 30-020.8, insert "of dioxin/furans" after 30 nanograms.

LRAPA Response: We agree, and the changes are made, as suggested.

5. In Section 30-025, change the cross-reference in paragraph 3 from section 1 to section 2. Also, the requirement in OAR 340-25-870(5) for flue gas outlet temperature should be added.

LRAPA Response: LRAPA agrees, and the cross-reference in paragraph 3 is changed from section 1 to section 2. We understand that there would be a need for this in incinerators which need to drop the temperatures in the stack to protect pollution control equipment; however, we have no such incinerators in Lane County. Consequently, we don't believe there is a need in Lane County for flue gas temperature outlet measurements, and we are not including this requirement in the rule draft.

6. In Section 30-030, in paragraph 2.B, insert "temperature" after "chamber." In paragraph 3, clarify that these monitors are in addition to those specified in paragraphs 1 and 2.

LRAPA Response: We agree, and the changes are made as suggested.

7. In Section 30-035.12, substitute the defined terms "solid waste incinerator" and "infectious waste incinerator" for the term "waste incinerator."

LRAPA Response: We agree with this and, in fact, have made this change throughout the draft rule.

8. In Section 30-040, specify what requirements apply prior to demonstration of compliance with Title 30. This might be existing permit conditions. Alternately, you might delay repeal of Section 33-020 until after the compliance date in Section 30-040. See also comment A9.

LRAPA Response: We agree with this and have proposed language to address this concern. We will be enforcing the conditions of the existing permit until such time as the existing incinerators must demonstrate compliance with these draft rules.

9. In Section 30-050.3, change "30-010.4" to "Title 12."

LRAPA Response: We agree, and the change is made as suggested.

10. In Section 30-060.2, delete the first sentence. This sentence is unnecessary and would exempt sources from all requirements including the requirements to test and demonstrate compliance. Requiring existing sources to comply

with existing permit conditions during the compliance schedule is acceptable, provided that the requirements of Section 33-020 are incorporated in their permits and repeal of Section 33-020 does not revoke the authority for those permit conditions.

LRAPA Response: We agree, and the changes are made as suggested.

Gary Buell, Buell Chapel, Springfield

- A. Section 30-050-1 reads, in part, "At no time while firing waste shall the temperature in the primary chamber fall below 1400°F, or higher." I think the word "primary" should be changed to secondary or final.

LRAPA Response: We agree, and the change is made as suggested.

- B. I would also suggest that the 1400°F be reduced to 1000°, with the understanding that 1400°F be reached within 10 minutes.

LRAPA Response: This would be less restrictive than the state requirement. The reason for the 1400°F secondary chamber requirement is to prevent any smoking from premature ignition in the primary chamber. This could occur if the primary chamber is hot due to a prior cremation. Sources have one year from the date of rule adoption to install equipment necessary to achieve the 1400°F requirement.

## STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

### Legal Authority

ORS 183, 468A.135, OAR 340-11-010 and 340-25-850 to 340-25-905, and the Federal Clean Air Act Amendments of 1990.

### Need for Amendments

**Title 30:** LRAPA's current incinerator and refuse-burning equipment rules (Section 33-020), adopted in 1973, are outdated and are meant to regulate the design of incinerator equipment of a general-purpose nature which would no longer be permitted, today. Public concerns about combustion by-products considered to pose threats to public health have resulted in development of equipment which is designed more for specific kinds of materials. This equipment reduces emissions of the worrisome compounds efficiently, through combustion temperature controls and/or air pollution controls. It is proposed to rescind the outdated rules in Title 33 and adopt a new Title 30 which would require operators of incineration equipment to ensure that specified operational parameters such as temperature and residence time are maintained during operations, that those parameters be monitored, and that proof of compliance be demonstrated through source tests and periodic reporting of these operational parameters.

**Title 12:** Existing Title 12 contains most, but not all, definitions used in interpreting LRAPA Rules and Regulations. In addition, each individual title contains definitions of words and terms used in that title. Some words and terms are defined differently in different titles, resulting in confusion when a reader uses a definition from one title to interpret the meaning of the same term in another title. It is proposed to reference the important words and terms in each title but to move the actual definitions to Title 12.

### Principal Documents Relied Upon

1. Attorney General's Uniform and Model Rules of Procedure
2. LRAPA Title 33
3. OAR 340-25 (Sections 850 through 905)
4. LRAPA Staff Report to LRAPA Board of Directors, January 11, 1994
5. Clean Air Act Amendments of 1990
6. ORS 183, 468 and 468A et. seq.

## FISCAL AND ECONOMIC IMPACT STATEMENT

Impact on Other Agencies: Title 30--Adoption of the proposed rule would bring LRAPA's rules into line with state regulations. Title 12--Consolidation of all definitions into one title makes all definitions available in one place. Removal of actual definitions from individual titles helps to avoid confusion between differing definitions for the same terms or words, as applied to different titles.

Impact on Public: Title 30--Because of the reduced levels of potentially harmful combustion by-products, the general public would enjoy cleaner air in the vicinity of incinerator facilities, and reduced concern regarding health effects. Title 12--Same as above.

Impact on Regulated Community: Title 30--Owners of incinerators and crematoriums in Lane County would be required to operate incineration facilities under more controlled conditions. All comments received from crematorium operators indicate that compliance is feasible and within their means. Verbal discussion with the operator of the infectious waste incinerator indicates that significant modifications would be required for compliance and that optional disposal methods would be considered during the one-year compliance period. Title 12--Same as above.

## LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

DRA/MJD

## NOTICE OF PROPOSED RULEMAKING HEARING

(Statement of Need and Fiscal Impact Accompanies this Form)

**AGENCY:** Lane Regional Air Pollution Authority and  
Department of Environmental Quality

The above named agencies give notice of hearing.

### HEARING TO BE HELD:

**Date:** March 8, 1994                      **Time:** 12:30 p.m.

**Location:** City Council Chambers  
Springfield City Hall  
225 North 5th Street  
Springfield, Oregon

Hearings Officer: Donald R. Arkell

Pursuant to the statutory authority of ORS 183 and 468A, the following action is proposed:

**AMEND:** LRAPA Title 12, "Definitions"

**RESCIND:** Section 33-020, "Incinerator and Refuse Burning Equipment"

**ADOPT:** New Title 30, "Incinerator Regulations"

X Prior Notice Given

**SUMMARY:** New Title 30, "Incinerator Regulations," would replace the agency's existing refuse-burning equipment rules contained in Section 33-020, which are outdated and inadequate. The proposed new rules would deal with modern incineration equipment which tends to be designed for specific kinds of waste materials, rather than the general waste categories for which the existing rules were written. Operators of affected facilities would be required to ensure that specified operational parameters such as temperature and residence time are maintained during operation, that those parameters be monitored, and that proof of compliance be demonstrated through source tests and periodic reporting of these operational parameters. Existing sources would be required to demonstrate compliance within one year of the effective date of the regulations.


Amendments to Title 12, Definitions," include additional of all definitions from individual Titles and some revised definitions.

Notice of Public Hearing  
Amendments to LRAPA Rules and Regulations  
-2-

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments received by March 7, 1994 will also be considered. Written comments should be sent to, and copies of the proposal rulemaking may be obtained from:

**AGENCY:** Lane Regional Air Pollution Authority  
**ADDRESS:** 225 North 5th, Suite 501  
Springfield, OR 97477-4671

**ATTN:** Donald R. Arkell, Director  
**PHONE:** (503) 726-2514

  
Signature

01-12-94  
Date

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 12  
Definitions

*(These draft amendments include revisions to some definitions and addition of definitions from other LRAPA titles. The numbers have also been removed from individual definitions and replaced with "bullets" to avoid having to renumber with subsequent additions or deletions.)*

Section 12-001 Definitions of Words and Terms Used in LRAPA Rules and Regulations

To aid in the understanding of these rules, the following [general] definitions are provided.

- "Acid Gases" means any exhaust gas which includes hydrogen chloride and sulfur dioxide.
- "Actual Emissions" means the mass rate of emissions of a pollutant from an emissions source during a specified time period. Actual emissions shall be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.

~~[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 Authority 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.~~

- "Actual Emission" means all emissions including but not limited to routine process emissions; fugitive emissions; and excess emissions from maintenance, startups and shutdowns, equipment malfunctions, and other activities.]

A. For purposes of determining actual emissions as of the baseline period:

(1) Except as provided in paragraph (2) of this subsection, actual emissions shall equal the average rate at which the source actually

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Approved  
Director

emitted the pollutant during a baseline period and which is representative of normal source operation;

(2) The Authority may presume the source-specific mass emissions limit included in the permit for a source that was effective on September 8, 1981 is equivalent to the actual emissions of the source during the baseline period if it is within 10 percent of the actual emissions calculated under paragraph (1) of this subsection.

B. For any source which had not yet begun normal operation in the specified time period, actual emissions shall equal the potential to emit of the source.

C. For purposes of determining actual emissions for Emission Statements under OAR 340-28-1500 through 340-28-1520, Major Source Interim Emission Fees under OAR 340-28-2400 through 340-28-2550, and Federal Operating Permit Fees under OAR 340-28-2560 through 340-28-2720, actual emissions include, but are not limited to, routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities.

- "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.
- "Adoption" means the carrying of a motion by the Board with regard to the subject matter or issues of an intended Authority action.
- "Agricultural open burning" means the open burning of "agricultural wastes," which are materials actually generated by an agricultural operation but excluding those materials described in Section 47-015-1.E.
- "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, 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.
- "Air Contaminant" means solid, liquid or gaseous materials suspended in the ambient air. This does not include water vapor.
- "Air Contaminant Discharge Permit" means a written permit issued by the Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify or operate specified facilities, conduct specified activities, or emit, discharge or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.
- ~~• "Air Contaminant Source" means, for the purposes of this title, any building, structure, or facility, 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 of 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). This definition does not include fuel burning equipment used to heat one or two family dwellings or internal combustion engines used in motor vehicles, aircraft, and marine vessels enroute to or from a source.]~~

- "Air Conveying System" means an air moving device such as a fan or blower, and 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. It does not include particle dryers.
- "Air Pollution" means the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are, or are likely to be, injurious to the public welfare, to the health of human, plant or animal life or to property, or which unreasonably interfere with enjoyment of life and property.
- "Air Pollution Control Equipment" means any equipment which has as its essential purpose a reduction in the emissions of air contaminants, or a reduction in the effect of such emissions.
- "Air Quality Maintenance Area (AQMA)" means any area that has been identified by the Authority or the Department, and approved by the Board or the Commission, as having the potential for exceeding any federal, state or local ambient air quality standard.
- "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.
- "Aircraft Operation" means any aircraft landing or takeoff.
- "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.
- "Ambient Air" means the air that surrounds the earth to which the general public has access, excluding the volume of gases contained within any building or structure.
- "Ambient Air Monitoring Site Criteria" means the general probe siting specifications in Appendix E of 40 CFR 58.
- "Asbestos" means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cumingtonite-grunerite (amosite), anthophyllite, actinolite and trimolite.

- "Asbestos-containing waste material" means any waste which contains mill tailings or any commercial asbestos and is generated by a source subject to the provisions of this subsection, including but not limited to asbestos mill tailings, control device asbestos waste, friable asbestos waste material, asbestos abatement project waste and bags or containers that previously contained commercial asbestos.
- "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 43-010-2 through 43-010-6. Emergency fire fighting is not an asbestos abatement project.
- "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 Section 43-015-3.
- "Asbestos-containing material" means asbestos or any material containing at least 1% asbestos by weight, including particulate asbestos material.
- "Asbestos mill" means any facility engaged in the conversion or any intermediate step in the conversion of asbestos ore into commercial asbestos.
- "Asbestos tailings" means any solid waste product of asbestos mining or milling operations which contains asbestos.
- "Approved Method" means an analytical method for measuring air contaminant concentrations which are described or referenced in Appendices to 40 CFR 50 and 40 CFR 53. These methods are approved by the Authority.
- "Assessable Emission" means a unit of emissions for which the major source will be assessed a fee. It includes an emission of a pollutant defined in LRAPA 35-010 from one emission point or from an area within a major source. For routine process emissions, emissions of each pollutant in LRAPA 35-010 from each emission point, included in an air contaminant discharge permit, shall be an assessable emission.
- "Associated Parking" means a discrete parking facility or facilities owned, operated and/or used in conjunction with an indirect source.
- "ASTM" means the American Society for Testing Materials.
- "Authority" means the Lane Regional Air Pollution Authority.
- "Authority-Approved Method" means any method of sampling and analyzing for an air contaminant approved by the Authority. These methods are listed in the state Department of Environmental Quality's Source Sampling Manual.

- "Auxiliary Combustion Equipment" includes, but is not limited to, fans or air curtain incinerators.
- "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.
- "Average Operating Opacity" means the opacity of emissions determined using EPA method 9 on 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.
- "Baseline concentration" means that ambient concentration level for a particular regulated pollutant which existed in an area during the calendar year 1978. If no ambient air quality data is available in an area, the baseline concentration for any pollutant may be estimated using modeling based on actual emissions for the calendar year 1978. Actual emissions increases or decreases occurring before January 1, 1978 will be included in the baseline concentration.
- "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.
- "Baseline Period" means either calendar years 1977 or 1978. The Authority shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.
- "Begin Actual Construction" means to begin to engage in a continuous program of on-site construction or on-site modification, including site clearing, grading, dredging, or landfilling in preparation for the fabrication, erection, installation or modification of a source.
- "Beryllium" means the element beryllium. Where weight or concentrations are specified in these Rules, such weights or concentrations apply to beryllium only, excluding any associated elements.
- "Beryllium Alloy" means any metal to which beryllium has been added in order to increase its beryllium content, and which contains more than one-tenth of one percent (0.1 %) beryllium by weight.
- "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.
- "Beryllium ore" means any naturally occurring material mined or gathered for its beryllium content.
- "Best Available Control Technology (BACT)" means an emission limitation (including 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.

- "Biological Waste," includes blood and blood products, excretions, exudates, secretions, suctionings and other 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 diapers soiled with urine or feces (see also "infectious waste").
- "BLS" means Black Liquor Solids, dry weight.
- "Board" means the Board of Directors of the Lane Regional Air Pollution Authority.
- "Calculated Emission" means actual emissions estimated using Authority-approved procedures.
- "Chair" means the chair of the Board of Directors of the Lane Regional Air Pollution Authority.
- "Charcoal Producing Plant" means an industrial operation which uses the destructive distillation of wood to obtain the fixed carbon in the wood.
- "Class I Area" means any federal, state, or Indian reservation land which is so classified. For the State of Oregon, these are as follows:
  - 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;
  - L. Gearhart Mountain Wilderness.

- "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.
- "Combustion Promoting Materials" include, but are not limited to, propane, diesel oil, or jellied diesel.
- "Commence Construction" means to begin to engage in a continuous program of on-site construction or on-site modification, including site clearing, grading, dredging, or landfilling in preparation for the fabrication, erection, installation or modification of a source; or entry into binding agreements or contractual obligations which cannot be canceled or modified without substantial loss to the owner or operator.
- "Commercial Area" means land which is zoned or used for commercial operations including retail sales and services.
- "Commercial asbestos" means any variety of asbestos which is produced by extracting asbestos from asbestos ore.
- "Commercial Open Burning" means the open burning of "commercial wastes," which are materials actually generated or used by a commercial operation.
- "Commission" means the Environmental Quality Commission.
- "Compliance" means meeting the requirements of the Authority's or [~~other government agencies~~] ~~Department's, Commission's or EPA's~~ rules, permits or orders.
- "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.
- "Construction" means any physical change including fabrication, erection, installation, or modification of a facility, building or emission unit; or change in method of operation of a source which would result in a change in actual emissions.
- "Construction Open Burning" means the open burning of "construction wastes," which are materials actually resulting from or produced by a building or construction project.
- "Contested Case" means a proceeding before the Board or a Hearings Officer:
  - A. In which the individual legal rights, duties or privileges of specific parties are required by statute or Constitution to be determined only after an agency hearing at which such specific parties are entitled to appear and be heard; or
  - B. Where the Authority has discretion to suspend or revoke a right or privilege of a person; or

- C. For the suspension, revocation or refusal to renew or issue a permit where the licensee or applicant for a license demands such hearing; or
- D. Where Authority rule or order provides for hearing substantially of the character required by ORS 183.415, 183.425 and 183.450 to 183.470.
- "Contingency Requirements" means the requirements of Sections 39-001 through 39-060.
  - "Continual Monitoring" means sampling and analysis, in a continuous or timed sequence, using techniques which will adequately reflect actual emission rates or concentrations on a continuous basis.
  - "Continuous Emissions Monitoring" 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.
  - "Continuous Monitoring Systems" means sampling and analysis, in a timed sequence, using techniques which will adequately reflect calculated emissions and actual emission levels or concentrations on a continuing basis, in accordance with the Department's Continuous Monitoring Manual, and includes continuous emission and parameter monitoring systems.
  - "Crematory Incinerator" means an incinerator used solely for the cremation of non-pathological human and non-pathological animal remains.
  - "Cultures and stocks" includes etiologic agents and associated biologicals, including specimen cultures and dishes and 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 (see also "infectious waste").
  - "Daily Arithmetic Average" means the average concentration over the twenty-four hour period in a calendar day, or Authority-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 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.
  - "Debris Clearing" means the removal of wood, trees, brush or grass in preparation for a land improvement or construction project.
  - "Demolish" or "Demolition" means the wrecking or removal of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

- "Demolition Open Burning" means the open burning of "Demolition Wastes," which are materials actually resulting from or produced by the complete or partial destruction or tearing down of a man-made structure or the clearing of any site to abate a nuisance, or land clearing for site preparation for development.
- "Department" means the Oregon Department of Environmental Quality.
- "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.
- "Dioxins and Furans" means total tetra- through octachlorinated dibenzo-p-dioxins and dibenofurans.
- "Director" means the Director of the Lane Regional Air Pollution Authority and authorized deputies or officers.
- "Distillate Fuel Oil" means any oil meeting the specifications of ASTM Grade 1 or Grade 2 fuel oils.
- "Documented Violation" means any violation which the Authority or other government agency [~~verifies through~~ records after] observation, investigation or data collection.
- "Dry Material" includes, but is not limited to, dried wood, feed, seed, or other materials.
- "Dry Standard Cubic Foot" means the amount of gas, free of uncombined water, that would occupy a volume of 1 cubic foot at standard conditions. When applied to combustion flue gases from waste or refuse burning, "Standard Cubic Foot (SCF)" means adjustment of gas volume to that which would result at a concentration of 7% oxygen (dry basis).
- "Emission" means a release into the ambient air of air contaminants.
- "Emission Estimate Adjustment Factor (EEAF)" means an adjustment applied to an emission factor to account for the relative inaccuracy of the emission factor.
- "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.
- "Emission Limitation" means a requirement established by LRAPA, local government, the State of Oregon DEQ or the U. S. EPA, which limits the quantity, rate or concentration of emissions of air pollutants on a continuous basis. This includes requirements on opacity limits, equipment prescriptions, fuel specifications, and operation and maintenance procedures.

- "Emission Point" means the location, place in horizontal plane and vertical elevation at which an emission enters the outdoor atmosphere.
- "Emission Reduction Credit Banking" means to reserve emission reductions for future use by the reserver or assignee.
- "Emission Reporting Form" means a paper or electronic form developed by the Authority that shall be completed by the permittee to report calculated emissions or permitted emissions for interim emission fee assessment purposes.
- "Emission Standard" is the same as "Emission Limitation".
- "Emission Unit" means any part of a source (including specific process equipment) which emits or would have the potential to emit any air contaminant subject to regulation under the Clean Air Act, State of Oregon laws, or these regulations.
- "Enforcement" means any documented action taken to address a violation.
- "EPA" means the United States Environmental Protection Agency.
- "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.
- "Eugene/Springfield Air Quality Maintenance Area" means that area described in Section 4.6.2.1 and Figure 4.6.2.1--1 of the State of Oregon State Implementation Plan Revision, Eugene/Springfield AQMA, as approved by the Board on November 6, 1980.
- "Eugene-Springfield Urban Growth Area (ESUGA)" means the area within and around the cities of Eugene and Springfield, as described in the August 23, 1982 acknowledged Eugene-Springfield Metropolitan Area General Plan, as amended.
- "Event" means any period of excess emissions.
- "Excess Emissions" means emissions which are in excess of an Air Contaminant Discharge Permit or any applicable air quality rule.
- "Existing Source" means any air contaminant source [~~in existence~~] **construct**  
**ed** prior to the date of adoption of rules affecting that source.
- "Expressway" means a divided arterial highway for through traffic with full or partial control of access and generally with grade separations at major intersections.
- "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.
- "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel including but not limited to ships.
  - "Federal Land Manager" means, with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.
  - "Federal Operating Permit Program" means a program approved by the EPA Administrator under 40 CFR Part 70 (last amended by 57 FR 32295, July 21, 1992). The rules and regulations which shall apply until superceded by LRAPA rules and regulations are OAR 340-28-2100 through 340-28-2320 and 340-28-2560 through 340-28-2740, and all of OAR 340-32.
  - "Filing" or "filed" means receipt in the office of the Director. Such receipt is adequate where filing is required for a document on a matter before the Authority, except a claim of personal liability.
  - "Fire Hazard" means the presence or accumulation of combustible material of such nature and in sufficient quantity that its continued existence constitutes an imminent and substantial danger to life, property, public welfare, or to adjacent lands.
  - "Fire Permit Issuing Agency" means any governmental fire permit issuing agency, such as city fire department, rural fire protection district, water district, forest protection district or county court or board of county commissioners or their designated representative, as applicable.
  - "Flagrant" means any documented violation where the respondent ha[s]d actual knowledge of the law and [has] consciously set out to commit the violation.
  - "Formal Enforcement Action" means an administrative action signed by the Director or authorized representative[s] which is issued to a respondent ~~on the basis that~~ for a documented violation. ~~[has been documented,] A formal enforcement action may requir[ing]e the respondent to take specific action within a specified time frame and/or stat[ing]e the consequences for continued non-compliance.~~
  - "Freeway" means an expressway with full control of access.
  - "Friable asbestos material" means any asbestos-containing material that hand pressure can crumble, pulverize or reduce to powder when dry.
  - "Fugitive Emissions," as used in Title 35, means emissions of any air contaminant which ~~[escapes to the ambient air from any point or area that is not identifiable as]~~ could not reasonably pass through a stack, vent, duct, or functionally equivalent opening.
  - "Fugitive Emission," ~~except as used in Title 35,~~ means ~~[dusts, fumes, gases, mist, odorous matter, vapors or any combination thereof not easily given to~~

~~measurement, collection, and treatment by conventional pollution control methods.] emissions of any air contaminant which escapes to the ambient air from any point or area that is not identifiable as a stack, vent, duct, or functionally equivalent opening.~~

- "Full-scale asbestos abatement project" means any asbestos abatement project which is intended to prevent the release of asbestos fibers into the air and which is not classified as a "small-scale asbestos abatement project."
- "Garbage" means putrescible animal and vegetable wastes resulting from the handling, preparation, cooking, and serving of food.
- "Gasoline" means any petroleum distillate having a Reid vapor pressure of four (4) pounds per square inch or greater.
- "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 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.
- "Growth Increment" means an allocation of some part of an airshed's capacity to accommodate future new minor sources, modifications of minor sources, and area source growth.
- "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.
- "Hazardous Air Contaminant" means any air contaminant considered by the Authority 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.
- "Hazardous Waste" means a hazardous waste as defined in 40 CFR 261.3.
- "HEPA filter" means a high-efficiency particulate air filter capable of filtering 0.3 micrometer particles with 99.97 percent efficiency.
- "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.
- "Immediately," as relates to notifying LRAPA of episodes of excess emissions, means one of the following:
  - A. During LRAPA's normal work hours, 8:00 a.m. to 5:00 p.m. Monday through Friday, report is to be made as soon as possible but no more than one (1) hour after the beginning of the excess emissions; or
  - B. During LRAPA's off-duty hours or on weekends or holidays, report is to be made as soon as possible but no more than one (1) hour after the

beginning of the excess emissions, using LRAPA's electronic telephone answering equipment. If the person reporting the incident is unable to access the telephone answering equipment because of overloaded telephone circuits or telephone equipment malfunction, the report must be made to the LRAPA business office at the beginning of the next working day.

- "Inactive asbestos 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.
- [~~• "Incineration Operation" means any operation in which combustion is carried on in an incinerator, for the principal purpose or with the principal result, of oxidizing wastes to reduce their bulk and/or facilitate disposal.~~]
- "Incinerator" means a combustion device specifically for destruction, by high temperature burning, of solid, semi-solid, liquid, or gaseous combustible wastes. This does not include devices such as open or screened barrels, drums, or process boilers.
- "Indirect Source" means a facility, building, structure, 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 federal, state or local standard. Such Indirect Sources shall include, but shall 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. Apartment and mobile home parks;
  - H. Educational facilities;
  - I. Hospital facilities; and
  - J. Religious facilities.
- "Indirect Source Construction Permit" means a written permit in letter form issued by the Authority, 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.
- "Indirect Source Emission Control Program (ISECP)" means a program which reduces mobile source emissions resulting from the use of the Indirect Source.
- "Industrial Area" means land which is zoned or used for industrial operations, including manufacturing.
- "Industrial Open Burning" means the open burning of "industrial wastes," which are materials produced as a direct result of any manufacturing or industrial process.

- "Infectious Waste" means waste which contains or may contain any disease-producing microorganism or material including, but not limited to, biological waste, cultures and stocks, pathological waste, and sharps (see individual definitions for these terms).
- "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.
- "Intentional," [~~when used with respect to a result or to conduct described by a statute, rule, permit, standard or order defining a violation,~~] means [~~that~~] ~~conduct~~ by a person [~~acts~~] with a conscious objective to cause the result of the ~~conduct~~ [~~or to engage in the conduct so described~~].
- "Interim Emission Fee" means \$13 per ton for each assessable emission subject to emission fees under LRAPA 35-010 for calculated or permitted emissions released during calendar years 1991 and 1992.
- "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.
- "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.
- "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 for construction.
- "Late Payment" means an interim emission fee which is postmarked after the due date.
- "Leaves" means needle or leaf materials which have fallen from trees, shrubs, or plants on the property around a dwelling unit.
- "Lime Kiln" means any production device in which calcium carbonate is thermally converted to calcium oxide.
- "Lowest Achievable Emission Rate (LAER)" means that rate of emissions which reflects:
  - A. 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
  - B. 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 allow 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.

- "Magnitude of the Violation" means the extent of a violator's deviation from federal, state and the Authority's statutes, rules, standards, permits or orders~~[, taking into account such factors as, but not limited to, concentration, volume, duration, toxicity, or proximity to human or environmental receptors].~~ In determining magnitude, the Authority shall consider available information, including such factors as concentration, volume, percentage, duration, toxicity, and the extent of the effects of the violation. In any case, the Authority may consider any single factor to be conclusive. Deviations shall be categorized as major, moderate or minor~~[, as follows:]~~.
  - ~~[A. "Major" means a substantial deviation from the standard;~~
  - ~~B. "Moderate" means a significant deviation from the standard;~~
  - ~~C. "Minor" means a slight deviation from the standard.]~~
- "Major Modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase (as defined in this section) 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 (not including mandated decreases) in actual emissions occurring at the source since January 1, 1978, or since the time of the last major source or major modification approval issued for the source pursuant to the rules for that pollutant, whichever time is more recent. If accumulation of emission increases results in a net significant emission rate increase, the modifications causing such increases become subject to the major modification requirements of this title, including the retrofit of required controls. For the purposes of this title, 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.
- "Major Source," for those sources subject to the Federal Operating Permit Program, 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 ~~[(as defined in Title 38)]~~; or any group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person (or persons under common control), belonging to a single major industrial grouping or supporting the major industrial group and that are described in paragraphs (A) or (B) of this definition. For the purposes of this definition, a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant-emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same major group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual (US Office of Management and Budget, 1987) or support the major industrial group.

A. A major source under section 112 of the Act, which is defined as:

- (1) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any Hazardous Air Pollutant (HAP) which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such HAP, or such lesser quantity as the Administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well, with its associated equipment, and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
- (2) For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.

B. A major stationary source as defined in part D of Title I of the Act, including:

- (1) For ozone nonattainment areas, sources with the potential to emit 100 tpy or more of VOCs or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tpy or more in areas classified as "serious," 25 tpy or more in areas classified as "severe," and 10 tpy or more in areas classified as "extreme"; except that the references in this paragraph to 100, 50, 25 and 10 tpy of nitrogen oxides shall not apply with respect to any source for which the Administrator has made a finding, under section 182(F)(1) or (2) of the Act, that requirements to not apply;
- (2) For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit 50 tpy or more of VOCs;
- (3) For carbon monoxide nonattainment areas,
  - (a) that area classified as "serious," and
  - (b) in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the Administrator, sources with the potential to emit 50 tpy or more of carbon monoxide;
- (4) For particulate matter (PM<sub>10</sub>) nonattainment areas classified as "serious," sources with the potential to emit 70 tpy or more of PM<sub>10</sub>.

~~["Major Source" or "Source" means any permitted 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. 100 tons per year or more of any regulated pollutant; or~~

~~B. 50 tons per year or more of a volatile organic compound and is located in a serious ozone non attainment area.]~~

- "Major Source," as used in Title 38, 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 (as defined in this section). For the purposes of this title, 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.
- "Material Balance" means a procedure for calculating emissions based on the difference between the amount of material added to a process and the amount consumed and recovered from a process.
- "Maximum Opacity" means the opacity as determined by EPA Method 9 (average of 24 consecutive observations).
- "Mercury" means the element mercury, excluding any associated elements and includes mercury in particulates, vapors, aerosols, and compounds.
- "Mercury Ore" means any mineral mined specifically for its mercury content.
- "Mercury Ore Processing Facility" means a facility processing mercury ore to obtain mercury.
- "Mercury Chlor-Alkali Cell" means a device which is basically composed of an electrolyzer section and denuder (decomposer) section, and which utilizes mercury to produce chlorine gas, hydrogen gas, and alkali metal hydroxide.
- "Mobile Source" means self-propelled vehicles, powered by internal combustion engines, including but not limited to automobiles, trucks, motorcycles and aircraft.
- "Model Rules" or "Uniform Rules" means the Attorney General's Uniform and Model Rules of Procedure, OAR 137-01-005 through 137-04-010 as amended and in effect on April 29, 1988.
- "Modification of an Air Contaminant Source" means any physical change or change in operation of a source which would result in a non-permitted increase in the air contaminant emissions from that source.
- "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on a public street or highway.
- "Negative pressure enclosure" means any enclosure of an asbestos abatement project area where ambient air pressure is greater than the air pressure within the enclosure, and the air inside the enclosure is changed at least two times an hour by exhausting it through a HEPA filter.

- "New Source" means any air contaminant source not in existence prior to adoption of rules affecting that source.
- "Nonattainment Area" means a geographical area within the jurisdiction of the Authority which exceeds any federal, state or local primary or secondary ambient air quality standard as designated by the Board, the Environmental Quality Commission, or the Environmental Protection Agency.
- "Non-Condensibles" means gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a kraft mill.
- "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.
- "Non-Major Source," as used in Title 38 means a stationary source which will not emit, and does not have the potential to emit, any pollutant regulated under the Clean Air Act at a Significant Emission Rate [~~as defined in Title 38~~].
- "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.
- "Nuisance to the Public" means an interference with a right or privilege common to members of the public, as determined through a formal process by the Board.
- "Nuisance Conditions" means unusual or annoying amounts of air contaminants. In determining whether a nuisance condition exists, consideration shall be given to all relevant factors including but not limited to the density of the affected population and the duration of the offending activity.
- "Odor" means the property of a substance which allows its detection by the sense of smell.
- "Off-Street Area or Space" means any area or space not located on a public road dedicated for public use.
- "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.
- "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background.
- "Opacity Readings" are the individual readings which comprise a visual opacity determination.
- "Open Outdoor Burning" includes burning in open outdoor fires, burn barrels, and incinerators which do not meet emission limitations specified in Section



33-020 of these Rules, and any other outdoor 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.

- "Order" means:
  - A. Any action satisfying the definition given in ORS Chapter 183; or
  - B. Any other action so designated in ORS Chapter 468 or 468A.
- "Other Sources of TRS emissions" means 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 operation; and
  - B. Any vent which is shown to contribute to an identified nuisance condition.
- "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 and local ambient air quality standards.
- "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.
- "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.
- "Particle Fallout Rate" means the weight of particulate matter which settles out of the air in a given length of time over a given area.
- "Particleboard" means mat-formed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.
- "Particulate asbestos material" means any finely divided particles of asbestos material.
- ~~[.0425 "Particulate Matter" means any matter except uncombined water which exists as a liquid or solid at standard conditions.]~~
- ~~[• "Particulate Matter" means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an Authority approved method.]~~
- "Particulate Matter" as used in Titles 33 and 39, means all solid or liquid material, other than uncombined water, emitted to the ambient air as measured in accordance with the Department Source Test 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 be sampled isokinetically, 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; veneer dryers, wood particle dryers and fiber dryers shall be tested with DEQ Method 7; and air conveying systems shall be tested with DEQ Method 8; pulp mills shall be tested with DEQ method 5, except that water shall be used instead of acetone as the clean up solvent.]~~

- "Particulate Matter Emissions" means all solid or liquid matter, other than uncombined water, emitted to the ambient air, as measured by an applicable EPA reference methods.
- "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).
- "Pathological waste" 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 (see also "infectious waste").
- "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Authority, pursuant to LRAPA and DEQ rules and regulations.
- "Permitted Emissions," as used in title 35, means assessable emission portion of the Plant Site Emission Limit.
- "Permittee" means the owner or operator of the facility, in whose name the operation of the source is authorized by [an] the Air Contaminant Discharge Permit or the federal operating permit.
- "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.
- "Person in Charge of Property" means an agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.
- "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. The PSEL may consist of more than one assessable emission.
- "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.

- "PM<sub>10</sub>" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by an approved method as listed in 40 CFR 53.
- "PM<sub>10</sub> Emissions" means emissions of [~~PM10~~] 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 [~~an~~] applicable reference methods in accordance with the Department [~~of Environmental Quality~~]'s Source Sampling Manual.
- "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 Authority.
- "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 federally enforceable. Secondary emissions do not count in determining the potential to emit of a source.
- "ppm" means parts of air contaminant per million parts of air on a volume basis.
- "Prevention of Significant Deterioration Increments" means maximum allowable ambient air quality impacts over baseline concentrations in areas designated Class I, II or III, as follows:

	Micrograms Per Cubic Meter		
	<u>Class I</u>	<u>Class II</u>	<u>Class III</u>
Particulate Matter--			
TSP Annual Geometric Mean	5	19	37
* TSP 24-Hour Maximum	10	37	75
Sulfur Dioxide--			
Annual Arithmetic Mean	2	20	40
* 24-Hour Maximum	5	91	182
* 3-Hour Maximums	25	512	700

(\* For these time periods, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.)

- "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.
- "Prior Violation" means any violation established, with or without admission, by payment of a civil penalty, by an order of default, by

issuance of a Notice of Non-Compliance or a Notice of Permit Violation, or by a stipulated or final order of the Authority.

- "Process Unit" includes all equipment and appurtenances for the processing of bulk material which are united physically by conveyor or chute or pipe or hose for the movement of product material provided that no portion or item of the group will operate separately with product material not common to the group operation. Such a grouping is considered encompassing all the equipment used from the point of initial charging or feed to the point or points of discharge of material where such discharge will:
  - A. Be stored,
  - B. Proceed to a separate process, or
  - C. Be physically separated from the equipment comprising the group.
- "Process Upset" means a failure or malfunction of a production process or system to operate in a normal and usual manner.
- "Process Weight" means total weight of the materials, including solid fuels but not including liquid and gaseous fuels and combustion air introduced into any process unit which may cause any emission into the atmosphere.
- "Production (Kraft Mill)" means the daily amount of air-dried unbleached pulp, or equivalent, produced during the 24-hour period each calendar day, or Authority-approved equivalent period, and expressed in air-dried metric tons (admt) per day. The corresponding English unit is air-dried tons (adt) per day.
- "Propellant" means a fuel and oxidizer physically or chemically combined containing beryllium or beryllium compounds, which undergoes combustion to provide rocket propulsion.
- "Propellant plant" means any facility engaged in the mixing, casting, or machining of propellant.
- "Public nuisance" see "Nuisance to the Public."
- "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.
- "Reckless" or "recklessly" means conduct by a person who is aware of and consciously disregards a substantial and unjustifiable risk that the result will occur or that the circumstance exists. The risk must be of such a nature and degree that disregard thereof constitutes a gross deviation from the standard of care a reasonable person would observe in that situation.
- "Recovery Furnace (Kraft Mill)" means the combustion device in which dissolved wood solids are incinerated and pulping chemicals recovered from the molten smelt. For these regulations, and where present, this term shall include the direct contact evaporator.

- "Reference Method" means ~~[a source testing technique approved by LRAPA]~~ any EPA approved method. (The methods are listed in the state Department of Environmental Quality's Source Sampling Manual.)
- "Refuse" means unwanted matter.
- "Refuse Burning Equipment" means a device designed to reduce the volume of refuse by combustion.
- "Regional Authority" means a regional air quality control authority established under the provisions of ORS 468.505.
- "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.
- ~~["Regulated Pollutant" means PM<sub>10</sub>, Sulfur Dioxide (SO<sub>2</sub>), Oxides of Nitrogen (NO<sub>x</sub>), 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.]~~
- "Renovate" or "Renovation" means altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or removed are excluded.
- "Residential Area" means land which is zoned or used for single or multiple family or suburban residential purposes.
- "Residential Open Burning" means the open burning of clean wood, paper products, and yard debris which are actually generated in or around a dwelling for four (4) or fewer family living units. Once this material is removed from the property of origin it becomes commercial waste. Such materials actually generated in or around a dwelling of more than four (4) family living units are commercial wastes.
- "Residual Fuel Oil" means any oil meeting the specifications of ASTM Grade 4, Grade 5 or Grade 6 fuel oils.
- "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 fifty (50) percent or more of the heat input to be considered a resource recovery facility.
- "Respondent" means the person to whom a formal enforcement action is issued.
- "Responsible person" means each person who is in ownership, control, or custody of the property on which the open burning occurs, including any tenant thereof; or who is in ownership, control, or custody of the materials

which are burned; or any person who causes or allows open burning to be initiated or maintained.

- "Ringelmann Chart" means the Ringelmann Smoke Chart with instructions for use as published in May, 1967, by the United States Bureau of Mines.
- "Risk of Harm" means the level of risk to public health or the environment created by the likelihood of exposure, either individual or cumulative, or the actual damage, either individual or cumulative, caused by a violation. [~~Risk of harm shall be categorized as major, moderate or minor levels.~~]
- "Roadways" mean surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.
- "Rule" means any agency directive, regulation or statement of general applicability that implements, interprets or prescribes law or policy, or describes the procedure or practice requirement of any agency. The term includes the amendment or repeal of a prior rule, but does not include:
  - A. Internal management directives, regulations or statements between agencies, or their officers or their employees, or within an agency, between its officers or between employees, unless hearing is required by statute, or action by agencies directed to other agencies or other units of government.
  - B. Declaratory rulings issued pursuant to ORS 183.410 or 305.105.
- "Secondary (or Final) Combustion Chamber" means the discrete equipment, chamber, or space, excluding the stack, in which the products of pyrolysis are combusted in the presence of excess air, such that essentially all carbon is burned to carbon dioxide.
- "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.
- "Sensitive Area" means locations which are actual or potential air quality non-attainment areas, as determined by LRAPA.
- "Sharps" 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 (see also "infectious waste").

- "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than:

Pollutant	Annual	Pollutant Averaging Time			
		24-hour	8-hour	3-hour	1-hour
SO <sub>2</sub>	1.0 ug/m <sup>3</sup>	5 ug/m <sup>3</sup>	---	25 ug/m <sup>3</sup>	---
TSP or PM10	0.2 ug/m <sup>3</sup>	1.0 ug/m <sup>3</sup>	---	---	---
NO <sub>2</sub>	1.0 ug/m <sup>3</sup>	---	---	---	---
CO	---	---	0.5 mg/m <sup>3</sup>	---	2 mg/m <sup>3</sup>

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 thirty (30) kilometers of an ozone nonattainment area and is capable of impacting the nonattainment area.

- "Significant Emission Rate" means emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:

Pollutant	Significant Emission Rate	
Carbon Monoxide	100	tons/year
Nitrogen Oxides	40	tons/year
Particulate Matter PM10	25 15	tons/year
Sulfur Dioxide	40	tons/year
Volatile Organic Compounds	40	tons/year
Lead	0.6	ton/year
Mercury	0.1	ton/year
Beryllium	0.0004	ton/year
Asbestos	0.007	ton/year
Vinyl Chloride	1	ton/year
Fluorides	3	tons/year
Sulfuric Acid Mist	7	tons/year
Total Reduced Sulfur (including hydrogen sulfide)	10	tons/year
Reduced Sulfur Compounds (including hydrogen sulfide)	10	tons/year

For pollutants not listed above, the Authority shall determine the rate that constitutes a significant emission rate.

Any emissions increase less than these rates associated with a new source or modification which would construct within ten (10) kilometers of a Class I area and would have an impact on such area equal to or greater than 1 ug/m<sup>3</sup> (24-hour average) shall be deemed to be emitting at a significant emission rate.

- "Significant Impairment" occurs when visibility impairment, in the judgement of the Authority, interferes with the management, protection, preservation,

or the enjoyment of the visual experience of visitors within a Class I area. The determination will be made on a case-by-case basis, considering the recommendation 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 Area, and the frequency and occurrence of natural conditions that reduce visibility.

- "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.
- "Slash" means forest debris of 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 is related to the management of forest land and does not include the burning of any other material created by land clearing.
- "Small-scale asbestos abatement project" means any short-duration asbestos abatement project as defined in 41, below, 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;
  - 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.
- "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 asbestos-containing insulation on pipes;
  - B. Removal 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; or
  - E. Installation of electrical conduits through or proximate to asbestos-containing materials.

Small-scale activities shall be limited to no more than forty (40) linear feet or eighty (80) square feet of asbestos-containing materials. An activity that would otherwise qualify as a full-scale abatement project shall not be subdivided into smaller units in order to avoid the requirements of these rules.



- F. No such activity described above shall result in airborne asbestos concentrations above 0.1 fibers per cubic centimeter of air (calculated on an 8-hour weighted average).
- "Smelt dissolving tank vent (Kraft Mill)" means the vent serving the vessel used to dissolve the molten smelt produced by the recovery furnace.
  - "Smoke" means small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon, ash and other combustible materials present in sufficient quantity to be observable.
  - "Solid Waste" means refuse, more than 50% 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 Incinerator" means an incinerator which is operated or utilized for the disposal or treatment of solid waste, including combustion for the recovery of heat.
  - "Source," except as used in Titles 32 and 34, and those sources subject to the Federal Operating Permit Program, 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 of 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).
  - "Source," as used in LRAPA Title 38, New Source Review, and the definitions of "BACT," "Commenced," "Construction," "Emission Limitation," "Emission Standard," "LAER," "Major Modification," "Major Source," "Potential to Emit," and "Secondary Emissions" as these terms are used for purposes of LRAPA Title 38, includes all pollutant-emitting activities which belong to a single major industrial group (i.e., which have the same two-digit code), as described in the Standard Industrial Classification Manual, (U. S. Office of Management and Budget, 1987) or are supporting the major industrial group.
  - "Source Category" means a group of major sources determined by the Authority to be using similar raw materials and having equivalent process control and pollution control equipment.
  - "Source Test" means the average of at least three test runs during operating conditions representative of the period for which emissions are to be calculated, conducted in accordance with the Department's Source Sampling Manual or other Authority-approved methods.
  - "Special Problem Area" means the formally designated Eugene/ Springfield AQMA and other specifically defined areas that the Board and the Environmental Quality Commission may formally designate in the future.

- "Standard Conditions" means a gas temperature of sixty-eight (68) degrees Fahrenheit and a gas pressure of 29.92 inches of mercury.
- "Standard Cubic Foot (SCF)" means that amount of gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at standard conditions.
- "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 (29.92 inches of 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.
- "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.
- "Shutdown," as used in Title 36, means that time during which normal operation of an air contaminant source or emission control equipment is terminated.
- "Startup," as used in Title 36, means that time during which an air contaminant source or emission control equipment is brought into normal operation.
- "Startup," except as used in Title 36 and 46, means commencement of operation of a new or modified source resulting in release of contaminants to the ambient air.
- "Structural member" means any load-supporting member, such as beams and load-supporting walls, or any non-supporting member, such as ceilings and non-load-supporting walls.
- "Substantial Underpayment" means the lesser of ten percent (10%) of the total interim emission fee for the major source or five hundred dollars (\$500).
- "Tempering Oven" means any facility used to bake hardboard following an oil treatment process.
- "Threshold Level of Olfactory Detection" means the odor perception threshold for fifty percent (50%) of the odor panel as determined by the ASTM procedure DI 391-57 Standard Method of Measurement of Odor in Atmospheres (Dilution method), or an equivalent method.

- "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<sub>2</sub>S).
- "Transmissometer" means a device that measures opacity and conforms to EPA specification Number 1 in Title 40 CFR, Part 60, Appendix B.
- "TSP" means particulate matter as measured by an [approved] reference method.
- "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.
- "Uncombined Water" means water which is not chemically bound to a substance.
- "Upset" or "Breakdown" mean any failure or malfunction of any pollution control equipment or process equipment which may cause excess emissions.
- "Vehicle Trip" means a single movement by a motor vehicle which originates or terminates at or uses an Indirect Source.
- "Veneer" means a single flat panel of wood not exceeding one-quarter (1/4) inch in thickness, formed by slicing or peeling from a log.
- "Veneer Dryer" means equipment in which veneer is dried.
- "Verified Emission Factor" means an emission factor approved by the Authority and developed for a specific major source or source category and approved for application to that major source by the Authority.
- "Violation" means a transgression of any statute, rule, order, license, permit, or any part thereof, and includes both acts and omissions. Violations shall be classed according to risk of harm as follows:
  - A. "Class One or I" means any violation which poses a major risk of harm to public health or the environment, or violation of any compliance schedule contained in an agency permit or board order;
  - B. "Class Two or II" means any violation which poses a moderate risk of harm to public health or the environment;
  - C. "Class Three or III" means any violation which poses a minor risk of harm to public health or the environment.
- "Visual Opacity Determination" consists of a minimum of twenty-four (24) opacity readings recorded every fifteen (15) seconds and taken by a trained observer.
- "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.

- [~~"VOC" means volatile organic compounds as defined in 40 CFR 51.100(S)-.~~]
- "Volatile Organic Compound" or "VOC" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions.
  - (A) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (CFC-22); trifluoromethane (FC-23); 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro-1-fluoroethane (HCFC-141b); 1-chloro-1,1-difluoroethane (HCFC-142b); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane 2 (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); and perfluorocarbon compounds which fall into these classes:
    - (1) Cyclic, branched, or linear, completely fluoroinated 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.
  - B. For purposes of determining compliance with emissions limits, VOC will be measured by an applicable reference method in accordance with the Department's Source Sampling Manual, January, 1992. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly reactive compounds, as listed in subsection A, may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by the Department.
  - C. As a precondition to excluding these compounds, as listed in subsection A, as VOC or at any time thereafter, the Authority may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Authority, the amount of negligibly reactive compounds in the source's emissions.
- "Volatile Organic Compound (VOC)," as used in Title 35, means any organic compound which would be emitted during use, application, curing or drying of a surface coating, solvent, or other material. Excluded from this definition are those compounds which EPA classifies as having negligible photochemical reactivity, which include: methane, ethane, methylene chloride, 1,1,1--trichlor-ethane (methyl chloriform), trichlorofluoromethane

(CFC-11), dichloro-fluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC 115).

- "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.
- "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.
- "Wigwam Waste Burner" means a burner which consists of a single combustion chamber, which has the general features of a truncated cone and is used for incineration of refuse.
- "Woody Yard Trimmings" means woody limbs, branches and twigs, with any attached leaves, which have been cut from or fallen from trees or shrubs from the property around a dwelling unit.
- "Yard Debris" means wood, needle, or leaf materials from trees, shrubs, or plants from the property around a dwelling unit.

## MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--JANUARY 11, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

### ATTENDANCE:

Board Steve Dodrill, Chair--Eugene; Terry Callahan--Oakridge; Nancy Nathanson--Eugene; Gretchen Nicholas--Eugene; Ralf Walters--Springfield  
(ABSENT: Marie Frazier--Lane County. The at-large position was vacant at the time of this meeting.)

Staff Don Arkell--Director, Mike Tharpe, Kim Partridge, Sharon Allen, Merrie Dinteman

**OPENING:** Callahan called the meeting to order at 12:48 p.m.

**ELECTION OF 1994 OFFICERS:** Callahan called for nominations for chair of the LRAPA board for 1994. Walters nominated Callahan to serve another year as chair, and Nicholas seconded the nomination. Callahan brought up the fact that there is a rotation of officers among the participating entities, and that Eugene representative Steve Dodrill--the 1993 vice-chair--would be next in line to serve as chair according to the rotation. The nomination and second were withdrawn.

**\*\* Action \*\*** MSP (Nathanson/Walters)(Unanimous) nomination of Steve Dodrill as LRAPA board chair for 1994.

There were no further nominations.

**\*\* Action \*\*** MSP (Nathanson/Walters)(Unanimous) to close nominations and ratify the nomination of Steve Dodrill.

Callahan then called for nominations for vice-chair. Arkell said that, if the board continued the rotation, Lane County would be next in line to serve as vice-chair, then Springfield, then the at-large member, and then back to the Cottage Grove/Oakridge representative.

Dodrill nominated Ralf Walters to serve as vice-chair, and Callahan seconded the nomination. Walters declined the nomination, stating that he is in transition with his business and that the LRAPA board meeting dates have been conflicting with business deadlines. He is not yet sure what his 1994 schedule will be and cannot commit to attending all LRAPA meetings. The nomination and second were withdrawn. Callahan then passed the gavel to Steve Dodrill.

**\*\* Action \*\*** Walters nominated Callahan to serve as 1994 vice-chair, and Nathanson seconded the nomination. Callahan was elected by unanimous vote.

MINUTES:

Dodrill commented that, in the discussion concerning the financial audit, on page 4 of the minutes, the word "generally" should be added, to read: "Dodrill commented that the audit report indicated that the staff generally did a very good job of handling the agency's finances." He said he did not want his comment to seem to condone the fact that the auditors did find an over-expenditure in the FY 92/93 records.

\*\* Action \*\*

MSP (Callahan/Nicholas)(unanimous) approval of minutes of December 14, 1993 meeting, as corrected.

Walters asked what would be the effect of the Governor's mandate to state agencies to plan decreases in spending levels, including program areas funded by grants and fees. If the level of contributions through grants and fees actually goes higher, would that money be used to fund other operations of government or other projects? Arkell responded that no one knows, yet, what the effect will be, because these plans have not yet been fully developed or approved. He explained that DEQ and LRAPA are funded from a variety of sources, including general funds which are approved by the legislature, and grants and fees which are also allocated for state programs by the legislature. LRAPA's portion of those funds comes through DEQ as a line item in the state budget. Although that funding seems secure for this fiscal year, indications are that there will be some reduction of general funds and federal grant funds in the coming fiscal year. The Governor has directed state agencies to make actual reductions in expenditures instead of just swapping reductions in general funds for increases in grants and fees.

Walters commented that, if agencies raise more money in grants and fees than what they are allowed to spend during that year, the fees become a tax. Arkell stated that it would not be a tax. Any excess funds in a given year would either be held in reserve or returned. Any federal grant funds not spent within the allotted time are returned to EPA. Excess fees would be carried forward in a separate account and used later. LRAPA is under no obligation to spend money or lose it. The only obligation is to meet the non-federal match for federal funding, which LRAPA has done.

EXPENSE REPORT: MSP (Nathanson/Walters)(unanimous) approval of expense report through December 31, 1993, as presented.

PUBLIC PARTICIPATION: None.

ADVISORY COMMITTEE: Kim Partridge reported that the committee will lose two members as of February and that a news release had been put out soliciting applications for membership. A letter of interest was received from Dave Seluga of Springfield. Partridge indicated that the committee also needs a representative from agriculture. She said the committee had recommended appointment of Tamara Davis, who has been attending committee meetings regularly and is very interested and active. Partridge reminded board members that the board changed membership of the committee from 15 to 11 members last year, in response to a request from the committee. She asked whether the board would like to keep that maximum

APPROVED  
DATE: 1/11/94  
BY: [Signature]

number or raise it to 12 or 13. She commented that it has been more difficult getting a quorum for meetings with 11 members than it was when there were 15 members. If the committee membership were left at 11 maximum, and an agricultural representative applied for appointment, Davis could not be appointed at this time. If the membership maximum were raised, she could be appointed at this time. (See New Business for action regarding the advisory committee.)

**PUBLIC PARTICIPATION:** None.

**AUTHORIZATION OF  
PUBLIC HEARING,  
PROPOSED AMEND-  
MENTS TO LRAPA  
TITLE 15  
(ENFORCEMENT):**

Arkell explained that the proposed amendments will result in significant change to LRAPA's enforcement procedures and civil penalties. The changes are necessary due to changes in state statutes over the past two legislative sessions. Also, the DEQ has adopted new civil penalty schedules which LRAPA must now adopt. In addition, the LRAPA proposal establishes penalties for specific classes of violations related to the federal permitting program. Arkell said that notices about the proposed amendments were sent out to a list of almost 300 interested parties, including all LRAPA permit holders and all asbestos contractors with whom LRAPA does business regularly, as well as local governments, environmental organizations and others. A few people had requested copies of the draft rules, and one written comment, regarding flexibility in penalty mitigation, had been received prior to this meeting. Arkell added that he had spoken with DEQ following public hearings on its enforcement rules, and was told that they received very few comments. He said he does not expect the proposal to be of major concern to the public.

Although the majority of the proposed amendments are locked in by state law, Arkell said there are a few areas where LRAPA has some discretion, and the board might wish to deal with those issues. Those areas are: the extent to which the board wishes to review mitigation of civil penalties; and the extent to which LRAPA will bring in prior notices of violation under these rules, or continue to treat them as they were treated under the existing rules, once these are adopted. Staff's proposal is that any pending case would continue to be handled under the rules in effect prior to these rules, for the purpose of establishing class of violation for prior offenses.

Nathanson requested that the chambers of commerce be added to the mailing list to receive notices of rulemaking.

There was some discussion of the role the board wishes to play in mitigation of civil penalties. Board members present felt that the board should be involved in mitigation of larger civil penalties, in order to insulate staff against public perception of inequity of treatment or arbitrary decisions in different cases. Consensus following discussion was that the board would like staff to handle mitigation requests on smaller civil penalties but would like to be involved in the decisions for mitigation of penalties of Class I violations of the \$10,000 matrix. Arkell stated that the proposed rules were worded like the state's rules, which delegate responsibility for penalty mitigation to the DEQ director. He said the draft rules can be



changed to reflect board consensus on this issue. He added that staff would write an addendum to the rule draft with this information in it, to hand out to anyone requesting copies of the proposal. Nathanson said that, since the rules have not yet been through public hearing, the board can't actually make an official decision on that, yet; therefore, the addendum should state that the board will consider this change in addition to the originally proposed amendments.

**\*\* Action \*\***

MSP (Callahan/Nathanson)(unanimous) authorization of public hearing for proposed amendments to Title 15 at the March 8, 1994 meeting.

**AUTHORIZATION OF PUBLIC HEARING, AMENDMENTS TO TITLES 33 AND 12 AND ADOPTION OF NEW TITLE 30 (INCINERATORS):**

Arkell stated that the proposed rulemaking, which was discussed with the board at a previous meeting, would affect six facilities currently operating in Lane County--one hospital incinerator and five crematories. He said it would also affect solid waste incinerators and, although there currently are none operating in Lane County, any new facilities would be subject to these rules. Arkell said the proposed rules were discussed with operators of the affected sources and that compliance should not create any difficulty for the crematories. The rules would, however, create major concerns for the hospital incinerator. Arkell said that, during the one-year grace period following adoption of these rules, the hospital plans to review its options for compliance. The choice might be made to close down the incinerator, package the waste and ship it to Portland for disposal. He added that this would be a good option from an air quality standpoint.

Walters called attention to Section 30-045.3, which states; "In cases where incinerator operation causes odors which unreasonably interfere with the use and enjoyment of property, the Authority may require by permit the use of good practices and procedures to prevent or eliminate those odors." Walters said the word "unreasonably" made the wording too lax, and it should be more stringent. He said the rules should strive for elimination of all odor from crematory operations. Arkell responded that he was not aware of the agency's receiving any complaints regarding odors from crematories. The only complaints have been infrequent and have involved visual observation of smoke due to burner failure. Walters said that, although he would like the wording to be stronger, he did not wish to invite neighborhood nuisance complaints just because someone doesn't like living next to a crematorium. Mike Tharpe stated that removal of the word "unreasonably" should not cause that kind of problem because, in order to enforce the rules, LRAPA staff would have to detect the odors, themselves--not just accept the word of a complainant. Nuisance complaints should not be a problem. Arkell said the word "unreasonably" would be stricken from the proposed section 30-045.3.

**\*\* Action \*\***

MSP (Callahan/Walters)(unanimous) authorization of public hearing on proposed amendments to Titles 33 and 12 and adoption of new Title 30 at the March 8, 1994 meeting.

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MARCH 29 1994

**DIRECTOR'S REPORT:** Arkell said staff will be undertaking enforcement of federal registration requirements for dry cleaners in Lane County and should complete initial registrations within about four months. Dry cleaners are one category of hazardous air pollutants which will be regulated under the Clean Air Act. He added that most dry cleaners have the kinds of controls required by EPA, and that part of the registration procedure is to inventory the cleaners and the kinds of controls they have.

Federal  
Operating  
Permit Program

Staff continues to work with Lane County major sources to get set up for the federal operating permit program and had completed submittal of the attorney general's opinion of LRAPA's authority to implement the program in Lane County. EPA had some questions about the state attorney general's opinion and LRAPA's jurisdiction to do the program, but those questions have been cleared up. EPA was expected to issue an affirmative completeness determination on the submittal by mid-January, and then to undertake the review process. Staff expects to be ready to begin enforcing the federal operating permit program by the end of 1994.

**OLD BUSINESS:**

Update on Employee Compensation Review. Dodrill reported that the committee was awaiting information from staff. Sharon Allen stated that the requested information had been gathered from other agencies, and staff was in the process of compiling it to send out to the committee chair, Don Nelson, within the next two weeks.

At-Large Board Position. Arkell said that Beverly Ficek had indicated that she may have some recommendations for the board regarding appointment to the position. He asked the board to decide how they wished to proceed with appointment of a new board member. He reminded them that a major criterion at the time Ficek was appointed was that the person live in a more rural area of the county rather than inside the Eugene-Springfield urban growth area. He also stated that since Eugene already has three representatives on the board--the maximum allowed by law--no one from inside the Eugene city limits can be appointed. Board members present commented as follows:

Walters. Does not want to see the board become dominated by "city environmentalists," and wants to be sure that rural interests are given equal consideration by this and future boards. He said he does not feel it is necessary to have another Springfield representative on the board. Walters pointed out that the manner in which the positions on the LRAPA board are designated according to statute indicates some concern for equal representation of all areas of the county. He strongly favored appointment of a person from a rural area of northern Lane County.

Callahan. There were a number of very well qualified individuals who applied at the time Ficek was appointed. Advertisement for the position stressed the preference for a rural representative, but the only applications received were from urban residents. As a rural representative, himself, Callahan said he would have no problem appointing another individual from the Eugene-Springfield

urban growth area. He said he thought most people appointed to this board would look at the issues and the long-range effects on everyone--not just from a rural vs urban standpoint. He suggested contacting the people who applied last time to see if they are still interested, and making a selection from those individuals.

Nicholas. Agreed that the previous applications provided some very well qualified people. She pointed out that, even though she lives in Eugene, she works in Veneta and brings that rural perspective to the board. Nicholas said that geographic designation does not guarantee a certain point of view. She commented that last year's recruitment effort did not attract applicants from the desired location. It is more important to appoint an individual who is very interested in LRAPA and will attend the meetings. She was in favor of selecting an appointee from the existing list of applicants.

Dodrill. Agreed that the board lacks representation for northern Lane County. He commented that, while he feels that the rural interests need to be served, he thinks the LRAPA board is fair enough to hear and deal with rural concerns. He also reminded board members that the at-large member was a Springfield representative in the past, and that the appointment is for two years, only. Representation can be from different areas each time the appointment is made, if that is what the board wants to do. Dodrill was in favor of using the applications received last year and hearing nominations at the February meeting.

Nathanson. Much of the impact of poor air quality is generated inside the metro area and impacts the quality of life for people outside the metro area; however, much of what the LRAPA board does impacts the lives, financially and physically, of the people in the metro area. It is important to have adequate representation from people within the urban growth area, such as Glenwood or River Road-Santa Clara or other areas inside the metro area but outside the cities. Perhaps the two board members already representing rural areas are enough to maintain a rural/urban mix.

Consensus

Following discussion, board members present decided to advertise the position again, indicating preference for applicants from northern Lane County, outside the Eugene-Springfield Urban Growth Boundary. The ads should also specify that residents inside the Eugene city limits are not eligible. Staff was also directed to notify the individuals who applied last year and let them know that this is opening up again in case they wish to re-apply.

Dodrill commented that applications from River Road-Santa Clara residents should be considered, even though they are inside the UGB, because otherwise they can't get representation on this board at all. They are not part of the city of Eugene, and the UGB cutoff would also exclude them from eligibility. Walters agreed that this is a good point.

RECEIVED  
LRAPA BOARD OF DIRECTORS  
JAN 11 1994

**NEW BUSINESS:** Nancy Nathanson brought up two issues which were brought to her attention by constituents.

1. Home Wood Heating Advisories. A resident of Eugene had spoken with Nathanson several times and with Arkell twice about localized wood smoke problems. His argument is that, while the agency's monitoring network gives a good regional representation of the Eugene-Springfield UGB, and the wood heating advisories which are set using the monitoring data are adequate overall, there are some specific topographic and climatological micro-climate regions in the area where there are specific conditions which create air quality standard differences, particularly in the south hills area of Eugene. He questions whether there might be thousands of people being subjected to very poor air quality because this one specific region has conditions that hold smoke and particulates in. Nathanson said the questions raised include:
  - A. How do we site and pay for maintenance and operation of additional air quality monitoring facilities?
  - B. If we did find that air quality is routinely poor in certain areas, what would we do?
  - C. Could we have sub-regions with different advisories?
  - D. Perhaps there are neighborhoods which are strongly impacted by a single household, and the situation could be handled through neighborhood organizations or some other localized solutions at the neighborhood level.

Nathanson asked that the board review the information which Arkell had prepared for her on this subject and asked staff to also send copies of the letter she had received from the constituent out to the board. She asked that this subject be placed on the agenda for discussion at a future meeting.

Arkell said this type of questions is a classic dilemma which comes up when you try to monitor at fixed locations. It is not known whether there might be higher levels of pollutants at locations other than the monitoring sites, although it is entirely possible. He said the agency must plan and budget for the monitoring necessary to determine the answers to these questions. In the meantime, Arkell said he had offered to do some survey work to test the complainant's theory but had explained to him that the agency can't relocate a \$10,000 to \$20,000 monitoring site without first having a lot more information than we have now. Arkell said he will continue to maintain contact with the complainant and work with him on this issue.

2. Regulation of Toxic Emissions. Nathanson said a constituent has been contacting her regularly regarding a west Eugene manufacturing facility which LRAPA might consider a nuisance, but which might actually be something more. She wants to schedule discussion at a future board meeting

about the more general issue of regulation of toxic emissions. Specifically, she would like to try to find answers to several questions:

- A. If we regulate toxic emissions, are we doing everything we can to assure the physical well-being of people when there are nuisances that actually do affect or might affect health on a long-term basis?
- B. If you are exposed to something and it makes your eyes water and your throat burn, or whatever, it might not have a toxic effect today; but what effect might that have, over time, on your level of health?
- C. Do we have authority to require, through permitting, some other kinds of treatment or some more rigid standards--a greater degree of control than what is technically required?

Nathanson said she would like to develop a more definitive response so that, when she is asked these questions, she can say something other than that the company is operating with a permit and there is nothing else LRAPA can do.

Arkell said he would work with Nathanson to prepare some information for the board to review.

Advisory  
Committee  
\*\* Action \*\*

MSP (Callahan/Walters)(unanimous) appointment of Tamara Davis to the LRAPA Advisory Committee, and expansion of the committee membership to 13 members.

ADJOURNMENT:

Prior to adjourning the meeting, Dodrill thanked Terry Callahan for his service as board chair during the past year. The other board members added their thanks. There being no further business, the meeting adjourned at 2:12 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, February 8, 1994, at 12:30 p.m. in the Springfield City Council Chambers.

Respectfully submitted,

*Merrie J. Dinteman*  
Merrie Dinteman  
Recording Secretary

Mr. Callahan  
 Mr. Walters  
 Mr. Dodrill  
 Mr. Arkell  
 Mr. Nathanson  
 Ms. Dinteman

# MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--MARCH 8, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

## ATTENDANCE:

Board Steve Dodrill, Chair--Eugene; Terry Callahan--Oakridge; Marie Frazier--Lane County; Mark Hommer--At-Large; Kevin Hornbuckle--Eugene; Gretchen Nicholas--Eugene  
(ABSENT: Ralf Walters--Springfield)

Staff Don Arkell--Director, Mike Tharpe, Kim Partridge, Sharon Allen, Merrie Dinteman

OPENING: Dodrill called the meeting to order at 12:13 p.m.

MINUTES: MSP (Frazier/Callahan)(unanimous) approval of the minutes of the February 8, 1994 meeting, as submitted.

EXPENSE REPORT: Sharon Allen distributed a spreadsheet showing the amounts originally budgeted for FY 93/94 and the effects of the supplemental federal grant funds received thus far during the same time period. Expenditure of the funds for each grant is approved by resolution by the board, and the spreadsheet showed the distribution of each grant, by resolution number.

Dodrill commented that the report seemed to indicate that AIRmetrics is falling behind anticipated revenues and asked whether there are any problems. Allen responded that the amount budgeted is higher than what is actually expected, to avoid having to go back to the budget committee for a supplemental budget if the amount were to exceed the budget.

**\*\* Action \*\*** MSP (Hommer/Nicholas)(unanimous) approval of expense report through February 28, 1994, as presented.

ADVISORY COMMITTEE: Kim Partridge reported that the committee began working on PM10 redesignation for Eugene-Springfield in February and is expected to continue with that project for the next nine or ten months.

PUBLIC PARTICIPATION: None.

PUBLIC HEARING--  
PROPOSED AMEND-  
MENTS TO LRAPA  
TITLE 15  
(ENFORCEMENT): Arkell said comments on the proposed amendments to Title 15 were received the previous week, and the rule proposal was revised to reflect those and other comments and LRAPA's responses.

Public Hearing Dodrill opened the public hearing at 12:19 p.m. There was no one present who wished to comment on the proposed amendments, the public hearing was closed at 12:19.

Discussion Nicholas asked whether the issue of board involvement in civil penalty mitigations still needed to be resolved. Arkell responded that the board had decided that the director's decision on mitigations would be final except for Class I major violations

of the \$10,000 penalty matrix. Nicholas expressed concern that board review of the large penalties not extend the process for a long period of time. Arkell said that the large penalties are expected to be negotiated at the staff level over a two to three month period prior to being brought to the board and that board involvement would add no more than a month to the process. He said experience has shown that the step of bringing the mitigation request before the board has not delayed implementation of any compliance schedules associated with the order, and the matters are resolved fairly expeditiously once the negotiations are concluded. Arkell added that he plans to keep the board informed of progress during negotiations and bring the board in at the time when decisions must be made, rather than waiting until the agreement is already accomplished before involving the board in it.

Nicholas was also concerned that citizens be informed about the increased penalties for open burning violations so that it doesn't take them by surprise. She asked how such notification is accomplished. Arkell said the most cost effective medium is newspaper articles. He said that notice regarding previous open burning rule changes was mailed to over 900 individuals who had obtained burning permits in the affected areas, and some of those people still said they were unaware of the rule changes. The agency does have a list of LRAPA permitted sources and other interested parties to which notices are mailed, in addition to newspaper, TV and radio coverage.

Frazier asked whether the enhanced penalties will result in additional staff costs, and also whether the penalties will still go to the county. Arkell explained that, with increased penalties, the possibility of increasing frequency of contested cases also goes up. He said that additional staff costs would likely be for legal assistance rather than regular staff. The small penalty cases which are contested are the ones that cause the financial problems, because the cost of legal assistance may exceed the amount of the penalties, using up available funds and leaving the agency in a weakened position from which to pursue the larger cases. He pointed out that the Authority's request to the county for reimbursement of legal costs for enforcement becomes even more important with the likelihood of increased contested cases. Frazier said the requested had gone to Finance and Audit, and some questions were raised. Arkell said he would contact Margo Drivas to discuss the questions.

Hornbuckle asked whether the higher cost associated with more contested cases was part of the justification for the larger penalty amounts. Arkell responded that the increase in penalties is due primarily to requirements of the federal Clean Air Act and corresponding state rules.

Arkell also said there were some small errors in the rule draft, mostly where the changes in response to comments did not get put into this draft. The changes will be made in the final version of the rules.

**\*\* ACTION \*\***

MSP (Callahan/Nicholas)(Unanimous) adoption of amendments to Title 15, "Enforcement."

**PUBLIC HEARING--  
PROPOSED AMEND-  
MENTS TO TITLES  
12 (DEFINITIONS)  
AND 33, AND  
ADOPTION OF NEW  
TITLE 30  
(INCINERATORS):**

Arkell said this was the package of rule changes which received the most comments. Most were relatively minor technical comments in Title 12, the definitions section of the rules. The proposal attempts to put all definitions used throughout the rules into one title and then to reference words and terms used in each of the other titles, as needed. There are several words or terms which are used differently in different titles and so require more than one definition in Title 12. Staff has attempted to simplify use of the rules and avoid confusion by putting all definitions in one place instead of in the individual titles.

As with the draft Title 15, Arkell said, there were some small errors in the drafts for Title 12. He pointed out a few of those errors so that the board could see the types of changes to be made in the final version of the rules. Examples are: (1) on page 27 of Title 12, under the definition of "source," the word "except" should be taken out because the word "source" does need to be defined for use in the two titles which the word "except" would exclude; (2) on page 28, under the definition of "startup-shutdown" and the second definition of "start-up," the word "except" and the words "Title 36 and" should be omitted. Arkell said that the changes would not change the intended meaning of the rules. In each case, LRAPA staff agreed with the comments received, and it just did not get entered into the draft rules.

**Public Hearing**

Dodrill opened the public hearing at 12:38 p.m. There was no one present who wished to comment on the rule proposals. Dodrill asked Arkell whether there was any additional material submitted which was not in the agenda packets. Arkell responded that there had been no further written comments or phone calls received. The hearing was closed at 12:38 p.m.

**Discussion**

Dodrill asked whether the board felt comfortable with making the minor changes which Arkell had described, after the fact. Consensus was that the changes were not substantive and seemed to be consistent with the intent of the rules.

**\*\* ACTION \*\***

MSP (Frazier/Nicholas)(Unanimous) to rescind Section 33-020, the existing incinerator rules.

MSP (Callahan/Frazier)(Unanimous) to adopt new Title 30 incinerators rules.

MSP (Frazier/Hornbuckle)(Unanimous) to adopt amendments to Title 12 definitions.

**AUTHORIZATIONS TO  
EXPEND FEDERAL  
SUPPLEMENTAL  
GRANT FUNDS--**

**(1) ENGINEERING  
SERVICES DATA  
SYSTEM UPDATE**

Allen explained that the next four items on the agenda were resolutions authorizing expenditure of federal supplemental grant funds for which LRAPA was able to qualify after the current budget was adopted last year. The first one, Resolution Number 94-7, was to upgrade the engineering services data system. Allen said this was a pass-through grant from EPA through DEQ and that, in addition to a person to do the work, the grant would also pay for creation of a work area and for a computer, both of which



(2) OAKRIDGE  
PM10 STUDY will be used in the future when interns are brought in to work on these special projects.

(3) NORTH EUGENE  
MONITORING SITE Staff has found that the information currently in the data system often does not reflect what is actually the case. The work being accomplished under this grant is to develop an emissions inventory form to send out to air contaminant sources, to validate the information received and enter it into the system. The end result will be to update the system, itself, as well as the information in the system.

(4) WOODSTOVE  
EDUCATION

Frazier suggested that all four resolutions be acted on at the same time, since all were related to supplemental grant funding for special projects.

**\*\* ACTION \*\*** MSP (Frazier/Callahan)(Unanimous) adoption of LRAPA Resolutions Numbers 94-7, 94-8, 94-9 and 94-10.

**DIRECTOR'S REPORT:** Arkell spoke about two items of good news for LRAPA.

**CO Redesignation** EPA has officially redesignated Eugene-Springfield as an attainment area for carbon monoxide. It will be more expeditious to do the transportation types of planning and longer-range issue resolution that the community is involved with now, without the constraints of having a CO non-attainment designation and having to deal with that. However, Arkell said, redesignation does not mean that nothing more needs to be done for CO. The standards must be maintained for the next ten years, as part of the redesignation. In addition, in eight years, we must submit information to EPA detailing how we plan to maintain the standards for another ten years. There is also a new set of federal rules called "conformity rules" which will require all federally funded projects and programs having to do with transportation to conform to the State Implementation Plan as it relates to CO attainment in Eugene-Springfield. LRAPA is in the process, now, of working with LCOG, the Department of Transportation, and others involved in transportation planning, to ensure that conformity is preserved when decisions are made on projects and programs in this area.

**PM10 Emissions** LRAPA has updated its emissions inventory, and it is estimated that total emissions from woodstoves in the Eugene-Springfield urban area is now down by about half from what it was at the time the last emissions inventory was performed. The number of households that use wood as the primary source of heat is down by about a third, and those households which still use wood are using less of it. Staff has never been completely comfortable with attributing the lower wintertime air contaminant levels to the home wood heating curtailment efforts, because it was not known for sure what effect the weather had on the levels, in conjunction with the curtailment programs. The wintertime weather since 1985/86, when air standards were exceeded due to cold stagnant weather and buildup of emissions from home wood heating, has been different in that there have been no such prolonged periods of air stagnation. The current heating season did have some periods of air stagnation similar to those which occurred in 1985/86. The fact that PM10 levels remained well

below the standard during those times does tend to demonstrate that the curtailment program is having the desired effect.

The situation in Oakridge is not quite as good, although there were no violations of the PM10 standard in Oakridge this year. A saturation study performed this winter indicates that the Willamette City area is still the high impact area, and we picked up some levels which were higher than when a similar study was performed two years ago. The centerpiece of the attainment strategy proposed for the Oakridge PM10 SIP is to continue to accelerate turn-over rate for old woodstoves, through loans and grants for low-income households, rather than institute a mandatory curtailment program. We want to get as much of a reduction in emissions as possible through replacement rather than having to go up to Oakridge whenever there's a red day and issue tickets to people. We're still looking for a more permanent source of revenue for the grant program, which has awarded about \$200,000 to date, replacing a little over 100 stoves. It is estimated that 50 to 100 more stoves will need to be replaced in order to demonstrate compliance with the standard in Oakridge.

The person who has been working on the SIP document for Oakridge was bought out by another company, and the new company is now negotiating a new contract with LRAPA for the individual to continue the SIP development process. The SIP is expected to be completed and ready for public hearing and adoption by June of this year.

**OLD BUSINESS:**

Employee compensation review. Dodrill reported that he, Don Nelson and Don Churnside met in January to discuss concerns about the upcoming budget process and consideration of employee salaries and benefits. Sharon Allen provided a document for them which compares LRAPA's salaries and benefits with five other air pollution control agencies in the West. At Don Nelson's request, Dodrill related two main concerns to the board and asked for discussion:

1. Pension contribution. LRAPA currently contributes 14 percent of salaries into a pension fund for employees. The employees are not required to contribute any of the 14 percent. Nelson would like to see LRAPA's contribution to employees' pension accounts rolled back to 5 or 6 percent, with the employees contributing more if they wish, up to the 14 percent.
2. Salary increases for the coming year. LRAPA employees are eligible each year for a 2.5 percent longevity increase and a 2.5 percent merit increase. In addition, there is sometimes a cost-of-living adjustment (COLA) increase. Nelson believes that COLA increases should be capped at 3 percent, and he does not want to see any COLA this year. Also, if there were any decreases in salary, Nelson would like to see that amount of reduction in the LRAPA contributions from the cities and the county, instead of having the funds returned to LRAPA's general fund, to be used for other purposes.

Nicholas said she would not feel comfortable making that type of decision without a lot more detailed information. She feels that it is appropriate for salaries and pension benefits to be somewhat keyed to the market. While she does not think LRAPA's salary and pension plans should be higher than other agencies', she does not want to see the board make a move which would jeopardize LRAPA's ability to compete, with regard to recruitment and employee retention.

Hornbuckle agreed with Nicholas and said he would also like to see more information before making any decisions, but his initial response is that he would not support a rollback in the pension plan contribution.

Frazier asked whether the PERS ballot measure later this year will have any effect on LRAPA's pension plan. Arkell said LRAPA's plan is a private plan through a private company and is not like PERS. Allen said LRAPA's plan is the same as the City of Springfield's, except that LRAPA is too small to contract a plan like theirs with a larger guaranteed fund percentage. LRAPA's plan's earnings rate fluctuates up and down with the market and the economy, and LRAPA employees are not guaranteed a certain amount at retirement. Frazier commented that, with the PERS initiative on the ballot, maybe something should be done with LRAPA's plan, too. She also said she would like to see written recommendations from the subcommittee, since the budget committee will need that information to help them to make the necessary decisions during the budget preparation process.

Dodrill said he does not feel that a rollback of the retirement contribution is appropriate. He said the budget committee should look at cost of living increases, but he feels that LRAPA salaries and pension contributions seem to be in line with those of similar agencies. Dodrill said that Don Nelson plans to leave March 11 and will be out of town for five weeks. Since Nelson will not be back until after the budget committee meets, Dodrill will ask him to submit a written report before he leaves.

Arkell said staff will provide the board with the same information which was sent to the subcommittee. He said that, since it is necessary to get on with preparation of the FY 94/95 budget, staff would like to proceed on that with the retirement plan as it is now, and as the budget committee reviews other information, they can request changes in the budget document, if necessary. Arkell said staff had anticipated that the committee would not want to see a COLA this year. He added that there are ramifications to major changes in the retirement plan, and the board will need more information before providing final guidance on that point.

**NEW BUSINESS:**

Budget Committee Appointment. Mark Hommer recommended appointment of Jay Maudlin of Dexter to the LRAPA Budget Committee.

**\*\* ACTION \*\***

MSP (Callahan/Frazier)(Unanimous) appointment of Jay Maudlin to the LRAPA Budget Committee.

One more appointment needs to be made to the committee by next month. Charlie Ward's appointment, representing Eugene, expired in December. Dodrill said he will contact Ward to determine whether Ward wishes to serve another term on the committee.

New board members. Frazier welcomed both Mark Hommer and Kevin Hornbuckle to the LRAPA Board of Directors.

New staff member. Arkell announced that Craig Bressan, from Cleveland, Ohio, has accepted the position of permit specialist and will start April 5, working on Title V operating permits. Mike Tharpe said Bressan has had experience with most aspects of LRAPA's operations, including permitting, compliance and ambient monitoring, and should be able to pick up his duties with minimal training.

ADJOURNMENT:

There being no further business, the meeting adjourned at 1:20 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, April 12, 1994, at 12:00 p.m. in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary

# ATTACHMENT B

LRAPA Adoption of Title 34

April 12, 1994

Agenda Item No. 6

LRAPA Board of Directors Meeting

April 12, 1994

TO: Board of Directors

FROM: Donald R. Arkell, Director

SUBJ: Public Hearing on Proposed Adoption of Modification to the existing Title 34, "Air Contaminant Discharge Permit Rules," Including Table A (Permit Fee Schedule)

**BACKGROUND**

Title 34 of LRAPA's Rules and Regulations contains a list of air contaminant sources which are required to have Air Contaminant Discharge Permits (ACDP's) and the fees associated with each source category. This list is known as Table A. The table is organized by source category, according to Standard Industrial Classification (SIC) number. Table A establishes permit and annual compliance determination fees for each source category, according to the anticipated cost of processing applications and determining compliance by inspections of each permitted source category on the list.

**PROBLEM**

Over recent years, LRAPA has experienced an increase in activity related to modification of existing permits, and more complicated review procedures, as new or modified source applications have increased. We are finding several source categories which require permits but are not specifically listed on Table A. The specific costs of performing the required functions of modification, issuing construction permits, evaluating air quality impacts, emission banking and bubbling are not now covered in the fee schedule of Table A. In order to continue to maintain the level of service the ACDP program requires, LRAPA must recover more of the costs associated with these supplemental activities. DEQ has had such user fees in place for several years, and user fees are being charged throughout the state, with the exception of Lane County.

The concept of user fees is embodied also in the federal operating permit program, which LRAPA will implement in Lane County. Major sources applying for federal permits will pay user fees, as required in SB86, and proposed by DEQ for adoption in March.

Finally, as the Title is presently written, if a source fails to pay the Annual Compliance Determination fee, the only option the Authority has under the existing rule is to revoke the Air Contaminant Discharge Permit. The proposed revisions would allow a source to continue to operate while staff pursues enforcement action on the failure to pay.

## PROPOSAL

LRAPA is proposing to:

1. Add user fees for all sources, as a new Part I in Table A, which DEQ has already adopted, retroactive to the effective date of the DEQ regulation, November 4, 1993.
2. Add several source categories, and associated fees, to Table A. There are no proposed increases in the fees currently charged for sources which are already on the list. In all cases, the Application Processing and Annual Compliance Determination fees which LRAPA is proposing are below that being charged by DEQ for the same source categories. The entire list will be Part II of Table A.
3. Add language to Section 34-025-5 to allow LRAPA to take enforcement actions against sources which fail to pay their Annual Compliance Determination fees.

## PROCESS

At its February meeting, the board authorized a hearing for the April board meeting. Notice of hearing was published in the Cottage Grove Sentinel, the Eugene Register Guard, the Oakridge Dead Mountain Echo, and the Springfield News, and in the March 1, 1994 edition of the Secretary of State's "Bulletin." In addition, a notice of rulemaking was distributed in a general mailing to interested parties, including all LRAPA permit holders. The rules were submitted to both the Oregon DEQ in Portland and the U. S. EPA Region 10 office in Seattle.

Written comments received from DEQ, and LRAPA's responses to each, are detailed attached to this report. In addition to comments on the proposal, DEQ authorized LRAPA to serve as hearing officer for the Environmental Quality Commission; and this is a concurrent EQC/LRAPA hearing.

## EFFECTS OF PROPOSED RULES

1. Public. The additional fees will be used to support the Air Contaminant Discharge Permit program. More time will be spent on evaluating proposed modifications to ensure that permits contain conditions for construction and operation which adequately protect the public, and that these conditions are enforceable.
2. Industry. The additional language which allows enforcement actions, short of revoking the permit, for failure to pay the Annual Compliance Determination fee will allow sources to continue to operate even if they fail to pay the fees, until the enforcement process is exhausted. The user fees will apply only to sources where additional analysis of new or modified sources is needed. Sources will be issued permits which conform fully to federal requirements. The additional costs for industrial sources will be for ambient monitoring network review, modeling review, alternative emission control review, non-technical permit modification, construction permits, or elective permits for synthetic minor processes.
3. LRAPA. The proposed additional fees would help to pay for the costs of these user-generated activities to LRAPA. Currently, these activities are not fee based. Based on construction activities in recent years, it is conservatively estimated that LRAPA would accrue approximately \$30,000 annually from these user fees.

## OPTIONS FOR BOARD ACTION

1. Do not adopt rules. LRAPA would continue to be able to conduct only limited reviews for new and modified sources, funded with existing revenues instead of with users' fees; and would continue to have only one option in dealing with sources who fail to pay annual compliance fees.
2. Postpone adoption and direct staff to bring back a revised proposal. The proposed amendments are consistent with state rules. All permitted sources, as well as other interested parties, have been notified of the proposal, and no comments have been received other than those from the DEQ. This proposed action has not been controversial, and additional public notice time would not likely yield further comments or suggested changes.
3. Adopt the rules as proposed, with recommended changes in response to DEQ comments. This would clear up ambiguities of permit requirements for sources which are not currently listed in Table A; provide for recovery of a portion of



the costs involved in performing user-generated functions such as permit modifications, construction permit issuance, evaluating air quality impacts coordinating emissions banking and bubbling; and provide the alternative of taking enforcement action when a source fails to pay annual compliance determination fees, instead of shutting the facility down which is the only option under the current rules.

#### **DIRECTOR'S RECOMMENDATION**

It is the director's recommendation that the board adopt the amendments to LRAPA Title 34, including Table A, with the recommended changes to the original proposal.

LWT/mjd

## STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

### Legal Authority

ORS 183, 468, 468A, LRAPA Title 14, and the Federal Clean Air Act Amendments of 1990.

### Need for Amendments

Over recent years, LRAPA has experienced an increase in its permitting activity as new or modified source applications have increased. There are several source categories which require permits but are not specifically listed on the existing Table A (source categories and associated fees). The proposed amendments would add those source categories to Table A.

The costs of performing the required functions of modification, issuing construction permits, evaluating air quality impacts, and emission banking and bubbling are not covered in Table A. In order to continue to maintain the level of service the Air Contaminant Discharge Permit program requires, LRAPA must recover more of the costs associated with these supplemental activities. DEQ has had user fees in place for several years, and user fees are being charged throughout the state, with the exception of Lane County. The proposed amendments would add user fees to Table A.

In addition, as Title 34 is currently written, if a source fails to pay the Annual Compliance Determination fee, the only option the Authority has is to revoke the Air Contaminant Discharge Permit. The proposed revisions would add language to Section 34-025 to give LRAPA the option of allowing a source to continue to operate while staff pursues enforcement action on the failure to pay.

### Principal Documents Relied Upon

1. LRAPA Title 34
2. OAR 340, Division 28
3. LRAPA Staff Report to LRAPA Board of Directors, February 8, 1994
4. Clean Air Act Amendments of 1990
5. ORS 183, 468 and 468A et. seq.

### FISCAL AND ECONOMIC IMPACT STATEMENT

Impact on State Agencies: There would be greater statewide consistency of fees associated with Air Contaminant Discharge Permits.

Impact on Local Agencies: LRAPA would recover a greater percentage of the cost of administering the Air Contaminant Discharge Permit program. LRAPA would also be able to allow a source to continue to operate while staff pursues enforcement action in cases of failure to pay annual permit compliance determination fees.

Impact on Public: The added cost recovery achieved through user fees and new fees for additional source categories helps to ensure a higher degree of control and monitoring of air contaminant sources throughout Lane County.

Impact on Regulated Community: Sources subject to Air Contaminant Discharge Permits would be subject to new fees for some activities associated with those permits which have, in the past, been performed by LRAPA with no fees charged. Permitted sources which fail to pay annual compliance determination fees on time may be allowed to continue to operate while LRAPA pursues enforcement action, rather than having their permits revoked as is the case under the existing rules.

### LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

DRA/MJD  
02/14/94

Proposed Amendments to LRAPA Title 34  
"Permits"

April 12, 1994

WRITTEN COMMENTS AND LRAPA RESPONSES

Oregon Department of Environmental Quality

1. DEQ Comment

Table A, Part I. Item E., Non-technical permit modification, DEQ fee is \$50.

LRAPA Response

Agree. Changed on draft rule.

2. DEQ Comment

Table A, Part II, Item 17, DEQ units are square feet/hour on 3/4" basis.

LRAPA Response

Agree. Changed on draft rule.

3. DEQ Comment

Table A, Part II, Item 18, DEQ units are square feet/hour on 3/4" basis.

LRAPA Response

According to OAR Chapter 340, Division 28, this item is on a 1/8" basis, as in the LRAPA draft. This is left as is in LRAPA's draft rule, but board feet is change to square feet.

4. DEQ Comment

Table A, Part II, Items 23, 24, 25, 26, 7 and 28--cost description missing.

LRAPA Response

The description in the state rules gives two categories, "high cost" and "low cost." There is no explanation of what the two designations mean. In the draft proposal for Title 34 amendments, LRAPA has included "complex review,"

"moderate review," and "simple review" categories. A key has been added at the end of the table explaining what each category signifies, the differences being relative to cost to the agency of performing the necessary functions described.

5. DEQ Comment

Table A, Part II, item 47, DEQ units are 2,000 TPY. Categories should be mutually exclusive, e.g., as proposed, sources at 20,000 TPY are subject to two different fee schedules.

LRAPA Response

Agree. In number 47, units are changed to 2,000 TPY. Regarding the categories being mutually exclusive, in those instances which differentiate between greater and lesser amounts, the sign for one category was greater than or equal to, and the sign for the other category was less than or equal to. In each instance, the sign for the second category has been changed in the current draft rule so that the first one is greater than or equal to, and the second one is less than.

6. DEQ Comment

Table A, Part II, Item 67, mutual exclusivity in fee categories should be established.

LRAPA Response

Agree. See LRAPA response on DEQ comment number 5, above.

7. DEQ Comment


Table A, Part II, item 74--DEQ does not differentiate between high and low toxicity for this category.

LRAPA Response

LRAPA anticipates higher cost for review and continuing compliance assurance on high-toxicity sources than there would be for low-toxicity sources. We are therefore retaining the differentiation in the LRAPA rules.



MEMORANDUM

To: Record of Adoption Proceedings, LRAPA Title 34  
From: Donald R. Arkell, Hearings Officer   
Subject: Public Hearing, April 12, 1994

Summary of Procedure

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority at 12:33 p.m. on April 12, 1994 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed adoption of amendments to LRAPA Title 34, "Air Contaminant Discharge Permit Rules," including Table A, "Air Contaminant Sources and Associated Fee Schedules." There was no one present who wished to comment on the proposed rules.

Summary of Testimony

There was no oral testimony presented at the hearing.

Written comments were received prior to the hearing date from DEQ. Those comments, along with LRAPA's responses, are detailed in the attached pages. The draft rules presented at the hearing contained revisions made in response to the written comments.

Notice of Proposed Action

Prior to the authorization for hearing, notice of the proposed rulemaking was sent to all holders of LRAPA Air Contaminant Discharge Permits, and to approximately 150 other businesses, local governments, fire districts, asbestos abatement contractors, environmental consultants, professional associations, special interest groups and individuals. In addition, notice of the hearing and intended action was published in the March 1, 1994 edition of the Secretary of State's Bulletin, and in the Oakridge Dead Mountain Echo, the Cottage Grove Sentinel, the Eugene Register-Guard, and the Springfield News.

Hearings Officer's Report, Amendments to LRAPA Title 34  
April 12, 1994

-2-

Action of the LRAPA Board of Directors

Based on the information presented, the board voted unanimously to adopt the amended proposal for Title 34.

DRA/mjd

LANE REGIONAL AIR POLLUTION AUTHORITY  
TITLE 34  
Air Contaminant Discharge Permits

DRAFT AMENDMENTS  
APRIL 12, 1994

Section 34-025 Permit Fees

1. All persons applying for a permit shall at the time of application pay the following fees:
  - A. A filing fee of \$75;
  - B. An application processing fee; and
  - C. An annual compliance determination fee.

The compliance determination fee may be waived when applying for modification of an existing permit. The application processing fee may be waived on permit renewals. Both of these fees may be waived when applying for letter permits.

2. The fee schedule contained in the listing of air contaminant sources in this section (see Table A) shall be applied to determine the permit fees on a standard industrial classification (SIC) basis.
3. Applications for multiple-source permits received pursuant to Section 34-015 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 this section.
4. Modifications of existing, unexpired permits, which are instituted by the Authority due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes and which do not require refiling or review of an application or plans and specifications, shall not require submittal of the filing fee or the application processing fee.
5. The annual compliance determination fee shall be paid at least thirty (30) days prior to the start of each subsequent permit year. Failure to remit the annual compliance determination fee on time shall be considered grounds for not issuing a permit or for terminating an existing permit. Also, such a failure is, in and of itself, a violation and may subject the permittee to enforcement procedures as defined in Title 15 of LRAPA Rules and Regulations.



6. If a permit is issued for a period of less than one 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 twelve (12) months, the applicable annual compliance determination fee shall be prorated by multiplying the annual compliance fee by the number of months covered by the permit and dividing by twelve (12).
7. If a temporary or conditional permit is issued in accordance with adopted procedure, fees submitted with the application shall be applied to the regular permit when it is granted or denied.
8. All fees shall be made payable to the Authority.
9. Table A in this Title lists all air contaminant sources required to have a permit and the associated fee schedule.

TABLE A  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE

**PART I**

NOTE: Fees in A-G are in addition to any other applicable fees.

A. Late Payment		F. Construction Permits	
(1) 8-30 days	\$200	(1) Complex	\$22,000
(2) Greater than 30 days	\$400	(2) Moderately Complex	\$10,000
B. Ambient Monitoring Network Review	\$900	(3) Simple	\$2,000
C. Modeling Review	\$2,000	G. Elective Permits--Synthetic Minor Sources	
D. Alternative Emission Control Review	\$1,500	(1) Permit application or modification	\$1,900
E. Non-technical permit modification (name change, ownership transfer, similar)	\$50	(2) Annual Compliance assurance	\$1,000

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in Part II, in addition to fee for other applicable category.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
1. Seed cleaning located in Air Quality Maintenance Areas commercial operations only (not elsewhere classified)	0723	260	500
2. RESERVED			
3. Flour and other grain mill products in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2041	840	970
(b) Less than 10,000 tons per year	2041	660	420
4. Cereal preparations in Air Quality Maintenance Areas	2043	840	690
5. Blended and prepared flour in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2045	840	690
(b) Less than 10,000 tons per year	2045	660	350
6. Prepared feeds for animals and fowl in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2048	840	970
(b) Less than 10,000 tons per year	2048	220	310

**Notes:** [1-] A filing fee of \$75 is required for all sources.

[2- ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

TABLE A  
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
7. Beet sugar manufacturing	2063	1,100	4,800
8. Rendering plant			
(a) 10,000 or more tons per year	2077	1,340	1,650
(b) Less than 10,000 tons per year	2077	1,210	1,320
9. Coffee roasting			
(a) 1 to 40 Kg. roasting capacity	2095	260	320
(b) Greater than 40 Kg. roasting capacity	2095	530	640
10. Sawmill and/or planing mill			
(a) 25,000 or more board feet per shift	2421	330	620
(b) Less than 25,000 board feet per shift	2421	220	460
11. Hardwood mills	2426	220	620
12. Shake and shingle mills with air transfer systems	2429	220	230
13. Mill work (including structural wood members) 25,000 or more board feet per shift	2431 & 2439	310	620

Notes: [1-] A filing fee of \$75 is required for all sources.

[2- ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
14. Plywood manufacturing			
(a) 25,000 or more square feet per hour (3/8" basis finished product)	2435 & 2436	1,280	1,540
(b) Less than 25,000 square feet per hour (3/8" basis finished product)	2435 & 2436	990	1,160
15. Veneer manufacturing only (not elsewhere classified)	2435 & 2436	220	620
16. Wood preserving	2491	1,300	1,160
17. Particleboard manufacturing (including strandboard, flakeboard and waferboard)			
(a) $\geq$ 10,000 sq. ft./hr--3/4" basis finished product	2492	1,450	2,080
(b) $<$ 10,000 sq. ft./hr--3/4" basis finished product	2492	900	1,200
18. Hardboard manufacturing			
(a) $\geq$ 10,000 sq. ft./hr--1/8" basis finished product	2493	1,630	1,890
(b) $<$ 10,000 sq. ft./hr--1/8" basis finished product	2493	1,000	1,100
19. Battery separator manufacturing	3069	260	1,400

**Notes:** [1.] A filing fee of \$75 is required for all sources.

[2.—Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.]

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
20. Furniture and fixture manufacturing			
25,000 or more board feet/shift	2511	400	760
21. Pulp mills, paper mills and paperboard mills	2611, 2621 & 2631	3,100	8,080
22. Building paper and building board mills	2661	530	640
23. Alkalies and chlorine manufacturing			
(a) Simple Review *	2812	900	1,670
(b) Complex Review *	2812	1,400	1,900
24. Calcium carbide manufacturing			
(a) Simple Review *	2819	970	1,670
(b) Complex Review *	2819	1,400	2,000
25. Nitric acid manufacturing			
(a) Simple Review *	2819	640	840
(b) Complex Review *	2819	900	1,200

Notes: [1.] A filing fee of \$75 is required for all sources.

[2. Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.]

TABLE A  
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
26. Ammonia manufacturing			
(a) Simple Review *	2819	640	970
(b) Complex Review *	2819	900	1,200
27. Industrial inorganic and organic chemicals manufacturing (not elsewhere classified)			
(a) Simple Review *	2819 & 2869	810	1,160
(b) Complex Review *	2819 & 2869	1,100	1,500
28. Synthetic resin manufacturing			
(a) Simple Review *	2821	620	920
(b) Complex Review *	2821	900	1,300
29. Charcoal manufacturing	2861	1,210	2,680
30. Pesticide/Herbicide manufacturing	2879	1,610	8,360
31. Petroleum refining	2911	3,210	8,360
32. Asphalt production by distillation	2951	660	1,260
33. Asphalt blowing plants	2951	640	970

Notes: [1.] A filing fee of \$75 is required for all sources.

[2. ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
34. Asphalt concrete paving plants			
(a) Stationary	2951	640	760
(b) Portable	2951	640	970
35. Asphalt felts or coating	2952	660	1,460
36. Blending, compounding or refining of lubricating oils and greases and reprocessing of oils and solvents for fuel	2992	570	900
37. Glass container manufacturing	3221	640	1,190
38. Cement manufacturing	3241 & 3251	2,070	6,130
39. <del>[Redimix-e] Concrete Manufacturing including Redimix and CTB</del>	3271, 3272 & 3273	220	310
40. Lime manufacturing	3274	970	640
41. Gypsum products	3275	510	690
42. Rock crusher			
(a) Stationary	1429, 1442, 1446 & 3295	570	760
(b) Portable	1429, 1442, 1446 & 3295	570	910

Notes: [1-] A filing fee of \$75 is required for all sources.

[2- ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]



TABLE A  
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE

PART II

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
43. Steel works, rolling and finishing mills, electrometallurgical products	3312 & 3313	1,630	1,670
44. Incinerators	4853 & 7261		
(a) 250 or more ton/day capacity or an off-site infectious waste incinerator		12,000	5,170
(b) 50 or more but less than 250 tons/day capacity		3,000	1,570
(c) 0.5 or more but less than 50 tons/day capacity		260	390
(d) crematoriums and pathological waste incinerators not elsewhere classified		260	390
(e) PCB and/or off-site hazardous waste incinerator		12,000	5,170
45. Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries (not elsewhere classified)	3321 & 3322 & 3324 & 3325		
(a) 3,500 or more tons per year production		1,630	1,460
(b) Less than 3,500 tons per year production		400	760
46. Primary aluminum production	3334	3,210	8,360

Notes: [1.] A filing fee of \$75 is required for all sources.

[2. ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
47. Primary smelting of zirconium or hafnium or <del>primary smelting and refining of</del> other ferrous or non-ferrous metals not elsewhere classified			
(a) $\geq$ 2,000 TPY production	3339	16,080	8,360
(b) < 2,000 TPY production	3339	5,000	3,000
48. Primary smelting of silicon	3339	1,740	3,920
49. Secondary smelting and refining of nonferrous metals	3341	770	970
50. Nonferrous metal foundries (100 or more tons/year metal charged)	3361, 3362 & 3369	220	390
51. Electroplating, polishing and anodizing	3471	330	640
52. Galvanizing and pipe coating--exclude all other activities	3479	220	390
53. Battery manufacturing	3691	400	840
54. Grain elevators--intermediate storage only, located in Air Quality Maintenance Areas			
(a) 20,000 or more tons per year	4221	600	1,320
(b) Less than 20,000 tons per year	4221	330	640

Notes: [1.] A filing fee of \$75 is required for all sources.

[2. ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
55. <del>[Commercial]</del> Electric power generation or cogeneration			
(a) Solid fuel--25 MW or greater	4911	12,980	8,470
(b) Solid Fuel--less than 25 MW	4911	7,780	4,180
(c) Oil or gas fired	4911	1,170	2,010
56. <del>Fuel burning equipment at</del> [G] gas production and/or <del>[manufacturing]</del> distribution facilities	4925	1,230	970
57. Grain elevators--terminal elevators primarily engaged in buying and/or marketing grain in Air Quality Maintenance Areas			
(a) 20,000 or more tons per year	5153	1,630	1,670
(b) Less than 20,000 tons per year	5153	460	640
58. Fuel burning equipment within the boundaries of Air Quality Maintenance Areas (fees based on aggregate heat output for plant site)			
(a) Residual or distillate oil <del>or gas</del> fired-- 250 million or more btu per hour (heat input)	4961	530	640
(b) Residual or distillate oil <del>or gas</del> fired--5 or more but less than 250 million btu per hour (heat input)	4961	440	460

Notes: ~~[1.] A filing fee of \$75 is required for all sources.~~

~~[2. Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.]~~

TABLE A  
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(c) Residual oil or distillate or gas fired, less than 5 million btu per hour (heat input)	4961	220	230
59. Fuel burning equipment within the boundaries of Air Quality Maintenance Areas (fees based on aggregate heat output for plant site)			
(a) Wood or coal fired--35 million or more btu per hour (heat input)	4961	620	760
(b) Wood or coal fired--less than 35 million btu per hour (heat input)	4961	220	540
60. Fuel burning equipment outside the boundaries of Air Quality Maintenance Areas (fees based on aggregate heat output for plant site)			
All wood, coal and oil fired--greater than 30 million btu per hour (heat input)	4961	640	690
61. <del>[New-s]</del> Sources not listed herein which would emit 10 or more tons per year of the aggregate of any air contaminants, including but not limited to: particulates, SO <sub>x</sub> , NO <sub>x</sub> or hydrocarbons, if the source were to operate uncontrolled			
(a) <del>[High-cost]</del> Complex Review *		5,200	5,200
(b) <del>[Medium-cost]</del> Moderate Review *		900	900

Notes: [1-] A filing fee of \$75 is required for all sources.

[2- ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(c) [ <del>Low-cost</del> ] <del>Simple Review</del> *		460	460
62. [ <del>New-s</del> ] Sources not listed herein which would emit significant malodorous emissions as determined by Authority review of sources which are known to produce similar air contaminant emissions			
(a) [ <del>High-cost</del> ] <del>Complex Review</del> *		5,200	5,200
(b) [ <del>Medium-cost</del> ] <del>Moderate Review</del> *		900	900
(c) [ <del>Low-cost</del> ] <del>Simple Review</del> *		400	400
63. [ <del>Existing-s</del> ] Sources not listed herein for which an air quality problem is identified by the Authority, including but not limited to: open storage of dusty or odorous material, dry material handling air transfer systems and sandblasting operations			
(a) [ <del>High-cost</del> ] <del>Complex Review</del> *		5,200	5,200
(b) [ <del>Medium-cost</del> ] <del>Moderate Review</del> *		880	880
(c) [ <del>Low-cost</del> ] <del>Simple Review</del> *		400	400
64. Bulk gasoline plants	5100 & 5171	220	420
65. Bulk gasoline terminals	5171	2,600	1,400

Notes: [1-] A filing fee of \$75 is required for all sources.

[2- ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
66. Liquid storage tanks--39,000 gallons or more capacity (not elsewhere classified) except for water	4200, 5169 & 5171	200/tank	400/tank
67. Can or drum coating			
(a) $\geq$ 50,000 units/mon	3411 & 3412	3,900	2,510
(b) < 50,000 units/mon	3411 & 3412	1,900	1,200
68. Paper or other substrate coating	2641 & 3861	1,300	840
69. Coating flat wood	2400 & 2672	1,300	840
70. Surface coating manufacturing			
(a) 100 tons or more of VOC per year	2500 & 3300	1,300	1,110
(b) 10 tons or more but less than 100 tons VOC per year	2500 & 3300	260	560
(c) [ <del>Greater than 1 ton but 1</del> ] less than 10 tons VOC per year	2500 & 3300	220	230
71. Flexographic or rotogravure printing 10 tons or more VOC per year per plant	2751, 2754 & 2759	260	560

Notes: [1-] A filing fee of \$75 is required for all sources.

[2- ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
72. <del>[New sources of VOC not listed herein which have the capacity or are allowed to emit 10 or more tons per year VOC</del>			
<del>(a) High cost</del>		<del>2,990</del>	<del>5,170</del>
<del>(b) Medium cost</del>		<del>900</del>	<del>900</del>
<del>(c) Low cost</del>		<del>400</del>	<del>400]</del>
<b><u>RESERVED</u></b>			
73. Sources subject to federal NESHAPS rules under section 112 of the federal Clean Air Act (except demolition or renovation)		220	330
74. Sources of toxic air pollutants, <b><u>including MACT</u></b> (not elsewhere classified)			
(a) High Toxicity **		900	900
(b) Moderate Toxicity **		550	660
75. Soil remediation Plants	1799	550	660

**Notes:** [1.] A filing fee of \$75 is required for all sources.

[2. ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
<p>* <b>Complex Permit Review:</b></p> <ul style="list-style-type: none"> <li>• sources requiring PSD/NSR review;</li> <li>• sources requiring a source-specific MACT determination for new hazardous air pollutant emissions; and</li> <li>• sources with extreme public involvement.</li> </ul> <p><b>Moderate Permit Review:</b></p> <ul style="list-style-type: none"> <li>• anything not classified as "complex" or "simple."</li> </ul> <p><b>Simple Permit Review:</b></p> <ul style="list-style-type: none"> <li>• sources going on minimal source permits; and</li> <li>• minor sources which do not require any special analysis and which are not controversial.</li> </ul>			

\*\* New York State Air Guide-1 1985-86 Edition

Notes: [1.] A filing fee of \$75 is required for all sources.  
 [2. ~~Persons who operate boilers shall include fees as indicated in Items 58, 59 or 60, in addition to fees for any other applicable category.~~]



# MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--FEBRUARY 8, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

## ATTENDANCE:

Board Steve Dodrill, Chair--Eugene; Terry Callahan--Oakridge; Marie Frazier--Lane County; Ralf Walters--Springfield  
(ABSENT: Kevin Hornbuckle--Eugene; Gretchen Nicholas--Eugene.  
The at-large member was appointed at this meeting.)

Staff Don Arkell--Director, Mike Tharpe, Kim Partridge, Sharon Allen, Merrie Dinteman

OPENING: Dodrill called the meeting to order at 12:28 p.m.

MINUTES: MSP (Walters/Callahan)(unanimous) approval of the minutes of the January 11, 1994 meeting, as submitted.

EXPENSE REPORT: MSP (Callahan/Walters)(unanimous) approval of expense report through January 31, 1994, as presented.

ADVISORY COMMITTEE: Kim Partridge reported that Tamara Davis was notified following the January meeting of her appointment to the committee, and that Davis is very pleased to be on the committee. Partridge noted that one application for appointment to the committee, from Dave Seluga of Weyerhaeuser Company, was awaiting board action. (See New Business for board action on appointment.)

Arkell stated that the committee will be involved in developing the maintenance plan for the Eugene-Springfield PM10 non-attainment area during 1994.

PUBLIC PARTICIPATION: None.

AUTHORIZATION OF PUBLIC HEARING, PROPOSED AMENDMENTS TO LRAPA TITLE 34 (Permits): Arkell explained that, as the economy picks up, staff expects increased activity among regulated industries relative to their air permits, such as permit modifications. Staff has been performing the necessary review and processing of requests for permit modifications, construction projects, etc., but has not collected fees. These projects have thus been a drain on LRAPA's resources. The proposed amendments include addition of a fee schedule for those activities, as a new Part I to Table A (the table of air contaminant discharge sources and the fees associated with those sources). In addition, it is proposed to designate the existing Table A as "Part II" and add several source categories, specifically gas-fired boilers. It is also proposed to add language to the text of Section 34-025, to allow for interim enforcement action in cases where sources fail to pay their permit fees. The current rules provide only the options of repeated billing or revocation of permits. The new language would allow sources to continue to operate while the fee payment problem is resolved. Arkell requested authorization of public hearing on the proposed amendments at the April 12, 1994 board meeting.

Frazier asked whether Arkell was also proposing to add new staff with the extra revenues generated by the new fees. Arkell explained that these activities have been performed all along but have not had fees associated with them. The fees will help to recover the cost of those activities. Staff is currently split between federal and non-federal permitting programs, and new staff is currently being hired for the federal program. No new staff will be added, beyond that already scheduled, because of the increased revenues generated by the proposed amendments to Title 34. Some of the time which is currently anticipated to be spent on federal permitting will be re-programmed to Title 34 non-federal permitting activities, including the permit modifications and construction reviews.

\* \* Action \* \* MSP (Frazier/Callahan)(unanimous) authorization of public hearing on proposed amendments to LRAPA Title 34 at the April 12, 1994 board meeting.

EGGE SAND &  
GRAVEL,  
SETTLEMENT  
DECISION:

Dodrill stated that the director was recommending approval of the proposed settlement in the Egge Sand & Gravel open burning enforcement case. MSP (Callahan/Walters)(unanimous) approval of the settlement as proposed.

WEYERHAEUSER  
SFO 93-38:

Arkell explained that Weyerhaeuser presented a Stipulated Final Order (number 92-33) to the board last year, with a compliance schedule to rectify violations at the particleboard plant. The SFO in 92-33 did not address all of the emission points at the particleboard plant, but the company believed it could be in compliance with the plant site emission limits just by completing the projects in that schedule. It discovered, however, that additional projects will be necessary in order to demonstrate full compliance. The proposed SFO 93-38 amends several elements of SFO 92-33. It does not delay the installation of the control equipment specified in 92-33, nor does 92-33 become void. SFO 93-38 does delay the time for source testing until all projects can be completed. In SFO 92-33, the company was to pay a \$10,000 fine at the end of the schedule with provisions to reduce the penalty if emission reductions were significantly below what was needed for compliance. In exchange for extending the time allowed for completion of the additional control measures and for compliance testing, Weyerhaeuser agrees to pay the full \$10,000 within thirty days of approval of the order. Arkell recommended approval of the order.

\* \* Action \* \* MSP (Frazier/Walters)(unanimous) approval of SFO 93-38 as proposed.

DIRECTOR'S REPORT: CO Attainment Arkell reported that EPA had redesignated Eugene-Springfield as an attainment area for carbon monoxide and was publishing the announcement in the Federal Register. He explained that CO levels have gone down, largely due to federal new car emission standards and fleet turnover. In addition, the City of Eugene, LCOG and LRAPA have worked together on traffic control measures, such as sequencing of signal lights, to achieve further reductions in CO levels. However, at the same time, as the population grows, there are more vehicle miles traveled per year. He said he expects CO levels to continue their downward trend for a

while, but the benefits of lower tailpipe standards will bottom out and CO levels will begin to climb again. LRAPA will continue to monitor continuously for CO, and its involvement in transportation control planning and alternate means of transportation in the urban area, to help keep the CO concentrations at minimal levels.

Open Burning

Staff attended a meeting of the Lane County Fire Defense Board to present information regarding implementation of LRAPA's open burning regulations. The meeting was well attended, although a few of the rural districts were not represented. Arkell said staff followed up the meeting with a letter requesting information about permitting requirements in the various fire districts.

OLD BUSINESS:

At-Large Board Position. Arkell reported that staff had contacted the individuals who submitted applications previously for the at-large position, and that two of them were still interested in appointment to the board. In addition, the opening was advertised in newspapers. Two new applications were received--one from Junction City and one from the River Road area.

Frazier said that, because Mark Hommer is from northern Lane County, the stated area of preference, and because of his current educational activity in environmental science, she believed he would be the best choice for appointment to the position.

Walters agreed with Frazier, stating that Hommer might bring some knowledge and expertise which would be helpful to the board, both because of his current educational pursuits and his past experience with water treatment and water recycling. Appointment to the LRAPA board would be good experience for Hommer, and LRAPA could benefit from his participation.

Callahan generally agreed with those comments and stated that his only reservation would be whether or not Hommer would be able to attend all the meetings, given his other time commitments.

Dodrill said he also liked Hommer's letter. He also said that Ted Johnson from River Road might be a good choice because he is retired and has time available and might have a little different viewpoint from other board members due to his being retirement age.

\* \* Action \* \*

MSP (Frazier/Walters)(unanimous) appointment of Mark Hommer of Junction City to the at-large position on the LRAPA Board of Directors.

NEW BUSINESS:

Advisory  
Committee

Kim Partridge had requested that the board take action on the application from Dave Seluga for appointment to the advisory committee. She said she would like to have him appointed prior to the next committee meeting.

Arkell added that the committee is required to have industrial representation, but the two industrial representatives who were on the committee both left recently. It was therefore necessary to appoint a new industrial representative. Dave Seluga works for Weyerhaeuser Company in Springfield and fits that category.

**\*\* Action \*\*** MSP (Walters/Callahan)(unanimous) appointment of Dave Seluga to the LRAPA Advisory Committee.

FY 94/95 Budget Arkell presented a rough calendar for the FY 94/95 budget schedule, with a budget committee meeting on April 12 and public hearing at the May board meeting. Budget preparation is beginning now, and staff will meet with members of the budget committee a week or two prior to the budget committee meeting, either individually or in small groups, to explain the details of the budget. Arkell said he believes that this approach, although time consuming for staff, makes it possible to complete the budget process with just one full committee meeting, limiting the time commitment of the members while still providing complete information and opportunity for input into the development of the final budget document.

Board members present indicated that the proposed schedule sounded fine to them.

DEQ Office Dodrill said he had read that DEQ is going to site an office in Eugene and asked what effect it would have on LRAPA. Arkell said that DEQ has tended to be a very centralized agency, and the move should help to bring the state's environmental programs closer to the people who are affected by them. DEQ will be involved with water quality, ground water, hazardous waste and solid waste. Arkell said he looks forward to working with the state on multi-media issues, and that it will be good for the area will have a local office to deal with environmental problems which fall under DEQ's jurisdiction. The down side of the move to Eugene, for LRAPA, is possible public perception problems about LRAPA's role, with DEQ being closer now. The DEQ office is to be located on Valley River Drive.

Board Meeting Time Walters asked whether there was any interest among board members in starting the board meetings at 12:15 instead of 12:30. Frazier said she would prefer to have the board meetings start earlier, to avoid having them run past 2:00 p.m. which is hard for her because of her commission schedule. Dodrill suggested that this discussion be postponed until the new members were also present, in order to come up with the best schedule for everyone.

Walters suggested moving the starting time to 12:00 noon. Arkell asked whether the board wanted the March meeting to begin at that time, and Frazier said yes. Arkell reminded the board that they would need to be here by 11:30 or 11:45 if they wanted to eat lunch prior to the meeting.

**ADJOURNMENT:** There being no further business, the meeting adjourned at 1:15 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, March 8, 1994, at 12:00 p.m. in the Springfield City Council Chambers.

Respectfully submitted,

*Merrie Dinteman*

Merrie Dinteman  
Recording Secretary

## MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--APRIL 12, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

### ATTENDANCE:

Board Steve Dodrill, Chair--Eugene; Terry Callahan--Oakridge/Cottage Grove; Mark Hommer--At-Large; Gretchen Nicholas--Eugene  
(ABSENT: Marie Frazier--Lane County; Kevin Hornbuckle--Eugene; Ralf Walters--Springfield)

Staff Don Arkell--Director, Mike Tharpe, Kim Partridge, Sharon Allen, Merrie Dinteman

OPENING: Dodrill called the meeting to order at 12:10 p.m.

MINUTES: MSP (Callahan/Nicholas)(unanimous) approval of the minutes of the March 8, 1994 meeting, as submitted.

EXPENSE REPORT: Sharon Allen commented that costs are below projection. She said that staff has tried to hold the line on costs as much as possible. At the end of March, 57 percent of the budget had been expended, even though 75 percent of the fiscal year has passed.

\*\* Action \*\* MSP (Nicholas/Callahan)(unanimous) approval of expense report through March 31, 1994, as presented.

ADVISORY COMMITTEE: Kim Partridge reported that the committee decided to change its regular meeting date to the last Tuesday of each month instead of the first Wednesday. The main reason for the change is so that advisory committee meeting minutes can be distributed in the board packets to keep the board informed regarding committee activities.

PUBLIC PARTICIPATION: None.

PUBLIC HEARING-- PROPOSED AMENDMENTS TO LRAPA TITLE 34 (PERMITS): Arkell said comments on the proposed amendments to Title 34 were received from DEQ. Most of the comments involved drafting errors or slight oversights which were caught during the review process. LRAPA agreed with most of the comments, and the draft proposal presented at this hearing reflected some changes made in response to DEQ's recommendations. In those instances where LRAPA did not agree with DEQ's comments and chose not to change the draft rules, the reasons were explained in the staff report and attached comments and responses.

Arkell explained that most of the proposed amendments affect Table A, which specifies the source categories which are required to have permits and establishes the fees for each of those categories. The proposed amendments add another series of fee categories and "user fees" to offset costs of performing specific functions related to the permits, for modifications or changes in process which need to be documented in the permits. These functions have been performed for years but have not been reflected in the fee schedule. Arkell said staff proposed that they be added now in order to recover more of the costs of operating the agency's permitting program. He added that DEQ has been charging user fees for some time, and this type of user fees have also been written into the state's Title V rules under which LRAPA will be operating the Federal Operating Permit Program in Lane County.

Discussion

Board members had several questions regarding the proposed amendments, for which Arkell provided the following information:

1. The designation of "simple," "moderate," or "complex" in several of the source categories are tied to the workload for LRAPA in performing the review of the request. The designations are not directly related to the nature of the source operation in question, although more "complex" review procedures would more likely be associated with larger, more complicated sources.
2. There is no duplication of permit fees. LRAPA writes air permits for all sources, and DEQ does not write air permits in Lane County.
3. There are some sources which operate on a seasonal basis. Board members were concerned that a source which may operate only during particular times of the year might be unduly burdened by the full fees. Arkell explained that the review provided by LRAPA must anticipate the emission rate during operation of the source. It requires the same workload whether the source operates all the time or on a periodic basis. There are, however, minimal and letter permit categories under which permit fees can be waived under certain circumstances. Arkell also pointed out that the compliance determination fees for regular permits are paid once a year, regardless of how many times the source may start or stop operation.
4. Coffee roasters have been put on air permits because there have been citizen complaint situations involving odors from these operations. These have required significant time commitment from staff and the board in the past. The fees in Table A have not been an issue with local roasters. *(Note: All coffee roasters currently operating in Lane County are on five-year letter permits, which require only a filing fee of \$75 at the time the permit is issued or renewed--once every five years--and are not subject to*

*annual compliance determination fees. If a particular roasting operation results in odor problems which cause significantly increased workload for LRAPA, that roaster, only, may be placed on a regular permit and would then be subject to annual compliance fees.)*

5. The fees in LRAPA's Table A are lower than DEQ's corresponding fee schedule. Past LRAPA cost analyses have always yielded lower unit costs than DEQ's, which may reflect more efficient operation due to LRAPA's smaller size and to organizational differences. In implementing the Federal Permit Operating Program in Lane County, LRAPA will be using the state's Title V permit fee schedule, which was established using a statewide workload analysis.

Public Hearing - Dodrill opened the public hearing at 12:33 p.m. Arkell entered into the record affidavits of hearing notice publication in the Cottage Grove Sentinel, the Eugene Register-Guard, the Oakridge Dead Mountain Echo, the Springfield News and the Secretary of State's Bulletin. There was no one present who wished to comment on the proposed rule amendments. Dodrill closed the public hearing at 12:34 p.m.

**\*\* Action \*\*** MSP (Nicholas/Hommer)(unanimous) adoption of amendments to Title 34, including Table A, with the recommended changes described in the staff report and attached comments and responses.

DIRECTOR'S REPORT: Since the budget committee meeting was to convene immediately following this board meeting, Arkell dispensed with oral presentation of the director's report of March activities and asked whether board members had any comments or questions regarding the written report. There were none.

OLD BUSINESS: Dodrill said he had contacted Charles Ward regarding reappointment to the LRAPA Budget Committee, representing Eugene. Ward had indicated that he was willing to serve another term. Dodrill Budget Committee Appointment NOMINATED Ward for a three-year term on the budget committee, and Callahan SECONDED the nomination. WARD WAS REAPPOINTED BY UNANIMOUS VOTE.

OLD BUSINESS: None.

ADJOURNMENT: There being no further business, the meeting adjourned at 12:38 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, May 10, 1994, 12:00 noon, in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary

# ATTACHMENT C

LRAPA Adoption of Title 34  
October 11, 1994



Agenda Item No. 6

LRAPA Board of Directors Meeting

October 11, 1994

TO: LRAPA Board of Directors

FROM: Donald R. Arkell, Director

SUBJ: Proposed Amendments to Title 34, "Air Contaminant Discharge Permits"

**BACKGROUND**

Over the years, LRAPA has operated with a mix of funding sources, including local contributions, state and federal grants, and fees. In recent years LRAPA has supplemented these resources with various revenue-producing enterprises.

DEQ has notified LRAPA that, due to overall cuts in state programs supported by general funds, as of FY 95-96 the level of state general fund support to LRAPA will be reduced by the same percentage as the air program administered by DEQ. In order to make up part of its general fund loss, DEQ is in the process of adopting a 54 percent increase in its Air Contaminant Discharge Permit (ACDP) fee schedule.

In addition, there is much pressure at the national level to reduce federal grant support for air programs over time. State and local agencies are actively opposing this, but there is a good chance of rollback of federal grants within the next several years.

Loss of resources in the amounts projected will result in loss of essential elements of LRAPA's air program in Lane County.

A financial forecast for the next five years, with analysis of several options for revenue enhancements, was presented to the board in August as part of a request for authorization of today's public hearing. At that time, board consensus was to increase permit fees to 80 percent of the state's fee schedule, and to increase asbestos permitting fees by 50 percent, but not to increase contribution requests to local participating entities unless it becomes necessary. The proposed amendments reflect the board's direction.

**RULEMAKING PROPOSAL**

It is proposed to amend Part II of Table A in Title 34, adjusting the ACDP fees to recover all costs of administering the program. This represents roughly 47% overall, above the present fees recovered, and about 80% of the DEQ fees. Changes made to

each specific source category reflect anticipated costs to review, process, issue each permit, and to perform the necessary compliance assurance inspections.

In addition, several inequities discovered in the activity fees of Part I are addressed by separating the fees for processing notices of construction from those for processing initial permit applications. Clarifying changes are made to the text in Section 34-025, defining "Complex", "Moderately Complex" and "Simple".

It is proposed to amend Section 43-015-5 (1) (a) through (f), increasing the fees for notification across the board by 50%. This is the same fee structure that DEQ is adopting.

### **NEED FOR THE RULE**

Recovery of a larger percentage of costs is needed in order to continue to maintain the current level of service in the ACDP program. We presently recover, through fees, about 57 percent of the costs of the ACDP program, the rest of the costs being subsidized by local contributions and grants. We have a good start on upgrading the ACDP data system and the data base, which provides greater confidence that permitted sources are maintaining compliance a high percentage of time.

Likewise, the asbestos program is not completely self-supporting. This program has gotten very complex due to additional federal requirements, and the workload has increased, despite a leveling off of demolition notices.

### **FISCAL IMPACT**

The analysis shows the Part II ACDP fee increases for affected sources will be 47 percent. The proposed fees now will recover most of the actual costs of the ACDP program at its current level. The Part I revision will reduce fees for sources wishing to make minor changes to plant equipment or changes which will reduce emissions, and for which a permit modification is not needed.

The increased fees for asbestos abatement projects will add slightly to the costs of abatement contractors.

### **OPTIONS FOR BOARD ACTION**

1. Do nothing at this time.

If Measure 5 passes and is implemented, future fee increases to cover inflation and additional permitting requirements will be very difficult to obtain. Tax base funding from dues and grants would continue to subsidize the permitting

program. Erosion of the existing level of ACDP activity is likely, leading to major deficiencies, possible assumption of ACDP's by DEQ or EPA.

2. Adopt increased ACDP fees and asbestos fees as proposed.

This would enable close to full cost recovery for the ACD permitting and asbestos permitting programs.

## **PUBLIC NOTICE AND COMMENTS**

The proposal was sent to DEQ and to EPA for review and comments. The attached letter from DEQ indicates that the proposal is at least as stringent as state rules and gives LRAPA authority to act as EQC hearings officer for a joint EQC/LRAPA public hearing. Notice of this public hearing was published in the September 1, 1994 volume of the Secretary of State's Bulletin, and in the September 7, 1994 editions of the Cottage Grove Sentinel, the Eugene Register-Guard, the Oakridge Dead Mountain Echo, and the Springfield News. In addition, an announcement regarding these proposed amendments was sent to permitted industrial sources, asbestos contractors, and other interested persons. The only correspondence received to date is the letter from DEQ.

## **REVISIONS TO ORIGINAL PROPOSAL**

The proposal contains several revisions to Table A Part II which were added by staff following the August board meeting, each of which is noted in the draft. These revisions to permit fees for the affected categories--concrete paving asphalt production, rock crushers, and fuel-burning equipment (numbers 34, 42, 58, 59 and 60 in the table)--more accurately reflect the workload involved in the permitting process for those sources.

## **DIRECTOR'S RECOMMENDATION**

It is the director's recommendation that the board amend Title 34 and increase the ACDP fee schedule by 47 percent overall (approximately 80 percent of the state's permit fee proposal), to recover close to all costs associated with LRAPA's ACDP program; and increase the asbestos abatement project fees by 50 percent, to a level equivalent to the DEQ proposal (including appropriate changes in Title 43).

DRA/MT/mjd

LANE REGIONAL

AIR POLLUTION AUTHORITY



(503) 726-2514 • FAX (503) 726-1205

225 North 5th, Suite 501  
Springfield, OR 97477-4671

Donald R. Arkell, Director

## MEMORANDUM

To: Record of Adoption Proceedings, LRAPA Titles 34 and 43

From: Donald R. Arkell, Hearings Officer

Subj: Public Hearing, October 11, 1994--Amendments to LRAPA Titles 34 and 43

### SUMMARY OF PROCEDURE

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority at 12:22 p.m. on October 11, 1994 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed adoption of amendments to LRAPA Title 34, "Air Contaminant Discharge Permits," including Table A, "Air Contaminant Sources and Associated Fee Schedule," and Title 43, "Emission Standards for Hazardous Air Pollutants" (asbestos notification fees, Section 43-015). There was no one present who wished to comment on the proposed rules.

### SUMMARY OF TESTIMONY

There was no public testimony presented at the hearing. In addition to delegation of hearings officer authority to LRAPA, DEQ staff found the proposed amendments to be at least as stringent as the state's rules. For clarification, the stringency determination is not mandatory in this case, since LRAPA has authority to set its own fee schedule.

### NOTICE OF PROPOSED ACTION

Following the authorization for hearing, notice of the proposed rulemaking was sent to all holders of LRAPA Air Contaminant Discharge Permits, and to approximately 150 other businesses, local governments, fire districts, asbestos abatement contractors, environmental consultants, professional associations, special interest groups and individuals. In addition, notice of the hearing and intended action was published in the September 1, 1994 edition of the Secretary of State's Bulletin, and in the Oakridge Dead Mountain Echo, the Cottage Grove Sentinel, the Eugene Register-Guard, and the Springfield News.

**ACTION OF THE BOARD OF DIRECTORS**

Based on the information presented, the board adopted the proposed amendments to Title 34, including Table A, and Title 43, with five votes in favor and one abstention.

DRA/MJD

## STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

### Legal Authority

ORS 183, 468.065, 468A.135 and 468A.155, OAR 340-11-010 and 340-20-165, LRAPA Titles 13, 14 and 34, and the Federal Clean Air Act Amendments of 1990.

### Need for Amendments

LRAPA has a need to increase ACDP fees generally to more fully recover costs associated with processing, issuance, and modification of Air Contaminant Discharge Permits and compliance assurance. Further cost recovery is needed to maintain the ACDP program at its current service level. State general fund revenues which have helped support the program are being reduced. DEQ has notified LRAPA that the level of state general fund support for LRAPA is being reduced as part of the overall reduction of state programs brought about by Ballot Measure 5. DEQ itself has raised its ACDP fees by 54 percent to partially offset the loss of state general fund revenue. The ACDP program is one of the required LRAPA programs, affecting all regulated sources not required to obtain a Federal Operating Permit. The proposed increase in Table A, Part II, will be approximately 47 percent, overall, to recover close to 100 percent of LRAPA's costs to operate the ACDP program.

Full cost recovery for the asbestos program is also needed. A 50 percent fee increase is proposed for notices of asbestos abatement.

In addition, several sections of LRAPA Title 34 need to be updated for clarity as to construction and permitting requirements and associated fees, including fees for synthetic minor permits. A distinction between construction and permit review is needed. The current rule charges excessive fees for some types of construction review and undercharges for certain permit transactions. It is also proposed to modify the activity fees in Part I of Table A to add fees for emission banking and offsetting reviews.

### Principal Documents Relied Upon

1. Attorney General's Uniform and Model Rules of Procedure
2. LRAPA Title 34, Including Table A
3. LRAPA Staff Report to LRAPA Board of Directors, August 9, 1994
4. Clean Air Act Amendments of 1990
5. ORS 183, 468 and 468A et. seq.

## FISCAL AND ECONOMIC IMPACT STATEMENT

Impact on State Agencies: **None.**

Impact on LRAPA: **Positive.** The increased fees recover close to the full costs of operating the Air Contaminant Discharge Permit program and the asbestos program in Lane County, offsetting projected losses of funding from other sources. The proposed amendments add clarity to the rules and correct some inequities in the current fee schedule.

Impact on Public: **Neutral.** The increase in fees to sources of air contaminants ensures on-going permitting and enforcement of air pollution regulations for sources subject to the ACDP program and the asbestos program. These are required programs which are partially funded by fees and tax-based revenues from state and federal grants and funds paid by local governments. Placing most of the financial burden on the regulated sources makes up for projected reductions from state and federal grants.

Impact on Industry: **Negative.** Air Contaminant Discharge Permits will cost ACDP sources more. (Note: There is no impact on sources subject to the Federal Permit Program requirements.) Asbestos abatement notices will cost more. **Positive.** The adjustments in the proposed amendments to the Table A fee schedule provide greater equity among air contaminant sources. The increased permit and asbestos fees ensure consistent administration of the permitting and asbestos programs by the local agency. If LRAPA is not able to continue to administer the programs in Lane County, the state will take over the programs, resulting in at least 20 percent higher fees to industry.

## LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

DRA/MJD  
08/09/94

# MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--AUGUST 9, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

## ATTENDANCE:

Board Terry Callahan, Acting Chair--Oakridge/Cottage Grove; Marie Frazier--Lane County; Mark Hommer--At-Large; Kevin Hornbuckle--Eugene; Gretchen Nicholas--Eugene  
(ABSENT: Steve Dodrill, Chair--Eugene; Ralf Walters--Springfield)

Staff Don Arkell--Director, Mike Tharpe, Sharon Allen, Kim Partridge, Merrie Dinteman

OPENING: The board chair, Steve Dodrill, was unable to attend this meeting. Vice-chair Terry Callahan served as Acting Chair, calling the meeting to order at 12:12 p.m.

MINUTES: MSP (Nicholas/Hornbuckle) approval of the minutes of the July 12, 1994 meeting, as submitted. Frazier abstained since she was not at the July meeting. Frazier had to leave this meeting shortly thereafter.

EXPENSE REPORT: MSP (Hornbuckle/Nicholas)(unanimous) approval of expense report through July 31, 1994, as presented.

ADVISORY COMMITTEE: Kim Partridge reported that the committee was working on the attainment PM10 redesignation for the Eugene-Springfield area. Chuck Fisher, the committee member who represented planning, has moved to Portland and is no longer on the committee. Staff will be soliciting applications to fill that position, as well as the fire suppression position vacated by Don Miller earlier in the year.

PUBLIC PARTICIPATION: None.

DISCUSSION-- PROPOSED AMENDMENTS TO LRAPA TITLE 34 (PERMITS), INCLUDING FEE INCREASE: Arkell explained some concerns regarding future funding of LRAPA. The reductions being required of state agencies due to Ballot Measure 5 will result in reduced state general fund money to LRAPA during the next biennium. There is also the possibility of greater reductions if the "Son of 5" measure is approved by the voters in November. In addition, there is a trend at the national level to reduce grants to state and local agencies for pollution control programs.

There are a number of options to increase revenues to make up the shortfall, if needed. One of these is Air Contaminant Discharge Permit fees, which may be raised through rulemaking. Currently, about half of the cost of administering the ACDP program is recovered through ACDP fees. Arkell presented a proposal for a general overall increase of approximately 47 percent in LRAPA's permit fees (Title 34, Table A). As part of this proposal,



source categories have been reevaluated for workload involved in permit processing and compliance determination. As a result, some fees would remain at current levels and some would actually be reduced under the proposed amendments. DEQ has very recently increased its own fees. For comparison, Arkell said the DEQ fees, which were previously higher than LRAPA's fees for the same services, are proposed to be increased by 54 percent. The LRAPA proposal would bring its fee schedule to approximately 80 percent of the state's. The proposal to increase LRAPA's permit fees is an effort to better ensure the integrity of the program in a way which moves toward the board's desire to go to greater cost recovery for programs.

The staff report for this discussion item included a five-year financial forecast and analysis document which presented the effects on LRAPA's programs of several different revenue scenarios. The preferred option took into account guidance from the board: that, if permits fees must be raised, they should continue to be less than DEQ's fees; that savings should accrue toward keeping local dues as low as possible; and that LRAPA should continue to seize opportunities to produce revenue through appropriate enterprises. The baseline from which scenarios were projected is worst-case. It included: loss of one half of federal grants; 27% reduction in state general fund support in the next biennium; overall personnel cost increase of 5 percent per year; and 3 percent inflation factor for services and materials. Four possible combinations of revenue enhancements were presented for discussion by the board, including:

1. Increase ACDP fees to proposed DEQ levels (would result in cumulative carryover of \$210,797 over five years, after allowing for anticipated shortfall in other revenues);
2. Increase ACDP fees to 90 percent of DEQ proposal (would result in cumulative \$52,310 carryover over five years);
3. Increase ACDP to 90 percent of DEQ proposal, increase asbestos fees by 50 percent, and increase local dues by 3 percent per year (would result in \$205,104 cumulative carryover over five years); and
4. Increase ACDP fees to 80 percent of DEQ proposal, increase asbestos fees by 50 percent, and increase local dues by 3 percent per year (would result in \$46,558 cumulative carryover over five years).

#### Discussion

The board discussed the various revenue enhancement options and expressed the following opinions:

Callahan said he favors the increase in fees to 80 percent of DEQ's proposal and 50 percent increase in asbestos fees. He does not favor an increase in contributions from local participating entities and suggested, as an alternative, taking the fees to 85 percent of DEQ's in lieu of a dues increase.

Hommer said that LRAPA should try to fund its programs as aggressively as possible. He would prefer to go with 90 percent of the DEQ fees, resulting in a \$250,000 carryover over five years. He is concerned that if funding is allowed to get down too far, without sufficient cushion, the program will lose momentum and effectiveness.

Hornbuckle said he would recommend the 80 percent permit fee option and 50 percent increase in asbestos fees. He said he anticipates that there will be some opposition among permit holders and that the proposal should not be made unless the board is serious about it.

Nicholas said that, because the analysis presented represents a worst-case scenario, as far as reductions in funding levels from several sources, she does not feel permit fee increases to 90 to 100 percent of DEQ's proposal can be justified at this time. She favors the permit increase to 80 percent of the state level and the 50 percent increase in asbestos fees, but wants to hold off on any increase in local dues until it is demonstrated that it is needed. She believes the principal burden for the permitting and asbestos programs should be shifted away from government to the permit holders.

**\*\* MOTION \*\***

MSP (Hornbuckle/Nicholas)(unanimous) authorization of public hearing in October regarding proposal to increase ACDP fees in Part II of Table A to 80 percent of DEQ's proposed fee schedule, modify Part I of Table A, and increase asbestos permitting fees by 50 percent.

**AUTHORIZATION  
OF MEMBERSHIP  
IN CITY/COUNTY  
INSURANCE  
TRUST:**

Sharon Allen explained that the City/County Insurance Trust is a self-insurance group which saves LRAPA money on auto and general liability insurance. The trust requires the board to authorize LRAPA's membership by resolution.

**\*\* MOTION \*\***

MSP (Hornbuckle/Hommer)(unanimous) approval of LRAPA membership in City/County Insurance Trust Liability Risk Sharing Pool.

**DIRECTOR'S REPORT:** Arkell spoke briefly regarding the agency's July activities.

**Complaints**

The bulk of the complaints received by LRAPA during July were related to field burning, as is usually the case during the summer months.

In addition, there were a number of complaints regarding odor from an experimental project near Junction City. In an effort to recycle sludge from its paper manufacturing operation, James River Corporation arranged with Agritec to use the sludge as a fertilizer on farm land near Junction City. An unexpected odor problem developed, resulting in numerous complaints from area residents. Arkell said DEQ is inclined to consider this an agricultural operation, exempt from air quality regulations. LRAPA considers it a commercial operation. While staff believes recycling of the material in this manner is a positive step, the potential for significant odor problems also makes it a potential air quality problem. Board policy is for the agency not to spend time on nuisance odor problems unless there are at least 10

complaints. There have been enough complaints in this case to warrant LRAPA's continued involvement, in order to help ensure that this type of intense odor problem does not recur in Lane County.

Enforcement

Arkell reported that enforcement activities are up sharply this year over the past few years. Recent rulemaking has made it possible to take enforcement action on more activities than in the past. There was some discussion of the range of penalties between different violations reported for July.

In the case of John Hyland Construction, the \$6,000 penalty was charged because asbestos material found in the roof of the McKenzie Orthopedic Groups building was scattered around the area, including a public sidewalk, with no effort to identify or handle it. In addition, the contractor has had asbestos training and should have known what steps to take upon discovering the asbestos material.

A relatively large penalty of \$1,200 levied against John Barnett for open burning violations was due to several facts: Mr. Barnett knew that a fire permit was required and did not apply for one; the burning occurred during a no-burn period; the fire was allowed to continue for three days after he was told to extinguish it. The fine represents three days of penalty, each day being a separate offense.

Callahan commented that quite a few of the civil penalties were issued for residential burning violations and asked whether LRAPA would be using additional media coverage to try to inform more people of the rules. Arkell replied that there are substantial public information campaigns at the beginning and the end of each burning season. He said the summer-time violations often occur because residents just don't get their burning done during the season and go ahead and burn after the end of the season. A number of the enforcement actions also result from fire department referrals. Arkell said that fire districts are concerned about the costs which they incur in responding to these illegal burning calls, and some fire districts have asked LRAPA to include those costs in our penalty assessments.

Also in response to Callahan's question, Kim Partridge reported that LRAPA has begun issuing news releases each month listing enforcement actions.

Federal Grants

Arkell reported that he has been very active at the national level, working with other agencies to keep as much of the national grants program in place as possible. The Clinton Administration appears to believe that this is an area which could be reduced, and state and local agencies have been sending letters to provide information about the impacts on state and local agencies from these reductions. Hornbuckle asked whether it would be helpful for board members to write letters to Oregon legislators encouraging them to keep the 105 grant level up. Arkell said the best time for that would be during the budget process. He will draft a letter for board review at the appropriate time.

- OLD BUSINESS:** There were two items of old business on the agenda.
- June Director's Report** Because time was short at the July meeting, the June Director's Report was placed under old business at this time in case board members had any questions. There were none.
- Director's Merit Review** Callahan read a letter from Steve Dodrill which recommended granting a merit increase to Don Arkell.
- Nicholas commented that she would recommend granting the increase because the performance review gave Arkell excellent ratings. He has shown strong leadership in making LRAPA the pass-through agency for the Pocatello SIP grant and in his other activities at the state, regional and national levels which have resulted in his being recognized by DEQ and EPA. She added that, under Arkell's leadership, the agency has shown that LRAPA's permitting program can be operated more cheaply than the state's program.
- \*\* MOTION \*\*** MSP (Hommer/Callahan)(unanimous) granting of merit increase to Donald Arkell.
- NEW BUSINESS:** Arkell said he would like to arrange more tours for the board while the weather is still good. Board members have indicated that they want to see Weyerhaeuser, and Arkell said he would try to arrange a September tour of the paper manufacturing operation, which is quite innovative in recycling. It is also the most complex facility operating in Lane County.
- ADJOURNMENT:** The meeting adjourned at 1:22 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, September 13, 1994, 12:00 noon, in the Springfield City Council Chambers.

Respectfully submitted,

*Merrie Dinteman*

Merrie Dinteman  
Recording Secretary

# MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--OCTOBER 11, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

## ATTENDANCE:

Board Steve Dodrill, Chair--Eugene; Terry Callahan--Oakridge/Cottage Grove; Steve Cornacchia--Lane County (proxy for Frazier); Mark Hommer--At-large; Kevin Hornbuckle--Eugene; Gretchen Nicholas--Eugene  
(ABSENT: Ralf Walters--Springfield)

Staff Don Arkell--Director, Mike Tharpe, Sharon Allen, Kim Partridge, John Morrissey, Kelly Conlon, Jeannine Parisi, Merrie Dinteman

Other Ruth Duemler; Glenn Klein--Legal Counsel

OPENING: Dodrill called the meeting to order at 12:17 p.m.

MINUTES: MSP (Hornbuckle/Nicholas) approval of August 9, 1994 minutes, as submitted; five in favor (Cornacchia abstained).

MSP (Callahan/Nicholas) approval of September 13, 1994 minutes as submitted; four in favor (Cornacchia and Hommer abstained).

EXPENSE REPORT: MSP (Hornbuckle/Nicholas) (unanimous) approval of September expense report as presented.

Sharon Allen commented that the reason the general fund appears to be over-budget is because all Title V expenses are currently being charged to the general fund. Nothing can be charged to Title V until after EPA approves the Title V program in November.

ADVISORY COMMITTEE: It was necessary to appoint an individual to represent fire suppression on the LRAPA Advisory Committee, following the departure of Don Miller earlier in the year. The only application received for the position was from Dale Kamrath, Fire Chief of the Fernridge Rural Fire District, whom the Fire Defense Board had recommended for appointment.

\*\* Motion \*\* MSP (Callahan/Nicholas) (unanimous) appointment of Dale Kamrath to represent fire suppression on the LRAPA Advisory Committee.

PUBLIC PARTICIPATION: None.

PUBLIC HEARING-- At the August 9 meeting, the board discussed LRAPA's financial  
PROPOSED AMEND- outlook for the next four or five years. At that time, staff  
MENTS TO LRAPA presented several different scenarios of effects of projected  
TITLES 34 AND funding cutbacks and several possible sources of revenue to  
43 (PERMIT AND make up the difference. Board discussion at that time resulted  
ASBESTOS FEES): in direction to staff to prepare a rule amendment proposal which  
would bring LRAPA's permit fees to approximately 80 percent of

the state's permit fee proposal, and increase LRAPA's asbestos permitting fees by 50 percent. Arkell explained that the current proposal contained some additional fee adjustments which were made following the August board meeting. Those changes were made to adjust for re-estimation of workloads for certain source categories. He said the proposal would enable LRAPA to recover most, if not all, of the costs associated with the non-Title V permitting program. The Title V permitting program is subject to a separate set of fees.

**Public Hearing**

Dodrill opened the public hearing at 12:20 p.m. There was no one present who wished to comment on the proposal, and the hearing was closed at 12:20 p.m.

Arkell submitted for the record affidavits of publication of hearing notice in the Oakridge Dead Mountain Echo, Eugene Register-Guard, the Cottage Grove Sentinel, and the Springfield News. He also submitted correspondence from DEQ authorizing LRAPA to act as EQC hearings officer for this joint LRAPA/EQC public hearing. He added that, since LRAPA has authority to set its own fee schedule, there was no issue of stringency comparison with state rules. Arkell said individual notice of this rulemaking was sent to all affected sources, and no comments were received.

**Discussion**

In response to questions from the board, Arkell said the draft rules reflected the board's direction at the August meeting. The fees, if approved, would take effective immediately.

**\*\* Motion \*\***

Nicholas moved approval of the proposed amendments to Title 34. Callahan seconded. Hornbuckle amended the motion to add approval of Table A fee schedule amendments. Hommer seconded. Nicholas and Callahan agreed to the amendment, and the board approved the proposed amendments to Title 34, including the Table A fee schedule amendments, by a vote of 5 in favor and 1 abstention (Cornacchia).

Cornacchia explained his abstention as follows: "I cannot, at this point, represent a majority position of the Board of County Commissioners that supports any establishment of fees, increase of fees, extension of fees, or extension of authority by or for LRAPA. And given that inability to represent such a position, I need to abstain at this particular time."

**\*\* Motion \*\***

MSP (Hommer/Callahan) approval of amendments to Title 43. There were five votes in favor, and Cornacchia again abstained, stating that he was incorporating, by reference, his comment on the previous motion, to establish the reason for abstention by the county at this time.

**DISCUSSION ITEM--  
PERSONNEL POLICY  
CHANGES:**

Arkell asked for board direction regarding possible action by the agency to provide some time for employees to adjust to the effects of Ballot Measure 8, should it pass in November. He explained the differences between LRAPA's retirement plan and

PERS and the history of plan contributions. Arkell presented three possible action options for board discussion, including: taking no action and waiting to see whether the measure passes; providing an offsetting salary increase before the effective date of the ballot measure and implementing the employee pickup even if the ballot measure does not pass; revising the existing personnel policy to effectively make it a contract to continue agency pickup of the entire retirement amount for a specific length of time. For each option he provided information regarding impact on the budget and impact on employees. Arkell recommended the third option, stating that legal counsel had advised that this is similar to what other public agencies are either looking at or, in some cases, have already done. Legal counsel has also advised that, if the measure passes, there will likely be some challenge to it, and it will take some time to sort out the legal questions. Arkell said a change in the policy to create this type of contract would affect only current employees, and the agency would have a two-tiered system after January 1, 1995, through the term of the contract. Arkell asked the board to provide direction for development of a specific plan for board discussion and action in November.

#### Discussion

Cornacchia again presented the commission's policy, as follows: "We [the Lane County Board of Commissioners] have come to the conclusion that the number of jurisdictions who have taken action is not many--in fact, it's a very distinct minority across the state--and that the interference with the initiative process, regardless of its merits--it's basically talking about the process, itself. If we're going to treat all the initiatives the same and give them all the appropriate respect, you don't come in and try to circumvent--whether by government or by private industry--actions (depending on what the initiative is)--the effects of that initiative until it's had the opportunity to go through the process of the public vote. In addition, our board feels that to take such action--which, as I understand, School District 4-J has done--feeds right into the hands of those who believe that government needs to be punished, if you will--and, likewise, its employees punished--for actions or policies of the past. And that: 'Here is another example of why you have to pass them. See what they went out and did? They went out and did this even before you had a chance to vote on it.' That may be a little hyperbole from those who spend a lot of time involved with analyzing politics. I'm not sure that regular, everyday Joe and Josephine out there really spends that much time analyzing what we do. But, nevertheless, with the polls showing that Ballot Measure 8 at this point does not have a majority of Oregonian support, that in fact, if the numbers hold true on voter turnout and how things go, and you have a large turnout of public employees, then Measure 8 is destined for failure. In the event, however, that other jurisdictions follow the example of District 4-J and the others that have done something, that could shift that balance of voter sentiment, if you will. So, upon that, we've made the policy that--and it's a policy at least at the Board of Commissioners level, which is different than

probably most all other entities--it's a decision that affects the commissioners also, because the commissioners also are part of that process. So we're doing something to ourselves, in effect, that we share with our fellow employees. So any action counter to that, or different that, I guess, that would be taken today by this board would have to receive a negative vote from the Board of County Commissioners, as contrary to its existing policies."

Hornbuckle said he felt the considerations brought up by Cornacchia were important; however, he also felt that the LRAPA board is responsible for projecting positive and negative impacts on the agency's ability to carry out its mission. The director has indicated that, if Measure 8 passes, there will likely be some employees who will leave the agency, resulting in loss of expertise and disruption of programs. Hornbuckle added that he feels Measure 8 is unfair to employees. He said he can see both sides of the argument.

Nicholas also agreed with Cornacchia, in that she is not comfortable with any action which would circumvent public will. However, the employees made a good-faith agreement with their employer to receive this benefit, and Measure 8 would come between the employees and their good-faith agreement. She suggested that there might be other recourse for the board if the measure passes.

Hommer asked why this needed to be done right away. Arkell responded that it did not have to be done at this meeting. He said that, if Measure 8 passes, it will become effective December 9, and employees will have to start paying the 6 percent, unless other provisions have been made. There is a 30-day window to do whatever the board wishes to do. He said that the November board meeting is the same day as the election and suggested that the board meeting could be delayed until the next day to see whether the measure passes. He said staff was looking for direction from the board to either develop a specific plan for board consideration, or do nothing.

**\*\* Motion \*\***

Hornbuckle moved to direct the director to prepare the policy revision option for consideration at the next LRAPA board meeting. Nicholas seconded.

This action was intended to give staff time to prepare the material necessary for the board to fully consider a possible personnel policy change. The issue of the duration of continued agency pickup of the retirement contribution would be taken up during the November discussion.

The motion passed, with Dodrill, Hornbuckle, Hommer and Nicholas in favor and Callahan and Cornacchia in opposition.

**DIRECTOR'S REPORT:** Arkell spoke briefly regarding the agency's September activities.



- Complaints           Lack of rainfall has caused some dust problems throughout the area, and LRAPA has been responding to complaints ranging from general air quality and dust in the air to specific complaints about fugitive dust emissions. Air quality is beginning to improve with the more volatile weather patterns of Autumn.
- FOPP                   Work continues on the rulemaking package for implementation of the Federal Operating Permit Program. These amendments are intended for greater clarity and ease of understanding, in the context of the federal permitting program. They do not place any new requirements on affected sources. Public hearing is scheduled for November 8. Staff is also participating with the state in developing state FOPP rules which will be implemented locally.
- PNWIS Meeting       Several LRAPA staff members are involved in planning for the 1994 Annual Meeting of PNWIS/AWMA. The November 16-18 conference at the Eugene Hilton is expected to bring 200 to 250 individuals from all over the Northwest.
- Oakridge SIP         The Oakridge PM10 SIP draft is undergoing review, and staff will work with Terry Callahan to schedule a hearing in Oakridge. Staff has been in contact with the Oakridge city manager, and the city is to develop a draft ordinance to complete the SIP package.
- Compliance          There was some discussion regarding the compliance and enforcement processes, specifically concerning a company certifying itself to be back in compliance. Arkell briefly explained the enforcement process in general and then the steps followed in the specific case in question. He said the company had certified in writing that they were back in compliance with reporting requirements in their permit. The company exceeded allowed hours of operation last year and expects to do so again this year. The permit is in the process of being modified to allow increased hours of operation.
- Teacher's Workshop   Dodrill commended Kim Partridge for her efforts in presenting a workshop for local teachers, in conjunction with the PNWIS meeting in November. Partridge said interest is so great that the course had filled up within four days after being announced. Arkell said the workshop seems to fill a need not currently being met in public education and that LRAPA will probably offer it again. Federal grant funds are available to help pay for substitute teachers. Teachers who attend receive a continuing education credit and a workbook with lesson plans.
- OLD BUSINESS:       None.
- NEW BUSINESS:       There was brief discussion regarding the starting time for LRAPA board meetings. Several months ago, the time was changed to 12:00 noon; however, the two board members who wanted to meet at that time have not been able to be at the meetings regularly. Cornacchia commented that the commission meets every other Tuesday and that public hearings are held at 1:30 p.m. The
- Meeting Time

commission representative on the LRAPA board must be back for the hearings at that time. The later the LRAPA board meetings start, the less time the commissioner has to devote to LRAPA business. He recommended leaving the start time at 12:00. Callahan commented that the meetings don't actually start at 12:00, anyway, and suggested that it be changed back to 12:15. It is not yet known who will be appointed to the LRAPA board in January by the various participating entities, and board members agreed this should be discussed again by the new board. However, all of the board members present, except Cornacchia, agreed that the meetings should begin at 12:15 in the interim. The November meeting is to begin at 12:15.

County  
Participation

Nicholas commented that she appreciated Cornacchia's presence at this meeting in Marie Frazier's absence. She said she felt that full participation by all the participating bodies is important, and that the county's input is particularly important. It would be helpful to have a county representative at all LRAPA board meetings, since many of the board's decisions are made only after several months of discussion and deliberation. Cornacchia responded that he could represent heightened scrutiny of LRAPA but not necessarily heightened participation. He said he would pass Nicholas's comments on to the commission so that they will be aware of these concerns. Cornacchia then had to leave the meeting to get back to the afternoon commission meeting.

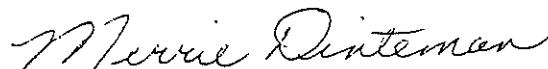
November Meeting

Because of the Measure 8 discussion, it was decided to postpone the November board meeting until Thursday, November 10. The public hearing for the FOPP rules is scheduled for November 8 and has been advertised as such. The board does not actually need to be present at the hearing, itself. Staff can act as hearings officer and prepare a hearings officer's report for consideration at the next board meeting. The board would then review the record and take action on the proposed rule amendments. Board members present agreed that this would be satisfactory. Board members want the public to be able to address them directly and directed staff to hold the public hearing open until the November 10 board meeting to allow opportunity for anyone wishing to address the board directly to do so. Callahan asked if Arkell would like some board members in attendance at the hearing, and Arkell responded that it would be helpful. Dodrill said he would probably be available on the 8th to attend the hearing.

ADJOURNMENT:

The meeting adjourned at 1:11 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Thursday, November 10, 1994, 12:15 p.m., in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 34

Air Contaminant Discharge Permits

Section 34-001 General Policy and Discussion

In order to restore and maintain Lane County air quality in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the county, it is the policy of the Lane Regional Air Pollution Authority to require a permit to discharge air contaminants from certain sources. As a result, no person shall construct, install, establish, modify, enlarge, develop or operate an air contaminant source listed in Table A, without first obtaining a permit from the Authority [~~to discharge air contaminants~~]. In addition, for those sources not listed in Table A which have emissions of air contaminants, the Director may require registration with the Authority. Sources not listed in Table A are subject to notice and approval to construct requirements contained in this Title.

Section 34-005 Definitions

All relevant definitions for this title can be found with the general definitions listed in Title 12, Definitions.

Section 34-010 General Procedures for Obtaining Permits (*Note: Procedures for reviewing new major sources or major modifications are contained in Title 38, New Source Review.*)

~~1. No person shall commence construction, installation or modification of an air contaminant discharge source prior to obtaining an Air Contaminant Discharge Permit. The Director may allow commencement of construction prior to obtaining an ACDP, if applicant demonstrates no emissions increase of any regulated pollutant.~~

- [1]2. Any person intending to construct, install or establish a new source or renew an expired permit shall submit a complete permit application on forms provided by the Authority and containing 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, all discharge points and the surrounding residential and commercial property;
  - D. Type and quantity of fuels used;

- E. Amount, nature and duration of all emissions of air contaminants;
- F. Estimated efficiency of air pollution control equipment;
- G. Other pertinent information required by the Authority.

[2]3. Unless otherwise specified, within fifteen (15) days after receiving the permit application the Authority will review the application to determine the adequacy of the information submitted.

- A. If the Authority determines that additional information is needed, it will promptly request the needed information from the applicant. The permit 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 ninety (90) days of the request.
- B. If, in the opinion of the Director, additional measures are necessary to gather facts regarding the permit application, the Director will notify the applicant of his intent to institute said measures 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.
- C. When the information in the permit application is deemed adequate, the applicant will be notified that the application is complete for processing.
- D. Following determination that it is complete for processing, each permit application will be reviewed on its own merit, in accordance with the provisions of all applicable statutes, rules and regulations of the State of Oregon and the Lane Regional Air Pollution Authority.
- E. If, upon review of the permit application, the Authority determines that a permit is not required, the Authority shall notify the applicant in writing of this determination. Such notification shall constitute final action by the Authority on the permit application. *(NOTE: Upon notification by the Authority, a registered source may be required to obtain a permit.)*

[3]4. In the event the Authority is unable to complete action on a permit application within forty-five (45) days of closing of the public comment period or hearing record under [LRAPA 34-010(4)] ~~subsection 5 of this section~~, the applicant shall be deemed to have received a temporary or conditional permit. Caution should be exercised by the applicant under a temporary or conditional permit, since it will expire upon final action by the Authority to grant or deny the original application, and since 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 Lane Regional Air Pollution Authority.

- [4]5. If the Authority proposes to issue a permit, public notice or proposed provisions prepared by the Authority will be forwarded to the applicant and other interested persons, at the discretion of the Authority, for comment. The public notice shall allow thirty (30) days for written comment from the applicant, the public and the interested local, state and federal agencies prior to issuance of the permit. If, within fourteen (14) days after commencement of the public notice period, the Authority 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 Authority 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, at the Authority's discretion, either in the notice accompanying the proposed provisions or in such other manner as is reasonably calculated to inform interested persons. The Authority shall take final action on the permit application within forty-five (45) days of the closing of the public comment period or the hearing record.
- [5]6. The Authority may adopt or modify the proposed provisions or recommend denial of a permit. In taking such action, the Authority shall consider the comments received regarding the proposed provisions and any other information obtained which may be pertinent to the application being considered.
- [6]7. The Authority shall promptly notify the applicant in writing of the final action taken on the application. 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.
- [7]8. If the applicant is dissatisfied with the conditions or limitations of any permit issued by the Authority, the applicant may request a hearing before the Board of Directors or its authorized representative. Such a request for hearing shall be made in writing to the Director within twenty (20) days of the date of mailing of the notification of issuance of the permit. Any hearing held shall be conducted pursuant to the rules of the Authority.
- [8]9. If the Authority 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 twenty (20) days from the date of mailing of such notice unless, within that time, the applicant request a hearing. Any hearing held shall be conducted pursuant to the rules of the Authority.
- [9]10. Permits issued by the Authority will specify those activities, operations, emissions and discharges which are permitted, as well as requirements, limitations and conditions which must be met.

- ~~10~~11. No permit will be issued to an air contaminant source which is not in compliance with applicable rules, unless a compliance schedule is made a condition of the permit.
- [11]12. Each permit proposed to be issued or revised by the Authority shall be submitted to the Department of Environmental Quality at least thirty (30) days prior to the proposed issuance date.
- [12]13. A copy of each permit issued, modified or revoked by the Authority pursuant to this section shall be promptly submitted to the Department.
- [13]14. The Authority may waive the procedures prescribed in these rules and issue special permits of duration not to exceed sixty (60) days from the date of issuance for unexpected or emergency activities, operations, emissions or discharges. Said permits shall be properly conditioned to insure adequate protection of property and preservation of public health, welfare and resources and shall include provisions for compliance with applicable emissions standards of the Authority. 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, as described in [~~Section 34-010.1~~] subsection 1 of this section.
- [14]15. The Authority may institute modification of a permit due to changing conditions or standards, receipt of additional information or other reason, by notifying the permittee by registered or certified mail of its intention to modify the permit. Such notification shall include the proposed modification and the reasons for modification. The modifications shall become effective twenty (20) days from the date of mailing of such notice unless, within that time, the permittee requests a hearing. Such a request for hearing shall be made in writing, and the hearing shall be conducted pursuant to the rules of the Authority. 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.

#### Section 34-015 Special Discharge Permit Categories

##### 1. Minimal Source Permits

- A. The Lane Regional Air Pollution Authority may designate any source as a "minimal source" based upon the following criteria:
- (1) Quantity and quality of emissions;
  - (2) Type of operation;
  - (3) Compliance with Authority regulations;
  - (4) Minimal impact on the air quality of the surrounding region.

- B. If a source is designated as a minimal source, the compliance determination fee, provided by Section 34-025 (ACDP Permits), will be collected in conjunction with plant site compliance inspections, which will occur every five (5) years.

## 2. Multiple Source Permits

- A. When a single site includes more than one air contaminant source, a single permit may be issued including all sources located at the site. Such applications shall separately identify by subsection each air contaminant source.
- B. When an individual air contaminant source, which is included in a multiple-source permit, is subject to permit modification, revocation, suspension or denial, such action by the Authority shall only affect that individual source without thereby affecting any other source subject to that permit.

## 3. Letter Permits

- A. Any source listed in Table A with no, or insignificant, air contaminant discharges may apply to the Authority for a letter permit.
- B. The determination of applicability of this letter permit shall be made solely by the Authority.
- C. If issued a letter permit, the application processing fee and/or annual compliance determination fee, provided by Section 34-025 (ACDP Fees) may be waived by the Authority.

## Section 34-020 Permit Duration

1. The duration of permits may vary but shall not exceed ten (10) years. The expiration date will be recorded on each permit issued.
2. Air Contaminant Discharge Permits issued by the Authority shall be automatically terminated:
  - A. Within sixty (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. Within one (1) year after a plant closure lasting continuously for one (1) or more years.
  - D. Upon issuance of a new, renewal or modified permit for the same operation;  
or

- E. Upon written request of the permittee.
3. In the event that it becomes necessary to suspend or terminate 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 Authority shall notify the permittee by registered or certified 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 twenty (20) days from the date of mailing of such notice unless, within that time, the permittee requests hearing. Such a request for hearing shall be made in writing and shall state the grounds for the request.
  4. Termination of a permit resulting from continuous plant closure shall subject the source to review as a new non-permitted source upon application to operate the facility.
  5. If the Authority finds that there is a serious danger to the public health or safety or that irreparable damage to a resource will occur, it may suspend or terminate a permit, effective immediately. Notice of such suspension or termination must state the reasons for action and advise the permittee that he may request a hearing. Such a request for hearing shall be made in writing within ninety (90) days of the date of suspension and shall state the grounds for the request.
  6. Any hearing requested under this Section shall be conducted pursuant to the rules of the Authority.

Section 34-025 [Permit] ACDP Fees

1. All persons applying for a new ACD permit or a renewal of an existing ACDP shall at the time of application pay the following fees:
  - A. A filing fee of \$75;
  - B. An application processing fee; and
  - C. An annual compliance determination fee.

~~[The compliance determination fee may be waived when applying for modification of an existing permit. The application processing fee may be waived on permit renewals. Both of these fees may be waived when applying for letter permits.] Both the application processing fee and the annual compliance fee may be waived when applying for letter permits (see Section 34-015, Special Discharge Permit Categories).~~

2. All persons applying for a modification of an existing ACDP shall at the time of application pay the following fees:
  - A. A filing fee of \$75; and



**B. An application processing fee.**

The application processing fee may be waived when applying for letter permits (see Section 34-015, Special Discharge Permit Categories). Modifications subject to the requirements of Section 34-050, Requirements for Construction, may be subject to the fees of Table A Part I, in addition to the fees of Table A Part II.

~~3. Applications for multiple source permits received pursuant to Section 34-015 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 this section.]~~

3. All persons applying for a Synthetic Minor ACDP (as defined by OAR 340-28-1740) shall at the time of application pay the following fees:

A. A filing fee of \$75;

B. An application processing fee;

C. An annual compliance determination fee; and

D. All of the applicable fees of Table A Part I.

4. The fee schedule contained in Table A Part II shall be applied to determine the ACDP fees on a standard industrial classification (SIC) basis.

5. Applications for multiple source permits received pursuant to Section 34-015 (Special Discharge Permit Categories) 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 this section.

6. In addition to the fees mentioned above, sources may be subject to the fees of Table A Part I. The fees for construction review shall be based on the definitions of review levels in Section 34-050-3.

[2]7. The fee schedule contained in the listing of air contaminant sources in this section (see Table A Part II) shall be applied to determine the permit fees on a standard industrial classification (SIC) basis.

[4]8. Modifications of existing, unexpired permits, which are instituted by the Authority due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes and which do not require refileing or review of an application or plans and specifications, shall not require submittal of the filing fee or the application processing fee.

- [5]9. The annual compliance determination fee shall be paid at least thirty (30) days prior to the start of each subsequent permit year. Failure to remit the annual compliance determination fee on time shall be considered grounds for not issuing a permit or for terminating an existing permit. Also, such a failure is, in and of itself, a violation and may subject the permittee to enforcement procedures as defined in Title 15 of LRAPA Rules and Regulations.
- [6]10. If a permit is issued for a period of less than one 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 twelve (12) months, the applicable annual compliance determination fee shall be prorated by multiplying the annual compliance fee by the number of months covered by the permit and dividing by twelve (12).
- [7]11. If a temporary or conditional permit is issued in accordance with adopted procedure, fees submitted with the application shall be applied to the regular permit when it is granted or denied.
- [8]12. All fees shall be made payable to the Authority.
- [9]13. Table A in this Title lists all air contaminant sources required to have a permit and the associated fee schedule.

#### Section 34-030 Source Emission Tests

1. Upon request of the Director, the person responsible for a suspected source of air contaminants shall make or have made a source test and shall submit a written report to the Director which describes the nature and quantity of air contaminants emitted, the specific operating conditions when the test was made and other pertinent data which the Director may require. The source shall be evaluated at maximum operating capacities.
2. All sampling and testing shall be conducted in accordance with the methods approved by the Authority.
3. The Director may conduct tests of emissions of air contaminants from any source, and may require any person in control of an air contamination source to provide necessary holes in stacks or ducts and proper sampling and testing facilities, as may be necessary and reasonable for the accurate determination of the nature and quantity of air contaminants which are emitted as a result of operation of the source. Upon request, the Director shall supply a copy of the test results to the person responsible for the source of air contaminant emissions.

Section 34-040 Records

The Director may require owners or operators of air contaminant emissions sources to monitor and maintain records of, and periodically report to the Authority, information on the nature and quantity of emissions and other such information deemed by the Director to be necessary to determine whether or not such sources are in compliance with the rules of the Authority. This may require the installation and maintenance of continuous monitors and electronic data handling systems.

Section 34-045 General Procedures for Registration

1. For those air contaminant sources not listed in Table A, the Director may require registration by the owner or operator of the source on forms provided by the Authority.
2. The following air contaminant sources shall register with the Authority no later than December 31, 1990 and annually thereafter, as required by this rule:
  - A. Sources within the urban growth boundary
    - (1) Sources listed in Table A but too small to require a discharge permit;
    - (2) Service stations;
    - (3) Paint shops;
    - (4) Fiberglass layup operations;
    - (5) Dry cleaners with discharges to the ambient air.
    - (6) Panel manufacturing operations.
  - B. Sources outside the urban growth boundary
    - (1) Sources listed in Table A but too small to require a discharge permit.
3. Registration shall be completed within thirty (30) days following the mailing date of the request by the Authority.
4. Registration shall be made on forms furnished by the Authority and completed by the owner or lessee of the sources, or agent.
5. Information listed under 34-010~~(1)~~<sup>2</sup> shall be reported by the registrant.

Section 34-050 Requirements for Construction (or Non-Major Modification) [ef]for [Permitted] ACDP Sources (Major Modification Requirements are Contained in Title 38)

1. No person shall commence construction or modification without first obtaining an Authority to Construct from the Authority.

[1]2. The owner or operator of an ACDP [permitted] source planning a construction project (or non-major modification) [or a construction project] which would change emissions shall submit to the Director a construction review fee and a Notice of Construction which includes all information necessary to perform any analysis or make any determination required by these rules. Such information shall include the following:

- A. Plans and specifications for any proposed new equipment or proposed modification[s] to existing equipment drawn in accordance with acceptable engineering practices;
- B. A description of the process and a related flow chart;
- C. An estimation of the amount and type of air contaminants to be emitted by the proposed new source or modification; and
- D. Any additional information which may be required by the Authority.

3. Applicable construction review fees listed in Table A Part I of this title. Construction review fees are assessed based on the review levels defined below:

A. Level I review applies to construction projects which meet all of the following criteria:

- (1) do not result in an increase in emissions or production;
- (2) do not require ACDP modification prior to the ACDP renewal date;
- (3) add a single piece of air pollution control equipment or replace an existing emission or process unit with a device of equivalent capacity; and
- (4) require minimal review by the Authority.

B. Level II review applies to construction projects which:

- (1) do not result in an increase in emissions; or
- (2) result in changes in emissions or throughputs to multiple emission points from those identified in the ACDP permit application; and

(3) require a moderate amount of review by the Authority.

C. Level III review applies to construction projects which:

(1) result in emission increases which are less than the Significant Emission Rate (SER) as defined in LRAPA Title 38 (New Source Review), subsection 005-12; or

(2) are subject to NSPS (New Source Performance Standards-see LRAPA Title 46); and

(3) require a substantial amount of review and analysis by the Authority.

D. Level IV review applies to construction projects which:

(1) result in an emission increase which is greater than or equal to the SER and are therefore subject to New Source Review/Prevention of Significant Deterioration review; or

(2) are subject to a Maximum Available Control Technology (MACT) or Generally Achievable Control Technology (GACT) determination; and

(3) require extensive review and analysis by the Authority.

E. For construction projects which do not clearly fit any of the levels described in subsections A through D of this section, the Authority shall assign a review level based on an estimate of the review time required and the level which most closely fits the construction project. The Authority may waive construction fees for sources with minimal or letter permits.

[2]4. Within sixty (60) days of receipt of all required information, the Authority shall make a determination as to whether the proposed construction or non-major modification is in accordance with the provisions of these rules. [~~In accordance with 32-102.C, modifications which increase emissions above baseline emission rates shall require a 30-day public notice period.~~]

A. If the proposed construction is found to be in accordance with the provisions of these rules, the Authority shall issue a "Notice of Approval to Construct." This issuance shall not relieve the owner or operator of the obligation of complying with all other titles of these rules.

B. If the proposed construction is found not to be in accordance with the provisions of these rules, the Director may issue an order prohibiting construction. Failure to issue the order within the sixty (60) day period shall be considered a determination that the construction may proceed in accordance with the information provided in the application.

- C. Any person against whom an order prohibiting construction is issued may, within twenty (20) days from the date of mailing of the order, demand a hearing. The demand shall be in writing, shall state the grounds for a hearing, and shall be submitted to the Director. Any hearing shall be conducted as a contested case pursuant to Title 14.
  - D. Deviation from approved plans or specifications, without the written permission of the Director, shall constitute a violation of these rules.
  - E. The Authority may require any order or other notice to be displayed on the premises designated. No person shall mutilate, alter, or remove such order or notice unless authorized to do so by the Authority.
- [3] Notice shall be provided in writing to the Authority of the completion of construction and the date when operation will commence. The Authority, following receipt of the notice of completion, shall inspect the premises.

Section 34-055 Compliance Schedules for Existing Sources Affected by New Rules

1. No existing source of air contaminant emissions will be allowed to operate out of compliance with the provisions of new rules, unless the owner or operator of that source first obtains a Board-approved compliance schedule which lists the steps being taken to achieve compliance and the final date when compliance will be achieved. Approval of a reasonable time to achieve compliance shall be at the discretion of the Board.
2. The owner or operator of any existing air contaminant source found by the Director to be in non-compliance with the provisions of new rules shall submit to the Board for approval a proposed schedule of compliance to meet those provisions. This schedule shall be in accordance with timetables contained in the new rules or in accordance with an administrative order by the Director. This schedule shall contain, as necessary, reasonable time milestones for engineering, procurement, fabrication, equipment installation and process refinement. This request shall also contain documentation of the need for the time extension to achieve compliance and the justification for each of the milestones indicated in the schedule.
3. Within one hundred and twenty (120) days of the submittal date of the request, the Board shall act to either approve or disapprove the request. A schedule for compliance becomes effective upon the date of the written order of the Board.
4. Compliance schedules of longer than eighteen (18) months' duration shall contain requirements for periodic reporting of progress toward compliance.
5. An owner or operator of an air contaminant source operating in non-compliance with these rules, but under an approved compliance schedule, who fails to meet that schedule or make reasonable progress toward completion of that schedule, shall be subject to enforcement procedures in accordance with these rules.

TABLE A  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE

PART I

NOTE: Fees in A-[G] are in addition to any other applicable fees.

<p>A. Late Payment</p> <p>(1) 8-30 days 10%</p> <p>(2) Greater than 30 days 25%</p> <p>B. Ambient Monitoring Network Review \$900</p> <p>C. Modeling Review \$2,000</p> <p>D. Alternative Emission Control Review \$1,500</p> <p>E. Non-technical permit modification (name change, ownership transfer, similar) \$50</p>	<p>F. Construction [Permits] Review (see Section 34-050 for definition of level of construction review)</p> <p>(1) [Complex] Level I \$[22,000] 200</p> <p>(2) [Moderately Complex] Level II \$[10,000] 2,000</p> <p>(3) [Simple] Level III \$[2,000] 10,000</p> <p>(4) Level IV \$20,000</p> <p>G. Elective Permits--Synthetic Minor Sources</p> <p>(1) Permit application or modification \$1,900</p> <p>(2) Annual Compliance assurance \$1,000</p> <p>H. Emission Banking Review</p> <p>(1) Initial setup \$1,000</p> <p>(2) Annual Review \$ 500</p> <p>I. Emission Offsetting Review \$1,000</p>
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NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in Part II, in addition to fee for other applicable category.

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
1. Seed cleaning located in Air Quality Maintenance Areas commercial operations only (not elsewhere classified)	0723	[260]490	[500]750
2. RESERVED			
3. Flour and other grain mill products in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2041	[840]1,600	[970]1,480
(b) Less than 10,000 tons per year	2041	[660]1,230	[420]630
4. Cereal preparations in Air Quality Maintenance Areas	2043	[840]1,600	[690]1,070
5. Blended and prepared flour in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2045	[840]1,600	[690]1,070
(b) Less than 10,000 tons per year	2045	[660]1,230	[350]620
6. Prepared feeds for animals and fowl in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2048	[840]1,600	[970]1,480
(b) Less than 10,000 tons per year	2048	[220]990	[310]1,160

Note: A filing fee of \$75 is required for all sources.



TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
7. Beet sugar manufacturing	2063	[1,100]2,090	[4,800]7,340
8. Rendering plant			
(a) 10,000 or more tons per year	2077	[1,340]1,970	[1,650]2,370
(b) Less than 10,000 tons per year	2077	[1,210]1,480	[1,320]1,280
9. Coffee roasting			
(a) 1 to 40 Kg. roasting capacity	2095	[260]320	[320]480
(b) Greater than 40 Kg. roasting capacity	2095	[530]990	[640]970
10. Sawmill and/or planing mill			
(a) 25,000 or more board feet per shift	2421	[330]990	[620]1,480
(b) Less than 25,000 board feet per shift	2421	[220]330	[460]690
11. Hardwood mills	2426	[220]330	[620]930
12. Shake and shingle mills with air transfer systems	2429	[220]330	[230]350
13. Mill work (including kitchen cabinets and structural wood members) 25,000 or more board feet per shift	2431, 2434 & 2439	[310]740	[620]1,160

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
14. Plywood manufacturing			
(a) 25,000 or more square feet per hour (3/8" basis finished product)	2435 & 2436	[1,280]3,080	[1,540]2,980
(b) Less than 25,000 square feet per hour (3/8" basis finished product)	2435 & 2436	[990]1,490	[1,160]1,740
15. Veneer manufacturing only (not elsewhere classified)	2435 & 2436	[220]330	[620]930
16. Wood preserving	2491	[1,300]1,950	[1,160]1,740
17. Particleboard manufacturing (including strandboard, flakeboard and waferboard)			
(a) ≥ 10,000 sq.ft./hr--3/4" basis finished product	2492	[1,450]3,080	[2,080]3,510
(b) < 10,000 sq.ft./hr--3/4" basis finished product	2492	[900]1,480	[1,200]1,680
18. Hardboard manufacturing			
(a) ≥ 10,000 sq.ft./hr--1/8" basis finished product	2493	[1,630]3,080	[1,890]2,880
(b) < 10,000 sq.ft./hr--1/8" basis finished product	2493	[1,000]1,480	[1,100]1,480
19. Battery separator manufacturing	3069	[260]1,230	[1,400]2,560

Note: A filing fee of \$75 is required for all sources.

TABLE A  
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE  
PART II

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
20. Furniture and fixture manufacturing			
25,000 or more board feet/shift	2511	[400]740	[760]1,160
21. Pulp mills, paper mills and paperboard mills	2611, 2621 & 2631	[3,100]5,160	[8,080]12,760
22. Building paper and building board mills	2661	[530]990	[640]970
23. Alkalies and chlorine manufacturing			
(a) Simple [Review]Permit *	2812	[900]1,730	[1,670]2,540
(b) Complex [Review]Permit *	2812	[1,400]3,020	[1,900]3,390
24. Calcium carbide manufacturing			
(a) Simple [Review]Permit *	2819	[970]1,850	[1,670]2,540
(b) Complex [Review]Permit *	2819	[1,400]3,230	[2,000]3,390
25. Nitric acid manufacturing			
(a) Simple [Review]Permit *	2819	[640]1,230	[840]1,280
(b) Complex [Review]Permit *	2819	[900]2,160	[1,200]1,710

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
26. Ammonia manufacturing			
(a) Simple [Review] <del>Permit</del> *	2819	[640]1,230	[970]1,480
(b) Complex [Review] <del>Permit</del> *	2819	[900]2,160	[1,200]1,970
27. Industrial inorganic and organic chemicals manufacturing (not elsewhere classified)			
(a) Simple [Review] <del>Permit</del> *	2819 & 2869	[810]1,600	[1,160]1,820
(b) Complex [Review] <del>Permit</del> *	2819 & 2869	[1,100]2,800	[1,500]2,410
28. Synthetic resin manufacturing			
(a) Simple [Review] <del>Permit</del> *	2821	[620]1,230	[920]1,480
(b) Complex [Review] <del>Permit</del> *	2821	[900]2,160	[1,300]1,970
29. Charcoal manufacturing	2861	[1,210]1,730	[2,680]3,080
30. Pesticide/Herbicide manufacturing	2879	[1,610]3,080	[8,360]12,760
31. Petroleum refining	2911	[3,210]6,160	[8,360]12,760
32. Asphalt production by distillation	2951	[660]1,230	[1,260]1,480
33. Asphalt blowing plants	2951	[640]1,230	[970]1,920

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
<i>See below for revised proposal for Number 34.</i>			
34. Asphalt concrete paving plants			
(a) Stationary	2951	640	760
(b) Portable	2951	640	970
<b>09/29/94 Revised Proposed Amendments to 34:</b>			
<b>34. Concrete Paving Plants Asphalt Production</b>			
(a) Stationary	2951	1,640	1,760
(b) Portable	2951	1,640	1,970
35. Asphalt felts or coating	2952	660	1,460
36. Blending, compounding or refining of lubricating oils and greases and reprocessing of oils and solvents for fuel	2992	[570]1,110	[900]1,380
37. Glass container manufacturing	3221	[640]1,230	[1,190]1,820
38. Cement manufacturing	3241 & 3251	[2,070]3,940	[6,130]9,350

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
39. Concrete Manufacturing including Redimix and CTB	3271, 3272 & 3273	[220]250	[310]390
40. Lime manufacturing	3274	[970]1,850	[640]970
41. Gypsum products	3275	[510]990	[690]1,070
<i>See below for revised proposal for Number 42.</i>			
42. Rock crusher			
(a) Stationary	1429, 1442, 1446 & 3295	570	760
(b) Portable	1429, 1442, 1446 & 3295	570	910
<b>09/29/94 Revised Proposed Amendments to 42:</b>			
42. Sand and Gravel Plants Rock Crusher			
(a) Stationary	1429, 1442, 1446 & 3295	1,870	1,960
(b) Portable	1429, 1442, 1446 & 3295	1,370	1,160
43. Steel works, rolling and finishing mills, electrometallurgical products	3312 & 3313	[1,630]3,080	[1,670]2,540

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
44. Incinerators	[4853] & 7261 4953		
(a) 250 or more ton/day capacity or an off-site infectious waste incinerator		[12,000] 14,780	[5,170] 6,370
(b) 50 or more but less than 250 tons/day capacity		[3,000] 3,700	[1,570] 1,930
(c) 0.5 or more but less than 50 tons/day capacity		[260] 620	[390] 750
(d) crematoriums and pathological waste incinerators not elsewhere classified		[260] 620	[390] 750
(e) PCB and/or off-site hazardous waste incinerator		[12,000] 14,780	[5,170] 6,370
45. Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries (not elsewhere classified)	3321 & 3322 & 3324 & 3325		
(a) 3,500 or more tons per year production		[1,630] 3,080	[1,460] 2,230
(b) Less than 3,500 tons per year production		[400] 740	[760] 1,160
46. Primary aluminum production	3334	[3,210] 6,160	[8,360] 12,760

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
47. Primary smelting of zirconium or hafnium or primary smelting and refining of other ferrous or non-ferrous metals not elsewhere classified			
(a) $\geq$ 2,000 TPY production	3339	[16,080] <del>6,160</del>	[8,360] <del>12,760</del>
(b) < 2,000 TPY production	3339	[5,000] <del>1,000</del>	[3,000] <del>2,000</del>
48. Primary smelting of silicon	3339	[1,740] <del>2,610</del>	[3,920] <del>5,880</del>
49. Secondary smelting and refining of nonferrous metals	3341	[770] <del>1,480</del>	[970] <del>1,480</del>
50. Nonferrous metal foundries (100 or more tons/year metal charged)	3361, 3362 & 3369	[220] <del>740</del>	[390] <del>1,280</del>
51. Electroplating, polishing and anodizing	3471	[330] <del>500</del>	[640] <del>960</del>
52. Galvanizing and pipe coating--exclude all other activities	3479	[220] <del>620</del>	[390] <del>970</del>
53. Battery manufacturing	3691	[400] <del>740</del>	[840] <del>1,280</del>
54. Grain elevators--intermediate storage only, located in Air Quality Maintenance Areas			
(a) 20,000 or more tons per year	4221	[600] <del>1,110</del>	[1,320] <del>2,010</del>
(b) Less than 20,000 tons per year	4221	[330] <del>620</del>	[640] <del>970</del>

Note: A filing fee of \$75 is required for all sources.



TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
55. Electric power generation or cogeneration			
(a) Solid fuel--25 MW or greater	4911	[12,980]24,640	[8,470]12,760
(b) Solid Fuel--less than 25 MW	4911	[7,780]11,670	[4,180]6,270
(c) Oil or gas fired	4911	[1,170]2,200	[2,010]3,080
56. Fuel burning Equipment at gas production and/or distribution facilities	4925	[1,230]2,340	[970]1,480
57. Grain elevators--terminal elevators primarily engaged in buying and/or marketing grain in Air Quality Maintenance Areas			
(a) 20,000 or more tons per year	5153	[1,630]3,080	[1,670]2,540
(b) Less than 20,000 tons per year	5153	[460]860	[640]970
<i>See below for revised proposal for Number 58.</i>			
58. Fuel burning equipment within the boundaries of Air Quality Maintenance Areas (fees based on aggregate heat output for plant site)			
(a) [ <del>Residual or distillate o</del> ] Oil or gas fired--250 million or more btu per hour (heat input)	4961	[530]1,970	[640]1,930

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(b) [ <del>Residual or distillate or</del> ] Oil or gas fired--5 or more but less than 250 million btu per hour (heat input)	4961	[440]1,230	[460]1,070
(c) [ <del>Residual or</del> ] Oil [ <del>or distillate</del> ] or gas fired, less than 5 million btu per hour (heat input)	4961	[220]330	[230]350

09/29/94, Revised Proposed Amendments to 58:

58. Fuel-Burning Equipment (gas or oil):  
Aggregate Heat Input

(a) >250 million BTU/hr	4961	2,220	3,080
(b) >100 and <250 million BTU/hr	4961	1,510	1,730
(c) >10 and <100 million BTU/hr	4961	990	1,210
(d) <10 million BTU/hr	4961	330	350

See below for revised proposal for Number 59.

59. Fuel burning equipment within the boundaries of Air Quality Maintenance Areas (fees based on aggregate heat output for plant site)

(a) Wood or coal fired--35 million [ <del>or more</del> ] btu per hour (heat input)	4961	[620]1,970	[760]1,930
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Note: A filing fee of \$75 is required for all sources.

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(b) Wood or coal fired-- <del>[less than]</del> $\geq$ 35 million btu per hour (heat input)	4961	<del>[220]</del> 490	<del>[540]</del> 1,070
<del>09/29/94 Revised Proposed Amendments to 59:</del>			
<del>59. Fuel-Burning Equipment Inside the AQMA (Wood or Coal Only) Aggregate Heat Input</del>			
<del>(a) &gt;250 million BTU/hr</del>	<del>4961</del>	<del>3,510</del>	<del>3,020</del>
<del>(b) &gt;100 and &lt;250 million BTU/hr</del>	<del>4961</del>	<del>2,490</del>	<del>2,320</del>
<del>(c) &gt;10 and &lt;100 million BTU/hr</del>	<del>4961</del>	<del>1,810</del>	<del>1,530</del>
<del>(d) &lt;10 million BTU/hr</del>	<del>4961</del>	<del>1,220</del>	<del>1,010</del>
<i>See below for revised proposal for Number 60.</i>			
60. Fuel burning equipment outside the boundaries of Air Quality Maintenance Areas (fees based on aggregate heat output for plant site)			
<del>[All wood, coal and oil fired greater than 30 million btu per hour (heat input)]</del>			
<del>(a) wood or coal-fired <math>\geq</math> 35 million btu/hr</del>	<del>4961</del>	<del>[640]</del> 960	<del>[690]</del> 1,040

Note: A filing fee of \$75 is required for all sources.

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(b) wood or coal-fired $\geq$ 5 million btu/hr and $<$ 35 million btu/hr	4961	480	520
(c) distillate oil or gas fired $\geq$ 5 million btu/hr	4961	480	520
(d) residual oil fired $\geq$ 5 million btu/hr	4961	960	1,035
09/29/94 Revised Proposed Amendments to 60:			
60. Fuel-Burning Equipment Outside the AQMA (Wood or Coal Only) Aggregate Heat Input			
(a) $>$ 250 million BTU/hr	4961	2,640	2,410
(b) $>$ 100 and $<$ 250 million BTU/hr	4961	1,970	2,130
(c) $>$ 10 and $<$ 100 million BTU/hr	4961	1,190	1,310
(d) $<$ 10 million BTU/hr	4961	490	1,070
61. Sources not listed herein which would emit 10 or more tons per year of the aggregate of any air contaminants, including but not limited to: particulates, SO <sub>x</sub> , NO <sub>x</sub> or hydrocarbons, if the source were to operate uncontrolled			
(a) Complex [Review] Permit *		5,200	5,200

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(b) Moderate Review *		900	900]
<del>[-e)] Simple [Review] Permit *</del>		<del>[460] 1,000</del>	<del>[460] 1,000</del>
62. Sources not listed herein which would emit significant malodorous emissions as determined by Authority review of sources which are known to produce similar air contaminant emissions			
(a) Complex [Review] Permit *		5,200	5,200
(b) <del>[Moderate Review *</del>		<del>900</del>	<del>900]</del>
<del>[-e)] Simple [Review] Permit *</del>		<del>[400] 1,000</del>	<del>[400] 1,000</del>
63. Sources not listed herein for which an air quality problem is identified by the Authority, including but not limited to: open storage of dusty or odorous material, dry material handling air transfer systems and sandblasting operations			
(a) Complex [Review] Permit *		5,200	5,200
(b) <del>[Moderate Review *</del>		<del>880</del>	<del>880]</del>
<del>[-e)] Simple [Review] Permit *</del>		<del>[400] 1,000</del>	<del>[400] 1,000</del>
64. Bulk gasoline plants	5100 & 5171	<del>[220] 490</del>	<del>[420] 630</del>
65. Bulk gasoline terminals	5171	<del>[2,600] 4,930</del>	<del>[1,400] 2,380</del>
66. Liquid storage tanks--39,000 gallons or more capacity (not elsewhere classified) except for water	4200, 5169 & 5171	<del>[200] 250/tank</del>	<del>[400] 440/tank</del>

Note: A filing fee of \$75 is required for all sources.

**TABLE A**  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
67. Can or drum coating			
(a) $\geq$ 50,000 units/mon.	3411 & 3412	<del>[3,900]</del> 7,390	<del>[2,510]</del> 3,830
(b) < 50,000 units/mon.	3411 & 3412	1,900	1,200
68. Paper or other substrate coating	2641 & 3861	<del>[1,300]</del> 7,390	<del>[840]</del> 3,830
69. Coating flat wood	2400 & 2672	<del>[1,300]</del> 2,460	<del>[840]</del> 1,700
70. Surface coating manufacturing			
(a) 100 tons or more of VOC per year	<del>[2500 &amp; 3300]</del> 2851	<del>[1,300]</del> 2,460	<del>[1,110]</del> 1,700
(b) 10 tons or more but less than 100 tons VOC per year	<del>[2500 &amp; 3300]</del> 2851	<del>[260]</del> 740	<del>[560]</del> 850
(c) Less than 10 tons VOC per year	<del>[2500 &amp; 3300]</del> 2851	<del>[220]</del> 250	<del>[230]</del> 360
71. Flexographic or rotogravure printing 10 tons or more VOC per year per plant	2751, 2754 & 2759	<del>[260]</del> 390	<del>[560]</del> 840
72. RESERVED			
73. Sources subject to federal NESHAPS rules under section 112 of the federal Clean Air Act (except demolition or renovation)		<del>[220]</del> 490	<del>[330]</del> 620

Note: A filing fee of \$75 is required for all sources.

TABLE A  
AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE  
PART II

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
74. Sources of toxic air pollutants, including Maximum Available Control Technology (MACT) (not elsewhere classified)			
(a) High Toxicity **		[900] 1,230	[900] 1,180
(b) Moderate Toxicity **		[550] 830	[660] 990
75. Soil remediation Plants			
(a) Stationary (emissions $\geq$ SER)	1799	[550] 1,230	[660] 1,160
(b) Portable (emissions $\geq$ SER)	1799	1,230	1,480
(c) Stationary (emissions $<$ SER)	1799	300	400
(d) Portable (emissions $<$ SER)	1799	300	500

\* [Complex Permit Review:  
~~• sources requiring PSD/NSR review;~~  
~~• sources requiring a source specific MACT determination for new hazardous air pollutant emissions; and~~  
~~• sources with extreme public involvement.~~  
 Moderate Permit Review:  
~~• anything not classified as "complex" or "simple."~~  
 Simple Permit Review:  
~~• sources going on minimal source permits; and~~  
~~• minor sources which do not require any special analysis and which are not controversial.]~~

Note: A filing fee of \$75 is required for all sources.

TABLE A  
**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**  
**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
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**Complex Permit:**

- sources requiring PSD or NSR review or
- sources requiring source-specific MACT/GACT determination or
- sources requiring a large amount of staff time to complete the permitting process

**Simple Permit:**

- sources which are not complex

\*\* New York State Air Guide-1 1985-86 Edition

Note: A filing fee of \$75 is required for all sources.



# ATTACHMENT D

LRAPA Adoption of Titles 32, 33, 34,  
and 46

November 10, 1994

LANE REGIONAL

AIR POLLUTION AUTHORITY

February 8, 1995

Greg Green, Administrator  
Air Quality Division  
Dept. of Environmental Quality  
811 S. W. Sixth Avenue  
Portland, OR 97204

**Re: EQC Approval of Recently Adopted LRAPA Rules, Title 32, "Emission Standards," Title 33, "Prohibited Practices and Control of Special Classes," Title 34, "Air Contaminant Discharge Permits" (Retitled "Stationary Source Rules and Permitting Procedures"), and Title 46, "Standards of Performance for New Stationary Sources"**

Dear Greg:

At its November 10, 1994 meeting, the LRAPA Board of Directors adopted amendments to Titles 32, 33, 34 and 46 of LRAPA's rules and regulations. The public hearing on these rules, held on November 8 and held open until the November 10 board meeting, was a concurrent LRAPA/EQC hearing, as authorized in your letter of October 18, 1994. The adopted amendments and support documentation are included in this package for you to submit to the EQC for approval. This information is also being sent to Kevin Downing and to Paul Kaprowski of EPA Oregon Operations and Dave Bray of EPA Region 10 in Seattle.

The following copies are attached: The adopted amendments (draft form); hearings officer's report; minutes of the September 13, 1994 board meeting when hearing was authorized; minutes of the November 8 board meeting when the rules were adopted; DEQ authorization to hold concurrent LRAPA/DEQ hearing; staff reports from the September and November board meetings; affidavits of publication of notice of hearing; hearing notice in the Secretary of State's Bulletin; and statements of need and fiscal impact.

Please let me know if you have questions or need additional information.

Sincerely,



Donald R. Arkell  
Director

DRA/mjd

c: Dave Bray  
Kevin Downing  
Paul Kaprowski

Enclosures



(503) 726-2514 • FAX (503) 726-1205  
225 North 5th, Suite 501  
Springfield, OR 97477-4671

Donald R. Arkell, Director

AGENDA ITEM NO. 6

LRAPA Board of Directors Meeting

September 13, 1994

TO: LRAPA Board of Directors

FROM: Donald R. Arkell, Director

SUBJ: RULE REORGANIZATION AND RULE ADOPTIONS NECESSARY TO IMPLEMENT THE FEDERAL OPERATING PERMIT PROGRAM IN LANE COUNTY

The Federal Operating Permit Program will take effect in November of this year. In order for LRAPA to implement the program in Lane County, Titles 32, 33, 34 and 46 of LRAPA's rules must be amended. The majority of these changes are administrative. It is proposed to reorganize Titles 32, 33, and 34 to consolidate emission standards and permitting procedures to make them easier to implement. Other changes involve adoption of rules necessary to give LRAPA full authority to implement the Title V Federal Operating Permit Program. A public hearing on the proposed changes will be scheduled for the November 8 board meeting.

## BACKGROUND

In the process of developing LRAPA's Title V federal operating permit program application forms, specifically the forms for "Applicable Requirements," it became evident that a partial reorganization of LRAPA rules would be prudent and it would be necessary to adopt several new rules (largely by reference) to allow LRAPA to fully implement the Title V program. A summary of the specific changes is as follows:

1. Rules for emission standards and limitations for various pollutants (opacity, PM, grain loading, SO<sub>2</sub>, etc.) are currently scattered throughout several titles. Without a centralized location for all pollutant-related emission standards (particulate matter, gaseous emissions, fugitives, etc.), sources would have a difficult time ensuring that all applicable rules governing emission standards (Applicable Requirements) are met. In order to ease implementation of the federal operating permit program and bring LRAPA's rule organization more in line with that of DEQ's, it is proposed to consolidate all pollutant-specific emission standards into LRAPA Title 32. In addition to reorganization, it is proposed to adopt federal acid rain regulations and rules for control of ozone depleting chemicals by reference. (See the "Discussion" section of this agenda item for the specific changes to Title 32).

2. Similar to the consolidation of pollutant-related emission standards, standards for specific industrial classes (i.e. kraft pulp mills, plywood mill, charcoal plants) need updating and consolidation. To this end, it is proposed to reorganize LRAPA Title 33 with the addition of several industry-specific definitions and adopt an update of industry-specific standards. (See the "Discussion" section of this agenda item for the specific changes to Title 33).
3. Rules governing permitting require updating to clearly delineate which permitting procedures a source may be subject to: Title V permitting; ACDP (Air Contaminant Discharge Permit) procedures for "non-majors"; or Synthetic Minor permitting. In addition, all rules which pertain to permitting (i.e. Plant Site Emission Limit [PSEL] rules) need to be consolidated into Title 34. (See the "Discussion" section of this agenda item for the specific changes to Title 34).
4. LRAPA's Title 46 "Standards of Performance for New Stationary Sources" (NSPS) contains 35 of the 68 NSPS regulations currently adopted by the U.S. EPA in Title 40, Code of Federal Regulations (CFR), Part 60 and by DEQ. Many of the corresponding federal NSPS regulations have undergone changes since LRAPA's last adoption in September 1985 and require updating. In order to avoid confusion in numbering and ensure that the most recent version of the rule is adopted, LRAPA proposes to rescind Title 46 in its entirety and adopt a new Title 46 which contains all the federal NSPS regulations. It is proposed that all NSPS regulations be adopted by reference to federal regulations, 40 CFR Part 60. Changes to Title 46 will provide LRAPA with the specific requirements and procedures necessary to implement and enforce all the current federal NSPS regulations which are enforceable at the state/local levels. (See the "Discussion" section of this agenda item for the specific changes to Title 46).

## DISCUSSION

The following specific changes are proposed for each of the titles listed.

1. Title 32 - Reorganization, Rule Adoption and Updates
  - A. Relax applicability of Highest and Best Practicable Treatment rule to new sources, and add the following elements to HBPT rule, to match the state rule:
    - (1) Pollution Prevention guidelines;
    - (2) Operating and Maintenance requirements; and
    - (3) Typically Achievable Control Technology (TACT) requirements.

- B. Consolidate pollutant-specific air contaminant emission limitations and standards into one title (emission limits, themselves, are unchanged). Consolidate emission standards for:
- (1) Visible emissions;
  - (2) Particulate Matter (PM)--include clarification of rule applicability according to date of installation/modification of air contaminant source;
  - (3) Gaseous emissions--transfer rules on sulfur content of fuels from Title 33 to Title 32, update sulfur dioxide emission limitations and adopt by reference the federal regulations for Acid Rain (40 CFR Part 72 [July 1, 1994]) and Control of Ozone Depleting Chemicals (40 CFR Part 82 [July 1, 1994]/OAR 340-22-420) along with DEQ's OAR 340-22-405 through 415 for Control of Ozone Depleting Chemicals;
  - (4) Nuisance emissions; and
  - (5) Fugitive emissions--reference LRAPA Title 48.
- B. Transfer all Plant Site Emission Limit (PSEL) permitting rules, including PSEL definitions to Title 34, Air Contaminant Discharge Permits (ACDP).
- C. Transfer veneer dryer regulations to Title 33.

2. Title 33 - Reorganization, Renumbering and Update

- A. Remove rules which do not pertain to a specific industrial classification. Title 33 to include standards for the following industrial classifications, with corresponding rule updates:
- (1) Board Products Industries--add definitions as in OAR 340-25-305
    - (a) veneer and plywood mfg.--consolidate veneer dryer rules under one title, transfer veneer dryer opacity limits from Title 32, and add particulate emission limitations for wood-fired veneer dryers as in OAR 340-25-315;
    - (b) particleboard mfg.--administrative change to correct typo error for particulate limit based on finished production (3.0 lbs PM/100 sf of finished production changed to 3.0 lbs PM/1000 sf of finished production);
    - (c) hardboard mfg.--no changes other than renumbering of rule.
  - (2) Charcoal Producing Plants--no changes other than renumbering of rule.

- (3) Kraft Pulp Mills--for clarity, transfer the kraft pulp mill-specific definitions to the Kraft Pulp Mill section from Title 33's main definition section, and include minor updates to the monitoring and reporting requirements to agree with DEQ's OAR 340-25-180 through 190 Kraft Pulp Mill rules, specifically:
    - (a) correct rule for combined monitoring to allow combined monitoring for opacity only, to be consistent with OAR 340-25-180 (5);
    - (b) change advance notification requirement for scheduled reference method source testing from 10-day prior notice to 15-day prior notice, to be consistent with OAR 340-25-185 (13);
    - (c) establish 5-day period for reporting upsets per OAR 340-25-190 (2)--no time frame is specified in current LRAPA version;
  - (4) Hot Mix Asphalt Plants--adopt rules as in OAR 340-25-105 through 25-125;
  - (5) Reduction of Animal Matter--adopt rules, as in OAR 340-25-055 through 25-075;
  - (6) Incinerators and Refuse Burning Equipment--transfer all references to incinerators and refuse burning equipment to Title 30; leave reference that states incinerator/refuse burning equipment rules have been moved to Title 30.
- B. Transfer "Sulfur Content of Fuels" standards section to the Gaseous Emission Standards section of Title 32.
3. Title 34--Reorganization, Rule Adoption and Updates
- A. Transfer PSEL rules and definitions from Title 32 to Title 34.
  - B. Add definition of "Significant Emission Rate (SER)" to PSEL definition list.
  - C. Add language to clarify sources required to obtain ACDP permits.
  - D. Add language which adopts by reference DEQ's Title V Federal Operating Permit Program for Major Sources (OAR 340-28-2100 through 2740), and reference LRAPA's authority to implement Title V including Division 28 (OAR 340-28-2100 through 2740) and Division 32 (HAPs) (OAR 340-32-100 through 5650), including the newly adopted 340-32-5520 and 5585 provisions, as provided for under OAR 340-28-100 (2) & (4).

- E. Adopt language similar to that provided in OAR 340-28-1720 (2) through (6), which clarifies requirements for permitting and modifications for sources subject to:
  - (1) ACDP permitting procedures;
  - (2) Synthetic Minor permitting procedures; and/or
  - (3) Title V Federal Operating Permit Program (FOPP).
- 4. Title 46--Rule Rescission, Reorganization, Rule Adoption and Updates
  - A. Rescind entire September 10, 1985 version of Title 46.
  - B. Adopt current list of 68 NSPS regulations by reference to corresponding federal rules.

AGENDA ITEM NO. 6

LRAPA Board of Directors Meeting

November 10, 1994

TO: Board of Directors

FROM: Donald R. Arkell, Director

SUBJ: Public Hearing Regarding Rule Reorganization and Rule Adoptions  
Necessary to Implement the Federal Operating Permit Program in Lane  
County

The Federal Operating Permit Program will take effect this month. In order for LRAPA to implement the program in Lane County, Titles 32, 33, 34 and 46 of LRAPA's rules must be amended. The majority of these changes are administrative. It is proposed to reorganize Titles 32, 33, and 34 to consolidate emission standards and permitting procedures to make them easier to implement. Other changes involve adoption of rules necessary to give LRAPA full authority to implement the Title V Federal Operating Permit Program. A public hearing on the proposed changes is scheduled for the November 8 board meeting.

**BACKGROUND**

In the process of developing LRAPA's Title V federal operating permit program application forms, specifically the forms for "Applicable Requirements," it became evident that a partial reorganization of LRAPA rules would be prudent and it would be necessary to adopt several new rules (largely by reference) to allow LRAPA to fully implement the Title V program. A summary of the specific changes is as follows:

1. Title 32 will contain Highest and Best Practicable Treatment (HBPT) and pollutant-specific emission limits.
  - A. Change HBPT rule in LRAPA Title 32 to equate HBPT to standards set by rule rather than by permit, and add specific work practice and Typically Achievable Control Technology (TACT) elements.
  - B. In addition, rules for emission standards and limitations for various pollutants (opacity, PM, grain loading, SO<sub>2</sub>, etc.) are currently scattered throughout several titles. Without a centralized location for all pollutant-related emission standards (particulate matter, gaseous emissions, fugitives,



etc.), sources would have a difficult time ensuring that all applicable rules governing emission standards (Applicable Requirements) are met. In order to ease implementation of the federal operating permit program, it is proposed to consolidate all pollutant-specific emission standards into LRAPA Title 32. In addition to reorganization, it is proposed to adopt federal acid rain regulations and rules for control of ozone depleting chemicals at Title V sources by reference. (Specific changes to Title 32 are detailed below).

2. Standards for specific industrial classes (i.e. Kraft Pulp Mills, Plywood Mills, Charcoal Plants) are updated and consolidated in LRAPA Title 33. In addition, two new industrial classes, Hot Mix Asphalt Plants and Reduction of Animal Matter Facilities, have been added. Updates to Title 33 include:
  - A. Addition of industry-specific definitions for the Board Products Industries (plywood, veneer manufacturing, hardboard, etc.); and
  - B. Correction of Pulp Mill standards for combined monitoring and modification requirements for source testing and upsets.

(Specific changes to Title 33 are detailed below).

3. Title 34 will contain Plant Site Emission Limit (PSEL) rules and permitting requirements. The rules are updated to clearly delineate which permitting procedures a source may be subject to: Title V permitting; ACDP (Air Contaminant Discharge Permit) procedures for "non-majors"; or Synthetic Minor permitting. In addition, all rules which pertain to permitting (i.e. Plant Site Emission Limit [PSEL] rules) are consolidated into Title 34. (Specific changes to Title 34 are detailed below).
4. Title 46 will contain references to federal New Source Performance Standards (NSPS). Title 46 contains 35 of the 68 NSPS regulations currently adopted by the U.S. EPA in Title 40, Code of Federal Regulations (CFR), Part 60 and by DEQ. Many of the corresponding federal NSPS regulations have undergone changes since LRAPA's last adoption in September 1985 and require updating. In order to avoid confusion in numbering and ensure that the most recent version of the federal rule is adopted by reference, LRAPA proposes to rescind Title 46 in its entirety and adopt a new Title 46 which contains all the federal NSPS regulations. It is proposed that all NSPS regulations be adopted by reference to federal regulations, 40 CFR Part 60. Changes to Title 46 will provide LRAPA with the specific requirements and procedures necessary to implement and enforce all the current federal NSPS regulations which are enforceable at the state/local levels. (Specific changes to Title 46 are detailed below).

## **SPECIFIC CHANGES PROPOSED**

1. Title 32--Highest & Best Practicable Treatment and Emissions Standards for Specific Pollutants
  - A. Change HBPT rule to require that HBPT be set by rule, rather than by permit (same as state rule), and add the following elements to HBPT rule, to match the state rule:
    - (1) Pollution Prevention guidelines;
    - (2) Operating and Maintenance requirements; and
    - (3) Typically Achievable Control Technology (TACT) requirements.
  - B. Consolidate pollutant-specific air contaminant emission limitations and standards into one title (emission limits, themselves, are unchanged). Consolidate existing emission standards for:
    - (1) Visible emissions;
    - (2) Particulate Matter (PM)--include clarification of rule applicability according to date of installation/modification of air contaminant source;
    - (3) Gaseous emissions--transfer rules on sulfur content of fuels from Title 33 to Title 32, update sulfur dioxide emission limitations and adopt by reference the federal regulations for Acid Rain (40 CFR Part 72 [July 1, 1994]) and Control of Ozone Depleting Chemicals (40 CFR Part 82 [July 1, 1994]/OAR 340-22-420) along with DEQ's OAR 340-22-405 through 415 for Control of Ozone Depleting Chemicals (applicable to Title V sources, only);
    - (4) Nuisance emissions; and
    - (5) Fugitive emissions--reference LRAPA Title 48.
  - C. Transfer all Plant Site Emission Limit (PSEL) permitting rules, including PSEL definitions to Title 34, Stationary Source Rules and Permitting Procedures.
  - D. Transfer veneer dryer regulations to Title 33.

2. Title 33--Standards for Industrial Classification (source categories)

A. Remove rules which do not pertain to a specific industrial classification. Title 33 is amended to include standards for the following industrial classifications, with corresponding rule updates:

(1) Board Products Industries--add definitions as in OAR 340-25-305

(a) veneer and plywood mfg.--consolidate veneer dryer rules under one title, transfer veneer dryer opacity limits from Title 32, and add particulate emission limitations for wood-fired veneer dryers as in OAR 340-25-315;

(b) particleboard mfg.--administrative change to correct typo error for particulate limit based on finished production (3.0 lbs PM/100 sf of finished production changed to 3.0 lbs PM/1000 sf of finished production);

(c) hardboard mfg.--no changes other than renumbering of rule.

(2) Charcoal Producing Plants--no changes other than renumbering of rule.

(3) Kraft Pulp Mills--for clarity, transfer the kraft pulp mill-specific definitions to the Kraft Pulp Mill section from Title 33's main definition section, and include minor updates to the monitoring and reporting requirements to agree with DEQ's OAR 340-25-180 through 190 Kraft Pulp Mill rules, specifically:

(a) correct rule for combined monitoring to allow combined monitoring for opacity only, to be consistent with OAR 340-25-180 (5);

(b) change advance notification requirement for scheduled reference method source testing from 10-day prior notice to 15-day prior notice, to be consistent with OAR 340-25-185 (13);

(c) establish 5-day period for filing written reports on upsets per OAR 340-25-190 (2)--no time frame is specified in current LRAPA version;

(4) Add definitions and emission limits for Hot Mix Asphalt Plants--adopt rules as in OAR 340-25-105 through 25-125;

- (5) Add definitions and emission limits for Reduction of Animal Matter--adopt rules, as in OAR 340-25-055 through 25-075;
  - (6) Incinerators and Refuse Burning Equipment--transfer all references to incinerators and refuse burning equipment to Title 30; leave reference that states incinerator/refuse burning equipment rules have been moved to Title 30.
- B. Transfer "Sulfur Content of Fuels" standards section to the Gaseous Emission Standards section of Title 32.
3. Title 34--Plant Site Emission Limits and Permitting Procedures for Air Contaminant Discharge Permits, Federal Operating Permits, and Hazardous Air Pollutants (by reference to state rules)
- A. Adopt rules for Control of Ozone-Depleting Chemicals for Title V sources;
  - B. Transfer PSEL rules and definitions from Title 32 to Title 34;
  - C. Add language which includes Federal Operating Permit Program as subject to PSEL rules;
  - D. Incorporate/adopt definitions associated with permitting of Federal Operating Permit Program sources;
  - E. Adopt PSEL rules for HAPs and Insignificant Activities;
  - F. Adopt Information Exempt from Disclosure rule;
  - G. Add language to emissions test section to clarify testing requirements;
  - H. Add definition of "Significant Emission Rate (SER)" to PSEL definition list;
  - I. Add language to clarify sources required to obtain ACDP permits (entire title reorganized);
  - J. Add language which adopts by reference DEQ's Title V Federal Operating Permit Program for Major Sources (OAR 340-28-2100 through 2740), and reference LRAPA's authority to implement Title V including Division 28 (OAR 340-28-2100 through 2740) and Division 32 (HAPs) (OAR 340-32-100 through 5650), including the newly adopted 340-32-5520 and 5585 provisions, as provided for under OAR 340-28-100 (2) & (4); and

- K. Adopt language similar to that provided in OAR 340-28-1720 (2) through (6), which clarifies requirements for permitting and modifications for sources subject to:
- (1) ACDP permitting procedures;
  - (2) Synthetic Minor permitting procedures; and/or
  - (3) Title V Federal Operating Permit Program (FOPP).
4. Title 46--New Source Performance Standards (by reference to federal rules)
- A. Rescind entire September 10, 1985 version of Title 46.
  - B. Adopt current list of 68 NSPS regulations by reference to corresponding federal rules.

## PUBLIC NOTICE AND COMMENT

Notice of the November 8 hearing was published in local newspapers and in the October 1 edition of the Secretary of State's Bulletin. The proposed amendments were submitted to the Oregon Department of Environmental Quality headquarters in Portland and to the U. S. EPA's Region 10 office in Seattle, for their review and comment. The only comments received were from DEQ.

In an October 18, 1994 letter, DEQ authorized LRAPA to act as hearings officer for the EQC, making this a joint EQC/LRAPA public hearing. That letter also contained DEQ comments on the proposed amendments. Those comments, and LRAPA's responses, are as follows:

1. Page 7 of Title 32, Section 32-009 (3) should include reference to adoption by the Environmental Quality Commission as well as LRAPA's Board.

**LRAPA RESPONSE:** LRAPA staff agrees, and the suggested reference is to be included in the final version of Title 32 for clarity. The sections would state that a requirement applicable to a major source shall be established if it has been adopted by EPA but has not otherwise been adopted by the EQC or the LRAPA Board.

2. In the same section, there is no reference to chemical weapons combustion.

**LRAPA RESPONSE:** LRAPA staff contends that there isn't a need for adoption of this subsection because no facility for chemical weapon combustion exists in Lane County at this time.

3. Page 10 of Title 34, the definition of "Aggregate insignificant Emissions" is missing a standard for lead.

**LRAPA RESPONSE:** LRAPA staff agrees, and the standard for lead is to be added in the final version of Title 34 (Section 34-060-3).

In addition to responding to DEQ's written comments, it is proposed to revise the proposed Section 34-070-5.B (page 20 of Title 34) to allow the Authority to determine the frequency of record reporting. The current language, which requires all sources to report semiannually, was based on Title V requirements for semi-annual compliance demonstration for major sources, only, and should not be a requirement for all permit holders. DEQ has determined that this language places an unnecessary burden on both the ACDP holders and regulatory staff. LRAPA agrees.

There are also a number of typographical corrections which will be made in the final version: Title 32, page 3, Section 32-005-2, correct reference from "OAAR" to "OAR"; Title 34, page 3, Section 34-015-4, correct "date" to "data"; Title 46, page 17, Section 46-505, correct the heading from "State of Purpose" to "Statement of Purpose."

#### **ACTION FOLLOWING PUBLIC HEARING**

Following the November 8 public hearing, staff will present a hearings officer's report to the full board, on Thursday, November 10. Unless there is testimony requiring extensive response, a request will be made to the board at that time to adopt the rules, either as currently proposed or with any changes deemed necessary in response to information received at the hearing.

DRA/mjd



**M E M O R A N D U M**

To: Board of Directors

From: Donald R. Arkell, Hearings Officer

Subj: Public Hearing, November 8, 1994--Amendments to LRAPA Titles 32, 33, 34 and 46

**SUMMARY OF PROCEDURE**

The hearing was convened at 12:30 p.m. on November 8, 1994 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA board member Terry Callahan chaired the hearing. Staff present was Don Arkell and Merrie Dinteman.

The purpose of the hearing was to receive testimony concerning proposed adoption of amendments to LRAPA Titles 32, "Emission Standards," 33, "Prohibited Practices and Control of Special Classes of Industry," 34, "Air Contaminant Discharge Permits," and 46, "Standards of Performance for New Stationary Sources."

Staff presented a summary of the proposal, and the chair opened the hearing.

Following testimony, the Chair adjourned, leaving the record open until the board takes action on November 10, 1994.

**SUMMARY OF TESTIMONY**

There was one person present who wished to comment on the proposed rules: Ruth Duemler, 1745 Fircrest Drive, Eugene, Oregon 97403, representing herself. Duemler commented on the proposed highest and best practicable treatment provisions in Title 32. She asked if staff would still give recommendations as to the best technology to solve pollution problems, if the Highest and Best Available Treatment rules were amended as proposed. Arkell responded affirmatively, stating that the board would establish the control requirements by adopting standards by rule, rather than having staff establish control requirements as permit conditions as is done currently. The board would still have access to the same information regarding available technology as LRAPA staff and the affected industries, and would consider staff assessment of available technology. There would be opportunity for

public input through the rulemaking procedure necessary to adopt the standards. Duemler commented that it sounded like the rule change would result in delays in permit issuance. She also cautioned that putting the responsibility in the hands of the board would mean the board would have to be made up of individuals who want to employ the best available technology, which is not always possible. In summary, Duemler said she felt the relaxation of the HBPT rule gives the board too much flexibility and delays the permitting process.

In addition to the oral testimony, DEQ provided minor housekeeping comments (see letter of October 18, 1994). LRAPA concurred with the comments and would recommend incorporating them into the rule. The proposal was also found to be at least as stringent as the state's rules.

#### **NOTICE OF PROPOSED ACTION**

Once the LRAPA board acts on this rule proposal, the record of the hearing and board action will be forwarded to EQC for adoption. Since these rules will supplement the Oregon federal operating permit program submittal to EPA, this hearing was also conducted for EQC.

Notice of the November 8 public hearing on the proposed amendments was published in September and October in the Oakridge Dead Mountain Echo, the Cottage Grove Sentinel, and the Eugene Register-Guard.

Following the authorization for hearing, individual notices of the proposed rule-making was sent to all holders of LRAPA Air Contaminant Discharge Permits, and to approximately 150 other businesses, local governments, fire districts, asbestos abatement contractors, environmental consultants, professional associations, special interest groups and individuals. In addition, notice of the hearing and intended action was published in the September 1, 1994 edition of the Secretary of State's Bulletin.

#### **DIRECTOR'S RECOMMENDATION**

Staff has responded to written comments and oral testimony provided at the hearing. It is recommended that the board adopt the proposed amendments to LRAPA Titles 32, 33, 34 and 46 as presented, with the revisions described in the staff report.

DRA/MJD



## MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--SEPTEMBER 13, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

### ATTENDANCE:

Board Steve Dodrill, Chair--Eugene; Terry Callahan--Oakridge/Cottage Grove; Kevin Hornbuckle--Eugene; Gretchen Nicholas--Eugene (ABSENT: Marie Frazier--Lane County; Mark Hommer--At-Large; Ralf Walters--Springfield)

Staff Don Arkell--Director, Mike Tharpe, Sharon Allen, Kim Partridge, Merrie Dinteman

Other Dave Stanley, Gleaves-Swearingen; Bill Trano, Seneca Sawmill; Corey Unfried, Willamette Industries

OPENING: Dodrill called the meeting to order at 12:17 p.m.

MINUTES: Callahan moved approval of the minutes of the August 9, 1994 meeting, as submitted, and Nicholas seconded the motion. Callahan, Hornbuckle and Nicholas voted in favor, and Dodrill abstained because he did not attend the August meeting. Since three votes do not constitute a majority of the board, the minutes of the August meeting will be placed on the October meeting agenda for approval.

EXPENSE REPORT: MSP (Callahan/Nicholas)(unanimous) approval of expense report through August 31, 1994, as presented.

ADVISORY COMMITTEE: Kim Partridge reported that the committee toured the agency's monitoring site located at the LCC Downtown Center in Eugene. Staff explained the monitoring operation to them as part of the background information which the committee is using in its work on the PM10 redesignation project.

PUBLIC PARTICIPATION: None.

DISCUSSION--  
PROPOSED AMEND-  
MENTS TO LRAPA  
TITLES 32, 33,  
34 AND 46  
(TITLE V IMPLI-  
MENTATION): Arkell explained that, in order for LRAPA to have full authority to implement the Title V Federal Operating Permit Program in Lane County, several of LRAPA's rules must be amended. In addition, it is proposed to restructure several titles to consolidate rules and make it easier for the regulated community to find the procedures they're required to follow to comply with the rules. It is also proposed to adopt federal New source Performance Standards rules by reference.

Arkell said the draft rules will include relaxation of the Highest and Best Practicable Treatment rules, according to board consensus at the August meeting. He said he wanted to be sure

the board understands the impact of this change. At present, LRAPA can require the best available controls as part of a permit, without having a specific standard in place for each type of process. The proposed amended rule would require those standards. Where there is technology available but no local standard requiring its application, a new facility or a modification to an existing facility would not be required to install the most efficient control technology. There would be an initial cost savings to the company, but it could create some uncertainty if the board expressed an intent to adopt a standard later on which would require the company to retrofit. Also, adoption of standards requires rulemaking. The rulemaking process takes longer than the permit issuance process. If a new source applied for a permit (or an existing source applied for a permit modification), and the board decided to adopt a standard to require HBPT for the subject system, the rulemaking process could cause a delay in the permit issuance. Arkell suggested that one way to avoid that problem would be for the board to adopt standards, even though there might not currently be any facilities operating in Lane County. That would give staff the ability to require the best available controls on new or modified facilities.

Arkell said the draft amendments would be sent to board members prior to the October board meeting. Public hearing on the proposed amendments is scheduled at the November 8, 1994 board meeting.

**AUTHORIZATION  
OF MEMBERSHIP  
IN CITY/COUNTY  
INSURANCE  
TRUST:**

Sharon Allen explained that the City/County Insurance Trust asked to have the LRAPA board adopt a new resolution authorizing LRAPA's membership. The resolution which they sent originally, which was adopted at the August 9, 1994 meeting, was effective for only one year. The one which they actually needed to have adopted approves a three-year membership.

**\*\* MOTION \*\***

**MSP (Hornbuckle/Nicholas) (unanimous) approval of three-year LRAPA membership in City/County Insurance Trust Liability Risk Sharing Pool.**

**DIRECTOR'S REPORT:** Arkell spoke briefly regarding the agency's August activities.

**PNWIS Meeting**

Several staff members are involved in planning for the 1994 annual meeting of the Pacific Northwest International Section of the Air & Waste Management Association (PNWIS-AWMA), to be held at the Eugene Hilton in November. Copies of the preliminary program will be sent to board members as soon as they are available.

**Portable  
Samplers**

Jerry Boyum of LRAPA staff has been notified that a patent has finally been granted to him and EPA Region 10 for the portable samplers manufactured by AIRmetrics.

- Public Education Kim Partridge has been asked to make a presentation on the computer game which was developed for the Lane County Fair, at the Air & Waste Management Association's annual meeting in San Antonio next summer.
- Oakridge SIP The Oakridge PM10 SIP is almost completed, and public hearing in Oakridge is anticipated in the next couple of months. Terry Callahan will be asked to serve as hearings officer at that hearing. The board will then be asked to approve the SIP, and it will be forwarded to DEQ for EQC approval and submittal to EPA. It will be subject to EPA review and will be the basis for further activities to deal with the woodstove-related air quality problem in Oakridge.
- OLD BUSINESS:** None.
- NEW BUSINESS:** Callahan reminded the board and staff that his term on the LRAPA board will be up at the end of this year. He asked if staff Board Members wanted to contact Cottage Grove regarding a new appointment. Arkell said he would call the city manager and see how Cottage Grove wants to proceed.
- Open Burning Hornbuckle said the Eugene City Council had approved some kind of open burning at Willow Creek, in conjunction with BLM and the Nature Conservancy. Arkell responded that LRAPA has also been involved in permitting for the prescribed burning which takes place annually to help ensure the survival of rare native vegetation species in the Willow Creek Preserve.
- ADJOURNMENT:** The meeting adjourned at 12:45 p.m., and board and staff members attended a tour of the Weyerhaeuser Paper facility in Springfield. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, October 11, 1994, 12:00 noon, in the Springfield City Council Chambers.

Respectfully submitted,

*Merrie Dinteman*

Merrie Dinteman  
Recording Secretary

# MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
THURSDAY--NOVEMBER 10, 1994  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

## ATTENDANCE:

Board Terry Callahan, Acting Chair--Oakridge/Cottage Grove; Marie Frazier--Lane County; Kevin Hornbuckle--Eugene; Gretchen Nicholas--Eugene; Ralf Walters--Springfield (Pat Patterson, 1995 Cottage Grove/Oakridge representative, was also present) (ABSENT: Steve Dodrill--Eugene; Mark Hommer--At-large)

Staff Don Arkell--Director, Mike Tharpe, Sharon Allen, Kim Partridge, John Morrissey, Kelly Conlon, Merrie Dinteman

Other Ruth Duemler

OPENING: Since Dodrill was unable to attend this meeting, Callahan chaired the meeting, calling the meeting to order at 12:22 p.m.

MINUTES: MSP (Hornbuckle/Nicholas) approval of October 11, 1994 minutes, as submitted; four in favor (Walters abstained).

EXPENSE REPORT: Walters commented on the fact that, due to LRAPA's entrepreneurial efforts, the portable sampler fund is making a profit and is providing equipment for monitoring projects nationwide, as well as internationally.

MSP (Frazier/Walters) (unanimous) approval of September expense report as presented.

ADVISORY COMMITTEE: Nothing new to report.

PUBLIC PARTICIPATION: None.

CONTINUATION OF PUBLIC HEARING-- PROPOSED RULE AMENDMENTS FOR TITLE V IMPLEMENTATION: Arkell noted that public hearing on the proposed rule amendments was opened on Tuesday, November 8, with Terry Callahan as hearings officer. The hearing was left open until today to allow additional time for public testimony on the proposal.

Callahan asked whether anyone present wished to comment on the rule amendments. There was no response, and Callahan closed the public hearing at 12:27 p.m.

Discussion Frazier commented that it was interesting that part of the testimony received at the hearing on the 8th concerned adopting standards by rule, rather than having them applied as control requirements in the permitting process. She asked, on behalf of those to whom the rules will apply, whether the intent was to make the process more flexible. Arkell responded that the intent was to put the definition of what control requirements are more in the hands of the board, rather than the permitting process

performed by staff. The standards would be set by rulemaking, which is a very public process. The permitting process has a public notice and comment element, but there is no hearing involved unless there is a public request. The proposed rules would be as flexible as the board wants them to be. Nicholas commented that that specific change was made under board direction. The board felt that it would make the process more predictable, since the standards are adopted by rule; therefore, industries would know what the rules were for any given circumstance. It would also be better for the public, because it gives them the opportunity to comment on any changes in the standards.

Hornbuckle asked about the authorization of LRAPA to serve as EQC hearings officer. Arkell explained that DEQ authorizes LRAPA to serve as hearings officer for EQC, since rules which result in a change to the State Implementation Plan (as these particular rule amendments do) must go through EQC and be adopted by the state before being submitted to EPA. Having LRAPA serve as hearings office saves a step at the state level by satisfying all hearing requirements at once.

Arkell stated that the rules were essentially the same as when they were originally presented to the board, with several small changes in response to comments made by DEQ in an October 18 letter.

**\*\* MOTION \*\***

MSP (Hornbuckle/Walters)(Unanimous) approval of the proposed amendments to titles 32, 33, 34, and 46, including the revisions recommended by DEQ in its letter of October 18, 1994.

**DIRECTOR'S REPORT:** Arkell spoke briefly regarding the agency's October activities.

**Air Quality** Air quality was good during October due to frequent weather patterns coming through the area.

**Inspections** Staff is providing greater detail of inspections in the written Director's Report each month, in order to give board members a better understanding of the sorts of things staff looks for when doing an inspection and making a compliance determination.

**Backyard Burning** The residential burning season was to begin October 1 but was delayed until October 15 due to high fire danger, at the request of the Fire Defense Board. This is the third year in a row the season has been delayed, and the Fire Defense Board may come to the board to request a rule change to make the delay permanent.

**Slash burning** Arkell said LRAPA received a request from the Wildish Company for a permit to burn slash from a logging operation on property they own just south of Springfield, across the river. This type of burning is normally handled under the Department of Forestry Smoke Management Plan; however, DOF changed the plan to be effective only in areas that are in fire protection zones, thus excluding areas outside the protection zones from regulation by

DOF. LRAPA rules do not currently cover these situations, and further checking revealed that no one else handles them, either. Arkell said the concern is that there is no mechanism in place to provide for setting times when burning would be allowed or for any other conditions to minimize smoke intrusions into the populated areas. He said LRAPA does not yet know how many pieces of property there might be near the populated areas of Lane County where disposal of logging slash is not covered by DOF. DOF is to provide maps to LRAPA showing those areas. Arkell asked board members whether they wish to consider rulemaking so that LRAPA may issue permits for this type of burning, recognizing that the conditions under which we might allow slash burning might be different from what that type of burning might have to meet in areas that are more remote. A LRAPA permit would require maximum salvage, along with combustion enhancement techniques. Arkell said that if there are not many areas involved, staff might be able to handle them through negotiated arrangements, on a case-by-case basis.

Nicholas said she has some concerns because of the tremendous amount of smoke generated by slash burning. Slash burning is very complex to monitor, and DOF spends significant amounts of time regulating these activities.

Frazier commented that there could be more conflict with this type of situation as the area develops in the future. The board needs more information in order to decide whether or not to take action. She suggested that an analysis of the situation should include estimates of fiscal impacts both to companies who might be involved in this type of burning, and to LRAPA for administering the permits.

Callahan noted that when slash is burned several miles from Oakridge, the town is often impacted very heavily, depending on the weather patterns. There are some times when most of the smoke in town is from slash burning, rather than from the town itself.

Walters said he is concerned about this, as a Springfield representative. He said LRAPA should be able use both the Oregon Smoke Management Plan and LRAPA's existing rules to create some sort of blended solution to this. He also commended Wildish for coming forward with the request to try to work it out. He said, while the board could not act at this time, it would seem to be a good idea to have a rule in place in the future. He had reservations about negotiating these situations on a case-by-case basis because of the potential for inequity of treatment.

Arkell noted that Wildish has been working with the Eastern Lane office of DOF and with LRAPA to try to accomplish the burning with minimal impact on the urban area. He said DOF has been very cooperative and helpful and has offered to advise the company as to what the smoke management requirements would be. He cautioned, however, that while DOF would provide a daily burning

advisory, they would not prescribe any amount of material removal (salvage); nor, necessarily, would they prescribe combustion enhancement. LRAPA would like to see that slash burning occurring close to populated areas be done according to some kind of process to minimize impact.

Oakridge SIP

The time frame has been rolled back a couple of months, with public hearing now expected in February or March. The draft SIP needs some additional work. The Clean Air Committee was scheduled to discuss the draft city ordinance on December 27.

Enforcement

There was some discussion of the enforcement section of the Director's Report. Two notices of permit violation were for failing to record daily inspections of water spray systems at rock crushing facilities. Board members were concerned as to whether this is an indication that the companies are not keeping adequate records, or whether the record-keeping requirements are onerous. Arkell and staff member John Morrissey explained the permit requirements and the need for daily operator inspections, stating that it is the permit holder's responsibility to see that the control equipment is kept up, and the records provide documentation that they are doing that. Morrissey said he has advised these two companies that they should request a permit modification if they feel the record-keeping requirement is unreasonable.

Walters suggested that this type of situation is, perhaps, an area where LRAPA can work with the regulated community to see if we can make it easier for them to comply with the rules, without sacrificing air quality.

Nicholas said that, if the board feels that changes in the rules are necessary to make compliance easier, there should be a systematic procedure for doing so. The agency must be careful to apply the rules on the books, though, and not try to break a rule for an individual or company because it seems onerous. If such a situation arises, it should be brought to the board for any necessary changes. She noted that the public comment period at the board meetings does not appear to be working because people don't bring issues to the board.

Callahan said that the members of the LRAPA Advisory Committee are members of the public and suggested asking them to provide input on rule changes, as well as other areas where the board needs public input.

OLD BUSINESS:

Personnel  
Policy Changes

Arkell stated that the reason this meeting was held on Thursday, the 10th, instead of Tuesday, the 8th, was to determine the outcome of Ballot Measure 8 before discussing possible action to amend the LRAPA personnel policy. The purpose of changes would be to shield employees from the immediate effects of the measure and allow time for legal challenges to be resolved and for employees to get their finances in order before they have to begin paying 6 percent into their pension plan. As of this date,

however, the outcome of Measure 8 was still unknown. Arkell said staff preferred to wait until the final vote was known before taking any action to change the plan. Board members present agreed that this seemed a prudent course of action.

**NEW BUSINESS:**

Agency  
Evaluation

Callahan asked Arkell to comment regarding a recent newspaper story about a Cottage Grove property owner who was fined by LRAPA for illegal open burning activities of a tenant on his property. Arkell said staff had written a policy statement to be used from now on to avoid this situation in the future. Finding of culpability on the part of the owner must be made before the owner is cited. That is, the owner must know about the activity and either approve it or not do what he can to stop it, in order to be cited. This policy shifts the burden of proof from the respondent to LRAPA. In the instance of the Cottage Grove property owner, the penalty was suspended.

There was lengthy discussion of recent publicity regarding LRAPA's handling of a permit request from Seneca Sawmill, and Lane County commissioners Cornacchia and Frazier's charges that the agency is rigidly regulatory, inflexible and intimidates the regulated community. The two commissioners have been gathering information for a report they will submit to the full commission regarding whether the county should continue its participation in LRAPA.

Nicholas said she had never heard Frazier's side of this issue and asked Frazier to tell the board what brought this about, why she took the actions she did, and what it was that she wanted Arkell to do, specifically, in the Seneca case, as opposed to the action he did take.

Frazier responded that the main questions were why it was taking so long to issue the permit and, since the permit was issued anyway in the end (with a stipulated order), why that didn't occur three weeks before it did. She said it was her understanding that the cost to Seneca was about \$730,000 for the time between their requesting the permit and their being allowed to operate the equipment. She said that she and Cornacchia met with Arkell, and that Aaron Jones and Dale Riddle were also present at that meeting. She said they discussed other allegations of unfair treatment which she and Cornacchia had received from other complainants besides Aaron Jones.

Nicholas asked whether the issue for Seneca was the 30-day waiting period required in the permit issuance process for public comment. Frazier said the issue for Seneca was that after they initiated the application there were several requests for additional information, and the application wasn't considered complete until that final information was submitted. Arkell noted that the completed application was handled on an expedited schedule in order to accommodate Seneca as much as possible. Any delays were due to difficulties in getting the necessary information from the applicant.



Nicholas suggested that the board develop a systematic procedure to audit the agency's programs and its relations with the public, in an effort to determine if there are areas where staff could improve service to the public and the regulated community. She said she was concerned that staff be timely in their responses to requests, but she does not want staff to feel pressured to bend the rules, as they exist. Nicholas also expressed surprise that the board had not received any input from the public on any of this.

Callahan agreed that it was surprising that the LRAPA board has had no complaints, yet the county commissioners suddenly have numerous complaints. He wondered why, with a county commissioner on the LRAPA board, these complaints had never been brought before the LRAPA board; why, if there was a concern by the commissioners, it wasn't brought to the board before this. He also wondered why the complainants are going to the county commissioners and not to the LRAPA board.

Frazier responded that she has been told by complainants that they are afraid to come to the LRAPA board or staff for fear of retaliation. She said people have told her that they have been threatened by LRAPA staff, and told that if they didn't do what LRAPA staff told them to do, they would not get their permit the next time they applied. As to there all of a sudden being many complaints, Frazier said that, often, when something comes out in the paper, the phones ring off the hook.

Callahan said the public has no need to fear the LRAPA board. If there are problems with LRAPA staff, the board is the appropriate body to handle them, since the board is here to oversee the staff.

Hornbuckle said he thought it is appropriate for staff to tell a permit holder or applicant what is expected of them and what the consequences will be if the rules aren't followed. He said the rules must be applied consistently. On the other hand, he said, if what staff tells the applicant to do is some kind of arbitrary punitive thing that's not permitted in the rules, then the board needs to know it--through the regular channels. Hornbuckle agreed that, if there is to be general regulation in a consistent and even-handed manner, there should be an audit process. He added that, if Lane County should decide to pull out of LRAPA, the Eugene City Council has some concerns that the city's dues would go up and that the regulation authority may suffer.

Frazier said the commissioners did discuss pulling out and decided not to make a decision until she and Cornacchia report back to them. She added that she understood one of the commissioners had spoken with LRAPA board members about a performance audit, and added that the board of commissioners decided that it was premature to do that until they did get the information and had a chance to assess and digest it and go forward.

Nicholas said she had spoken with Commissioner Rust, but that her idea of a performance audit predated that conversation. She spoke of a situation with her company where an operations board was set up as a sub-set of the board of directors, and it had proved to be very helpful to audit the agency and to set a consistent direction for it. She would like to see a systematic approach to evaluate performance, perhaps by a committee made up of a representative from each of the participating entities. Another approach would be to just hire an independent agency to do an audit. Nicholas added that, when you're talking about flexibility in the field, you can't be talking about changing the rules for particular people. Performance discussions should center around timeliness, giving good assistance up-front to the people that we work with so that they don't break the rules.

Frazier agreed that the rules and regulations need to be fairly and equitably applied. She said that, rather than being rigidly regulatory, there should be a little bit of flexibility and facility in working with an applicant to tell them how it should be done, instead of a "do it, or else" attitude. She said each application should be addressed as an individual application, instead of taking an across-the-board approach, taking particular circumstances of the individual situations into account and working to take care of the request with a "how can we make this happen" attitude.

Hornbuckle offered an analysis of how these political balls get rolling. He noted that in a report about the Seneca situation in the Register Guard, the actual facts of the dispute were not even noted until nearly the end of the article. Most of the article consisted of innuendo blasts from either side, and this is not the way an informed public or an informed commission can make decisions about a regulatory agency. Hornbuckle recommended that the board think about this situation for the next month and perhaps get ideas from other sources, about establishing a performance evaluation mechanism, to bring back for group discussion at the next meeting.

Walters said that in the two years he has been on the LRAPA board, he has never seen anyone come to the meetings with a complaint. He, too, is surprised that complaints are suddenly surfacing. He noted that the board can't respond or be sensitive to these problems if people don't come before the board and tell them about the problems. He suggested taking a more customer-service oriented approach to facilitate the permitting process, to work with them to make sure they know what they need to do in advance so they can get the proper permits and not incur civil penalties. He said we should encourage front-end service, rather than back-end but also suggested sending out a customer evaluation form after contact with the agency to see how people perceive LRAPA and their treatment by LRAPA staff.

Frazier said, on behalf of the board of commissioners, that anything the LRAPA board does will not influence the commission's

discussion and decision, and that LRAPA might be given notice of the county's intent to withdraw. She directed her comment to Nicholas because Nicholas wanted to know about the board of commissioners was going to do.

Nicholas responded that she is more concerned with getting a fair picture of what was going on.

Callahan commented that he hopes the commission will look at the overall picture of what LRAPA has done over the years, and that there was not an implied threat to the board of withdrawal, by the commissioner.

Frazier said nothing was implied and that the commissioners will look at everything--not just one isolated concern that's been expressed. She added that several commissioners also mentioned that they haven't heard any complaints in all these years. That will also be taken into account.

Walters noted that air quality has improved over the last several years, and he thinks that's due, in large part, to the existence of LRAPA.

Enforcement  
Program Review

Arkell presented the results of an analysis which staff had performed on its enforcement activity over the years, in response to some of the comments in the news media that the agency "fines first and asks questions later." Staff wanted to see whether that was, indeed, the case and whether there were any discernable trends or patterns. The five different categories of activities regulated include major sources, non-major sources, commercial open burning, residential open burning, and asbestos. Arkell presented several graphs. The numbers in the graphs showed that there has been an increase in documented contacts in recent years in the non-major source and residential open burning categories. The numbers in the other categories have remained basically the same over the past several years.

The two categories which have experienced increased contacts are both in a transitional phase. In the residential open burning category, the number of actions rose, as expected, following adoption of open burning rules in 1993 and have declined since then. The reason for the decline is that first-time violators were given the option to have the penalties suspended in exchange for signing an agreement not to do the open burning again. Of 30 penalties assessed, 27 were suspended. Penalties were collected only in the three most egregious cases. The non-major source category is also in a transitional phase, and staff is starting to document violations of rules where before we would not have done so. This documentation has become more important, with the national emphasis on direct EPA enforcement actions where states and locals do not take appropriate enforcement actions. Documentation has become more important. The increased enforcement contacts usually take the form of a first-time warning letter to let the company know that they are doing something

wrong, what is needed to correct the situation, and what the penalties are for continued non-compliance. Very few of these actions involve civil penalties.

Arkell said that, overall, penalties are assessed in a little over half the cases. About half the penalties are actually collected, because the rest are mitigated and settlement is reached before they get to a hearing. Settlements are normally for less than the original assessments.

The conclusion reached by staff is that the agency is not fining first and asking questions later. The penalties are used as a tool to make sure that compliance is achieved. Arkell stated that he hopes the board, the commissioners, and the public will look at this type of information when making judgements about the way in which the agency operates. He said you can't operate on innuendo and accusations about which you have no specific information. He can't do anything as administrator of the agency unless he knows what the specific complaint is, who is making it, and under what circumstances it is made. He can only take corrective action if he knows what the specific problem is. He said he believes the board's suggestion of a performance audit is a good one which he would welcome. It would be helpful for him, as director, to have an objective evaluation to see if the agency is doing what it should be doing, and where improvements can be made. Arkell said that, to his knowledge, LRAPA staff does not try to intimidate the regulated community. Intimidation is not acceptable, and he would like to hear about any incidents of this nature so that he can do something about them.

Nicholas turned the subject back to the Seneca permit request and subsequent enforcement action. She said she does not feel comfortable with the fact that the company was allowed to operate the equipment, under penalty by stipulated agreement, before the required public notice period was up and the permit issued. She said it looked to her as if LRAPA had bent the rules for Seneca. She asked if this would have been the ultimate solution if LRAPA had not been under pressure by Frazier and Cornacchia. Arkell said he would ordinarily have taken a different kind of action, but the action he took in this case was the best of the alternatives open to him at the time. He added that Seneca will still go through the permitting process, including the public comment period. Nicholas said she is still concerned about the situation, that she still does not feel she has all the facts. She hopes that an audit will look into this situation. She does not want the agency to be pressured to bend the rules. Nicholas said she thinks there should be some bylaws for the board or some procedure so that, if a board member wants to intervene with the director, they would have to at least conform it with the rest of the board of directors. She wants to avoid having the board go in one direction, and then have an individual board member try to pressure the director into going in another direction. Nicholas said her main concern in the final solution to the Seneca case

was that it was handled on case-by-case basis rather than in a more systematic way.

Hornbuckle responded to Nicholas and said it would be within her authority as a board members to do an independent investigation of the Seneca situation and report to the board what she found, or she could move for formation of a committee to do whatever is necessary to be sure the board has all the facts. Hornbuckle said he does not think there needs to be a change in the bylaws to accomplish what Nicholas wants. He said board members should work to inform themselves about the day-to-day issues of the agency in order to strengthen the board's position with the county and the cities. Hornbuckle said that it is only in the absence of that knowledge that this kind of political ball can get rolling. He noted that this incident was unfair to the director, to the public, and to Seneca's competitors.

Callahan agreed and said he felt the board needed to decide how to direct staff to handle this type of situation in the future. He added that, until he gets some facts to back the statements of unfair treatment or intimidation by LRAPA staff, he is hard pressed to totally believe that. He said people will say things when they are angry or upset that may not necessarily be a true reflection of the situation. If the media gets wind of it and blows it out of proportion, you end up with a situation like this one with LRAPA, the commissioners and Seneca.

Walters commented that, whenever you have an authority that can levy fines, with the weight of the law behind it, there will be accusations that that entity is "fine driven" to continue its existence. What needs to be considered is whether or not LRAPA is really operating in a heavy-handed or over-bearing way and, if that is the case, to correct the problem. The rules must be applied even-handedly, and they can't be bent for anyone. He suggested that maybe the agency should use an ombudsman-type of objective person to whom complainants could express their concerns without being afraid of some kind of retaliation. Walters added that there are always political pressures involved with public agencies and that the board needs to find a balance and not succumb to deregulation forces, nor be so overbearing in enforcement actions that the agency is perceived by the public as unadulterated environmentalists, without sensitivity to the pragmatism of the individual situation.

Callahan asked if board members would like to have any specific information from staff prior to the next meeting. Hornbuckle asked that a copy of the agency's complaint form be included in the packet. Walters asked about customer-service oriented strategies such as follow-up mailings which could be returned anonymously. Arkell said staff has been working on such a survey form which could be done on a routine basis, rather than in response to a crisis situation. Arkell said he also would like to develop a mechanism with regulated community to routinely share information regarding rules, regulations, policy changes,

what's happening with EPA, etc., so that the relationship between LRAPA and the regulated community is more of a collaborative one.

When the new board members are appointed to the board in January, staff will begin informational sessions at board meetings regarding the agency's programs and procedures. This will include such things as the processes a regulated industry must go through in order to comply with the rules, the inspection process, the permitting process, etc.

New Board  
Member

Callahan formally introduced Pat Patterson from Cottage Grove, who has been appointed by Cottage Grove to fill the joint seat with Oakridge which Callahan has held for the past three years.

Board Makeup

There was brief discussion regarding the other seats on the board. Walters said he will continue his service on the LRAPA board. Arkell said Steve Dodrill's term was expiring but that Steve has applied for re-appointment by the City of Eugene. Hornbuckle said he would continue to serve unless another councilor indicates a strong desire for appointment to the LRAPA board. The at-large position currently held by Mark Hommer is for two years, and Mark has one more year to go. Next year the board, as the appointing body for that position, will need to consider that seat.

ADJOURNMENT:

The meeting adjourned at 1:58 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, December 13, 1994, 12:15 p.m., in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 32

EMISSION STANDARDS

*(As part of these proposed revisions to Title 32 some of the definitions, which have been separate from Title 32 in the past, are added to the title as Section 32-001. Other definitions are being moved to Title 12 or to other titles to which specific sections of existing Title 32 are being moved under these proposed amendments.)*

Section 32-001 Definitions

- "Automobile" means any self-propelled motor vehicle used for transporting persons or commodities on public roads.
- "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).
- "Typically Achievable Control Technology" or "TACT" means the emission limit established on a case-by-case basis for a criteria pollutant from a particular emissions unit in accordance with Section 32-008. For existing sources, the emissions limit established shall be typical of the emission level achieved by emissions units similar in type and size. For new and modified sources, the emission limit established shall be typical of the emission level achieved by well-controlled new or modified emissions units similar in type and size that were recently installed. TACT determinations shall be based on information known to the Authority considering pollution prevention, impacts on other environmental media, energy impacts, capital and operating costs, cost effectiveness, and the age and remaining economic life of existing emission control equipment. The Authority may consider emission control technologies typically applied to other types of emissions units where such technologies could be readily applied to the emissions unit. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required.
- ~~"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 Authority may assume 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.~~
- ~~• "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.~~
  - ~~• "Baseline Period" means either calendar years 1977 or 1978. The Authority shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.~~
  - ~~• "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.~~
  - ~~• "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.~~
  - ~~• "Significant Emission Rate" means emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:~~

<del>Pollutant</del>	<del>Significant Emission Rate</del>
<del>Carbon Monoxide</del>	<del>100 tons/year</del>
<del>Nitrogen Oxides</del>	<del>40 tons/year</del>
<del>Particulate Matter</del>	<del>25 tons/year</del>
<del>PM10</del>	<del>15 tons/year</del>
<del>Sulfur Dioxide</del>	<del>40 tons/year</del>
<del>Volatile Organic Compounds</del>	<del>40 tons/year</del>
<del>Lead</del>	<del>0.6 ton/year</del>
<del>Mercury</del>	<del>0.1 ton/year</del>
<del>Beryllium</del>	<del>0.0004 ton/year</del>
<del>Asbestos</del>	<del>0.007 ton/year</del>
<del>Vinyl Chloride</del>	<del>1 ton/year</del>
<del>Fluorides</del>	<del>3 tons/year</del>
<del>Sulfuric Acid Mist</del>	<del>7 tons/year</del>
<del>Total Reduced Sulfur (including hydrogen sulfide)</del>	<del>10 tons/year</del>
<del>Reduced Sulfur Compounds (including hydrogen sulfide)</del>	<del>10 tons/year</del>

~~For pollutants not listed above, the Authority shall determine the rate that constitutes a significant emission rate.~~

~~Any emissions increase less than these rates associated with a new source or modification which would construct within ten (10) kilometers of a Class I area and would have an impact on such area equal to or greater than 1 ug/m<sup>3</sup> (24 hour average) shall be deemed to be emitting at a significant emission rate.] (The deleted definitions are being moved to Title 34, Section 005.)~~



Section 32-005 [General] Highest and Best Practicable Treatment and Control Required

~~[A. Notwithstanding emission standards of these rules and regulations, no person shall cause or permit emissions from any air contaminant source whatsoever which cause or are likely to cause injury or detriment or nuisance to the public or which have a natural tendency to cause injury or damage to business or property whatsoever.]~~

~~B. Notwithstanding the general and specific emission standards and regulations contained in these rules, 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 purest 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 of existing high air quality, the degree of treatment and control provided shall be such that the degradation of existing air quality is minimized to the greatest extent possible.]~~

1. As specified in 34-006 through 34-009 and subsections 2 through 6 of this section, 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-level 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.

2. A source shall be deemed to be in compliance with subsection 1 of this section if the source is in compliance with all other applicable emission standards and requirements contained in LRAPA Titles 32 through 51 and OAR Divisions 28 and 32, including but not limited to requirements applicable to:

A. specific pollutants in Title 32;

B. specific existing and new source categories in Title 33;

C. hazardous air pollutants in OAR 340-32;

D. control requirements and operational and maintenance requirements in sections 32-007 through 32-009; and

E. review of new major sources and major modifications in Title 38.

3. The Authority may adopt additional rules as necessary to ensure that the highest and best practicable treatment and control is provided as specified in subsection 1 of this section. Such rules may include, but are not limited to, the following requirements:

A. Applicable to a source category, pollutant or geographic area of Lane County;

- B. Necessary to protect public health and welfare for air contaminants that are not otherwise regulated by the Authority; or
  - C. Necessary to address the cumulative impact of sources on air quality.
- 4. The Authority encourages the owner or operator of a source to further reduce emissions from the source beyond applicable control requirements where feasible.
  - 5. Nothing in sections 32-005 through 32-009 revokes or modifies any existing permit term or condition unless or until the Authority revokes or modifies the term or condition by a permit revision. Adoption of 32-005 is not intended to withdraw authority for application of any existing policy for new sources of toxic and hazardous air pollutants to a federal operating permit program source until the effective date of the program.
- [E]6. Compliance with a specific emission standard in these rules does not preclude the required compliance with any other applicable emission standard.

#### Section 32-006 Pollution Prevention

The owner or operator of a source is encouraged to take into account the overall impact of the control methods selected, considering risks to all environmental media and risks from all affected products and processes. The owner or operator of a source is encouraged, but not required, to utilize the following hierarchy in controlling air contaminant emissions:

- 1. Modify the process, raw materials or product to reduce the toxicity and/or quantity of air contaminants generated;
- 2. Capture and reuse air contaminants;
- 3. Treat to reduce the toxicity and/or quantity of air contaminants released, or
- 4. Otherwise control emissions of air contaminants.

#### Section 32-007 Operating and Maintenance Requirements

##### 1. Operational, Maintenance and Work Practice Requirements

- A. Where the Authority has determined that specific operational, maintenance, or work practice requirements are appropriate to ensure that the owner or operator of a source is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness to minimize emissions, the Authority shall establish such requirements by permit condition or notice of construction approval.
- B. Operational, maintenance and work practice requirements include, but are not limited to:
  - (1) flow rates, temperatures and other physical or chemical parameters related to the operation of air pollution control equipment and emission reduction processes;

(2) monitoring, record-keeping, testing and sampling requirements and schedules;

(3) maintenance requirements and schedules; or

(4) requirements that components of air pollution control equipment be functioning properly.

## 2. Emission Action Levels

A. Where the Authority has determined that specific operational, maintenance, or work practice requirements considered or required under subsection 1 of this section are not sufficient to ensure that the owner or operator of a source is operating and maintaining air pollution control equipment and emission reduction processes at the highest reasonable efficiency and effectiveness, the Authority may establish, by permit or Notice of Construction approval, specific emission action levels in addition to applicable emission standards. An emission action level shall be established at a level which ensures that air pollution control equipment or an emission reduction process is operated at the highest reasonable efficiency and effectiveness to minimize emissions.

B. If emissions from a source equal or exceed the applicable emission action level, the owner or operator of the source shall:

(1) take corrective action as expeditiously as practical to reduce emissions to below the emission action level;

(2) maintain records at the plant site for two (2) years which document the exceedance, the cause of the exceedance, and the corrective action taken;

(3) make such records available for inspection by the Authority during normal business hours; and

(4) submit such records to the Authority upon request.

C. The Authority shall revise an emission action level if it finds that such level does not reflect the highest reasonable efficiency and effectiveness of air pollution control equipment and emission reduction processes.

D. An exceedance of an emission action level which is more stringent than an applicable emission standard shall not be a violation of such emission standard.

3. In determining the highest reasonable efficiency and effectiveness for purposes of this rule, the Authority shall take into consideration operational variability and the capability of air pollution control equipment and emission reduction processes. If the performance of air pollution control equipment and emission reduction processes during start-up or shut-down differs from the performance under normal operating conditions, the Authority shall determine the highest reasonable efficiency and effectiveness separately for these start-up and shut-down operating modes.

Section 32-008 Typically Achievable Control Technology (TACT)

1. Existing Sources. The Authority shall require an existing emissions unit to meet TACT for existing sources if:
  - A. the emissions unit, for the pollutants emitted, is not subject to emissions standards under Title 33, Title 39 or Title 46, or this section at the time TACT is required;
  - B. the source is required to have a permit;
  - C. the emissions unit has emissions of criteria pollutants equal to or greater than five (5) tons per year of particulate or ten (10) tons per year of any gaseous pollutant; and
  - D. The Authority determines that air pollution control equipment and emission reduction processes in use for the emissions unit do not represent TACT and that further emission control is necessary to address documented nuisance conditions, address an increase in emissions, ensure that the source is in compliance with other applicable requirements, or to protect public health or welfare or the environment.
2. New and Modified Sources. The Authority shall require a new or modified emissions unit to meet TACT for new or modified sources if:
  - A. the new or modified emissions unit, for the pollutants to be emitted, is not subject to New Source Review requirements in Title 38, an applicable Standard of Performance for New Stationary Sources in Title 46, or any other standard applicable only to new or modified sources at the time TACT is required;
  - B. the source is required to have a permit.
  - C. the emissions unit:
    - (1) if new, would have emissions of any criteria pollutant equal to or greater than 1 ton per year, or of  $PM_{10}$  equal to or greater than 500 pounds per year in a  $PM_{10}$  nonattainment area; or
    - (2) if modified, would have an increase in emissions from the permitted level for the emissions unit of any criteria pollutant equal to or greater than 1 ton per year, or of  $PM_{10}$  equal to or greater than 500 pounds per year in a  $PM_{10}$  nonattainment area; and
  - D. the Authority determines that the proposed air pollution control equipment and emission reduction processes do not represent TACT.
3. Prior to making a TACT determination, the Authority shall notify the owner or operator of a source of its intent to make such determination utilizing information known to the Authority. The owner or operator of the source may supply the Authority with additional information by a reasonable date set by the Authority for use in making the TACT determination.
4. The owner or operator of a source subject to TACT shall submit compliance plans and specifications by a reasonable date established by the Authority

for approval by the Authority. The owner or operator of the source shall demonstrate compliance in accordance with a method and compliance schedule approved by the Authority.

Section 32-009 Additional Control Requirements for Stationary Sources of Air Contaminants

The Authority shall establish control requirements in addition to otherwise applicable requirements by permit, if necessary, as specified in section 1 through 5 of this section:

1. Requirements shall be established to prevent violation of an Ambient Air Quality Standard caused or projected to be caused substantially by emissions from the source as determined by modeling, monitoring or a combination thereof. For existing sources, the violation of an Ambient Air Quality Standard shall be confirmed by monitoring conducted by the Authority.
2. Requirements shall be established to prevent significant impairment of visibility in Class I areas caused or projected to be caused substantially by a source as determined by modeling, monitoring or a combination thereof. For existing sources, the visibility impairment shall be confirmed by monitoring conducted by the Authority.
3. A requirement applicable to major source shall be established if it has been adopted by EPA but has not otherwise been adopted by the Board.
4. An additional control requirement shall be established if requested by the owner or operator of a source.
5. Additional controls may be required to achieve air contaminant reduction as part of a State Implementation Plan.

Section 32-010 [Restriction on Emission of] Visible Air Contaminant[s, Including Veneer Dryers] Limitations

1. ~~[All sources other than existing fuel burning equipment utilizing wood wastes and veneer dryers].~~ Except as provided in Subsection[s] 2 ~~[and 3],~~ no person ~~[maintaining, owning or operating any source of]~~ shall cause, suffer, allow, or permit the emission ~~[shall discharge]~~ of any air contaminant into the atmosphere from any ~~[single] air contaminant source [of emission whatsoever any air contaminant]~~ for a period or periods aggregating more than three minutes in any one hour~~[, except for incinerators which shall not be more than one minute in any one hour,]~~ which is:
  - [a] A. As dark or darker in shade than that designated as No. 1 on the Ringelmann Chart; or
  - [b] B. Equal to or greater than 20 percent opacity.
2. Existing Fuel Burning Equipment Utilizing Wood Wastes ~~(any source installed, constructed or modified before June 1, 1970).~~ [A] No person shall ~~[not]~~ discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

- a. As dark or darker in shade than that designated as No. 2 on the Ringelmann Chart; or
- b. Equal to or greater than 40 percent opacity.

~~3. Exception - Visible Air Contaminant Standards~~

~~[Section 32-025 - Exception - Visible Air Contaminant Standards]~~

Uncombined Water. Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of Section 32-010 ~~1 or 2~~ [1, 2, or 3], such section shall not apply.

~~[3]4. Veneer Dryers~~ ~~(moved to Title 33, section 33.060-2.A)~~

- ~~[a. Consistent with Section 33-060 A, it is the objective of this section to control air contaminant emissions, including, but not limited to, condensible hydrocarbons such that visible emissions from each veneer dryer are limited to a level which does not cause a characteristic "blue haze" to be observable.~~
- ~~b. After December 31, 1980 no person shall operate any veneer dryer such that visible air contaminants emitted from any dryer stack or emission point exceed:  
[1. a design opacity of 10%,]  
2. an average operating opacity of 10%, and  
3. a maximum opacity of 20%.  
Where the presence of uncombined water is the only reason for the failure to meet the above requirement, this requirement shall not apply.]~~

*(Section c, below, to be deleted altogether)*

- ~~[c. After 90 days following adoption of this regulation by the Board of Directors, no person shall operate a veneer dryer unless:  
1. the owner or operator has submitted a program and time schedule for installing an approved emission control system which has been approved in writing by the Authority as being capable of complying with Section 32-010 3b, (2) or (3) as applicable,  
2. the veneer dryer is equipped with an emission control system which has been approved in writing by the Authority and is capable of complying with the opacity requirements of Section 32-010 3b(2), or (3) as applicable, or  
3. the owner or operator has demonstrated and the Authority has agreed in writing that the design is capable of being operated in continuous compliance with the opacity requirements of Section 32-010 3b, (2) or (3) as applicable.]~~
- ~~[d. 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 emissions of air contaminants are kept at the lowest practicable levels.~~
- ~~e. 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 regulation.~~

- f. ~~Where effective measures are not taken to minimize fugitive emissions, the Authority 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.~~
- g. ~~The Authority may require more restrictive emission limits than provided in Section 32-010-3a or b for an individual plant upon finding by the Board of Directors 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 emission expressed in opacity, pounds per hour, or total maximum daily emissions to the atmosphere, or a combination thereof.~~
- h. ~~The Authority 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 Authority and shall consist of the following:~~
- ~~1. a specified minimum frequency for performing visual opacity determinations on each dryer emission point;~~
  - ~~2. all data obtained shall be recorded on copies of a "Veneer Dryer Visual Emission Monitoring Form" which shall be provided by the Authority or on an alternate form which is approved by the Authority; and~~
  - ~~3. a specified period during which all records shall be maintained at the plant site for inspection by authorized representatives of the Authority.]~~

#### Section 32-0[30]15 Particulate Matter Weight Standards

Notwithstanding emission limits of Section [32-045] 32-0[35]20[,], and 32-0[40]30, particulate emissions [from any existing source] shall not exceed:

1. 0.2 grain per standard dry cubic foot for existing sources installed, constructed or modified prior to June 1, 1970; or
2. 0.1 grain per standard dry cubic foot for new sources (any air contaminant source installed, constructed or modified after June 1, 1970) [corrected to standard conditions of temperature and pressure].

#### Section 32-0[35]20 Particulate Matter Weight Standards - Existing Combustion Sources

The maximum allowable emission of particulate matter from any existing combustion source (sources installed, constructed or modified prior to June 1, 1970) shall not exceed 0.2 grain per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide.

#### Section 32-0[4]30 Particulate Matter Weight Standards - New Combustion Sources

The maximum allowable emission of particulate matter from any new combustion source (sources installed, constructed or modified after June 1, 1970) shall not exceed 0.1 grain per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide.

Section 32-045 Process Weight Emission Limitations

- A. The maximum allowable emissions of particulate matter for specific processes shall be a function of process weight and shall be determined from Table 1.
- B. The maximum allowable emissions of particulate matter from hot mix asphalt plants shall be determined from Table 1 except that the maximum allowable particulate emissions from processes greater than 60,000 pounds per hour shall be limited to 40 pounds per hour.

Section 32-055 Particulate Matter Size Standard

No person shall cause or permit the emissions of any particulate matter which is greater than 250 microns in size [provided] if such particulate matter does or will deposit upon the real property of another person.

Section 32-[800]060 Air Conveying Systems

1 Affected Sources

- [A-] Dry material air conveying systems located within the Eugene/Springfield [Air Quality Maintenance Area (AQMA)] ~~PM<sub>10</sub> Non-attainment Area~~ which use a cyclone or other mechanical separating device and which have a baseline year emission rate of three (3) Metric Tons or more of particulate matter are affected sources.

2 Emission Limits for Affected Sources

- [B-] Notwithstanding the general and specific emission standards and regulations contained in these rules, affected sources shall not emit particulate matter to the atmosphere in excess of the following amounts:
  - A One (1) Metric Ton/year (1.10 Tons/year)
  - B 2.88 kg/day (6.24 lbs./day)

~~[Compliance Schedules~~

- ~~C. Dry material air conveying systems having baseline year emission rates of three (3) Tons/year, as determined by the Director, shall comply with these rules as soon as practicable, but no later than January 1, 1985.~~
- ~~D. Applicability of Part C to affected sources shall be based on calculated actual emissions.~~
- ~~E. Upon the effective date of this rule, the Director shall compile a list of permitted air conveying systems and their respective emission rates, and shall issue a notice of determination of applicability; the Director may require source tests prior to final determination.~~
- ~~F. Affected sources shall submit compliance schedules to the Director for approval within ninety (90) days after a notice of determination of applicability is issued by the Director. Compliance schedules shall contain reasonable periodic increments of progress dates for:
  - 1. submittal of source's final control plan;
  - 2. award of emission control system or process modification contract; or issuance of orders for purchase of component parts to accomplish emission control or process modification;
  - 3. initiation of on site construction or installation of emission control equipment or process change;~~



- ~~4. completion of on site construction or installation of emission control equipment or process change;~~
- ~~5. final compliance demonstration.~~
- ~~G. Consistent with Section 21 010 and 22 010, sources with a baseline year emission rate of less than three (3) Metric Ton/year shall notify the Authority when emission rates change such that this rule applies.]~~

### Gaseous Emission Limitations

#### Section 32-065 Sulfur Content of Fuels

##### 1. Residual Fuel Oils

No person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.

##### 2. Distillate Fuel Oils

No person shall sell, distribute, use or make available for use, any distillate fuel oil containing more than the following percentages of sulfur:

A. ASTM Grade 1 fuel oil - 0.3 percent by weight

B. ASTM Grade 2 fuel oil - 0.5 percent by weight

##### 3. Coal

A. No person shall sell, distribute, use or make available for use, any coal containing greater than 1.0 percent sulfur by weight.

B. Except as provided for sub-subsections D and E of this subsection, 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 PM10 Non-Attainment 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.

C. 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 LRAPA inspection and which:

(1) specify quantities of coal or coal-containing fuels sold;

(2) contain name and address of customers who are sold coal or coal-containing fuels;

(3) 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 PM10 Non-Attainment Areas.

D. Users of coal for direct residential space heating in 1980 who apply in writing by July 1, 1983 and receive written approval from the Authority

shall be exempted from the requirement of sub-subsection B of this subsection provided they certify that they used more than one-half (1/2) ton of coal in 1980.

E. Distributors may sell coal not meeting specification in sub-subsection B of this subsection to those users who have applied for and received the exemption provided for in subsection D of this section.

4. Exemptions. Exempted from the requirements of 32-065.1-3, above, are:

A. Fuels used exclusively for the propulsion and auxiliary power requirements of vessels, railroad locomotives and diesel motor vehicles.

B. With prior approval of the Authority, 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 32-065.

#### Section 32-0[65]70 Sulfur Dioxide Emission Limitations

[A] Fuel Burning Equipment: The following emissions standards are applicable to new sources (any air contaminant source installed, constructed or modified after January 1, 1972) 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 input, no person shall cause, suffer, allow or permit the emission into the atmosphere of sulfur dioxide in excess of:

[a-]A. 1.4 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned.

[b-]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-]A. 0.8 lb. per million BTU heat input, maximum 2-hour average, when liquid fuel is burned.

[b-]B. 1.2 lb. per million BTU heat input, maximum 2-hour average, when solid fuel is burned.

~~[B. No person shall cause or permit emission of sulfur dioxide in excess of 1000 ppm from any air contamination source.]~~

#### Section 32-075 Federal Acid Rain Regulations Adopted by Reference

1. 40 CFR Part 72 (July 1, 1994) is by this reference adopted and incorporated herein, for purposes of implementing an acid rain program that meets the requirements of Title IV of the Clean Air Act. The term "permitting authority" shall mean the Lane Regional Air Pollution Authority, and the

~~Term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.~~

- ~~2. If the provisions or requirements of 40 CFR Part 72 conflict with or are not included in OAR 340-28-2100 through 340-28-2740, the Part 72 provisions and requirements shall apply and take precedence.~~

Section 32-100 Plant Site Emission Limits Policy (Moved to Title 34)

- ~~[A. The Authority 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 Section 32-101 through Section 32-104. However, by the adoption of these rules, the Authority does not intend to:~~
- ~~1. Limit the use of existing production capacity of any air quality permittee;~~
  - ~~2. Cause any undue hardship or expense to any permittee due to the utilization of existing unused productive capacity; or[,]~~
  - ~~3. Create inequity within any class of permittees subject to specific industrial standards which are based on emissions related to production.~~
- ~~B. Plant site emission limits (PSEL) can be established at levels higher than baseline if a demonstrated need exists to emit at a higher level, PSD increments and air quality standards would not be violated, and reasonable further progress in implementing control strategies would not be impeded and all requirements of Section 32-102 are met.]~~

Section 32-101 Requirement for Plant Site Emission Limits (Moved to Title 34)

- ~~[A. Plant site emission limits (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 regulated pollutants. PSELs will be incorporated in permits when permits are renewed, modified, or newly issued.~~
- ~~B. The emissions limits established by PSELs shall provide the basis for:~~
- ~~1. Assuring reasonable further progress toward attaining compliance with ambient air standards.~~
  - ~~2. Assuring that compliance with ambient air standards and prevention of significant deterioration increments are being maintained.~~
  - ~~3. Administering offset, banking and bubble programs.~~
  - ~~4. Establishing the baseline for tracking consumption of prevention of significant deterioration increments.]~~

Section 32-102 Criteria for Establishing Plant Site Emission Limits (Moved to Title 34)

- ~~[A. 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 Authority rules.~~
- ~~B. If an applicant requests that the plant site emission limit be established at a rate higher than the baseline emission rate, the applicant shall:~~
- ~~1. Demonstrate that the requested increase is less than the significant emission rate increase defined in OAR 340-22-225(22) (see definition of "significant emission rate," included in Definitions Section) or,~~
  - ~~2. Provide an assessment of the air quality impact pursuant to procedures specified in Section 22-415 to Section 22-420. A demonstration that no~~

~~air quality standards of PSD increment will be violated in an attainment area or that a growth increment or offset is available in a non-attainment area shall be sufficient to allow an increase in the plant site emission limit 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.~~

- ~~C. Increases above baseline emission rates shall be subject to public notice and opportunity for public hearing pursuant to the Authority's permit requirements.~~
- ~~D. 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.~~
- ~~E. Mass emission limits may be established separately within a particular source for process emissions, combustion emissions, and fugitive emissions.~~
- ~~F. Documentation of PSEL calculations shall be available to the permittee.~~
- ~~G. For new sources, PSELS shall be based on application of applicable control equipment requirements and projected operating condition.~~
- ~~H. PSELS shall not allow emissions in excess of those allowed by any applicable Federal or State regulation or by any specific permit condition unless specific provisions of Section 20 103 are met.~~
- ~~I. PSELS may be changed pursuant to Authority rules when:
  - ~~1. Errors are found or better data is available for calculating PSELS.~~
  - ~~2. More stringent control is required by a rule adopted by the Environmental Quality Commission or the Authority.~~
  - ~~3. An application is made for a permit modification pursuant to the air contaminant discharge permit requirements and the new source review requirements. Approval may be granted based on growth increments, offsets, or available prevention of significant deterioration increments.~~
  - ~~4. The Authority finds it necessary to initiate modifications of a permit pursuant to Section 22 045.]~~~~

Section 32-103 Alternative Emission Controls (Bubble) (Moved to Title 34)

- ~~[A. Alternative emission controls may be approved for use within a plant site such that specific mass emission limit rules are exceeded if:
  - ~~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 Section 22 435 (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) and National Emission Standards for Hazardous Air Pollutants (NESHAP), 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 Authority.~~~~
- ~~B. Operators of existing sources requesting alternative emission controls shall, at the time of application, pay the following fees:
  - ~~1. A filing fee of \$75,~~
  - ~~2. An application processing fee of \$500.]~~~~

Section 32-104 Temporary PSD Increment Allocation (Moved to Title 34)

- ~~[A. On demonstration to the Authority, PSEs 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, if:~~
- ~~1. No ambient air quality standard is exceeded.~~
  - ~~2. No applicable PSD increment is exceeded.~~
  - ~~3. No nuisance condition is created.~~
  - ~~4. The applicant's proposed and approved objective continues to be realized.~~
- ~~B. Such temporary allocation of a PSD increment must be set forth in a specific permit condition issued pursuant to the Authority's notice and permit issuance or modification procedures.~~
- ~~C. Such temporary allocations are for a specific time period and may be recalled with proper notice.]~~

[Section 32 800 Air Conveying Systems

Affected Sources

- ~~A. Dry material air conveying systems located within the Eugene/Springfield Air Quality Maintenance Area (AQMA) which use a cyclone or other mechanical separating device and which have a baseline year emission rate of three (3) Metric Tons or more of particulate matter are affected sources.~~

Emission Limits for Affected Sources

- ~~B. Notwithstanding the general and specific emission standards and regulations contained in these rules, affected sources shall not emit particulate matter to the atmosphere in excess of the following amounts:~~
- ~~One (1) Metric Ton/year (1.10 Tons/year)~~
  - ~~2.88 kg/day (6.24 lbs./day)~~

Compliance Schedules

- ~~C. Dry material air conveying systems having baseline year emission rates of three (3) Tons/year, as determined by the Director, shall comply with these rules as soon as practicable, but no later than January 1, 1985.~~
- ~~D. Applicability of Part C to affected sources shall be based on calculated actual emissions.~~
- ~~E. Upon the effective date of this rule, the Director shall compile a list of permitted air conveying systems and their respective emission rates, and shall issue a notice of determination of applicability; the Director may require source tests prior to final determination.~~
- ~~F. Affected sources shall submit compliance schedules to the Director for approval within ninety (90) days after a notice of determination of applicability is issued by the Director. Compliance schedules shall contain reasonable periodic increments of progress dates for:~~
- ~~1. submittal of source's final control plan;~~
  - ~~2. award of emission control system or process modification contract; or issuance of orders for purchase of component parts to accomplish emission control or process modification;~~
  - ~~3. initiation of on site construction or installation of emission control equipment or process change;~~
  - ~~4. completion of on site construction or installation of emission control equipment or process change;~~
  - ~~5. final compliance demonstration.~~
- ~~G. Consistent with Section 21 010 and 22 010, sources with a baseline year emission rate of less than three (3) Metric Ton/year shall notify the Authority when emission rates change such that this rule applies.]~~

Section 32-080 Control of Ozone-Depleting Chemicals

1. The purpose of Section 32-080 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 LRAPA Board of Directors, having determined that equipment for the recovery and recycling of chlorofluorocarbons from automobile air conditioners is affordable and available, intends that Section 32-080 apply to persons handling automobile air conditioners.
2. Requirement for recycling automobile air conditioning coolant are as follows:
  - A. Except as provided in sub-subsection B of this subsection, no person shall engage in the business of installing, servicing, repairing, disposing of, or otherwise treating automobile air conditioners without recovering and recycling CFC.
  - B. Any automobile repair shop that has:
    - (1) fewer than four employees; or
    - (2) fewer than three covered bays shall comply with the provisions of sub-subsection A of this subsection after August 10, 1992.
  - C. 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 Authority as being equivalent, shall be used.
  - D. 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.
3. Except as provided in subsection 4 of this section, 40 CFR Part 82 (July 1, 1994) is by this reference adopted and incorporated herein for major sources only, for purposes of implementing a stratospheric ozone protection program that meets the requirements of Title VI of the Clean Air Act.
4. Where "Administrator" or "EPA" appears in 40 CFR Part 82, "Authority" shall be substituted, except in any section of 40 CFR Part 82 for which a federal rule or delegation specifically indicates that authority will not be delegated to the state/local agency.
5. Where a discrepancy is determined to exist between LRAPA Section 32-080 and 40 CFR Part 82, 40 CFR Part 82 will apply.

Section 32-[9]090 Other Emissions

- [A]1. No person shall discharge from any source whatsoever such quantities of air contaminants which cause injury, detriment, public nuisance or annoyance to any persons or to the public or which cause injury or damage to business or property; such determination to be made by the Authority.

- [B]2. No person shall cause or permit emission of water vapor if the water vapor causes or tends to cause detriment to the health, safety or welfare of any person or causes, or tends to cause damage to property or business.

Section 32-095 Fugitive Emissions

See LRAPA Title 48 for rules pertaining to fugitive emissions.

TABLE 1

Table of Allowable Rate of Particulate Emissions - Based on Process Weight

<u>Process Lbs/Hr.</u>	<u>Emission Lbs/Hr.</u>	<u>Process Lbs/Hr.</u>	<u>Emission Lbs/Hr.</u>	<u>Process Lbs/hr.</u>	<u>Emission Lbs/Hr.</u>
50	0.24	2300	4.44	7500	8.39
100	0.46	2400	4.55	8000	8.71
150	0.66	2500	4.64	8500	9.03
200	0.85	2600	4.74	9000	9.36
250	1.03	2700	4.84	9500	9.67
300	1.20	2800	4.92	10000	10.00
350	1.35	2900	5.02	11000	10.63
400	1.50	3000	5.10	12000	11.28
450	1.63	3100	5.18	13000	11.89
500	1.77	3200	5.27	14000	12.50
550	1.85	3300	5.36	15000	13.13
600	2.01	3400	5.44	16000	13.74
650	2.12	3500	5.52	17000	14.36
700	2.24	3600	5.61	18000	14.97
750	2.34	3700	5.69	19000	15.58
800	2.43	3800	5.77	20000	16.19
850	2.53	3900	5.85	30000	22.22
900	2.62	4000	5.93	40000	28.30
950	2.72	4100	6.01	50000	34.30
1000	2.80	4200	6.08	60000	40.00
1100	2.97	4300	6.15	70000	41.30
1200	3.12	4400	6.22	80000	42.50
1300	3.26	4500	6.30	90000	43.60
1400	3.40	4600	6.37	100000	44.60
1500	3.54	4700	6.45	120000	47.30
1600	3.66	4800	6.52	140000	47.80
1700	3.79	4900	6.60	160000	49.00
1800	3.91	5000	6.67	200000	51.20
1900	4.03	5500	7.03	1000000	69.00
2000	4.14	6000	7.37	2000000	77.60
2100	4.24	6500	7.71	6000000	92.70
2200	4.34	7000	8.05		

Interpolation and extrapolation of emissions above a process weight of 60,000 pounds per hour shall be accomplished by use of this equation:

$E = (55.0 \times P^{0.11}) - 40$ , where P = process weight in tons per hour and  
E = emission rate in pounds per hour.



LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 33

PROHIBITED PRACTICES AND CONTROL OF SPECIAL CLASSES OF INDUSTRY

Section 33-005 Definitions (See individual sections for applicable definitions)

- ~~1. "Authority" means the Lane Regional Air Pollution Authority.~~
- ~~2. "Department" means the Department of Environmental Quality~~
- ~~3. "Emission" means a release into the atmosphere of air contaminants]~~

Section 33-020 Incinerator and Refuse Burning Equipment

*Section 33-020 rescinded and new, separate incinerator rules adopted March 8, 1994. See Title 30.*

Section 33-030 Concealment and Masking of Emissions

- ~~[A] 1. No person shall willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminants emitted, conceals an emission of air contaminant which would otherwise violate these rules.~~
- ~~[B] 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 causes or tends to cause detriment to health, safety or welfare of any person.~~

Section 33-045 Gasoline Tanks

Gasoline tanks with a capacity of 1500 gallons or more may not be installed without a permanent submerged fill pipe or other adequate vapor loss control device in any control area.

Section 33-055 Sulfur Content of Fuels (Moved to Title 32, Section 065, on 11/08/94.)

A. Residual Fuel Oils

- ~~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, no person shall sell, distribute, use or make available for use, any residual fuel oil containing more than 1.75 percent sulfur by weight.~~

B. Distillate Fuel Oils

~~After July 1, 1972, 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~~

~~C. Coal~~

~~After July 1, 1972, no person shall sell, distribute, use or make available for use, any coal containing greater than 1.0 percent sulfur by weight.~~

~~D. Exemptions~~

~~Exempted from the requirements of A, B and C above 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 Authority, 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 Sections A, B and C.]~~

Section 33-060 Board Products Industries (Hardwood, Particleboard, Plywood, Veneer)

I. Definitions

- A. "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.
- B. "Board Products" means hardwood, particleboard, plywood and veneer.
- C. "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.
- D. "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.
- E. "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.
- F. "Hardboard" means a flat panel made from wood that has been reduced to basic wood fibers and bonded by adhesive properties under pressure.
- G. "Particleboard" means matformed flat panels consisting of wood particles bonded together with synthetic resin or other suitable binder.
- H. "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

emissions determinations shall consist of the average of three separate consecutive runs.

(1) 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. Veneer dryers, wood particle dryers, fiber dryers and press/cooling vents shall be tested with DEQ Method 7.

(2) 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. Air conveying systems shall be tested with DEQ Method 8.

I. "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.

J. "Tempering Oven" means any facility used to bake hardboard following an oil treatment process.

K. "Veneer" means a single flat panel of wood not exceeding 1/4 inch in thickness formed by slicing or peeling from a log.

L. "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 of natural gas or propane combustion.

## [A] 2. General Provisions

[1] A. Th[ese regulations] is section establishes minimum performance and emission standards for veneer, plywood, particleboard and hardboard manufacturing operations.

[2] B. Emissions limitations established herein are in addition to, and not in lieu of, general emission standards for visible emissions, fuel burning equipment (Title 32), and refuse burning equipment (Title 30), except as provided for in subsection 33-060-3.A.

[3] C. 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.

D. Each affected veneer, plywood, particleboard, and hardboard plant shall proceed with a progressive and timely program of air pollution control. Each plant shall, at the request of the Authority, submit periodic reports in such form and frequency as directed to demonstrate the progress being made toward full compliance with LRAPA 33-060-2 through 5.

[B]3. Veneer and Plywood Manufacturing Operations

A. Veneer Dryers

(1) Consistent with Section 33-060-2, A-D, it is the objective of this section to control air contaminant emissions, including but not limited to condensible hydrocarbons, such that visible emissions from each veneer dryer are limited to a level which does not cause a characteristic "blue Haze" to be observable.

(2) 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%.

Where the presence of uncombined water is the only reason for the failure to meet the above requirement, this requirement shall not apply.

(3) 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%; and

(c) in addition to paragraphs (a) and (b) of this subsection, 0.40 pounds per 1000 pounds of steam generated in boilers which exhaust gases to the veneer dryer.

(4) Exhaust gases from fuel-burning equipment vented to the veneer dryer are exempt from LRAPA 32-020 and 030.

(5) 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 emissions of air contaminants are kept at the lowest practicable levels.

(6) 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 regulation.

(7) Where effective measures are not taken to minimize fugitive emissions, the Authority 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.

(8) The Authority may require more restrictive emission limits than provided in Section 33-060-3.A(2) and (3) for an individual plant upon finding by the Board of Directors 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 emission expressed in opacity, pounds per hour, or total maximum daily emissions to the atmosphere, or a combination thereof.

[1]B. 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.

[2]C. Excepted from subsection 33-060-3.B are veneer dryers, fuel burning equipment and refuse burning equipment.

D. The Authority 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 Authority and shall consist of the following:

(1) A specified minimum frequency for performing visual opacity determinations on each dryer emission point;

(2) All data obtained shall be recorded on copies of a "Veneer Dryer Visual Emission Monitoring Form" which shall be provided by the Authority or on an alternate form which is approved by the Authority; and

(3) A specified period during which all records shall be maintained at the plant site for inspection by authorized representatives of the Authority.

[3]E. Open Burning

Upon the effective date of these regulations, no person shall cause or permit the open burning of wood residues or other refuse in conjunction with the operation of any veneer or plywood manufacturing mill and such acts are hereby prohibited.

[6]4. Particleboard Manufacturing Operations

[1]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 to be deposited upon property not under the ownership of said person.

[2]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 notifies the Authority and receives written approval for said storage.

- [a-](1) When authorized by the Authority, 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-](2) Any temporary storage areas authorized by the Authority shall not be operated in excess of six (6) months from the date they are first authorized.
- [3] Any person who proposes to control windblown particulate emissions from truck dump and storage areas other than by enclosure shall apply to the Authority for authorization to utilize alternative controls. The application shall be submitted pursuant to LRAPA 34-035 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.
- [4] 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 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.
- [5] Excepted from subsection 33-060 C.4 are truck dump and storage areas, fuel burning equipment and refuse burning equipment.
- [6] Open Burning

Upon the effective date of these regulations, no person shall cause or permit the open burning of wood residues or other refuse in conjunction with the operation of any particleboard manufacturing plant and such acts are hereby prohibited.

[D]5. Hardboard Manufacturing Operations

- [1]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 to be deposited upon property not under the ownership of said person.
- [2]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 Authority and receives written approval.
- [a-](1) When authorized by the Authority, 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-]~~(2) Any temporary storage areas authorized by the Authority shall not be operated in excess of six (6) months from the date they are first authorized.

[3] Alternative Means of Control

Any person who desires to control windblown particulate emissions from truck dump and storage areas other than by enclosure shall first apply to the Authority for authorization to utilize alternative controls. The application shall be submitted pursuant to LRAPA 34-035 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.

[4] 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.

[5] Excepted from subsections 33-060 3D.4 are truck dump and storage areas, fuel burning equipment and refuse burning equipment.

[6] 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 1500oF for 0.3 seconds or longer. Specific operating temperatures lower than 1500oF may be approved by the Authority 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. In no case shall fume incinerators installed pursuant to this section be operated at temperatures less than 1000oF.

[7] Any person who proposes to control emissions from hardboard tempering ovens by means other than fume incineration shall apply to the Authority for authorization to utilize alternative controls. The application shall be submitted pursuant to LRAPA 34-035 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.

[8] Open Burning

Upon the effective date of these regulations, no person shall cause or permit the open burning of wood residues or other refuse in conjunction with the operating of any hardboard manufacturing plant and such acts are hereby prohibited.

Section 33-065 Charcoal Producing Plants

- [A]1. No person shall cause or permit the emission of particulate matter from charcoal producing plant sources including, but not limited to, charcoal furnaces (retorts), heat recovery boilers, after combustion chambers, 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 charcoal produced (as determined from the retort process) as an annual average.
- [B]2. Emissions from char storage, briquette making (excluding dryers using furnace off-gases), boilers not using charcoal furnace off-gases, and fugitive sources are excluded in determining compliance with subsection (A).
- [C]3. Charcoal producing plants as described in (A) above shall be exempt from the limitations of Sections 32-030, 32-035, 32-040 and 32-045 which concern particulate emission concentrations and process weight.
- [D]4. The Agency may require the installation and operation of instruments and recorders for measuring emissions and/or parameters which affect the emission of air contaminants from sources covered by this rule 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 instruments and recorders shall be periodically calibrated. The method and frequency of calibration shall be approved in writing by the Agency. The recorded information shall be kept for a period of at least one year and shall be made available to the Agency upon request.
- [E]5. The person responsible for the sources of particulate emissions shall make or have made tests once every year to determine the type, quantity, quality and duration of emissions, and process parameters affecting emissions, in conformance with test methods of file with the Agency. If this test exceeds the annual emission limitation then three (3) additional tests shall be required at three (3) month intervals with all four (4) tests being averaged to determine compliance with the annual standard. No single test shall be greater than twice the annual average emission limitation for that source.
- A. Source testing shall begin within 90 days of the date by which compliance is to be achieved for each individual emission source.
- B. These source testing requirements shall remain in effect unless waived in writing by the Agency upon adequate demonstration that the source is consistently operating at lowest practicable levels.

Section 33-070 Kraft Pulp Mills

1. Definitions

- "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.
- "Daily Arithmetic Average" means the average concentration over the twenty-four hour period in a calendar day, or Authority-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 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.
- "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" means gases and vapors, contaminated with TRS compounds, from the digestion and multiple-effect evaporation processes of a mill.
- "Other Sources" means 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 operation; 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 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 Authority-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, 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 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 (29.92 inches of 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<sub>2</sub>S).

[A]2. [General Provisions] Statement of Policy

Recent technological developments have enhanced the degree of malodorous emissions 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 Authority to:

- [1]A. 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, complies with the highest and best practicable treatment requirement[s].
- [2]B. Require degrees and methods of treatment for major and minor emissions points that will minimize emissions of odorous gases and eliminate ambient odor nuisances.
- [3]C. Require effective monitoring and reporting of emissions and reporting of other data pertinent to air quality or emissions. The Authority 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.

~~[B. Highest and Best Practicable Treatment and Control Required~~

- ~~1. Notwithstanding the specific emission limits set forth in rule 33-070, C, 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.]~~

[C] Emission Limitations

- [1] Emission of Total Reduced Sulfur (TRS):

~~[a-]~~ [1] Recovery Furnaces:

[1] 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.

[2] 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) production as daily arithmetic averages.

~~[b-]~~ [2] Lime Kilns. Lime kilns shall be operated and controlled such that emission 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 paragraph applies to those sources where construction was initiated prior to September 25, 1976.

~~[c-]~~ [3] Smelt Dissolving Tanks.

[1] 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 [2] b) below.

[2] 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 Authority, the affected smelt dissolving tank shall not exceed 0.033 gram/Kg BLS (0.066 lb/ton BLS) as a daily average.

~~(d-)~~ (4) 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-)~~ (5) Other Sources:

(1) (a) The total emissions 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.

(2) (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) (b). Particulate Matter:

~~(a-)~~ (1) Recovery Furnaces. The emissions of particulate matter from each recovery furnace stack shall not exceed:

(1) (a) 2.0 kilograms per metric ton (~~four (4)~~ 4.0 pounds per ton) of production as a daily arithmetic average;

(2) (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 LRAPA Section 33-060 and the Department Source Test Manual~~]; and

(3) (c) 35 percent opacity for a period or periods aggregating more than thirty (30) minutes in any one hundred and 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)~~ (2). Lime Kilns. The emissions of particulate matter from each lime kiln stack shall not exceed:

(1) (a) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average;

(2) (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 LRAPA Section 33-060 and the Department Source Test Manual]; and~~

(~~[3]~~)(~~c~~) The visible emission limitations in LRAPA section 33-070-  
[~~C-4~~](~~3~~)(~~D~~).

[~~e-~~](~~3~~) Smelt Dissolving Tanks. The emission of particulate matter from each smelt dissolving tank stack shall not exceed:

(~~[1]~~)(~~a~~) A daily arithmetic average of 0.25 kilogram per metric ton (0.50 pound per ton) of production; and

(~~[2]~~)(~~b~~) The visible emission limitations in LRAPA section 33-070-  
[~~C-4~~](~~3~~)(~~D~~).

[~~d-~~](~~4~~) Replacement or Significant Upgrading of existing particulate pollution control equipment after July 1, 1988 shall result in more restrictive standards as follows:

(~~[1]~~)(~~a~~) Recovery Furnaces.

(~~[a]~~)(~~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

(~~[b]~~)(~~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 LRAPA Section 33-060 and the Department Source Test Manual~~].

(~~[2]~~)(~~b~~) Lime Kilns.

(~~[a]~~)(~~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

(~~[b]~~)(~~ii~~) 0.15 gram per dry standard cubic meter (0.067 grain per day standard cubic foot) as a daily arithmetic average [~~in accordance with LRAPA section 33-060 and the Department Source Test Manual~~] when burning gaseous fossil fuel; or

(~~[e]~~)(~~iii~~) 0.50 kilogram per metric ton (1.00 pound per ton) of production as a daily arithmetic average; and

(~~[d]~~)(~~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 LRAPA section 33-060 and the Department Source Test Manual~~] when burning liquid fossil fuel.

(~~[3]~~)(~~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] ~~C~~. Sulfur Dioxide (SO<sub>2</sub>). 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 LRAPA section [46-025-2-B] ~~32-065-1 and 2, respectively.~~
- [4] ~~D~~. 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] ~~E~~. New Source Performance Standards. New or modified sources that commenced construction after September 24, 1976, are subject to each provision of this section and the New Source Performance Standards, LRAPA section 46-[075] ~~630~~, whichever is more stringent.
- [6. ~~Each mill with any recovery furnace, lime kiln, or smelt dissolving tank not in compliance by July 1, 1991 with the emission limitations of this section shall submit by November 1, 1991 a program and schedule for achieving compliance as soon as practicable but not later than July 1, 1992.~~]

[D] ~~4~~. More Restrictive Emission Limits

The Authority may establish more restrictive emission limits than the numerical emission standards contained in rule 33-070[~~, -C~~] ~~3~~, and maximum allowable daily mill site emission limits in kilograms per day for an individual mill upon a finding by the Authority that:

- [1] ~~A~~. 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] ~~B~~. 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] ~~C~~. Other rules which are more stringent apply.

[E] ~~5~~. Plans and Specifications

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 Authority. All construction shall be in accordance with plans as approved in writing by the Authority.

[F] 6. Monitoring

[1] A. General:

[a-] (1) The details of the monitoring program for each mill shall be submitted to and approved by the Authority. 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 Authority for review and approved in writing prior to change.

[b-] (2) 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 two (2) calendar years and shall be furnished to the Authority upon request.

[c-] (3) All source test data; TRS and SO<sub>2</sub> 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] B. Total Reduced Sulfur (TRS). Each mill shall monitor TRS continuously in accordance with the following:

[a-] (1) The monitoring equipment shall determine compliance with the emission limits and reporting requirements established by these regulations, and shall continuously sample and record concentrations of TRS.

[b-] (2) 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-] (3) At least once per year, vents from other sources as required in subsection 33-070-[C.1.e] 3.A(5), Other Sources, shall be sampled to demonstrate the representativeness of the emissions of TRS using EPA Method 16, 16A, 16B or continuous emissions monitors. EPA methods shall consist of three (3) separate consecutive runs of one hour each, in accordance with the Department Source Test 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 Authority.

~~[d-]~~ (4) 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 Manual.

[3] C. Particulate Matter.

~~[a-]~~ (1) 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 Manual.

~~[b-]~~ (2) Each mill shall provide continuous monitoring of opacity of emissions discharged to the atmosphere from each recovery furnace stack or particulate matter from the recovery furnace(s) in a manner approved in writing by the Authority. (or)

~~[e-]~~ (3) 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-]~~ (4) 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 LRAPA section 33-070-[2] ~~3 B(1)(a)~~ or 0.075 gram/dscm (0.033 grain/dscf) for furnaces subject to LRAPA section 33-070-[2] ~~3 B(4)(a)(i)~~.

~~[e-]~~ (5) Lime kiln source tests shall be performed semi-annually.

~~[f-]~~ (6) 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] D. Sulfur Dioxide (SO<sub>2</sub>). 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 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] E. Combined Monitoring. The Authority may allow the monitoring for opacity of a combination of more than one emission stream[s] if each individual emission stream has been demonstrated (with the exception of opacity) to be in compliance with all the emission limits of rule 33-070-[C] ~~3~~ [ , with the exception of opacity]. [The emission limits for the combined emission stream shall be established by t] The Authority may establish more stringent emission limits for the combined emission stream.



[6]7. Reporting

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 month as follows:

- [1]A. Applicable daily average emissions of TRS gases expressed in parts per million of H<sub>2</sub>S on a dry gas basis with oxygen concentrations, if oxygen corrections are required, for each source included in the approved monitoring program.
- [2]B. Daily average emissions of TRS gases in pounds of total reduced sulfur per equivalent ton of pulp processed, expressed as H<sub>2</sub>S for each source included in the approved monitoring program.
- [3]C. 3-hour average emissions of SO<sub>2</sub> based on all samples collected in one sampling period from the recovery furnace(s), expressed as ppm, dry basis.
- [4]D. All daily average opacities for each recovery furnace stack where transmissometers are utilized.
- [5]E. All 6-minute average opacities from each recovery furnace stack that exceeds 35 percent.
- [6]F. 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 Section 33-070-[F.3(e)]6.C(3).
- [7]G. 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 noted in Section 33-070-[F.3(e)]6.C(3).
- [8]H. Unless otherwise approved in writing, all periods of non-condensable gas bypass shall be reported.
- [9]I. Upset conditions shall be reported in accordance with Section 33-070[~~H.3~~]8.C.
- [10]J. Each kraft mill shall furnish, upon request of the Authority, such other pertinent data as the Authority may require to evaluate the mill's emission control program.
- [11]K. Monitoring data reported shall reflect actual observed levels corrected for oxygen, if required, and analyzer calibration.
- [12]L. Oxygen concentrations used to correct pollutant data shall reflect oxygen concentrations at the point of measurement of pollutants.

[13]M. The Authority shall be notified at least [~~ten (10)~~] ~~fifteen (15)~~ days in advance of all scheduled reference method testing including all scheduled changes.

[H]8. Upset Conditions

[1]A. Each mill shall report to the Authority 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 [LRAPA] working day. The mill shall also take immediate corrective action to reduce emission levels to regulatory or permit levels.

[2]B. Upsets shall be reported in writing ~~within five (5) working days of each incident,~~ with an accompanying report on measures taken or to be taken to correct the condition and prevent its reoccurrence[ ~~within the time period requested by the Director~~].

[3]C. 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-](1) Recovery Furnace:

- ([1]a) TRS;
- ([2]b) Particulate.

[b-](2) Lime Kiln:

- ([1]a) TRS;
- ([2]b) Particulate

[e-](3) Smelt Tank Particulate.

[I]9. Chronic Upset Conditions

If the Authority 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.

Section 33-075 Hot Mix Asphalt Plants

1. Definitions

A. "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.

B. "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.

C. "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.

D. "Particulate matter" means any matter except uncombined water, which exists as a liquid or solid at standard conditions.

E. "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.

F. "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.

G. "Special control areas" means any location within:

(1) Benton, Clackamas, Columbia, Lane, Linn, Marion, Multnomah, Polk, Washington and Yamhill Counties;

(2) Any incorporated city or within six (6) miles of the city limits of said incorporate city;

(3) Any area of Lane County within one (1) mile of any structure or building used for a residence;

(4) Any area of Lane County 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.

## 2. Control Facilities Required

A. No person shall operate any hot mix asphalt plant, either portable or stationary, located within any area of Lane County 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 percent by weight.

B. No person shall operate any hot mix asphalt plant, either portable or stationary, located within any special control area of Lane County 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 Section 32-010-1 and 3 and 32-015.

### 3. Other Established Air Quality Limitations

The emission limits established under Section 33-075 are in addition to visible emission and other ambient air standards, established or to be established by the LRAPA Board of Directors, unless otherwise provided by rule or regulation.

### 4. Portable Hot Mix Asphalt Plants

Portable hot mix asphalt plants may apply for air contaminant discharge permits within the area of Authority jurisdiction without indicating specific site locations. As a condition of said permit, the permittee will be required to obtain approval from the Authority 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.

### 5. Ancillary Sources of Emission--Housekeeping of Plant Facilities

A. 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.

B. The handling of aggregate and traffic shall be conducted at all times so as to minimize emissions into the atmosphere.

### Section 33-080 Reduction of Animal Matter

#### 1. Control Facilities Required

A. No person shall 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 article, machine, equipment or other contrivance are:

(1) incinerated at temperatures of not less than 1200 degrees Fahrenheit for a period of not less than 0.3 seconds; or

(2) processed in such a manner determined by the Authority to be equally, or more, effective for the purpose of air pollution control than sub-subsection (1) of this subsection.

B. Any person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this section shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified by the Authority, for indicating temperature, pressure or other operating conditions.

C. For the purpose of this section, "reduction" is defined as any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating.

D. The provisions of this section shall not apply to any article, machine, equipment, or other contrivance used exclusively for the processing of food for human consumption.

## 2. Monitoring of Reduction Facilities

A. When requested by the Authority 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:

(1) continuous or at least hourly influent and effluent temperature readings on the condenser;

(2) continuous or at least hourly temperature readings on the after-burner;

(3) estimated weights of finished products processed in pounds per hour;

(4) hours of operation per day; and

(5) a narrative description to accurately portray control practices, including the housekeeping measures employed.

B. When requested by the plant manager any information relating to processing or production shall be kept confidential by the Authority and shall not be disclosed or made available to competitors or their representatives in the rendering industry.

C. 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 Authority shall be immediately notified.

3. Housekeeping of Plant and Plant Area. 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:

A. 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;

B. storage of all solid wastes in covered containers, and daily disposal in an incinerator or fill, approved by the Authority, or by contract with a company or municipal department providing such service; and

C. disposal of liquid and liquid-borne waste in a manner approved by the Authority.

4. Applicability. Section 33-080 shall apply in all areas of Lane County which are within city limits or within two miles of the boundaries of incorporated cities.

## Section 33-085 Incinerator and Refuse-Burning Equipment

See Title 30 for rules pertaining to incinerators and refuse-burning equipment.

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 34

[Air Contaminant Discharge Permits]

Stationary Source Rules and Permitting Procedures

Section 34-001 General Policy and [Discussion] Rule Organization

In order to restore and maintain Lane County air quality in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the county, it is the policy of the Lane Regional Air Pollution Authority to require a permit to discharge air contaminants from certain sources. As a result, ~~[no person shall construct, install, establish, modify, enlarge, develop or operate an air contaminant source listed in Table A, without first obtaining a permit from the Authority to discharge air contaminants]~~ LRAPA has set forth in this title the air pollution control rules and permitting procedures which apply to all stationary sources regulated by the Authority in Lane County.

~~[In addition, for those sources not listed in Table A which have emissions of air contaminants, the Director may require registration with the Authority. Sources not listed in Table A are subject to notice and approval to construct requirements contained in this Title.]~~

This title is organized as follows:

34-010 Rules applicable to all stationary sources, including:

- 34-015 Request for Information
- 34-020 Information Exempt from Disclosure
- 34-025 Highest and Best Practicable Treatment and Control (HBPT)
- 34-030 Source Registration
- 34-035 Requirements for Construction
- 34-040 Compliance Schedules

34-050 Rules applicable to sources required to have Air Contaminant Discharge Permits (ACDP) or Federal Operating Permits (FOP), including:

- 34-060 Plant Site Emission Limits (PSEL) Rules
- 34-070 Sampling, Testing, Monitoring and Reporting
- 34-080 Excess Emissions

34-090 Rules applicable to sources required to have Air Contaminant Discharge Permits (ACDP), including:

- 34-100 Permit Categories
- 34-110 Requirements to Obtain Permit
- 34-120 Synthetic Minor Permitting Procedures
- 34-130 General Procedures for ACD Permits
- 34-140 Permit Duration
- 34-150 ACDP Fees
- 34-160 New Source Review

34-170 Rules applicable to sources required to have Federal Operating Permits (FOP), as specified by OAR 340-28-2100 through 2740 and OAR 340-32 in its entirety, including:

- 34-180 Authority to Implement
- 34-190 Definitions
- 34-200 Federal Operating Permitting Program Requirements and Procedures

#### Section 34-005 Definitions

All relevant definitions for this title can be found with the general definitions listed in Title 12[-], with the following exceptions:

1. Plant Site Emission Limit (PSEL) definitions, which may be found in Section 34-060; and
2. Definitions pertaining to Federal Operating Permits (FOP's), which may be found in OAR 340-28-110.

### RULES APPLICABLE TO ALL STATIONARY SOURCES

#### Section 34-010 Applicability

Unless specified elsewhere, 34-015 through 34-040 shall apply to all stationary sources in Lane County.

#### Section 34-015 Request for Information

All sources subject to Title 34 shall provide in a reasonably timely manner any and all information that the Authority may reasonably require for the purpose of regulating stationary sources. Such information may be required on a one-time, periodic, or continuous basis and may include, but is not limited to, information necessary to:

1. issue a permit and ascertain compliance or noncompliance with the permit terms and conditions;
2. ascertain applicability of any requirement;
3. ascertain compliance or noncompliance with any applicable requirement; and
4. incorporate monitoring, recordkeeping, reporting, and compliance certification requirements into a permit.

Compliance with this section may require the installation and maintenance of continuous monitors and electronic data handling systems.

#### Section 34-020 Information Exempt from Disclosure

1. Pursuant to the provisions of ORS 192.410 to 192.505, all information submitted to the Authority under Title 34 shall be presumed to be subject to inspection upon request by any person unless such information is determined to be exempt from disclosure pursuant to subsections 2 or 3 of this section.
2. If an owner or operator claims that any writing, as that term is defined in ORS 192.410(5), is confidential or otherwise exempt from disclosure, in whole or in part, the owner or operator shall comply with the following procedures:
  - A. The writing shall be clearly marked with a request for exemption from disclosure. For a multi-page writing, each page shall be so marked.
  - B. The owner or operator shall state the specific statutory provision under which it claims exemption from disclosure and explain why the writing meets the requirements of that provision.
  - C. For writings that contain both exempt and non-exempt material, the proposed exempt material shall be clearly distinguishable from the non-exempt material. If possible, the exempt material shall be arranged so that it is placed on separate pages from the non-exempt material.
3. For a writing to be considered exempt from disclosure as a "trade secret," it shall meet all of the following criteria:
  - A. the information shall not be patented;
  - B. it shall be known only to a limited number of individuals within a commercial concern who have made efforts to maintain the secrecy of the information;
  - C. it shall be information which derives actual or potential economic value from not being disclosed to other persons; and



~~D. it shall give its users the chance to obtain a business advantage over competitors not having the information.~~

~~Section 34-025 Highest and Best Practicable Treatment and Control Requirements~~

~~See Title 32, Section 32-005-1 through 9.~~

~~Section 34-045<sup>30</sup> [General Procedures for] Source Registration~~

- ~~1. For those air contaminant sources not listed in Table A, the Director may require registration by the owner or operator of the source on forms provided by the Authority.~~
- ~~5. Information listed under 34-010(1) shall be reported by the registrant.]~~

~~Any air contaminant source which is not subject to the ACDP rules (34-090 through 34-160) or the Federal Operating Permit program rules (34-170 through 34-200) shall register with the Authority upon request pursuant to 34-030-1 through 4. Mandatory registration is required for sources specified in 34-030-5.~~

- ~~[3]1. Registration shall be completed within thirty (30) days following the mailing date of the request by the Authority.~~
- ~~[4]2. Registration shall be made on forms furnished by the Authority 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; and~~
  - ~~I. any other information requested by the Authority.~~

4. 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 Authority. Any changes in any of the factual data reported under subsection 3 of this section shall be reported to the Authority, at which time re-registration may be required on forms furnished by the Authority.

5. The following air contaminant sources shall register with the Authority [~~no later than December 31, 1990 and~~] annually [~~thereafter~~], as required by this rule:

A. Sources within the urban growth boundary

- (1) sources listed in Table A, Part II, but too small to require a discharge permit;
- (2) service stations;
- (3) paint shops;
- (4) fiberglass layup operations;
- (5) dry cleaners with discharges to the ambient air;
- (6) panel manufacturing operations.

B. Sources outside the urban growth boundary which are listed in Table A, Part II, but are too small to require a discharge permit.

- (1) ~~Sources listed in Table A but too small to require a discharge permit.~~

Section 34-0150~~35~~ Requirements for Construction (or Non-Major Modification) [of Permitted Sources] {Major Modification Requirements are Contained in Title 38}

1. No person shall commence construction or modification without first obtaining an Authority to Construct from the Authority.

[1]2. The owner or operator of an air contaminant discharge [permitted] source planning a construction project (or non-major modification) [or a construction project] which would change emissions shall submit to the Director a construction review fee and a Notice of Construction which includes all information necessary to perform any analysis or make any determination required by these rules. Such information shall include the following:

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.

~~[B]D.~~ a description of the ~~production~~ process and a related flow chart;

~~E.~~ a plot plan showing the location and height of all air contaminant sources and indicating the nearest residential or commercial property;

~~F.~~ type and quantity of fuels used;

~~[C]G.~~ ~~[An estimation of the amount and type of air contaminants to be emitted by the proposed new source or modification; and]~~ Amount, nature and duration of air contaminant emissions;

~~[A]H.~~ Plans and specifications for ~~[any proposed new]~~ air pollution control equipment ~~[or proposed modification to existing equipment drawn in accordance with acceptable engineering practices]~~ and facilities and their relationship to the production process;

~~I.~~ estimated efficiency of air pollution control equipment under present or anticipated operating conditions;

~~J.~~ any information on pollution prevention measures and cross-media impacts desired to be considered in determining applicable control requirements and evaluating compliance methods;

~~K.~~ where the operation or maintenance of air pollution control equipment and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for the Authority to establish operational and maintenance requirements under subsections 32-007-1 and 2;

~~L.~~ amount and method of refuse disposal; and

~~M.~~ corrections and revisions to the plans and specifications to ensure compliance with applicable rules, orders and statutes.

~~[D. Any additional information which may be required by the Authority.]~~

3. Construction review by the Authority is subject to applicable fees listed in Table A Part I of this title. Construction review fees are assessed based on the review levels defined below:

A. Level I review applies to construction projects which meet all of the following criteria:

(1) do not result in an increase in emissions or production;

(2) do not require ACDP modification prior to the ACDP renewal date;

(3) add a single piece of air pollution control equipment or replace an existing emission or process unit with a device of equivalent capacity; and

(4) require minimal review by the Authority.

B. Level II review applies to construction projects which:

(1) do not result in an increase in emissions; or

(2) result in changes in emissions or throughputs to multiple emission points from those identified in the ACDF permit application; and

(3) require a moderate amount of review by the Authority.

C. Level III review applies to construction projects which:

(1) result in emission increases which are less than the Significant Emission Rate (SER) as defined in LRAPA Title 38 (New Source Review), subsection 005-12; or

(2) are subject to NSPS (New Source Performance Standards--see LRAPA Title 46), and

(3) require a substantial amount of review and analysis by the Authority.

D. Level IV review applies to construction projects which:

(1) result in an emission increase which is greater than or equal to the SER and are therefore subject to New Source Review/Prevention of Significant Deterioration review; or

(2) are subject to a Maximum Available Control Technology (MACT) or Generally Achievable Control Technology (GACT) determination; and

(3) require extensive review and analysis by the Authority.

E. For construction projects which do not clearly fit any of the levels described in subsections A through D of this section, the Authority shall assign a review level based on an estimate of the review time required and the level which most closely fits the construction project. The Authority may waive construction fees for sources with minimal or letter permits as defined in 34-100-5 and 6.

[2]4. Within sixty (60) days of receipt of all required information, the Authority shall make a determination as to whether the proposed construction or non-major modification is in accordance with the provisions of these rules. In

accordance with 34-060-4.C, modifications which increase emissions above baseline emission rates shall require a 30-day public notice period.

- A. If the proposed construction is found to be in accordance with the provisions of these rules, the Authority shall issue a "Notice of Approval to Construct." This issuance shall not relieve the owner or operator of the obligation of complying with all other titles of these rules.
  - B. If the proposed construction is found not to be in accordance with the provisions of these rules, the Director may issue an order prohibiting construction. Failure to issue the order within the sixty (60) day period shall be considered a determination that the construction may proceed in accordance with the information provided in the application.
  - C. Any person against whom an order prohibiting construction is issued may, within twenty (20) days from the date of mailing of the order, demand a hearing. The demand shall be in writing, shall state the grounds for a hearing, and shall be submitted to the Director. Any hearing shall be conducted as a contested case pursuant to Title 14.
  - D. Deviation from approved plans or specifications, without the written permission of the Director, shall constitute a violation of these rules.
  - E. The Authority may require any order or other notice to be displayed on the premises designated. No person shall mutilate, alter, or remove such order or notice unless authorized to do so by the Authority.
- [3] Notice shall be provided in writing to the Authority of the completion of construction and the date when operation will commence. Such notice will be provided within thirty (30) days of completion of the construction project on forms provided by the Authority. The Authority, following receipt of the notice of completion, shall inspect the premises.

Section 34-0[55]40 Compliance Schedules for Existing Sources Affected by New Rules

1. No existing source of air contaminant emissions will be allowed to operate out of compliance with the provisions of new rules, unless the owner or operator of that source first obtains a Board-approved compliance schedule which lists the steps being taken to achieve compliance and the final date when compliance will be achieved. Approval of a reasonable time to achieve compliance shall be at the discretion of the Board.
2. The owner or operator of any existing air contaminant source found by the Director to be in non-compliance with the provisions of new rules shall submit to the Board for approval a proposed schedule of compliance to meet those provisions. This schedule shall be in accordance with timetables contained in the new rules or in accordance with an administrative order by the Director. This schedule shall contain, as necessary, reasonable time milestones for engineering,

procurement, fabrication, equipment installation and process refinement. This request shall also contain documentation of the need for the time extension to achieve compliance and the justification for each of the milestones indicated in the schedule.

3. Within one hundred and twenty (120) days of the submittal date of the request, the Board shall act to either approve or disapprove the request. A schedule for compliance becomes effective upon the date of the written order of the Board.
4. Compliance schedules of longer than eighteen (18) months' duration shall contain requirements for periodic reporting of progress toward compliance.
5. An owner or operator of an air contaminant source operating in non-compliance with these rules, but under an approved compliance schedule, who fails to meet that schedule or make reasonable progress toward completion of that schedule, shall be subject to enforcement procedures in accordance with these rules.

#### **RULES APPLICABLE TO SOURCES REQUIRED TO HAVE ACDP OR FEDERAL OPERATING PERMITS**

##### **Section 34-050 Applicability**

Sections 34-060 through 34-080 shall apply to all stationary sources required to obtain ACDP's under 34-090 through 34-160 or Federal Operating Permits under 34-170 through 34-200.

##### **Section 34-060 Plant Site Emission Limit Rules**

1. Policy. The Authority recognizes the need to establish a more definitive method for regulating increases and decreases in air emissions of permit holders as contained in Section 34-060. However, by the adoption of these rules, the Authority does not intend to:
  - A. Limit the use of existing production capacity of any air quality permittee (except for synthetic minor source permittees);
  - B. Cause any undue hardship or expense to any permittee due to the utilization of existing unused productive capacity; or
  - C. Create inequity within any class of permittees subject to specific industrial standards which are based on emissions related to production.
2. Plant Site Emission Limits (PSEL) may be established at levels higher than baseline if a demonstrated need exists to emit at a higher level, PSD increments and air quality standards would not be violated, and reasonable further progress in implementing control strategies would not be impeded.

### 3. Definitions

• "Actual Emissions" means the mass rate of emissions of a pollutant from an emissions source during a specified time period. Actual emissions shall be directly measured with a continuous monitoring system or calculated using a material balance or verified emission factor in combination with the source's actual operating hours, production rates, or types of materials processed, stored, or combusted during the specified time period.

A. For purposes of determining actual emissions as of the baseline period:

(1) Except as provided in paragraph (2) of this subsection, actual emissions 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.

(2) The Authority may assume the source-specific mass emissions limit included in the permit for a source that was effective on September 8, 1981 is equivalent to the actual emissions of the source during the baseline period if it is within 10 percent of the actual emissions calculated under paragraph (1) of this subsection.

B. For any source which had not yet begun normal operation in the specified time period, actual emissions shall equal the potential to emit of the source.

C. For purposes of determining actual emissions for Major Source Interim Emission Fees under LRAPA Title 35 and for Federal Operating Permit Fees under OAR 340-28-2560 through 340-28-2720, actual emissions include, but are not limited to, routine process emissions, fugitive emissions, excess emissions from maintenance, startups and shutdowns, equipment malfunction, and other activities.

• "Aggregate Insignificant Emissions" means the annual actual emissions of any regulated air pollutant as defined in OAR 340-28-110, for any federal operating permit major source, including the usage of exempt mixtures, up to the lowest of the following applicable level:

A. one ton for each criteria pollutant,

B. 500 pounds for PM<sub>10</sub> in a PM<sub>10</sub> nonattainment area,

C. the lesser of the amount established in OAR 340-32-4500, Table 3, or 1,000 pounds for each Hazardous Air Pollutant,

D. an aggregate of 5,000 pounds for all Hazardous Air Pollutants.

- "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.
- "Baseline Period" means either calendar years 1977 or 1978. The Authority shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.
- "Categorically Insignificant Activity" means any of the following pollutant emitting activities principally supporting the source:
  - A. exempt insignificant mixture usage;
  - B. evaporative and tail pipe emissions from on-site motor vehicle operation;
  - C. natural gas, propane, and distillate oil space heating rated at less than 0.4 million British Thermal Units/hour;
  - D. office activities;
  - E. food service activities;
  - F. janitorial activities;
  - G. personal care activities;
  - H. grounds keeping activities;
  - I. on-site laundry activities;
  - J. on-site recreation activities;
  - K. instrument calibration;
  - L. maintenance and repair shop;
  - M. automotive repair shops or storage garages;
  - N. air conditioning or ventilating equipment not designed to remove air contaminants generated by, or released from, associated equipment;
  - O. refrigeration systems, including pressure tanks used in refrigeration systems, but excluding any combustion equipment associated with such systems;



- P. bench-scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including associated vacuum-producing devices, but excluding research and development facilities;
  - Q. construction activities excluding fugitive dust;
  - R. warehouse activities;
  - S. accidental fires;
  - T. electric air compressors;
  - U. air purification systems;
  - V. continuous emissions monitoring vent lines;
  - W. demineralized water tanks;
  - X. demineralizer vents;
  - Y. cafeteria or office waste dumpsters;
  - Z. electrical charging stations;
  - AA. fire brigagde training;
  - BB. instrument air dryers and distribution;
  - CC. process raw water filtration systems;
  - DD. process sewer floor drains or open trenches;
  - EE. pharmaceutical packaging;
  - FF. fire suppression; and
  - GG. blueprint making.
- "Normal Source Operation" means operations which do not include such conditions as forced fuel substitution, equipment malfunction, or highly abnormal market conditions.
  - "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. The PSEL may consist of more than one assessable emission.

• "Significant Emission Rate (SER)" means

A. Emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:

Significant Emission Rates for Pollutants  
Regulated Under the Clean Air Act

<u>Significant Pollutant</u>	<u>Emission Rate</u>
(1) Carbon Monoxide	100.00 tons/year
(2) Nitrogen Oxides	40.00 tons/year
(3) Particulate Matter	25.00 tons/year
(4) PM <sub>10</sub>	15.00 tons/year
(5) Sulfur Dioxide	40.00 tons/year
(6) VOCs	40.00 tons/year
(7) Lead	0.60 ton/year
(8) Mercury	0.10 ton/year
(9) Beryllium	0.0004 ton/year
(10) Asbestos	0.007 ton/year
(11) Vinyl Chloride	1.00 ton/year
(12) Fluorides	3.00 tons/year
(13) Sulfuric Acid Mist	7.00 tons/year
(14) Hydrogen Sulfide	10.00 tons/year
(15) Total Reduced Sulfur (including hydrogen sulfide)	10.00 tons/year
(16) Reduced Sulfur Compounds (including hydrogen sulfide)	10.00 tons/year

B. For pollutants not listed above, the Authority 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  $\mu\text{g}/\text{m}^3$  (24-hour average) shall be deemed to be emitting at a significant emission rate.

4. Requirements for Plant Site Emission Limits

A. Plant Site Emission Limits (PSEL) shall be incorporated in all Air Contaminant Discharge Permits (ACDPs) and Federal Operating Permits (FOPs), except minimal source permits and special letter permits, as a means of managing airshed capacity. Except as provided for in 34-060-6 and 7, all sources subject to regular permit requirements shall be subject to PSELs for all regulated pollutants. PSELs will be incorporated in permits when permits are renewed, modified, or newly issued.

B. The emissions limits established by PSELs shall provide the basis for:

- (1) assuring reasonable further progress toward attaining compliance with ambient air standards;
- (2) assuring that compliance with ambient air standards and Prevention of Significant Deterioration increments are being maintained;
- (3) administering offset, banking and bubble programs; and
- (4) establishing the baseline for tracking consumption of Prevention of Significant Deterioration increments.

5. Criteria for Establishing Plant Site Emission Limits

A. 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 Authority rules.

B. If an applicant requests that the PSEL be established at a rate higher than the baseline emission rate, the applicant shall:

- (1) demonstrate that the requested increase is less than the significant emission rate increase defined in Section 34-060-3; or
- (2) provide an assessment of the air quality impact pursuant to procedures specified in Section 38-015 to Section 38-020. A demonstration that no air quality standards of PSD increment will be violated in an attainment area or that a growth increment or offset is available in a non-attainment area shall be sufficient to allow an increase in the 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.

C. Increases above baseline emission rates shall be subject to public notice and opportunity for public hearing pursuant to applicable permit requirements.

D. 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.

E. Mass emission limits may be established separately within a particular source for process emissions, combustion emissions, and fugitive emissions.

F. Documentation of PSEL calculations shall be available to the permittee.

G. For new sources, PSELs shall be based on application of applicable control equipment requirements and projected operating conditions.

H. 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 Section 34-060-8 are met.

I. PSELS may be changed pursuant to Authority rules when:

(1) Errors are found or better data is available for calculating PSELS.

(2) More stringent control is required by a rule adopted by the Environmental Quality Commission or the Authority.

(3) An application is made for a permit modification pursuant to the Air Contaminant Discharge Permit requirements (34-090 through 34-160) and the New Source Review requirements (Title 38), or Rules Applicable to Sources Required to Have Federal Operating Permits (34-170 through 34-200). Approval may be granted based on growth increments, offsets, or available Prevention of Significant Deterioration increments.

(4) The Authority finds it necessary to initiate modifications of a permit pursuant to Section 34-130-15 or OAR 340-28-2280, Reopenings.

#### 6. Plant Site Emission Limits for Sources of Hazardous Air Pollutants

A. For purposes of establishing PSELS, hazardous air pollutants listed under OAR 340-32-130 or OAR 340-32-5400 shall not be considered regulated pollutants under Section 34-060-4.A until such time as the Authority determines otherwise.

B. The Authority may establish PSELS for hazardous air pollutants for the following causes:

(1) An owner or operator elects to establish a PSEL for any hazardous air pollutant emitted for purposes of determining emission fees as prescribed in Title 35; or

(2) The source is subject to a hazardous air pollutant emission standard, limitation, or control requirement other than Plant Site Emission Limits.

C. Procedures for establishing and modifying PSELS for hazardous air pollutant emissions shall be consistent with Section 34-060-5, except for the following:

(1) a baseline emission rate shall not apply; and

(2) the provisions of Section 34-060-8 shall not apply.

D. PSELS established for hazardous air pollutants shall not be used for any provisions other than those prescribed in subsection 2 of this section.

7. Plant Site Emission Limits for Insignificant Activities

- A. For purposes of establishing PSELs, emissions from categorically insignificant activities listed in Subsection 34-060-3 shall not be considered regulated air pollutants under Section 34-060-4 until such time as the Authority determines otherwise, except as provided in subsection 3 of this section.
- B. For purposes of establishing PSELs, emissions from non-exempt insignificant mixture usage and aggregate insignificant emissions listed in Subsection 34-060-3 shall be considered regulated air pollutants under Section 34-060-4.
- C. For purposes of determining New Source Review or Prevention of Significant Deterioration applicability, Title 38, emissions from insignificant activities shall be considered.

8. Alternative Emission Controls (Bubble)

- A. Alternative emission controls may be approved for use within a plant site such that specific mass emission limit rules are exceeded if:
  - (1) such alternatives are not specifically prohibited by a permit condition;
  - (2) net emissions for each pollutant are not increased above the PSEL;
  - (3) The net air quality impact is not increased as demonstrated by procedures required by Section 38-035 (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) and National Emission Standards for Hazardous Air Pollutants (NESHAP), 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; or
  - (7) application is made for a permit modification and such modification is approved by the Authority.
- B. Operators of existing sources requesting alternative emission controls shall, at the time of application, pay the following fees:
  - (1) a filing fee of \$75; and

(2) an application processing fee of \$500.

9. Temporary PSD Increment Allocation

A. On demonstration to the Authority, PSEs 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 if:

(1) no ambient air quality standard is exceeded;

(2) no applicable PSD increment is exceeded;

(3) no nuisance condition is created; and

(4) the applicant's proposed and approved objective continues to be realized.

B. 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 Authority, extraordinary circumstances exist.

C. Such temporary allocation of a PSD increment shall be set forth in a specific permit condition issued pursuant to the Authority's notice and permit issuance or modification procedures.

D. Such temporary allocations are for a specific time period and may be recalled with proper notice.

Section 34-070. Sampling, Testing and Monitoring of Air Contaminant Emissions

[Section 34-030 Source Emission Tests

1. ~~Upon request of the Director, the person responsible for a suspected source of air contaminants shall make or have made a source test and shall submit a written report to the Director which describes the nature and quantity of air contaminants emitted, the specific operating conditions when the test was made and other pertinent data which the Director may require. The source shall be evaluated at maximum operating capacities.~~

2. ~~All sampling and testing shall be conducted in accordance with the methods approved by the Authority.~~

3. ~~The Director may conduct tests of emissions of air contaminants from any source, and may require any person in control of an air contamination source to provide necessary holes in stacks or ducts and proper sampling and testing facilities, as may be necessary and reasonable for the accurate determination of the nature and quantity of air contaminants which are emitted as a result of operation of the source. Upon request, the Director shall supply a copy of the test results to~~

~~the person responsible for the source of air contaminant emissions.~~

~~Section 34-040 Records~~

~~The Director may require owners or operators of air contaminant emissions sources to monitor and maintain records of, and periodically report to the Authority, information on the nature and quantity of emissions and other such information deemed by the Director to be necessary to determine whether or not such sources are in compliance with the rules of the Authority. This may require the installation and maintenance of continuous monitors and electronic data handling systems.]~~

1. Program

A. As part of its coordinated program of air quality control and preventing and abating air pollution, the Authority 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 Authority in writing and signed by the person or persons responsible for conducting the tests; and
- (3) require continuous monitoring of specified air contaminant emissions and periodic regular reporting of the results of such monitoring.

B. At the request of the Authority, an owner or operator of a source required to conduct emissions tests may be required to provide emission testing facilities as follows:

- (1) sampling ports, safe sampling platforms, and access to sampling platforms adequate for test methods applicable to such source; and
- (2) utilities for sampling and testing equipment.

C. Testing shall be conducted in accordance with the Department's Source Sampling Manual (January, 1992), the Department's Continuous Monitoring Manual (January, 1992), or an applicable EPA Reference Method unless the Authority, where allowed under applicable federal requirements:

- (1) specifies or approves, in specific cases, minor changes in methodology;
  - (2) approves the use of an equivalent method or alternative method which will provide adequate results;
  - (3) waives the requirement for tests because the owner or operator of a source has demonstrated by other means to the Authority's satisfaction that the affected facility is in compliance with applicable requirements;
- or

- (4) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors.

## 2. Stack Heights and Dispersion Techniques

A. 40 CFR, Parts 51.100 (ff) through 51.100(kk), 51.118, 51.160 through 51.166 (July 1, 1993) are by this reference adopted and incorporated herein concerning stack heights and dispersion techniques.

B. 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.

C. This section has the following general applicability:

- (1) 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 section, 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.

- (2) With respect to the use of dispersion techniques, any technique implemented after December 31, 1970, at any plant, is subject to this section. 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.

## D. Definitions:

- (1) Where found in the federal rule, the term "reviewing agency" means the Authority, the Department, or the EPA, as applicable;

- (2) Where found in the federal rule, the term "authority administering the State Implementation Plan" means the Authority, the Department, or the EPA;

- (3) The "procedures" referred to in 40 CFR 51.164 are the New Source Review procedures at the Department (OAR 340-28-1900 to 340-28-2000) or at the Authority (Title 38); and the review procedures for new, or modifications to, minor sources, at the Department (OAR 340-28-800 to 340-28-820, 340-28-1700 to 340-28-1790) or at the Authority (34-035).



(4) Where "the state" or "state, or local control agency" is referred to in 40 CFR 51.118, it means the Department or the Authority.

(5) Where found in the federal rule, the terms "applicable state implementation plan" and "plan" refer to the programs and rules of the Department or the Authority, as approved by the EPA, or any EPA-promulgated regulations (see 40 CFR Part 52, Subpart MM).

### 3. Methods

A. Any sampling, testing, or measurement performed under this regulation shall conform to methods contained in the Department's Source Sampling Manual or to recognized applicable standard methods approved in advance by the Authority.

B. The Authority may approve any alternative method of 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.

4. Authority Testing. The Authority, 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 Authority, a copy of the results shall be provided to the person responsible for the air contamination source.

### 5. Records-Maintaining and Reporting

A. Upon notification from the Director, all persons owning or operating a source within Lane County shall 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 the source is in compliance with applicable emission rules, limitations or other control measures.

B. The records shall be prepared in the form of a report and submitted to the Authority on a semi-annual basis, or more frequently if requested in writing by the Authority, commencing with the first full semi-annual period after the Director's notification of these record-keeping requirements to such persons owning or operating a stationary air contaminant source. Except as may be otherwise provided by rule, semi-annual periods are January 1 through June 30 and July 1 through December 31. A more frequent basis for reporting may be required due to noncompliance or to protect human health or the environment.

- C. The reports required by this rule shall be completed on forms approved by the Authority and shall be submitted within thirty (30) days after the end of each reporting period.

Section 34-080 Excess Emissions

See Title 36, Section 36-001 through 36-030.

**RULES APPLICABLE TO SOURCES REQUIRED TO HAVE  
AIR CONTAMINANT DISCHARGE PERMITS (ACDP)**

Section 34-090 Purpose and Applicability

1. In order to restore and maintain Lane County air quality in a condition as free from air pollution as is practicable, it is the policy of the Lane Regional Air Pollution Authority to require a permit to discharge air contaminants from certain sources. As a result, no person shall construct, install, establish, modify, enlarge, develop or operate an air contaminant source listed in Table A Part II, without first obtaining an Air Contaminant Discharge Permit (ACDP) from the Authority.
2. The purpose of Sections 34-090 through 34-160 is to prescribe the requirements and procedures for obtaining ACDP's for stationary sources listed in Table A Part II. Sections 34-090 through 34-160 shall not apply to Federal Operating Permit program sources unless an ACDP is required by 34-110(2), 34-110(4), 34-120 or 38-001.
3. Sources not listed in Table A Part II are subject to requirements for construction (34-035) and may be subject to registration requirements (34-030).

Section 34-~~015~~100 [Special Discharge] Permit Categories

The following list delineates the types of permit which may apply to a stationary source:

1. Title V Federal Operating Permit, for major stationary sources as defined by OAR 340-28-2110. Permitting requirements for Federal Operating Permit program sources are prescribed in Sections 34-110-2 and 4, and Sections 34-170 through 34-200.
2. Regular ACDP, for stationary sources listed in Table A Part II. Permitting requirements for regular ACD permits are prescribed in Sections 34-110 through 34-160.

3. Synthetic Minor ACDP, for stationary sources defined by OAR 340-28-110 (117). Permitting procedures for Synthetic Minor ACDP's are prescribed in Sections 34-110-2, 4 and 5, and 34-120 through 34-160.

[A]4. [2-]Multiple Source Permit[s]. When a single site includes more than one air contaminant source, a single [permit] ACDP may be issued including all sources located at the site. For uniformity [S]such applications shall separately identify, by subsection, each air contaminant source included from Table A Part II. Permitting procedures for multiple source permits are the same as for regular ACDP's and are prescribed in Sections 34-130 through 34-160.

[B] A. When a single [site] air contaminant source[,] which is included in a multiple-source [permit] ACDP[,] is subject to permit modification, revocation, suspension, or denial, such action by the Authority shall only affect that individual source without thereby affecting any other source subject to the permit.

B. When a multiple-source ACDP includes air contaminant sources subject to the jurisdictions of both the Department and the Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

#### 5. Minimal Source Permit

A. The Lane Regional Air Pollution Authority may designate any source as a "minimal source" based upon the following criteria:

- (1) quantity and quality of emissions;
- (2) type of operation;
- (3) compliance with Authority regulations;
- (4) minimal impact on the air quality of the surrounding region.

B. If a source is designated as a minimal source, the compliance determination fee, provided by Section 34-150 (ACDP Permits) will be collected no less frequently than every five (5) years.

#### 6. Letter Permits

A. Any source listed in Table A, Part II, with no, or insignificant, air contaminant discharges may apply to the Authority for a letter permit.

B. The determination of applicability of this letter permit shall be made solely by the Authority.

- C. If issued a letter permit, the application processing fee and/or annual compliance determination fee, provided by Section 34-150 (ACDP Fees) may be waived by the Authority.

Section 34-110. Permit Required

1. No person shall construct, install, establish, develop or operate any air contaminant source which is referred to in Table A Part II, appended hereto and incorporated herein by reference, without first obtaining an Air Contaminant Discharge Permit (ACDP) from the Authority.
2. No person shall construct, install, establish, or develop any major source, as defined by OAR 340-28-2110 that will be subject to the federal operating permit program without first obtaining an ACDP from the Authority. Any Federal Operating Permit program source required to have obtained an ACDP prior to construction shall:
  - A. choose to become a synthetic minor source, Section 34-120, and remain in the ACDP program; or
  - B. file a complete application to obtain the Federal Operating Permit within twelve (12) months after initial startup.
3. No person shall modify any source covered by an ACDP under 34-100 through 34-160 such that the emissions are significantly increased without first applying for and obtaining a permit modification.
4. No person shall modify any source required to be covered by an ACDP under 34-100 through 34-160 such that the source becomes subject to the Federal Operating Permit program, 34-170 through 34-200 without first applying for and obtaining a modified ACDP. Any Federal Operating Permit program source required to have obtained an ACDP prior to modification shall:
  - A. choose to become a synthetic minor source, 34-120, and remain in the ACDP program;
  - B. choose to remain a synthetic minor source, 34-120, and remain in the ACDP program; or
  - C. file a complete application to obtain the Federal Operating Permit within twelve (12) months after initial startup of the modification.
5. No person shall increase emissions above the PSEL or operate in excess of the enforceable condition to limit potential to emit and remain a synthetic minor source without first applying for and obtaining a modified ACDP.
6. No person shall modify any source covered by an ACDP under 34-100 through 34-160 and not required to obtain a Federal Operating Permit such that:

- A. the process equipment is substantially changed or added to; or
- B. the emissions are significantly changed, without first notifying the Authority.

Section 34-120 Synthetic Minor Sources

1. Enforceable conditions to limit a source's potential to emit shall be included in the ACDP for a synthetic minor source. Enforceable conditions, in addition to the PSEL established under 34-060, shall include one or more of the following physical or operational limitations, but in no case shall exceed the conditions used to establish the PSEL:
  - A. restrictions on hours of operation;
  - B. restrictions on levels of production;
  - C. restrictions on the type or amount of material combusted, stored, or processed;
  - D. additional air pollution control equipment; or
  - E. other limitations on the capacity of a source to emit air pollutants.
2. The reporting and monitoring requirements of the conditions which limit the potential to emit contained in the ACDP of synthetic minor sources shall meet the requirements of 34-070.
3. To avoid being required to submit an application for a Federal Operating Permit, the owner or operator of a major source shall obtain an ACDP or a modification to an ACDP containing conditions that would qualify the source as a synthetic minor source prior to the time the owner or operator would be required to submit a Federal Operating Permit application.
4. Applications for synthetic minor source status shall be subject to notice procedures of 34-130-5.
5. Synthetic minor source owners or operators who cause their source to be subject to the Federal Operating Permit program by requesting an increase in the source's potential to emit, when that increase uses the source's existing capacity and does not result from construction or modification, shall:
  - A. become subject to 34-170 through 34-200 (OAR 340-28-2100 through 340-28-2320);
  - B. submit a Federal Operating Permit application pursuant to OAR 340-28-2120; and

- C. receive a Federal Operating Permit before commencing operation in excess of the enforceable conditions to limit potential to emit.
6. Synthetic minor source owners or operators who cause their source to be subject to the Federal Operating Permit program by requesting an increase in the source's potential to emit, when that increase is the result of construction or modification, shall:
- A. submit an application for the modification of the existing ACDP;
  - B. receive the modified ACDP before beginning construction or modification;
  - C. become subject to 34-170 through 34-200 (OAR 340-28-2100 through 340-28-2320); and
  - D. submit a Federal Operating Permit application under OAR 340-28-2120 to obtain a Federal Operating Permit within twelve (12) months after initial startup of the construction or modification.
7. Synthetic minor sources that exceed the limitations on potential to emit are in violation of OAR 340-28-2110(1)(a).

Section 34-010130 General Procedures for Obtaining ACDP Permits (*Note: Procedures for reviewing new major sources or major modifications are contained in Title 38, New Source Review.*)

1. No person shall commence construction, installation or modification of an air contaminant discharge source prior to obtaining an Air Contaminant Discharge Permit. The Director may allow commencement of construction prior to obtaining an ACDP, if applicant demonstrates no emissions increase of any regulated pollutant.
- [1]2. Any person intending to construct, install or establish a new source or renew an expired permit shall submit a complete permit application on forms provided by the Authority and containing 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, all discharge points and the surrounding residential and commercial property;
  - D. type and quantity of fuels used;
  - E. amount, nature and duration of all emissions of air contaminants;

- F. plans and specifications for air pollution control equipment and facilities and their relationship to the production process;
  - [F]G. estimated efficiency of air pollution control equipment;
  - H. any information on pollution prevention measures and cross-media impacts the person wants the Authority to consider in determining applicable control requirements and evaluating compliance methods;
  - L. where the operation or maintenance of air pollution control equipment and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for the Authority to establish operational and maintenance requirements under 32-007-1 and 2; and
  - [G]J. other pertinent information required by the Authority.
- [2]3. Unless otherwise specified, within fifteen (15) days after receiving the permit application the Authority will review the application to determine the adequacy of the information submitted.
- A. If the Authority determines that additional information is needed, it will promptly request the needed information from the applicant. The permit 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 ninety (90) days of the request.
  - B. If, in the opinion of the Director, additional measures are necessary to gather facts regarding the permit application, the Director will notify the applicant of his intent to institute said measures 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.
  - C. When the information in the permit application is deemed adequate, the applicant will be notified that the application is complete for processing.
  - D. Following determination that it is complete for processing, each permit application will be reviewed on its own merit, in accordance with the provisions of all applicable statutes, rules and regulations of the State of Oregon and the Lane Regional Air Pollution Authority.
  - E. If, upon review of the permit application, the Authority determines that a permit is not required, the Authority shall notify the applicant in writing of this determination. Such notification shall constitute final action by the Authority on the permit application. (*NOTE: Upon notification by the Authority, a registered source may be required to obtain a permit.*)

- [3]4. In the event the Authority is unable to complete action on a permit application within forty-five (45) days of closing of the public comment period or hearing record under ~~[LRAPA 34-010(4)]~~ subsection 5 of this section, the applicant shall be deemed to have received a temporary or conditional permit. Caution should be exercised by the applicant under a temporary or conditional permit, since it will expire upon final action by the Authority to grant or deny the original application, and since 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 Lane Regional Air Pollution Authority.
- [4]5. **Public Notice.** If the Authority proposes to issue a permit, public notice of proposed provisions prepared by the Authority will be forwarded to the applicant and other interested persons, at the discretion of the Authority, for comment. The public notice shall allow thirty (30) days for written comment from the applicant, the public and the interested local, state and federal agencies prior to issuance of the permit. **Public notice shall include the names 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 Authority.** If, within fourteen (14) days after commencement of the public notice period, the Authority 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 Authority 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, at the Authority's discretion, either in the notice accompanying the proposed provisions or in such other manner as is reasonably calculated to inform interested persons. The Authority shall take final action on the permit application within forty-five (45) days of the closing of the public comment period or the hearing record.
- [5]6. The Authority may adopt or modify the proposed provisions or recommend denial of a permit. In taking such action, the Authority shall consider the comments received regarding the proposed provisions and any other information obtained which may be pertinent to the application being considered.
- [6]7. The Authority shall promptly notify the applicant in writing of the final action taken on the application. 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.
- [7]8. If the applicant is dissatisfied with the conditions or limitations of any permit issued by the Authority, the applicant may request a hearing before the Board of Directors or its authorized representative. Such a request for hearing shall be made in writing to the Director within twenty (20) days of



the date of mailing of the notification of issuance of the permit. Any hearing held shall be conducted pursuant to the rules of the Authority.

- [8]9. If the Authority 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 twenty (20) days from the date of mailing of such notice unless, within that time, the applicant request a hearing. Any hearing held shall be conducted pursuant to the rules of the Authority.
- [9]10. Permits issued by the Authority will specify those activities, operations, emissions and discharges which are permitted, as well as requirements, limitations and conditions which must be met.
- 1[0]11. No permit will be issued to an air contaminant source which is not in compliance with applicable rules, unless a compliance schedule is made a condition of the permit.
- 1[1]12. Each permit proposed to be issued or revised by the Authority shall be submitted to the Department of Environmental Quality at least thirty (30) days prior to the proposed issuance date.
- 1[2]13. A copy of each permit issued, modified or revoked by the Authority pursuant to this section shall be promptly submitted to the Department.
- 1[3]14. The Authority may waive the procedures prescribed in these rules and issue special permits of duration not to exceed sixty (60) days from the date of issuance for unexpected or emergency activities, operations, emissions or discharges. Said permits shall be properly conditioned to insure adequate protection of property and preservation of public health, welfare and resources and shall include provisions for compliance with applicable emissions standards of the Authority. 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, as described in ~~[Section 34-010.1]~~ subsection 1 of this section.
- 1[4]15. The Authority may institute modification of a permit due to changing conditions or standards, receipt of additional information or other reason, by notifying the permittee by registered or certified mail of its intention to modify the permit. Such notification shall include the proposed modification and the reasons for modification. The modifications shall become effective twenty (20) days from the date of mailing of such notice unless, within that time, the permittee requests a hearing. Such a request for hearing shall be made in writing, and the hearing shall be conducted pursuant to the rules of the Authority. 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.

Section 34-1020140 Permit Duration

1. The duration of permits may vary but shall not exceed ten (10) years. The expiration date will be recorded on each permit issued.
2. Air Contaminant Discharge Permits issued by the Authority shall be automatically terminated:
  - A. Within sixty (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. Within one (1) year after a plant closure lasting continuously for one (1) or more years.
  - D. Upon issuance of a new, renewal or modified permit for the same operation;  
or
  - E. Upon written request of the permittee.
3. In the event that it becomes necessary to suspend or terminate 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 Authority shall notify the permittee by registered or certified 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 twenty (20) days from the date of mailing of such notice unless, within that time, the permittee requests hearing. Such a request for hearing shall be made in writing and shall state the grounds for the request.
4. Termination of a permit resulting from continuous plant closure shall subject the source to review as a new non-permitted source upon application to operate the facility.
5. If the Authority finds that there is a serious danger to the public health or safety or that irreparable damage to a resource will occur, it may suspend or terminate a permit, effective immediately. Notice of such suspension or termination must state the reasons for action and advise the permittee that he may request a hearing. Such a request for hearing shall be made in writing within ninety (90) days of the date of suspension and shall state the grounds for the request.
6. Any hearing requested under this Section shall be conducted pursuant to the rules of the Authority.

Section 34-025]150 [Permit]ACDP Fees

1. All persons applying for a new ACD permit or a renewal of an existing ACDP shall at the time of application pay the following fees:

- A. A filing fee of \$75;
- B. An application processing fee; and
- C. An annual compliance determination fee.

~~[The compliance determination fee may be waived when applying for modification of an existing permit. The application processing fee may be waived on permit renewals. Both of these fees may be waived when applying for letter permits.] Both the application processing fee and the annual compliance fee may be waived when applying for letter permits (see Section 34-100-6, Permit Categories).~~

2. All persons applying for a modification of an existing ACDP shall at the time of application pay the following fees:

- A. a filing fee of \$75; and
- B. an application processing fee.

~~The application processing fee may be waived when applying for letter permits (see Section 34-100-6, Permit Categories). Modifications subject to the requirements of Section 34-035, Requirements for Construction, may be subject to the fees of Table A Part I, in addition to the fees of Table A Part II.~~

3. All persons applying for a Synthetic Minor ACDP (34-120) shall at the time of application pay the following fees:

- A. a filing fee of \$75;
- B. an application processing fee;
- C. an annual compliance determination fee; and
- D. all of the applicable fees of Table A Part I.

~~2]4.~~ The fee schedule contained in ~~[the listing of air contaminant sources in this section (see Table A-)]~~ Table A Part II shall be applied to determine the ~~[permit] ACDP~~ fees on a standard industrial classification (SIC) basis.

~~3]5.~~ Applications for multiple-source permits received pursuant to Section 34-~~045]100-4 (Permit Categories)~~ 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 ~~[this section]~~ Table A Part II.

6. ~~In addition to the fees mentioned above, sources may be subject to the fees of Table A Part I. The fees for construction review shall be based on the definitions of review levels in Section 34-035-3.~~
- [4]7. Modifications of existing, unexpired permits, which are instituted by the Authority due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes and which do not require refiling or review of an application or plans and specifications, shall not require submittal of the filing fee or the application processing fee.
- [5]8. The annual compliance determination fee shall be paid at least thirty (30) days prior to the start of each subsequent permit year. Failure to remit the annual compliance determination fee on time shall be considered grounds for not issuing a permit or for terminating an existing permit. Also, such a failure is, in and of itself, a violation and may subject the permittee to enforcement procedures as defined in Title 15 of LRAPA Rules and Regulations.
- [6]9. If a permit is issued for a period of less than one 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 twelve (12) months, the applicable annual compliance determination fee shall be prorated by multiplying the annual compliance fee by the number of months covered by the permit and dividing by twelve (12).
- [7]10. If a temporary or conditional permit is issued in accordance with adopted procedure, fees submitted with the application shall be applied to the regular permit when it is granted or denied.
- [8]11. All fees shall be made payable to the Authority.
- [9]12. Table A ~~in~~ Part II of this Title lists all air contaminant sources required to have a permit and the associated fee schedule.

#### Section 34-160 New Source Review

New Source Review requirements are contained in LRAPA Title 38, Sections 38-001 through 38-050.

**RULES APPLICABLE TO SOURCES REQUIRED TO HAVE  
FEDERAL OPERATING PERMITS (FOP)**

**Section 34-170 Applicability**

Sections 34-180 through 34-200 apply to any stationary source defined under OAR 340-28-2110.

**Section 34-180 Authority to Implement**

In accordance with OAR 340-28-100 and OAR 340-32-110, the Authority is authorized to implement all Oregon Administrative Rules, Divisions 28 and 32, which apply to sources subject to the Title V Federal Operating Permit program in Lane County. LRAPA shall implement Division 28 and 32 rules as they pertain to Title V Federal Operating Permit Program sources until such time as it adopts its own Federal Operating Permit Program rules.

**Section 34-190 Definitions**

All definitions relevant to Federal Operating Permit Program rules are contained in OAR 340-28-110 and are adopted here by reference in their entirety.

**Section 34-200 Federal Operating Permitting Program Requirements and Procedures**

All rules pertaining to permitting of sources subject to Federal Operating Permit program are contained in OAR 340-28-2110 through 2740 and OAR Division 32, and shall be implemented by the Authority in accordance with Section 34-180.

LANE REGIONAL AIR POLLUTION AUTHORITY

TITLE 46

Standards of Performance for New Stationary Sources

*It is proposed to rescind existing Title 46 in its entirety and adopt a new Title 46 which is the same as DEQ's rules, namely the Standards of Performance for New Stationary Sources section of OAR 340-25.*

~~Section 46 005 Applicability~~

~~This rule shall be applicable to stationary sources identified in Sections 46 025 through 46 195, for which construction or modification has been commenced after the effective dates of these rules.~~

~~Section 46 010 General Provisions~~

~~Title 40, CFR, Part 60, Subpart A, as promulgated prior to August 2, 1985, is by this reference adopted and incorporated herein. Subpart A includes paragraphs 60.1 through 60.16 which address, among other things, definitions, performance tests, monitoring requirements, and modification.~~

~~Section 46 020 Federal Regulations Adopted by Reference~~

~~Title 40, CFR, Parts 60.40 through 60.154 and 60.250 through 60.685, as established as final rules prior to August 2, 1985, are by this reference adopted and incorporated herein. As of August 2, 1985, the federal regulations adopted by reference set emission standards for the new stationary source categories enumerated in Sections 46 025 through 46 195. (These are summarized here for easy screening, but testing conditions, the actual standards, and other details will be found in the Code of Federal Regulations.)~~

~~Section 46 025 Standards of Performance for Fossil Fuel Fired Steam Generators~~

- ~~1. The pertinent federal rules are 40 CFR 60.40 through 60.46, also known as Subpart D.~~
- ~~2. 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 generating unit of more than 73 megawatts (250 million Btu/hr.) heat input.~~
  - ~~A. 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 particulate matter in excess of 43 nanograms per joule heat input (0.10 lb./million Btu) derived from fossil fuel or fossil fuel and wood residue.~~
    - ~~(2) Exhibit greater than 20 percent opacity except for one six minute period per hour of not more than 27 percent opacity.~~
  - ~~B. 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:~~
    - ~~(1) 340 nanograms per joule heat input (0.80 lb./million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.~~
    - ~~(2) 520 nanograms per joule heat input (1.20 lb./million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue.~~

- ~~(3) When different fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula:~~

$$SO_2 = \frac{y(340) + z(520)}{y + z}$$

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) SO<sub>2</sub> 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.~~

- ~~(4) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.~~

~~C. 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 NO<sub>2</sub>, in excess of:~~

- ~~(1) 86 nanograms per joule heat input (0.20 lb./million Btu) derived from gaseous fossil fuel or gaseous fossil fuel and wood residue.  
(2) 130 nanograms per joule heat input (0.30 lb./million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.  
(3) 300 nanograms per joule heat input (0.70 lb./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).~~

- ~~(4) When different fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula:~~

$$NO_x = \frac{w(260) + x(86) + y(130) + z(300)}{w + x + y + z}$$

where:

- ~~(a) PNO<sub>x</sub> 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) w is the percentage of total heat input derived from lignite; and  
(c) 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).~~

- ~~(5) When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid or other solid fuel or wood residue, 46-025(2)(C).~~

- ~~(6) Section 46-025(2) does not apply to Electric Utility Steam Generating Units for which construction is commenced after September 18, 1978. These units must comply with the more stringent 46-055.~~

Section 46 030 Standards of Performance for Incinerators

1. ~~The pertinent federal rules are 40 CFR 60.50 through 60.54, also known as Subpart E.~~
2. ~~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:~~
  - A. ~~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 CO<sub>2</sub>.~~

Section 46 035 Standards of Performance for Asphalt Concrete Plants

1. ~~The pertinent federal rules are 40 CFR 60.90 through 60.93, also known as Subpart I.~~
2. ~~The following emission standards, summarizing the federal standards set forth in Subpart I, apply to each asphalt concrete plant:~~
  - A. ~~No owner or operator subject to the provisions of this rule shall 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.~~

Section 46 040 Standards of Performance for Storage Vessels for Petroleum Liquids

1. ~~The pertinent federal rules are 40 CFR 60.110 through 60.115a, also known as Subparts K and Ka.~~
2. ~~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.~~
  - A. ~~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 category 46 040(2)(A)(1) above 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 (1) and (3) above, and required by (2) above shall be designed so as to reduce Volatile Organic Compounds emissions to the atmosphere by at least 95 percent by weight.~~



Section 46 045 Standards of Performance for Iron and Steel Plants

1. The pertinent federal rules are 40 CFR 60.140 through 60.144, also known as Subpart N.
2. 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:
  - A. 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 particulate matter in excess of 50 mg/dscm (0.022 gr/dscf), and
    - (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.

Section 46 050 Standards of Performance for Sewage Treatment Plants

1. The pertinent federal rules are 40 CFR 60.150 through 60.154, also known as Subpart O.
2. 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:
  - A. No owner or operator of any sewage sludge incinerator subject to the provisions of this rule shall 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.

Section 46 055 Standards of Performance for Electric Utility Steam Generating Units

1. The pertinent federal rules are 40 CFR 60.40a through 60.49a, also known as Subpart Da.
2. 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.
  - A. 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 particulate matter in excess of:
    - (1) 13 ng/J (0.030 lb./million Btu) heat input derived from the combustion of solid, liquid, or gaseous fuel;
    - (2) 1.00 percent of the potential combustion concentration when combusting solid fuel, and
    - (3) 30 percent of the potential combustion concentration when combusting liquid fuel;
    - (4) An opacity of 20 percent, except for one six minute period per hour of not more than 27 percent opacity.
  - B. 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:
    - (1) 520 ng/J (1.20 lb./million Btu) heat input for solid fuel or solid derived fuel and 10 percent of the potential combustion concentration (90 percent reduction), or

- ~~(2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 260 ng/J (0.60 lb./million Btu) heat input for solid fuel or solid derived fuel.~~
  - ~~(3) 340 ng/J (0.80 lb./million Btu) heat input from liquid or gaseous fuels and 10 percent of the potential combustion concentration (90 percent reduction), or~~
  - ~~(4) When emissions are less than 80 ng/J (0.20 lb./million Btu) heat input from liquid or gaseous fuels, 100 percent of the potential combustion concentration (zero percent reduction);~~
  - ~~(5) 520 ng/J (1.20 lb./million Btu) heat input from any affected facility which combusts 100 percent anthracite or is classified as a resource recovery facility.~~
- ~~C. 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:~~
- ~~(1) 86 ng/J heat input for gaseous fuels except for coal derived gaseous fuels;~~
  - ~~(2) 130 ng/J heat input for liquid fuels except for coal derived or shale oil;~~
  - ~~(3) 210 ng/J heat input for coal derived gaseous, liquid, and solid fuels; for shale oil; or for subbituminous coal;~~
  - ~~(4) 260 ng/J heat input from bituminous and anthracite coal; from lignite except as noted in (5) below; from all other solid fossil fuels not specified elsewhere in this rule;~~
  - ~~(5) 340 ng/J heat input from any solid fuel containing more than 25 percent by weight of lignite mined in the Dakotas or Montana, and combusted in a slag tap furnace;~~
  - ~~(6) No limit for any solid fuel containing more than 25 percent by weight of coal refuse.~~

Section 46.060 Standards of Performance for Coal Preparation Plants

- ~~1. The pertinent federal rules are 40 CFR 60.250 through 60.254, also known as Subpart Y.~~
- ~~2. 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. An owner or operator shall not cause to be discharged into the atmosphere from:~~
  - ~~A. Any thermal dryer gases which~~
    - ~~(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf);~~
    - ~~(2) Exhibit 20 percent opacity or greater;~~
  - ~~B. Any pneumatic coal cleaning equipment, gases which~~
    - ~~(1) Contain particulate matter in excess of 0.040 g/dscm (0.018 gr/dscf);~~
    - ~~(2) Exhibit 10 percent opacity or greater.~~

Section 46.065 Standards of Performance for Ferroalloy Production Facilities

- ~~1. The pertinent federal rules are 40 CFR 60.260 through 60.266, also known as Subpart Z.~~
- ~~2. 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.~~

- ~~A. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any electric submerged arc furnace any gases which:~~
- ~~(1) 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;~~
  - ~~(2) 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, silicomanganese, calcium carbide, ferrochrome silicon, ferromanganese silicon, or silvery iron is being produced;~~
  - ~~(3) Exit from a control device and exhibit 15 percent opacity or greater;~~
  - ~~(4) 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.~~
- ~~B. No owner or operator subject to the provisions of these rules shall cause to be discharged into the atmosphere from any dust handling equipment any gases which exhibit 10 percent opacity or greater.~~
- ~~C. No owner or operator subject to the provisions of these rules 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.~~

Section 46 070 Standards of Performance for Steel Plants: Electric Arc Furnaces

- ~~1. The pertinent federal rules are 40 CFR 60.270 through 60.276a, also known as Subpart AA and AAa.~~
  - ~~2. 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.~~
- ~~A. No owner or operator shall cause to be discharged into the atmosphere from an electric arc furnace any gases which:~~
- ~~(1) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);~~
  - ~~(2) Exit from a control device and exhibit 3.0 percent opacity or greater;~~
  - ~~(3) 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 7, 1983, the shop opacity must be only less than 20 percent during charging periods and only less than 40 percent during tapping periods.~~
- ~~B. 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.~~

Section 46 075 Standards of Performance for Kraft Pulp Mills

- ~~1. The pertinent federal rules are 40 CFR 60.280 through 60.286, also known as Subpart BB.~~
- ~~2. 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, black liquor oxidation system, and condensate stripper system built or modified after September 24, 1976.~~

~~A. No owner or operator shall cause to be discharged into the atmosphere particulate matter:~~

~~(1) From 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;~~

~~(2) From any smelt dissolving tank in excess of 0.10 g/Kg black liquor solids, dry weight, (0.20 lb./ton);~~

~~(3) From 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.~~

~~B. No owner or operator shall cause to be discharged into the atmosphere Total Reduced Sulfur compounds (TRS), which are hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide:~~

~~(1) From any digester system, brown stock washer system, multiple effect evaporator system, black liquor oxidation 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;~~

~~(2) From any straight kraft recovery furnace in excess of 5.0 ppm by volume on a dry basis, corrected to 8 percent oxygen;~~

~~(3) From any cross recovery furnace in excess of 25 ppm by volume on a dry basis, corrected to 8.0 percent oxygen;~~

~~(4) From any smelt dissolving tank in excess of 0.0084 g/Kg black liquor solids, dry weight (0.0168 lb./ton);~~

~~(5) From any lime kiln in excess of 8.0 ppm by volume on a dry basis, corrected to 10 percent oxygen.~~

#### Section 46 080 Standards of Performance for Glass Manufacturing Plants

~~1. The pertinent federal rules are 40 CFR 60.290 through 60.296, also known as Subpart CC.~~

~~2. The following particulate matter standard, summarizing the federal standard 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.~~

~~A. 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.~~

#### Section 46 085 Standards of Performance for Grain Elevators

~~1. The pertinent federal rules are 40 CFR 60.300 through 60.304, also known as Subpart DD.~~

~~2. 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.~~

- A. ~~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:~~
- ~~(1) Zero percent opacity from any column dryer with column plate perforation exceeding 2.4 mm (0.094 inch) diameter,~~
  - ~~(2) Zero percent opacity from any rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh,~~
  - ~~(3) 5.0 percent opacity from any individual truck unloading station, railcar unloading station, or railcar loading station,~~
  - ~~(4) Zero percent opacity from any grain handling operation,~~
  - ~~(5) 10.0 percent opacity from any truck loading station,~~
  - ~~(6) Any barge or ship loading station which exhibits greater than 20 percent opacity.~~
- B. ~~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:~~
- ~~(1) Contains particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf),~~
  - ~~(2) Exhibits greater than zero percent opacity.~~
- C. ~~The owner or operator of any barge or ship unloading station shall operate as follows:~~
- ~~(1) 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.~~
  - ~~(2) The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft<sup>3</sup>/bu).~~
  - ~~(3) Rather than meet the requirements of subparagraphs (1) and (2) of this paragraph, the owner or operator may use other methods of emission control if it is demonstrated to the Authority's satisfaction that they would reduce emissions of particulate matter to the same level or less.~~

Section 46-090 Standards of Performance for Gas Turbines

- ~~1. The pertinent federal rules are 40 CFR 60.330 through 60.335, also known as Subpart GG.~~
- ~~2. 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 was commenced after October 3, 1977.~~
  - ~~A. 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 rates specified in 40 CFR 60.332.~~
  - ~~B. Owners or operators shall:~~
    - ~~(1) 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~~
    - ~~(2) Not burn in any gas turbine any fuel which contains sulfur in excess of 0.80 percent by weight.~~

Section 46 095 Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations

1. ~~The pertinent federal rules are 40 CFR 60.390 through 60.398, also known as Subpart MM.~~
2. ~~The following emission standards, summarizing the federal standards set forth in Subpart MM, apply to automobile or light duty truck assembly plants surface coating operations:~~
  - A. ~~No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any affected facility VOC emissions in excess of:~~
    - (1) ~~0.16 kilograms of VOC per liter of applied coating solids from each prime coat operation;~~
    - (2) ~~1.40 kilograms of VOC per liter of applied coating solids from each guide coat operation;~~
    - (3) ~~1.47 kilograms of VOC per liter of applied coating solids from each topcoat operation.~~

Section 46 100 Standards of Performance for Nitric Acid Plants

1. ~~The pertinent federal rules are 40 CFR 60.70 to 60.74, also known as Subpart G.~~
2. ~~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.~~
  - A. ~~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<sub>2</sub>, in excess of 1.5 Kg/metric ton of acid produced (3.0 lb./ton), the production being expressed as 100 percent nitric acid;~~
    - (2) ~~Exhibit 10 percent opacity or greater.~~

Section 46 105 Standards of Performance for Sulfuric Acid Plants

1. ~~The pertinent federal rules are 40 CFR 60.80 through 60.85, also known as Subpart H.~~
2. ~~The following emission standards summarizing the federal standards set forth in Subpart H, apply to each sulfuric acid production unit but do 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.~~
  - A. ~~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 sulfur dioxide in excess of 2.0 Kg/metric ton of acid produced (4.0 lb./ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>.~~
  - B. ~~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 acid mist expressed as H<sub>2</sub>SO<sub>4</sub>, in excess of 0.075 Kg/metric ton of acid produced (0.15 lb./ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>.~~
    - (2) ~~Exhibit 10 percent opacity or greater.~~

Section 46 110 Standards of Performance for Secondary Lead Smelters

1. ~~The pertinent federal rules are 40 CFR 60.120 through 60.123, also known as Subpart L.~~
2. ~~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 lb.) charging capacity, blast (cupola) furnaces, and reverberatory furnaces.~~
  - A. ~~No owner or operator subject to the provisions of this rule shall 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.~~
  - B. ~~No owner or operator subject to the provisions of this rule shall cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.~~

Section 46 115 Standards of Performance for Secondary Brass and Bronze Production Plants

1. ~~The pertinent federal rules are 40 CFR 60.130 through 60.133, also known as Subpart M.~~
2. ~~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 lb.) or greater production capacity and blast (cupola) furnaces of 250 Kg/hr. (550 lb./hr) or greater production capacity.~~
  - A. ~~No owner or operator subject to the provisions of this rule shall 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.~~
  - B. ~~No owner or operator subject to the provisions of this rule shall cause the discharge into the atmosphere from any blast (cupola) or electric furnace any gases which exhibit 10 percent opacity or greater.~~

Section 46 120 Standards of Performance for Metal Furniture Surface Coating

1. ~~The pertinent federal rules are 40 CFR 60.310 through 60.316, also known as Subpart EE.~~
2. ~~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 use 1,000 gallons of coating per year or more and commenced construction, modification, or reconstruction after November 28, 1980:~~
  - A. ~~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.~~

Section 46 125 Standards of Performance for Lead Acid Battery Manufacturing Plants

1. ~~The pertinent federal rules are 40 CFR 60.370 through 60.374, also known as Subpart KK.~~
2. ~~The following standards, summarizing the federal standard 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 con-~~

~~taining 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 rule commenced after January 14, 1980.~~

~~A. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere:~~

- ~~(1) From 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 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 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 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 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 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);~~
- ~~(7) From any affected facility other than a lead reclamation facility any gases with greater than 0 percent opacity;~~
- ~~(8) From any lead reclamation facility any gases with greater than 5 percent opacity.~~

~~Section 46 130 Standards of Performance for Publication Rotogravure Printing~~

~~1. The pertinent federal rules are 40 CFR 60.430 through 60.435, also known as Subpart QQ.~~

~~2. 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.~~

~~A. No owner or operator subject to the provisions of this rules shall cause to be discharged into the atmosphere Volatile Organic Compounds in excess of 16 percent of the total mass of Volatile Organic Compounds solvent and water used at that facility during any one performance averaging period.~~

~~Section 46 135 Standards of Performance for Tape and Label Surface Coating~~

~~1. The pertinent federal rules are 40 CFR 60.440 through 60.447, also known as Subpart RR.~~

~~2. 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.~~

~~A. No owner or operator subject to the provisions of this rule 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.~~



Section 46 140 Standards of Performance for Large Appliance Surface Coating

1. ~~The pertinent federal rules are 40 CFR 60.450 through 60.456, also known as Subpart SS.~~
2. ~~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.~~
  - A. ~~No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere Volatile Organic Compounds in excess of 0.90 kilograms per liter of coating solids applied.~~

Section 46 145 Standards of Performance for Metal Coil Surface Coating

1. ~~The pertinent federal rules are 40 CFR 60.460 through 60.466, also known as Subpart TT.~~
2. ~~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.~~
  - A. ~~No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere more than:~~
    - (1) ~~0.28 kilogram VOC per liter (kg VOC/l) of coating solids applied for each calendar month for each affected facility that does not use an emission control device(s); or~~
    - (2) ~~0.14 kg VOC/l 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; or~~
    - (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; or~~
    - (4) ~~A value between 0.14 (or a 90 percent emissions reduction) and 0.28 kg VOC/l 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.~~

Section 46 150 Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture

1. ~~The pertinent federal rules are 40 CFR 60.470 through 60.474, also known as Subpart UU.~~
2. ~~The following emission standards, summarizing the federal standards set forth in Subpart UU, apply 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.~~
  - A. ~~No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any saturator:~~
    - (1) ~~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;~~
- ~~(2) Exhaust gases with opacity greater than 20 percent; and~~
- ~~(3) Any visible emissions from a saturator capture system for more than 20 percent of any period of consecutive valid observations totaling 60 minutes.~~
- ~~B. No owner or operator shall discharge or cause to be discharged into the atmosphere from any blowing still:
  - ~~(1) 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~~
  - ~~(2) 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~~
  - ~~(3) Particulate matter in excess of 0.60 kilograms of particulate per megagram of asphalt charged to the still during blowing without a catalyst; and~~
  - ~~(4) 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~~
  - ~~(5) 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 Authority.~~~~
- ~~C. No owner or operator subject to the provisions of this rule 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.~~
- ~~D. No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any mineral handling and storage facility emissions with opacity greater than 1 percent.~~

Section 46.155 Standards of Performance for VOC Leaks from Synthetic Organic Chemical Manufacturing

- ~~1. The pertinent federal rules are 40 CFR 60.480 through 60.489, also known as Subpart VV.~~
- ~~2. The emissions standards, summarizing 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:
  - ~~A. 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:
    - ~~(1) Pumps in light liquid service;~~
    - ~~(2) Compressors;~~
    - ~~(3) Pressure relief devices in gas/vapor service;~~
    - ~~(4) Sampling connection systems;~~
    - ~~(5) Open ended valves or lines;~~
    - ~~(6) Valves;~~
    - ~~(7) Closed vent systems and control devices.~~~~
  - ~~B. The detailed standards are found in seven pages of federal rules, along with the record keeping and reporting requirements.~~~~

Section 46 160 Standards of Performance for Beverage Can Surface Coating

1. ~~The pertinent federal rules are 40 CFR 60.490 through 60.496, also known as Subpart WW.~~
2. ~~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.~~
  - A. ~~No owner or operator subject to the provisions of this rule 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 operations, 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; and~~
    - (3) ~~0.89 kilograms of VOC per liter of coating solids from each two piece can inside spray coating operation.~~

Section 46 165 Standards of Performance for Bulk Gasoline Terminals

1. ~~The pertinent federal rules are 40 CFR 60.500 through 60.506, also known as Subpart XX.~~
2. ~~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 December 17, 1980.~~
  - A. ~~The emission 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 B of this rule.~~
  - B. ~~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.~~

Section 46 170 Standards of Performance for Lime Manufacturing Plants

1. ~~The pertinent federal rules are 40 CFR 60.340 through 60.344, also known as Subpart HH.~~
2. ~~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 rule commenced after May 3, 1977.~~
  - A. ~~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.~~

Section 46 175 Standards of Performance for Flexible Vinyl and Urethane Coating and Printing

1. ~~The pertinent federal rules are 40 CFR 60.580 through 60.585, also known as Subpart FFF.~~
2. ~~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.~~
  - A. ~~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, or~~
    - (2) ~~Reduce VOC emissions to the atmosphere by 85 percent.~~

Section 46 180 Standards of Performance for Synthetic Fiber Plants

1. ~~The pertinent federal rules are 40 CFR 60.600 through 60.604, also known as Subpart HHH.~~
2. ~~The following emission standards, summarizing the 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.~~
  - A. ~~No owner or operator subject to the provisions of this rule shall cause to be discharged 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.~~

Section 46 185 Standards of Performance for Petroleum Dry Cleaners

1. ~~The pertinent federal rules are 40 CFR 60.620 through 60.625, also known as Subpart JJJ.~~
2. ~~The following work practice standards, summarizing the 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.~~
  - A. ~~Each dryer shall be a solvent recovery dryer;~~
  - B. ~~Each filter shall be a cartridge filter, which shall be drained in its sealed housing for at least eight (8) hours prior to its removal;~~
  - C. ~~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.~~

Section 46 190 Standards of Performance for Fiberglass Insulation Manufacturing

1. ~~The pertinent federal rules are 40 CFR 60.680 through 60.685, also known as Subpart PPP.~~
2. ~~The following emission standard, summarizing the 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.~~
  - A. ~~No owner or operator subject to the provisions of this rule 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.~~

~~Section 46 195 Standards of Performance for Nonmetallic Mineral Processing Plants~~

- ~~1. The pertinent federal rules are 40 CFR 60.670 through 60.676, also known as Subpart 000.~~
- ~~2. The following standards, summarizing the federal standards set forth in Subpart 000, apply to affected facilities in fixed or portable nonmetallic mineral processing plants which commenced construction, modification, or reconstruction after August 31, 1983. Exempted from these standards are fixed sand and gravel plants and crushed stone plants with capacities less than or equal to 25 tons per hour, portable sand and gravel plants and crushed stone plants with capacities less than or equal to 150 tons per hour, and common clay plants and pumice plants with capacities less than or equal to 10 tons per hour.~~
  - ~~A. On and after the date on which the required performance test is completed, no owner or operator of an affected facility shall cause to be discharged into the atmosphere any stack emissions which contain particulate matter in excess of 0.05 g/dscm.~~
  - ~~B. On and after the 60th day after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after initial startup, no owner or operator of an affected facility shall cause to be discharged into the atmosphere fugitive emissions which exceed opacity limits defined in Subpart 000.~~

~~Section 46 200 Compliance~~

~~Compliance with standards set forth in this rule shall be determined by performance tests and monitoring methods as set forth in the federal regulation adopted by reference in Section 46 010 and 46 020.~~

~~Section 46 205 More Restrictive Regulations~~

~~If at any time there is a conflict between Authority or Oregon Department of Environmental Quality rules and the federal regulation (40 CFR, Part 60), the more stringent shall apply.~~

## PROPOSED NEW RULES

### Section 46-505 State of Purpose

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 LRAPA Title 46 to specify requirements and procedures necessary for the Authority to implement and enforce the aforementioned Federal Regulations.

### Section 46-510 Definitions

As used in Title 46:

- "Administrator" means the Administrator of the EPA or authorized representative.
- "Alternative Method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Authority's satisfaction to, in specific cases, produce results adequate for determination of compliance.
- "ASTM" means the American Society of Testing & Materials.
- "Authority" means the Lane Regional Air Pollution Authority.
- "Board" means the Board of Directors of the Lane Regional Air Pollution Authority.
- "Capital Expenditure" means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.
- "CFR" means Code of Federal Regulations.
- "Commenced" means, with respect to the definition of "new source" in section 111(a)(2) of the federal Clean Air Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.
- "Commission" means the Oregon Environmental Quality Commission.
- "Construction" means fabrication, erection, or installation of a facility.
- "Department" means the Department of Environmental Quality.

- "Environmental Protection Agency" or "EPA" means the United States Environmental Protection Agency.
- "Equivalent Method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Authority's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
- "Existing Facility" means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in 40 CFR Part 60, and the construction or modification of which commenced before the date of proposal by EPA of that standard; or any apparatus which could be altered in such a way as to be of that type.
- "Facility" means all or part of any public or private building, structure, installation, equipment, vehicle or vessel, including, but not limited to, ships.
- "Fixed Capital Cost" means the capital needed to provide all the depreciable components.
- "Modification" means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.
- "Particulate Matter" means any finely divided solid or liquid material, other than uncombined water, as measured by an applicable reference method, or an equivalent or alternative method.
- "Reconstruction" means the replacement of components of an existing facility to such an extent that:
  - A. the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility; and
  - B. it is technologically and economically feasible to meet the applicable standards set forth in 40 CFR Part 60.
- "Reference Method" means any method of sampling and analyzing for an air pollutant as specified in the Department's Source Sampling Manual, January 1992, The Department's Continuous Monitoring Manual, January 1992, or an applicable subpart of 40 CFR Part 60 (July 1, 1993).
- "Standard" means a standard of performance proposed or promulgated under 40 CFR Part 60.
- "Stationary Source" means any building, structure, facility, or installation that emits or may emit any air pollutant subject to regulation under the federal Clean Air Act.

- "Volatile Organic Compounds" or "VOC" means any organic compounds that participate in atmospheric photochemical reactions; or that are measured by a reference method, an equivalent method, or an alternative method; or that are determined by procedures specified under any applicable rule.

#### Section 46-515 Statement of Policy

It is the policy of the Board to consider the performance standards for new stationary sources contained in Title 46 to be minimum standards; and as technology advances, conditions warrant, and Authority rules require or permit, additional rules may be adopted.

#### Section 46-520 Delegation

1. The Commission authorizes the Authority to implement and enforce, within its boundaries, the provisions of OAR 340-25-505 through 340-25-805.
2. The Commission authorizes the Authority to implement and enforce its own provisions upon a finding that such provisions are at least as stringent as a corresponding provision in OAR 340-25-505 through 340-25-805. The Authority may implement and enforce provisions authorized by the Commission in place of any or all of OAR 340-25-505 through 340-25-805 upon receipt of delegation from EPA. Delegation may be withdrawn for cause by the Commission.

#### Section 46-525 Applicability

LRAPA Title 46 shall be applicable to stationary sources identified in Title 46 for which construction, reconstruction, or modification has commenced.

#### Section 46-530 General Provisions

1. Except as provided in subsection 2 of this section, 40 CFR, Part 60, Subpart A (July 1, 1993) is by this reference adopted and incorporated herein.
2. Where "Administrator" or "EPA" appears in 40 CFR Part 60, Subpart A, "Authority" shall be substituted, except in any section of 40 CFR Part 60 for which a federal rule or delegation specifically indicates that authority will not be delegated to the state or regional authority.

### Performance Standards

#### Section 46-535 Federal Regulations Adopted by Reference

1. Except as provided in subsection 2 of this section, 40 CFR Part 60, Subparts D through XX and BBB through NNN and PPP through VVV (July 1, 1993) are by this reference adopted and incorporated herein. 40 CFR Part 60, Subpart 000 (July 1, 1993) is by this reference adopted and incorporated herein for major sources only.
2. Where "Administrator" or "EPA" appears in 40 CFR Part 60, "Authority" shall be substituted, except in any section of 40 CFR Part 60 for which a federal



rule or delegation specifically indicates that authority will not be delegated to the state or regional authority.

3. Where a discrepancy is determined to exist between LRAPA Title 46 and 40 CFR Part 60, 40 CFR Part 60 shall apply.

Section 46-550 Standards of Performance for Fossil Fuel-Fired Steam Generators for Which Construction Commenced After August 17, 1971

1. Applicability

A. Except as provided in sub-subsections B and C of this subsection and subsection 3 of this section, this section applies to the following steam generating units for which construction or modification commenced after August 17, 1971:

(1) each fossil-fuel-fired steam generating unit or more than 250 million Btu per hour; and

(2) each fossil-fuel and wood-residue-fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 250 million Btu per hour.

B. A lignite-fired steam generating unit for which construction or modification commenced on or before December 22, 1976 is not subject to 40 CFR sections 60.44(a)(4), 60.44(a)(5), 60.44(b), 60.44(d) and 60.45(f)(4)(vi).

C. A steam generating unit subject to Section 46-610 is not subject to this section.

2. Requirements. Steam generating units subject to this section shall comply with 40 CFR Part 60, Subpart D, as adopted under LRAPA Section 46-535.

3. Special provisions. Any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials other than fossil fuels shall not subject the steam generating unit to this section.

4. Definitions. As used in this section:

A. "Fossil fuel" means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.

B. "Steam generating unit" means a furnace or boiler used in the process of burning fossil fuel or wood residue for the purpose of producing steam by heat transfer.

C. "Wood residue" means bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

Section 46-553 Standards of Performance for Industrial/Commercial/Institutional  
Steam Generating Units

1. Applicability

- A. Except as provided in sub-subsection B of this subsection and subsection 3 of this section, this section applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million Btu/hour.
- B. A steam generating unit subject to Section 46-610, Standards of Performance for Electric Steam Generating Units, is not subject to this section.

2. Requirements

- A. Steam generating units subject to this section for which construction, modification, or reconstruction commenced on or before June 19, 1986 shall comply with 40 CFR 60.40b(b).
- B. Steam generating units subject to this section for which construction, modification, or reconstruction commenced after June 19, 1986 shall comply with 40 CFR Part 60, Subpart Db, as adopted under Section 46-535.

3. Special provisions

- A. A steam generating unit subject to this section and to Section 46-580, Standards of Performance for Petroleum Refineries, shall comply with particulate matter and nitrogen oxide standards under 40 CFR Part 60, Subpart Db and the sulfur dioxide standard under 40 CFR Part 60, Subpart J.
- B. A steam generating unit subject to this section and to Section 46-555, Standards of Performance for Incinerators, shall comply with nitrogen oxide and particulate matter standards under 40 CFR Part 60, Subpart Db.
- C. Any change to an existing steam generating unit for the sole purpose of combusting gases containing TRS as defined in Section 46-630 is not considered a modification, and the steam generating unit is not subject to this section.

4. Definitions. As used in this section:

- A. "Heat input" means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).
- B. "Heat transfer medium" means any material that is used to transfer heat from one point to another point.

C. "Process heating" means the device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

D. "Steam generating unit" means a device that combusts any fuel or by-product/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters.

Section 46-554 Standards of Performance for Small Industrial/Commercial/Institutional Steam Generating Units

1. Applicability. This section applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 million Btu per hour (Btu/hr) or less, but greater than or equal to 10 million Btu/hr.

2. Requirements. Steam generating units subject to this section shall comply with 40 CFR Part 60, Subpart Dc, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Heat input" means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

B. "Steam generating unit" means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters.

Section 46-555 Standards of Performance for Incinerators

1. Applicability. This section applies to each incinerator of more than 50 tons per day charging rate that commenced construction or modification after August 17, 1971.

2. Requirements. Incinerators subject to this section shall comply with 40 CFR Part 60, Subpart E, as adopted under Section 46-535.

3. Definitions. As used in this section, "incinerator" means any furnace used in the process of burning solid waste for the purpose of reducing the volume of the waste by removing combustible matter.

Section 46-556 Standards of Performance for Municipal Waste Combustors

1. Applicability

A. Except as provided in sub-subsections B through D of this subsection and subsection 3 of this section, this section applies to each Municipal

Waste Combustor with an MWC unit capacity greater than 250 tons per day of MSW or RDF for which construction, modification, or reconstruction commenced after December 20, 1989.

B. Cofired combustors that are subject to a federally enforceable permit limiting the operation of the combustor to no more than 250 tons per day of MSW or RDF are not subject to this section.

C. MWC units combusting solely medical waste are not subject to this section.

D. Cofired combustors which fire less than 30 percent segregated medical waste and no other municipal solid waste are not subject to this section.

## 2. Requirements

A. Except as provided in sub-subsections B and C of this subsection, MWC units subject to this section shall comply with 40 CFR Part 60, Subpart Ea, as adopted under Section 46-535.

B. An MWC unit combusting tires or fuel derived solely from tires and that combusts no other MSW or RDF is only subject to the initial reporting in 40 CFR 60.59a(a).

C. Cofired combustors are only subject to the initial reporting in 40 CFR 60.59a(a), and records and reports of the daily weight of MSW or RDF and other fuels fired as required under 40 CFR 60.59a(b)(14) and 40 CFR 60.59a(m).

3. Special provisions. Physical or operational changes made to an existing MWC unit solely to comply with emission guidelines under 40 CFR Part 60, Subpart Ca, are not considered a modification or reconstruction and do not subject an existing MWC unit to this section.

## 4. Definitions. As used in this section:

A. "Cofired combustor" means a unit combusting municipal-type solid waste or refuse-derived fuel with a non MSW fuel and subject to a federally enforceable permit limiting the unit to combusting a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of MSW or RDF as measured on a 24-hour daily basis. A unit combusting a fuel feed stream, more than 30 percent of the weight of which is comprised, in aggregate, of MSW or RDF shall be considered a municipal waste combustor unit and not a cofired combustor.

B. "Medical waste" means any solid waste which is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in production or testing of biologicals. Medical waste does not include any hazardous waste identified under subtitle C of the Resource Conservation and Recovery Act or any household waste as defined in regulations under subtitle C of the Resource Conservation and Recovery Act.

C. "Municipal-type solid waste" or "MSW" means household, commercial/retail, and/or institutional waste.

(1) Household waste includes material discarded by single and multiple residential dwellings, hotels, motels, and other similar permanent or temporary housing establishments or facilities.

(2) Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities and other similar establishments or facilities.

(3) Institutional waste includes material discarded by schools and hospitals, and nonmanufacturing activities at prisons and government facilities and other similar establishments or facilities.

(4) Household, commercial/retail, and institutional waste do not include sewage, wood pallets, construction and demolition wastes, industrial process or manufacturing wastes, or motor vehicles (including motor vehicle parts or vehicle fluff). Municipal-type solid waste does include motor vehicle maintenance materials, limited to vehicle batteries, used motor oil, and tires. Municipal-type solid waste does not include wastes that are solely segregated medical wastes. However, any mixture of segregated medical wastes and other wastes which contains more than 30 percent medical waste discards, is considered to be municipal-type solid waste.

D. "Municipal waste combustor" or "MWC" or "MWC unit" means any device that combusts solid, liquid, or gasified MSW including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved air or excess air), boilers (i.e., steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, or fluidized bed-fired) and gasification/combustion units. This does not include combustion units, engines, or other devices that combust landfill gases collected by landfill gas collection systems.

E. "MWC unit capacity" means the maximum design charging rate of an MWC unit expressed in megagrams per day (tons per day) of MSW combusted, calculated according to the procedures under 40 CFR 60.58a(j). Municipal waste combustor unit capacity is calculated using a design heating value of 4,500 British thermal units per pound for MSW and 8,500 British thermal units per pound for medical waste. The calculation procedures under 40 CFR 60.58a(j) include procedures for determining MWC unit capacity for batch MWCs and cofired combustors and combustors firing mixtures of medical waste and other MSW.

F. "Refuse-derived fuel" or "RDF" means a type of MSW produced by processing MSW through shredding and size classification. This includes all classes of RDF including low-density fluff RDF through densified RDF and RDF fuel pellets.

Section 46-560 Standards of Performance for Portland Cement Plants

1. Applicability. This section applies to the following facilities in portland cement plants for which construction or modification commenced after August 17, 1971:
  - A. kiln;
  - B. clinker cooler;
  - C. raw mill system;
  - D. finish mill system;
  - E. raw mill dryer;
  - F. raw material storage;
  - G. clinker storage;
  - H. finished product storage;
  - I. conveyor transfer points;
  - J. bagging and bulk loading; and
  - K. unloading system.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart F, as adopted under Section 46-535.
3. Definitions. As used in this section, "portland cement plant" means any facility manufacturing portland cement by either the wet or dry process.

Section 46-565 Standards of Performance for Nitric Acid Plants

1. Applicability. This section applies to each nitric acid production unit for which construction or modification commenced after August 17, 1971.
2. Requirements. Nitric acid production units subject to this section shall comply with 40 CFR Part 60, Subpart G, as adopted under 46-535.
3. Definitions. As used in this section, "nitric acid production unit" means any facility producing weak nitric acid by either the pressure or atmospheric pressure process.

Section 46-570 Standards of Performance for Sulfuric Acid Plants

1. Applicability. This section applies to each sulfuric acid production unit for which construction or modification commenced after August 17, 1971.
2. Requirements. Sulfuric acid production units subject to this section shall comply with 40 CFR part 60, Subpart H, as adopted under Section 46-535.

3. Definitions. As used in this section, "sulfuric acid production unit" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans, or acid sludge, 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.

#### Section 46-575 Standards of Performance for Hot Mix Asphalt Facilities

1. Applicability. This section applies to each hot mix asphalt facility for which construction or modification commenced after June 11, 1973.
2. Requirements. Hot mix asphalt facilities subject to this section shall comply with 40 CFR Part 60, Subpart I, as adopted under Section 46-535.
3. Definitions. As used in this section, "hot mix asphalt facility" means any combination of the following used to manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements:
  - A. dryers;
  - B. systems for screening, handling, storing, and weighing hot aggregate;
  - C. systems for loading, transferring, and storing mineral filler;
  - D. systems for mixing hot asphalt; and
  - E. loading, transfer, and storage systems associated with emission control systems.

#### Section 46-580 Standards of Performance for Petroleum Refineries

##### 1. Applicability

- A. Except as provided in sub-subsections B through D of this subsection and Subsection 3 of this section, this section applies to the following facilities in petroleum refineries:
  - (1) fluid catalytic cracking unit catalyst regenerators and fuel gas combustion devices for which construction or modification commenced after June 11, 1973; and
  - (2) all Claus sulfur recovery plants, including those physically located outside the boundaries of a petroleum refinery which process gases produced within a petroleum refinery, for which construction or modification commenced after October 4, 1976.
- B. Claus plants of 20 long tons per day (LTD) or less are not subject to this section.
- C. A fluid catalytic cracking unit catalyst regenerator for which construction or modification commenced on or before January 17, 1984, is not subject to 40 CFR 60.104(b).

D. A fluid catalytic cracking unit in which a contact material reacts with petroleum derivatives to improve feedstock quality, and in which the contact material is regenerated by burning off coke and/or other deposits, and for which construction or modification commenced on or before January 17, 1984, is not subject to this section.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart J, as adopted under Section 46-535.

3. Special provisions. For the purposes of 40 CFR Part 60, Subpart J, the term "fixed capital cost of all depreciable components" as used in determining if a facility has been reconstructed, includes the fixed capital cost of all depreciable components which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following January 17, 1984. For purposes of this section, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

4. Definitions. As used in this section:

A. "Claus sulfur recovery plant" means a process unit which recovers sulfur from hydrogen sulfide by a vapor phase catalytic reaction of sulfur dioxide and hydrogen sulfide.

B. "Coke burn-off" means the coke removed from the surface of the fluid catalytic cracking unit catalyst by combustion in the catalyst regenerator. The rate of coke burn-off is calculated by the formula specified in 40 CFR 60.106.

C. "Fluid catalytic cracking unit" means a refinery process unit in which petroleum derivatives are continuously charged; hydrocarbon molecules in the presence of a catalyst suspended in a fluidized bed are fractured into small molecules, or react with a contact material suspended in a liquidized bed to improve feedstock quality for additional processing; and the catalyst or contact material is continuously regenerated by burning off coke and other deposits. The unit includes the riser, reactor, regenerator, air blowers, spent catalyst or contact material stripper, catalyst or contact material recovery equipment, and regenerator equipment for controlling air pollutant emissions and for heat recovery.

D. "Fluid catalytic cracking unit catalyst regenerator" means one or more regenerators (multiple regenerators) which comprise that portion of the fluid catalytic cracking unit in which coke burn-off and catalyst or contact material regeneration occurs, and includes the regenerator combustion air blower(s).

E. "Fuel gas" means any gas which is generated at a petroleum refinery and which is combusted. Fuel gas also includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Fuel gas does not include gases generated by catalytic cracking unit catalyst regenerators and fluid coking burners.



- F. "Fuel gas combustion device" means any equipment, such as process heater, boilers, and flares used to combust fuel gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid.
- G. "Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.
- H. "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum or through the redistillation, cracking or reforming of unfinished petroleum derivatives.

Section 46.585 Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978

1. Applicability

- A. Except as provided in sub-subsection B of this subsection, this section applies to each storage vessel for petroleum liquids which has a storage capacity greater than 40,000 gallons; and
  - (1) has a capacity not exceeding 65,000 gallons and for which construction or modification commenced after March 8, 1974, and prior to May 19, 1978; or
  - (2) has a capacity greater than 65,000 gallons for which construction or modification commenced after June 11, 1973 and prior to May 19, 1978.
- B. A storage vessel for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer is not subject to this section.

2. Requirements. Storage vessels subject to this section shall comply with 40 CFR Part 60, Subpart K, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.
- B. "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.
- C. "Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.
- D. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not

mean Nos. 2 through 6 fuel oils as specified in ASTM D396-78, gas turbine fuel oils Nos. 2-GT through 4-GT as specified in ASTM D2880-78, or diesel fuel oils Nos. 2-D and 4-D as specified in ASTM D975-78.

E. "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum or through the redistillation, cracking or reforming of unfinished petroleum derivatives.

F. "Storage vessel" means any tank, reservoir, or container used for the storage of petroleum liquids, but does not include:

(1) pressure vessels which are designed to operate in excess of 15 pounds per square inch gauge without emissions to the atmosphere, except under emergency conditions;

(2) subsurface caverns or porous rock reservoirs; or

(3) underground tanks, if the total volume of petroleum liquids added to and taken from a tank annually does not exceed twice the volume of the tank.

Section 46-586. Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to each storage vessel for petroleum liquids which has a storage capacity greater than 40,000 gallons and for which construction commenced after May 18, 1978.

B. Any petroleum liquid storage vessel with a capacity of less than 420,000 gallons used for petroleum or condensate stored, processed, or treated prior to custody transfer is not subject to this section.

2. Requirements. Storage vessels subject to this section shall comply with 40 CFR Part 60, Subpart Ka, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

B. "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.

C. "Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

- D. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Nos. 2 through 6 fuel oils as specified in ASTM D396-78, gas turbine fuel oils Nos. 2-GT through 4-GT as specified in ASTM D2880-78, or diesel fuel oils Nos. 2-D and 4-D as specified in ASTM D975-78.
- E. "Storage vessel" means any tank, reservoir, or container used for the storage of petroleum liquids, but does not include:
- (1) pressure vessels which are designed to operate in excess of 15 pounds per square inch gauge without emissions to the atmosphere, except under emergency conditions;
  - (2) subsurface caverns or porous rock reservoirs; or
  - (3) underground tanks, if the total volume of petroleum liquids added to and taken from a tank annually does not exceed twice the volume of the tank.

Section 46-587 Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984

1. Applicability

- A. Except as provided in sub-subsections B through D of this subsection, this section applies to each storage vessel with a capacity greater than or equal to 40 cubic meters ( $m^3$ ) used to store volatile organic liquids (VOLs), for which construction, reconstruction, or modification commenced after July 23, 1984.
- B. Except for record-keeping requirements specified in 40 CFR 60.116b(a) and (b), storage vessels with design capacity less than  $75 m^3$  are not subject to Section 46-530 or this section.
- C. Except for record-keeping requirements specified in 40 CFR 60.116(a) and (b), vessels either with a capacity greater than or equal to  $151 m^3$  storing a liquid with a maximum true vapor pressure less than 3.5 kPa or with a capacity greater than or equal to  $75 m^3$  but less than  $151 m^3$  storing a liquid with a maximum true vapor pressure less than 15.0 kPa are not subject to Section 46-530 or this section.
- D. The following storage vessels are not subject to this section:
- (1) vessels at coke oven by-product plants;
  - (2) pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere;
  - (3) vessels permanently attached to mobile vehicles such as trucks, rail cars, barges, or ships;

(4) vessels with a design capacity less than or equal to 1,589,874 m<sup>3</sup> used for petroleum or condensate stored, processed, or treated prior to custody transfer;

(5) vessels located at bulk gasoline plants;

(6) storage vessels located at gasoline service stations; and

(7) vessels used to store beverage alcohol.

2. Requirements. Storage vessels subject to this section shall comply with 40 CFR Part 60, Subpart Kb, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Bulk gasoline plant" means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under federal requirement or federal, state or local law, and discoverable by the Authority and any other person.

B. "Condensate" means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

C. "Custody transfer" means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.

D. "Maximum true vapor pressure" means the equilibrium partial pressure exerted by the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOLs stored above or below the ambient temperature, or at the local maximum monthly average temperature as reported by the National Weather Service for VOLs stored at the ambient temperature:

(1) as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks;

(2) as obtained from standard reference texts;

(3) as determined by ASTM Method D2879-83; or

(4) as determined by any other method approved by the Authority.

E. "Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

F. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.

G. "Storage vessel" means each tank, reservoir, or container used for the storage of volatile organic liquids, but does not include:

- (1) frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors; or
- (2) subsurface caverns or porous rock reservoirs.

H. "Volatile organic liquid" or "VOL" means any organic liquid which can emit volatile organic compounds into the atmosphere except those VOLs that emit only those compounds which the Authority has determined do not contribute appreciably to the formation of ozone. These compounds are identified in 42 FR 35314, 44 FR 32042, 45 FR 32424, and 45 FR 48941.

#### Section 46-590 Standards of Performance for Secondary Lead Smelters

1. Applicability. This section applies to the following facilities in secondary lead smelters for which construction or modification commenced after June 11, 1973:

- A. pot furnaces of more than 550 lb charging capacity;
- B. blast (cupola) furnaces; and
- C. reverberatory furnaces.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart L, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Reverberatory furnace" includes the following types of reverberatory furnaces:

- (1) stationary;
- (2) rotating;
- (3) rocking; and
- (4) tilting.

B. "Secondary lead smelter" means any facility producing lead from a leadbearing scrap material by smelting to the metallic form.

#### Section 46-595 Standards of Performance for Secondary Brass and Bronze Production Plants

1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities in secondary brass or bronze production plants for which construction or modification commenced after June 11, 1973:

- (1) reverberatory and electric furnaces of 2205 lb or greater production capacity; and
  - (2) blast (cupola) furnaces of 550 lb/h or greater production capacity.
- B. Furnaces from which molten brass or bronze are cast into the shape of finished products, such as foundry furnaces, are not subject to this section.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart M, as adopted under Section 46-535.
3. Definitions. As used in this section:
- A. "Blast furnace" means any reduction furnace to which sinter is charged and which forms separate layers of molten slag and lead bullion.
  - B. "Brass" or "bronze" means any metal alloy containing copper as its predominant constituent, and lesser amounts of zinc, tin, lead, or other metals.
  - C. "Electric furnace" means any furnace which uses electricity to produce over 50 percent of the heat required in the production of refined brass or bronze.
  - D. "Reverberatory furnace" includes the following types of reverberatory furnaces:
    - (1) stationary;
    - (2) rotating;
    - (3) rocking; and
    - (4) tilting.

Section 46-600 Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces for Which Construction Commenced After June 11, 1973

1. Applicability. This section applies to each basic oxygen process furnace for which construction or modification commenced after June 11, 1973.
2. Requirements. Basic oxygen process furnaces subject to this section shall comply with 40 CFR Part 60, Subpart N, as adopted under Section 46-535.
3. Definitions. As used in this section, "basic oxygen process furnace" or "BOPF" means any furnace with a refractory lining in which molten steel is produced by charging scrap metal, molten iron and flux materials or alloy additions into a vessel and by introducing a high volume of oxygen-rich gas. This does not include open hearth, blast, and reverberatory furnaces.

Section 46-602 Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction Commenced After January 20, 1983

1. Applicability. This section applies to the following facilities in an iron and steel plant for which construction, modification, or reconstruction commenced after January 20, 1983:
  - A. top-down BOPFs; and
  - B. hot-metal transfer stations and skimming stations used with bottom-blown or top-blown BOPFs.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart Na and those provisions of 40 CFR Part 60, Subpart N, as adopted in Section 46-535, applicable to facilities commencing construction, modification or reconstruction after January 20, 1983.
3. Definitions. As used in this section:
  - A. "Basic oxygen process furnace" or "BOPF" means any furnace with a refractory lining in which molten steel is produced by charging scrap metal, molten iron, and flux materials or alloy additions into a vessel and by introducing a high volume of oxygen-rich gas. This does not include open hearth, blast, and reverberatory furnaces.
  - B. "Bottom-blown furnace" means any BOPF in which oxygen and other combustion gases are introduced to the bath of molten iron through tuyeres in the bottom of the vessel or through tuyeres in the bottom and sides of the vessel.
  - C. "Skimming station" means the facility where slag is mechanically raked from the top of the bath of molten iron.
  - D. "Top-blown furnace" means any BOPF in which oxygen is introduced to the bath of molten iron by means of an oxygen lance inserted from the top of the vessel.

Section 46-605 Standards of Performance for Sewage Treatment Plants

1. Applicability. This section applies to the following incinerators for which construction or modification commenced after June 11, 1973:
  - A. each incinerator that combusts wastes containing more than 10 percent sewage sludge (dry basis) produced by municipal sewage treatment plants; or
  - B. each incinerator that charges more than 2,205 pounds per day municipal sewage sludge (dry basis).
2. Requirements. Incinerators subject to this section shall comply with 40 CFR Part 60, Subpart O, as adopted under Section 46-535.

Section 46-606 Standards of Performance for Primary Copper Smelters

1. Applicability. This section applies to the following facilities in primary copper smelters for which construction or modification commenced after October 16, 1974:

- A. dryer;
- B. roaster;
- C. smelting furnace; and
- D. copper converter.

2. Requirements. Emission units subject to this section shall comply with 40 CFR Part 60, Subpart P, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Copper converter" means any vessel to which copper matte is charged and oxidized to copper.
- B. "Dryer" means any facility in which a copper sulfide ore concentrate charge is heated in the presence of air to eliminate a portion of the moisture from the charge, provided less than 5 percent of the sulfur contained in the charge is eliminated in the facility.
- C. "Primary copper smelter" means any installation or any intermediate process engaged in the production of copper from copper sulfide ore concentrates through the use of pyrometallurgical techniques.
- D. "Roaster" means any facility in which a copper sulfide ore concentrate charge is heated in the presence of air to eliminate a significant portion (5 percent or more) of the sulfur contained in the charge.
- E. "Smelting" means processing techniques for the melting of a copper sulfide ore concentrate or calcine charge leading to the formation of separate layers of molten slag, molten copper, and/or copper matte.
- F. "Smelting furnace" means any vessel in which the smelting of copper sulfide ore concentrates or calcines is performed and in which the heat necessary for smelting is provided by an electric current, rapid oxidation of a portion of the sulfur contained in the concentrate as it passes through an oxidizing atmosphere, or the combustion of a fossil fuel.

Section 46-607 Standards of Performance for Primary Zinc Smelters

1. Applicability. This section applies to the following facilities in primary zinc smelters for which construction or modification commenced after October 16, 1974:

- A. roaster; and



B. sintering machine.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart Q, as adopted in Section 46-535.

3. Definitions. As used in this section:

A. "Primary zinc smelter" means any installation engaged in the production, or any intermediate process in the production, of zinc or zinc oxide from zinc sulfide ore concentrates through the use of pyrometallurgical techniques.

B. "Roaster" means any facility in which a copper sulfide ore concentrate charge is heated in the presence of air to eliminate a significant portion (10 percent or more) of the sulfur contained in the charge.

C. "Sintering machine" means any furnace in which calcines are heated in the presence of air to agglomerate the calcines into a hard porous mass called sinter.

#### Section 46-608 Standards of Performance for Primary Lead Smelters

1. Applicability. This section applies to the following facilities in primary lead smelters for which construction or modification commenced after October 16, 1974:

A. sintering machine;

B. sintering machine discharge end;

C. blast furnace;

D. dross reverberatory furnace;

E. electric smelting furnace; and

F. converter.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart R, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Blast furnace" means any furnace used to recover metal from slag.

B. "Converter" means any vessel to which lead concentrate or bullion is charged and refined.

C. "Dross reverberatory furnace" means any furnace used for the removal or refining of impurities from lead bullion.

D. "Electric smelting furnace" means any furnace in which the heat necessary for smelting of the lead sulfide ore concentrate charge is

generated by passing an electric current through a portion of the molten mass in the furnace.

E. "Primary lead smelter" means any installation or any intermediate process engaged in the production of lead from lead sulfide ore concentrates through the use of pyrometallurgical techniques.

F. "Sintering machine" means any furnace in which a lead sulfide ore concentrate charge is heated in the presence of air to agglomerate the charge into a hard porous mass called sinter.

G. "Sintering machine discharge end" means any apparatus which receives sinter as it is discharged from the conveying grate of a sintering machine.

#### Section 46-609 Standards of Performance for Primary Aluminum Reduction Plants

1. Applicability. This section applies to the following facilities in primary aluminum reduction plants for which construction or modification commenced after October 23, 1974:

A. potroom groups; and

B. anode bake plants.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart S, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Anode bake plant" means a facility which produces carbon anodes for use in a primary aluminum reduction plant.

B. "Potroom" means a building unit which houses a group of electrolytic cells in which aluminum is produced.

C. "Potroom group" means an uncontrolled potroom, a potroom which is controlled individually, or a group of potrooms or potroom segments ducted to a common control system.

D. "Primary aluminum reduction plant" means any facility manufacturing aluminum by electrolytic reduction.

#### Section 46-610 Standards of Performance for Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978

1. Applicability. Except as provided in subsection 3 of this section, this section applies to the following facilities for which construction or modification commenced after September 18, 1978:

A. each electric utility steam generating unit that is capable of combusting more than 250 million Btu/hour heat input of fossil fuel (either alone or in combination with any other fuel); and

B. each electric utility combined cycle gas turbine that is capable of combusting more than 250 million Btu/hour heat input of fossil fuel in the steam generator, only for emissions resulting from combustion of fuels in the steam generating unit.

2. Requirements. Facility subject to this section shall comply with 40 CFR Part 60, Subpart Da, as adopted under Section 46-535.

3. Special provisions. The following changes shall not subject a facility to this section:

A. any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials, other than fossil fuels; or

B. any change to an existing steam generating unit originally designed to fire gaseous or liquid fossil fuels, to accommodate the use of any other fossil or nonfossil fuel.

4. Definitions. As used in this section:

A. "Combined cycle gas turbine" means a stationary turbine combustion system where heat from the turbine exhaust gases is recovered by a steam generating unit.

B. "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam applied to a steam distribution system for the purpose of providing steam to a steam electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the unit.

C. "Fossil fuel" means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.

D. "Steam generating unit" means any furnace, boiler, or other device used for combusting fuel for the purpose of producing steam, including fossil fuel-fired steam generators associated with combined cycle gas turbines, but excluding nuclear steam generators.

Section 46-611 Standards of Performance for the Phosphate Fertilizer Industry Superphosphoric Acid Plants

1. Applicability. This section applies to each superphosphoric acid plant with a design capacity of more than 15 tons of equivalent  $P_2O_5$  feed per calendar day for which construction or modification commenced after October 22, 1974, including any combination of evaporators, hot wells, acid sumps, and cooling tanks.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart U, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Equivalent  $P_2O_5$  feed" means the quantity of phosphorus, expressed as phosphorous pentoxide, fed to the process.
- B. "Superphosphoric acid plant" means any facility which concentrates wet-process phosphoric acid to 66 percent or greater  $P_2O_5$  content by weight for eventual consumption as a fertilizer.

Section 46-612 Standards of Performance for the Phosphate Fertilizer Industry:  
Diammonium Phosphate Plants

- 1. Applicability. This section applies to each granular diammonium phosphate plant with a design capacity of more than 15 tons of equivalent  $P_2O_5$  feed per calendar day for which construction or modification commenced after October 22, 1974, and includes any combination of reactors, granulators, dryers, coolers, screens, and mills.
- 2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart V, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Equivalent  $P_2O_5$  feed" means the quantity of phosphorus, expressed as phosphorous pentoxide, fed to the process.
- B. "Granular diammonium phosphate plant" means any plant manufacturing granular diammonium phosphate by reacting phosphoric acid with ammonia.

Section 46-613 Standards of Performance for the Phosphate Fertilizer Industry:  
Triple Superphosphate Plants

- 1. Applicability. This section applies to each triple superphosphate plant with a design capacity of more than 15 tons of equivalent  $P_2O_5$  feed per calendar day for which construction or modification commenced after October 22, 1974, including any combination of mixers, curing belts (dens), reactors, granulators, dryers, cookers, screens, mills, and facilities which store run-of-pile triple superphosphate.
- 2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart W, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Equivalent  $P_2O_5$  feed" means the quantity of phosphorus, expressed as phosphorous pentoxide, fed to the process.
- B. "Run-of-pile triple superphosphate" means any triple superphosphate that has not been processed in a granulator and is composed of particles, at least 25 percent by weight of which (when not caked) will pass through a 16 mesh screen.

C. "Triple superphosphate plant" means any facility manufacturing triple superphosphate by reacting phosphate rock with phosphoric acid. A run-of-pile triple superphosphate plant includes curing and storing.

Section 46-614 Standards of Performance for the Phosphate Fertilizer Industry:  
Granular Triple Superphosphate Storage Facilities

1. Applicability. This section applies to each granular triple superphosphate storage facility for which construction or modification commenced after October 22, 1974, including any combination of storage or curing piles, conveyors, elevators, screens, and mills.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart X, as adopted under Section 46-535.
3. Definitions. As used in this section, "granular triple superphosphate storage facility" means any facility curing or storing granular triple superphosphate.

Section 46-615 Standards of Performance for Coal Preparation Plants

1. Applicability. This rule applies to the following facilities in coal preparation plants which process more than 200 tons per day, and for which construction or modification commenced after October 24, 1974:
  - A. thermal dryers;
  - B. pneumatic coal-cleaning equipment (air tables);
  - D. coal processing and conveying equipment (including breakers and crushers);
  - E. coal transfer and loading systems.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart Y, as adopted under Section 46-535.
3. Definitions. As used in this section:
  - A. "Coal" means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388-77.
  - B. "Coal preparation plant" means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.
  - C. "Coal processing and conveying equipment" means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts.

- D. "Coal storage system" means any facility used to store coal except for open storage piles.
- E. "Pneumatic coal-cleaning equipment" means any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).
- F. "Thermal dryer" means any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.
- G. "Transfer and loading systems" means any facility used to transfer and load coal for shipment.

Section 46-618 Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants

- 1. Applicability. This section applies to each wet-process phosphoric acid plant with a design capacity of more than 15 tons of equivalent  $P_2O_5$  feed per calendar day for which construction or modification commenced after October 22, 1974, including any combination of reactors, filters, evaporators, and hot wells.
- 2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart T, as adopted under Section 46-535.
- 3. Definitions. As used in this section:
  - A. "Equivalent  $P_2O_5$  feed" means the quantity of phosphorus, expressed as phosphorous pentoxide, fed to the process.
  - B. "Wet-process phosphoric acid plant" means any facility manufacturing phosphoric acid by reacting phosphate rock and acid.

Section 46-620 Standards of Performance for Ferroalloy Production Facilities

- 1. Applicability. This section applies to the following facilities for which construction or modification commenced after October 21, 1974:
  - A. electric submerged arc furnaces which produce silicon metal, ferrosilicon, calcium silicon, silicomanganese zirconium, ferrochrome silicon, silvery iron, high-carbon ferrochrome, charge chrome, standard ferromanganese, silicomanganese, ferromanganese silicon, or calcium carbide; and
  - B. dust-handling equipment.
- 2. Requirements. Ferroalloy production facilities subject to this section shall comply with 40 CFR Part 60, Subpart Z, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Calcium carbide" means material containing 70 to 85 percent calcium carbide by weight.
- B. "Calcium silicon" means that alloy as defined by ASTM Designation A495-76.
- C. "Charge chrome" means that alloy containing 52 to 70 percent by weight chromium, 5 to 8 percent by weight carbon, and 3 to 6 percent by weight silicon.
- D. "Dust-handling equipment" means any equipment used to handle particulate matter collected by the air pollution control device (and located at or near such device) serving an electric submerged arc furnace subject to this section.
- E. "Electric submerged arc furnace" means any furnace in which electrical energy is converted to heat energy by transmission of current between electrodes partially submerged in the furnace charge.
- F. "Ferrochrome silicon" means that alloy as defined by ASTM Designation A482-76.
- G. "Ferromanganese silicon" means that alloy containing 63 to 66 percent by weight manganese, 28 to 32 percent by weight silicon, and a maximum of 0.08 percent by weight carbon.
- H. "Ferrosilicon" means that alloy as defined by ASTM Designation A100-69 grades A, B, C, D, and E, which contains 50 or more percent by weight silicon.
- I. "High-carbon ferrochrome" means that alloy as defined by ASTM Designation A101-73.
- J. "Silicomanganese" means that alloy as defined by ASTM Designation A483-64.
- K. "Silicomanganese zirconium" means that alloy containing 60 to 65 percent by weight silicon, 1.5 to 2.5 percent by weight calcium, 5 to 7 percent by weight zirconium, 0.75 to 1.25 percent by weight aluminum, 5 to 7 percent by weight manganese, and 2 to 3 percent by weight barium.
- L. "Silvery iron" means that alloy as defined by ASTM Designation A100-69, which contains less than 30 percent silicon.
- M. "Silicon metal" means any silicon alloy containing more than 96 percent silicon by weight.
- N. "Standard ferromanganese" means that alloy as defined by ASTM Designation A99-76.

Section 46-625 Standards of Performance for Steel Plants: Electric Arc Furnaces  
Constructed After October 31, 1974 and On or Before August 17, 1983

1. Applicability. This rule applies to the following facilities in steel plants that produce carbon, alloy, or specialty steels for which construction, modification or reconstruction commenced after October 31, 1974, and on or before August 17, 1983:
  - A. electric arc furnaces; and
  - B. dust-handling systems.
2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart AA, as adopted under Section 46-535.
3. Definitions. As used in this section:
  - A. "Dust-handling equipment" means any equipment used to handle particulate matter collected by the air pollution control device (and located at or near such device) serving an electric arc furnace subject to this rule.
  - B. "Electric arc furnace" or "EAF" means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes.

Section 46-626 Standards of Performance for Steel Plants: Electric Arc Furnaces  
and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983

1. Applicability.
  - A. Except as provided in sub-subsection B of this subsection, this rule applies to the following facilities in steel plants that produce carbon, alloy, or specialty steels for which construction, modification, or reconstruction commences after August 17, 1983:
    - (1) electric arc furnaces;
    - (2) argon-oxygen decarburization vessels; and
    - (3) dust-handling systems.
  - B. Furnaces that continuously feed direct-reduced iron ore pellets as the primary source of iron are not subject to this rule.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart AAa, as adopted under Section 46-535.
3. Definitions. As used in this section:
  - A. "Argon-oxygen decarburization vessel" or "AOD vessel" means any closed-bottom refractory-lined converter vessel with submerged tuyeres through which gaseous mixtures containing argon and oxygen or nitrogen may be blown into molten steel for further refining.



B. "Dust-handling system" means equipment used to handle particulate matter collected by the control device for an electric arc furnace or AOD vessel subject to this section. For the purposes of this section, the dust-handling system shall consist of the control device dust hoppers, the dust-conveying equipment, any central dust storage equipment, the dust-treating equipment, dust transfer equipment (from storage to truck), and any secondary control devices used with the dust transfer equipment.

C. "Electric arc furnace" or "EAF" means a furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. An electric arc furnace shall consist of the furnace shell and roof and the transformer.

#### Section 46-630 Standards of Performance for Kraft Pulp Mills

1. Applicability. Except as provided in subsection 3 of this section and 40 CFR 60.283(a)(1)(iv), this section applies to the following facilities in kraft pulp mills for which construction or modification commenced after September 24, 1976:

A. digester system;

B. brown stock washer system;

C. multiple-effect evaporator system;

D. recovery furnace;

E. smelt dissolving tank;

F. lime kiln; and

G. condensate stripper system

2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart BB, as adopted under Section 46-535.

3. Special Provisions. In pulp mills where kraft pulping is combined with neutral sulfite semichemical pulping, this rule applies when any portion of the material charged to an affected facility is produced by the kraft pulping operation.

4. Definitions. As used in this section:

A. "Brown stock washer system" means brown stock washers and associated knotters, vacuum pumps, and filtrate tanks used to wash the pulp following the digestion system. Diffusion washers are excluded from this definition.

B. "Condensate stripper system" means a column and associated condensers used to strip, with air or steam, TRS compounds from condensate streams from various processes within a kraft pulp mill.

- C. "Digester system" means each continuous digester or each batch digester used for the cooking of wood in white liquor, and associated flash tank(s), blow tank(s), chip steamer(s), and condenser(s).
- D. "Kraft pulp mill" means any stationary source which produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of kraft pulp mill.
- E. "Lime kiln" means a unit used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.
- F. "Multiple-effect evaporator system" means the multiple-effect evaporators and associated condenser(s) and hotwell(s) used to concentrate the spent cooking liquid that is separated from the pulp (black liquor).
- G. "Neutral sulfite semichemical pulping operation" means any operation in which pulp is produced from wood by cooking (digesting) wood chips in a solution of sodium sulfite and sodium bicarbonate, followed by mechanical defibrating (grinding).
- H. "Recovery furnace" means either a straight kraft recovery furnace or a cross recovery furnace, and includes the direct-contact evaporator for a direct-contact furnace.
- I. "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the recovery furnace.
- J. "Total reduced sulfur" or "TRS" means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during the kraft pulping operation and measured by EPA Reference method 16.

#### Section 46-635 Standards of Performance for Glass Manufacturing Plants

##### 1. Applicability

- A. Except as provided in sub-subsection B of this subsection, this section applies to each glass melting furnace for which construction or modification commenced after June 15, 1979.
- B. The following facilities are not subject to this section:
- (1) hand glass melting furnaces;
  - (2) glass melting furnaces designed to produce less than 4,550 kilograms of glass per day; and
  - (3) all-electric melters.

2. Requirements. Glass melting furnaces subject to this section shall comply with 40 CFR Part 60, Subpart CC, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "All-electric melters" means a glass melting furnace in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, although some fossil fuel may be charged to the furnace as raw material only.

B. "Glass melting furnace" means a unit comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass. The unit includes foundations, superstructure and retaining walls, raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendages for conditioning and distributing molten glass to forming apparatuses. The forming apparatuses, including the float bath used in flat glass manufacturing and flow channels in wool fiberglass and textile fiberglass manufacturing, are not considered part of the glass melting furnace.

C. "Hand glass melting furnace" means a glass melting furnace where the molten glass is removed from the furnace by a glassworker using a blowpipe or a pontil.

#### Section 46-640 Standards of Performance for Grain Elevators

1. Applicability. Except as provided in 40 CFR 60.304(b), this section applies to each of the following facilities at any grain terminal elevator or any grain storage elevator, for which construction, modification, or reconstruction commenced after August 3, 1978:

A. truck loading station;

B. truck unloading station;

C. barge and ship loading station;

D. barge and ship unloading station;

E. railcar loading station;

F. railcar unloading station;

G. grain dryer; and

H. all grain handling operations.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart DD, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Grain" means corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.
- B. "Grain elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded.
- C. "Grain storage elevator" means any grain elevator located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity of 1 million bushels.
- D. "Grain handling operations" include bucket elevators or legs (excluding legs used to unload barges or ships), scale hoppers and surge bins (garners), turn heads, scalpers, cleaners, trippers, and the headhouse and other such structures.
- E. "Grain terminal elevator" means any grain elevator which has a permanent storage capacity of more than 2.5 million U. S. bushels, except those located at animal food manufacturers, pet food manufacturers, cereal manufacturers, breweries, and livestock feedlots.
- F. "Rail car" means railroad hopper car or boxcar.

Section 46-642 Standards of Performance for Metal Furniture Surface Coating

1. Applicability

- A. Except as provided for in sub-subsection B of this subsection, this section applies to each metal furniture surface coating operation in which organic coatings are applied and for which construction, modification, or reconstruction commenced after November 28, 1980.
- B. Any metal furniture surface coating operation which uses less than 3,842 liters of coating (as applied) per year, and keeps purchase or inventory records or other data necessary to substantiate annual coating usage at the facility for at least 2 years, is not subject to any other provisions of this section.

2. Requirements. Metal furniture surface coating operations subject to this section shall comply with 40 CFR Part 60, Subpart EE, as adopted under Section 46-535.

3. Definitions. As used in this section, "organic coating" means any coating used in a surface coating operation, including dilution solvents, from which volatile organic compound emissions occur during the application or the curing process. As used in this section, this term does not include powder coatings.

Section 46-645 Standards of Performance for Gas Turbines

1. Applicability. This section applies to all stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour.

based on the lower heating value of the fuel fired, for which construction, modification, or reconstruction commenced after October 3, 1977, except as provided in 40 CFR 60.332(e) and (j).

2. Requirements. Stationary gas turbines subject to this section shall comply with 40 CFR Part 60, Subpart GG, as adopted under Section 46-535.
3. Definitions. As used in this section, "stationary gas turbine" means any simple cycle gas turbine, regenerative cycle gas turbine, or any gas turbine portion of a combined cycle steam/electric generating system that is not self-propelled. It may, however, be mounted on a vehicle for portability.

#### Section 46-647 Standards of Performance for Lime Manufacturing Plants

##### 1. Applicability

- A. Except as provided for in sub-subsection B of this subsection, this section applies to each rotary lime kiln used in the manufacture of lime for which construction or modification commenced after May 3, 1977.
- B. Facilities used in the manufacture of lime at kraft pulp mills are not subject to this section.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart HH, as adopted under Section 46-535.

##### 3. Definitions. As used in this section:

- A. "Lime manufacturing plant" means any plant which uses a rotary lime kiln to produce lime product from limestone by calcination.
- B. "Rotary lime kiln" means a unit with an inclined rotating drum that is used to produce a lime product from limestone by calcination.

#### Section 46-650 Standards of Performance for Lead-Acid Battery Manufacturing Plants

1. Applicability. This section applies to the following facilities at 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 6.5 tons, and for which construction or modification commenced after January 14, 1980:

- A. grid casting facility;
- B. paste mixing facility;
- C. three-process operation facility;
- D. lead oxide manufacturing facility;
- E. lead reclamation facility; and
- F. other lead-emitting operations.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart KK, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Grid casting facility" means the facility which includes all lead melting pots and machines used for casting the grid used in battery manufacturing.

B. "Lead-acid battery manufacturing plant" means any plant that produces a storage battery using lead and lead compounds for the plates and sulfuric acid for the electrolyte.

C. "Lead oxide manufacturing facility" means a facility that produces lead oxide from lead, including product recovery.

D. "Lead reclamation facility" means the facility that remelts lead scrap and casts it into lead ingots for use in the battery manufacturing process, and which is not a furnace subject to Section 46-590.

E. "Other lead-emitting operation" means any lead-acid battery manufacturing plant operation from which lead emissions are collected and ducted to the atmosphere and which is not part of a grid casting, lead oxide manufacturing, lead reclamation, paste mixing, or three-process operation facility, or a furnace subject to Section 46-590.

F. "Paste mixing facility" means the facility including lead oxide storage, conveying, weighting, metering, and charging operations; paste blending, handling, and cooling operation; and plate pasting, takeoff, cooling, and drying operations.

G. "Three-process operation facility" means the facility including those processes involved with plate stacking, burning or strap casting, and assembly of elements into the battery case.

#### Section 46-652 Standards of Performance for Metallic Mineral Processing Plants

##### 1. Applicability

A. Except as provided for in sub-subsections B and C of this subsection, this section applies to the following facilities in metallic mineral processing plants for which construction or modification commenced after August 24, 1982:

(1) each crusher and screen in open-pit mines; and

(2) each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, rail car loading station, and rail car unloading station at the mill or concentrator.

B. Facilities located in underground mines are not subject to this section.

- C. At uranium ore processing plants, all facilities subsequent to and including the beneficiation of uranium ore are not subject to this section.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart LL, as adopted under Section 46-535.
3. Definitions. As used in this section:
- A. "Crusher" means a machine used to crush any metallic minerals and includes feeders or conveyors located immediately below the crushing surfaces. Crushers include, but are not limited to, the following types: jaw, gyratory, cone, and hammermill.
- B. "Metallic mineral processing plant" means any combination of equipment that produces metallic mineral concentrates from ore. Metallic mineral processing commences with the mining of ore and includes all operations either:
- (1) up to and including the loading of wet or dry concentrates or solutions of metallic minerals for transfer to facilities at non-adjacent locations that will subsequently process metallic concentrates into purified metals (or other products, or
  - (2) up to and including all material transfer and storage operations that precede the operations that produce refined metals (or other products) from metallic mineral concentrates at facilities adjacent to the metallic mineral processing plant.
- This definition shall not be construed as requiring that mining of ore be conducted in order for the combination of equipment to be considered a metallic mineral processing plant.
- C. "Product packaging station" means the equipment used to fill containers with metallic compounds or metallic mineral concentrates.
- D. "Rail car loading station" means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into rail cars.
- E. "Rail car unloading station" means that portion of a metallic mineral processing plant where metallic ore is unloaded from a rail car into a hopper, screen, or crusher.
- F. "Screen" means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).
- G. "Storage bin" means a facility for storage (including surge bins and hoppers) of metallic minerals prior to further processing or loading.

- H. "Thermal dryer" means a unit in which the surface moisture content of a metallic mineral or a metallic mineral concentrate is reduced by direct or indirect contact with a heated gas stream.
- I. "Truck loading station" means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into trucks.
- J. "Truck unloading station" means that portion of a metallic mineral processing plant where metallic ore is unloaded from a truck into a hopper, screen, or crusher.

Section 46-653 Standards of Performance for Automobile and Light-Duty Truck Surface Coating Operations

1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities in an automobile or light-duty truck assembly plant, for which construction, reconstruction, or modification commenced after October 5, 1979:

- (1) each prime coat operation;
- (2) each guide coat operation; and
- (3) each topcoat operation.

B. Operations used to coat plastic body components or all-plastic automobile or light-duty truck bodies on separate coating lines are not subject to this section. The attachment of plastic body parts to a metal body before the body is coated does not cause the metal body coating operation to be exempted.

2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart MM, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Automobile" means a motor vehicle capable of carrying no more than 12 passengers.
- B. "Automobile and light-duty truck body" means the exterior surface of an automobile or light-duty truck including hoods, fenders, cargo boxes, doors, and grill opening panels.
- C. "Guide coat operation" means the guide coat spray booth, flash-off area and bake oven(s) which are used to apply and dry or cure a surface coating between the prime coat and topcoat operations on the components of automobile and light-duty truck bodies.
- D. "Light-duty truck" means any motor vehicle rated at 3,850 kilograms gross vehicle weight or less, designed mainly to transport property.



E. "Plastic body" means an automobile or light-duty truck body constructed of synthetic organic material.

F. "Prime coat operation" means the prime coat spray booth or dip tank, flash-off area, and bake oven(s) which are used to apply and dry or cure the initial coating on components of automobile or light-duty truck bodies.

### Section 46-655 Standards of Performance for Phosphate Rock Plants

#### 1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities used in phosphate rock plants which have a maximum plant production capacity greater than 4 tons/hr. and for which construction, modification, or reconstruction commenced after September 21, 1979:

(1) dryers;

(2) calciners;

(3) grinders; and

(4) ground rock handling and storage facilities.

B. Facilities used in producing or preparing phosphate rock solely for consumption in elemental phosphorus production are not subject to this section.

2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart NN, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Calciner" means a unit in which the moisture and organic matter of phosphate rock is reduced within a combustion chamber.

B. "Dryer" means a unit in which the moisture content of phosphate rock is reduced by contact with a heated gas stream.

C. "Grinder" means a unit which is used to pulverize dry phosphate rock to the final product size used in the manufacture of phosphate fertilizer and does not include crushing devices used in mining.

### Section 46-656 Standards of Performance for Ammonium Sulfate Manufacture

1. Applicability. This section applies to each ammonium sulfate dryer within an ammonium sulfate manufacturing plant in the caprolactam by-product, synthetic, and coke over by-product sectors of the ammonium sulfate industry for which construction or modification commenced after February 4, 1980.

2. Requirements. Ammonium sulfate dryers subject to this section shall comply with 40 CFR part 60, Subpart PP, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Ammonium sulfate dryer" means a unit or vessel into which ammonium sulfate is charged for the purpose of reducing the moisture content of the product using a heated gas stream. The unit includes foundations, superstructure, material charger systems, exhaust systems, and integral control systems and instrumentation.

B. "Ammonium sulfate manufacturing plant" means any plant which produces ammonium sulfate.

C. "Caprolactam by-product ammonium sulfate manufacturing plant" means any plant which produces ammonium sulfate as a by-product from process streams generated during caprolactam manufacture.

D. "Coke oven by-product ammonium sulfate manufacturing plant" means any plant which produces ammonium sulfate by reacting sulfuric acid with ammonia recovered as a by-product from the manufacture of coke.

E. "Synthetic ammonium sulfate manufacturing plant" means any plant which produces ammonium sulfate by direct combination of ammonia and sulfuric acid.

Section 46-650 Standards of Performance for Graphics Arts Industry Publication Rotogravure Printing

1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to each publication rotogravure printing press for which construction, modification, or reconstruction commenced after October 28, 1980.

B. Proof presses are not subject to this section.

2. Requirements. Publication rotogravure printing presses subject to this section shall comply with 40 CFR Part 60, Subpart QQ, as adopted under Section 46-535.

3. Definitions. As used in this section:

A. "Proof press" means any device used only to check the quality of the image formation of newly engraved or etched gravure cylinders and print only non-saleable items.

B. "Publication rotogravure printing press" means any number of rotogravure printing units capable of printing simultaneously on the same continuous web or substrate and includes any associated device for continuously cutting and folding the printed web, where the following saleable paper products are printed:

- (1) catalogues, including mail order and premium;
- (2) direct-mail advertisements, including circulars, letters, pamphlets, cards, and printed envelopes;
- (3) display advertisements, including general posters, outdoor advertisements, car cards, window posters, counter and floor displays, point-of-purchase, and other printed display material;
- (4) magazines;
- (5) miscellaneous advertisements, including brochures, pamphlets, catalogue sheets, circular folders, announcements, package inserts, book jackets, market circulars, magazine inserts, and shopping news;
- (6) newspapers, magazine and comic supplements for newspapers, and preprinted newspaper inserts, including hi-fi and spectacolor rolls and section;
- (7) periodicals; and
- (8) telephone and other directories, including business reference services.

Section 46-662 Standards of Performance for Tape and Label Surface Coating Operations

1. Applicability. This section applies to each coating line used in the manufacture of pressure-sensitive tape and label materials for which construction, modification, or reconstruction commenced after December 30, 1980.
2. Requirements
  - A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart RR, as adopted under Section 46-535.
  - B. Any facility which inputs to the coating process 45 Mg of VOC or less per 12-month period is not subject to the emission limits of 40 CFR 60.442(a) unless and until the amount of VOC input exceeds 45 Mg per 12-month period.
3. Definitions. As used in this section:
  - A. "Coating line" means any number or combination of adhesive, release, or precoat coating applicators, flashoff areas, and ovens which coat a continuous web, located between a web unwind station and a web rewind station, to produce pressure-sensitive tape and label materials.
  - B. "Flashoff area" means the portion of a coating line after the coating applicator and usually before the oven entrance.

Section 46-665 Standards of Performance for Industrial Surface Coating: Large Appliances

1. Applicability. This section applies to each surface coating operation in a large appliance surface coating line for which construction, modification or reconstruction commenced after December 24, 1980.
2. Requirements. Surface coating operations subject to this rule shall comply with 40 CFR Part 60, Subpart SS, as adopted under Section 46-535.
3. Definitions. As used in this section:
  - A. "Coating application station" means that portion of the coating operation where a prime coat or a topcoat is applied to large appliance parts or products.
  - B. "Large appliance surface coating line" means that portion of a large appliance assembly plant engaged in the application and curing of organic surface coatings on large appliance parts or products.
  - C. "Surface coating operation" means the system on a large appliance surface coating line used to apply and dry or cure an organic coating on the surface of large appliance parts or products. The surface coating operation may be a prime coat or a topcoat operation and includes the coating application station(s), flashoff area, and curing oven.

Section 46-670 Standards of Performance for Metal Coil Surface Coating

1. Applicability. This section applies to the following facilities in a metal coil surface coating operation for which construction, modification or reconstruction commenced after January 5, 1981:
  - A. each prime coat operation;
  - B. each finish coat operation; and
  - C. each prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously.
2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart TT, as adopted under Section 46-535.
3. Definitions. As used in this section:
  - A. "Coating" means any organic material that is applied to the surface of metal coil.
  - B. "Coating application station" means that portion of the coating operation where the coating is applied to the surface of the metal coil, including the flashoff area between the coating application station and the curing oven.

- C. "Finish coat operation" means the coating application station, curing oven, and quench station used to apply and dry or cure the final coating(s) on the surface of the metal coil. Where only a single coating is applied to the metal coil that coating is considered a finish coat.
- D. "Metal coil surface coating operation" means the application system used to apply an organic coating to the surface of any continuous metal strip with thickness of 0.006 inches or more that is packaged in a roll or coil.
- E. "Prime coat operation" means the coating application station, curing oven, and quench station used to apply and dry or cure the initial coating(s) of the surface of the metal coil.

Section 46-675 Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture

1. Applicability

- A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities:
  - (1) each saturator and each mineral handling and storage facility at asphalt roofing plants for which construction or modification commenced after November 18, 1980; and
  - (2) each asphalt storage tank and each blowing still at asphalt processing plants, petroleum refineries, and asphalt roofing plants that processes and/or stores:
    - (a) asphalt used for roofing only or for roofing and other purposes for which construction or modification commenced after November 18, 1980; or
    - (b) only nonroofing asphalts for which construction or modification commenced after May 26, 1981
- B. Storage tanks containing cutback asphalts (asphalts diluted with solvents to reduce viscosity for low temperature applications) and emulsified asphalts (asphalts dispersed in water with an emulsifying agent) are not subject to this section.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart UU, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Asphalt processing" means the storage and blowing of asphalt.
- B. "Asphalt processing plant" means a plant which blows asphalt for use in the manufacture of asphalt products.

- C. "Asphalt roofing plant" means a plant which produces asphalt roofing products (shingles, roll roofing, siding, or saturated felt).
- D. "Asphalt storage tank" means any tank used to store asphalt at asphalt roofing plants, petroleum refineries, and asphalt processing plants.
- E. "Blowing still" means the equipment in which air is blown through asphalt flux to change the softening point and penetration rate.
- F. "Mineral handling and storage facility" means the areas in asphalt roofing plants in which minerals are unloaded from a carrier, the conveyor transfer points between the carrier and the storage silos, and the storage silos.
- G. "Saturator" means the equipment in which asphalt is applied to felt to make asphalt roofing products. The term saturator includes the saturator, wet looper, and coater.

Section 25-680 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI)

- 1. Applicability. This section applies to the group of all fugitive emissions equipment within a process unit in the synthetic organic chemicals manufacturing industry for which construction or modification commenced after January 5, 1981.
- 2. Requirements
  - A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart VV, as adopted under Section 46-535.
  - B. The following facilities are not subject to 40 CFR 60.482 provided that records are maintained as required in 40 CFR 60.486(i):
    - (1) any facility with the design capacity to produce less than 1,000 Mg/yr.;
    - (2) a facility producing heavy liquid chemicals only from heavy liquid feed or raw materials;
    - (3) any facility that produces beverage alcohol; or
    - (4) any facility that has no equipment in VOC service.
- 3. Special Provisions. Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this rule.
- 4. Definitions. As used in this section:
  - A. "Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of process equipment.

- B. "Fugitive emissions equipment" means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by 40 CFR Part 60, Subpart VV.
- C. "Open-ended valve or line" means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.
- D. "Process unit" means components assembled to produce, as intermediate or final product, one or more of the chemicals listed in 40 CFR 60.489. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.
- E. "Synthetic organic chemicals manufacturing industry" or "SOCMI," means the industry that produces, as intermediates or final products, one or more of the chemicals listed in 40 CFR 60.489.

Section 46-685 Standards of Performance for the Beverage Can Surface Coating Industry

1. Applicability. This section applies to the following facilities in beverage can surface coating lines for which construction, modification, or reconstruction commenced after November 26, 1980:
  - A. each exterior base coat operation;
  - B. each overvarnish coating operation; and
  - C. each inside spray coating operation.
2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart WW, as adopted under Section 46-535.
3. Definitions. As used in this section:
  - A. "Beverage can" means any two-piece steel or aluminum container in which soft drinks or beer, including malt liquor, are packaged. This does not include containers in which fruit or vegetable juices are packaged.
  - B. "Exterior base coating operation" means the system on each beverage can surface coating line used to apply a coating to the exterior of a two-piece beverage can body. The exterior base coat provides corrosion resistance and a background for lithography or printing operations. The exterior base coat operation consists of the coating application station, flashoff area, and curing oven. The exterior base coat may be pigmented or clear (unpigmented).
  - C. "Inside spray coating operation" means the system on each beverage can surface coating line used to apply a coating to the interior of a two-piece beverage can body. This coating provides a protective film between the contents of the beverage can and the metal can body. The inside spray coating operation consists of the coating application

station, flashoff area, and curing oven. Multiple applications of an inside spray coating are considered to be a single coating operation.

D. "Overvarnish coating operation" means the system on each beverage can surface coating line used to apply a coating over ink which reduces friction for automated beverage can filling equipment, provides gloss, and protects the finished beverage can body from abrasion and corrosion. The overvarnish coating is applied to two-piece beverage can bodies. The overvarnish coating operation consists of the coating application station, flashoff area, and curing oven.

E. "Two-piece can" means any beverage can that consists of a body manufactured from a single piece of steel or aluminum and a top. Coatings for a two-piece can are usually applied after fabrication of the can body.

#### Section 46-690 Standards of Performance for Bulk Gasoline Terminals

1. Applicability. Except as provided in subsection 3 of this section, this section applies to the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks for which construction or modification commenced after December 17, 1980.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart XX, as adopted under Section 46-535.

3. Special provisions. Any replacement of components of an existing facility which commenced before August 18, 1983 in order to comply with any emission standard adopted by the Commission, the Authority, or a political subdivision of the state shall not be considered a reconstruction for purposes of this section.

4. Definitions. As used in this section:

A. "Bulk gasoline terminal" means any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under federal, state or local law and discoverable by the Authority and any other person.

B. "Gasoline" means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines.

C. "Gasoline tank truck" means a delivery tank truck used at bulk gasoline terminals for loading gasoline or which has loaded gasoline on the immediately previous load.

D. "Loading rack" means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill delivery tank trucks.



Section 46-695 Standards of Performance for the Rubber Tire Manufacturing Industry

1. Applicability. This section applies to the following facilities in rubber tire manufacturing plants for which construction, modification, or reconstruction commenced after January 20, 1983:

- A. each undertread cementing operation;
- B. sidewall cementing operation;
- C. tread end cementing operation;
- D. bead cementing operation;
- E. green tire spraying operation;
- F. Michelin-A operation;
- G. Michelin-B operation; and
- H. Michelin-C automatic operation.

2. Requirements

- A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart BBB, as adopted under Section 46-535, for all tire types, including those not listed under "tire" as defined in this section.
- B. Each undertread cementing operation and each sidewall cementing operation in rubber tire manufacturing plants, subject to sub-subsection A of this subsection, that commenced construction, modification, or reconstruction before September 15, 1987, shall have the option of complying with the alternate provisions in 40 CFR 60.542a instead of 40 CFR 60.542.

3. Definitions. As used in this section:

- A. "Bead cementing operation" means the system that is used to apply cement to the bead rubber before or after it is wound into its final circular form. A bead cementing operation consists of a cement application station, such as a dip tank, spray booth and nozzles, cement trough and roller or swab applicator, and all other equipment necessary to apply cement to wound beads or bead rubber and to allow evaporation of solvent from cemented beads.
- B. "Green tire spraying operation" means the system used to apply a mold release agent and lubricant to the inside and/or outside of green tires to facilitate the curing process and to prevent rubber from sticking to the curing press. A green tire spraying operation consists of a booth where spraying is performed, the spray application station, and related equipment, such as the lubricant supply system.

- C. "Sidewall cementing operation" means the system used to apply cement to a continuous strip of sidewall component or any other continuous strip component (except combined tread/sidewall component) that is incorporated into the sidewall of a finished tire. A sidewall cementing operation consists of a cement application station and all other equipment, such as the cement supply system and feed and takeaway conveyors, necessary to apply cement to sidewall strips or other continuous strip component (except combined tread/sidewall component) and to allow evaporation of solvent from the cemented rubber.
- D. "Tire" means any agricultural, airplane, industrial, mobile home, light-duty truck and/or passenger vehicle tire that has a bead diameter less than or equal to 19.7 inches and a cross section dimension less than or equal to 12.8 inches, and that is mass produced in an assembly-line fashion.
- E. "Tread end cementing operation" means the system used to apply cement to one or both ends of the tread or combined tread/sidewall component. A tread end cementing operation consists of a cement application station and all other equipment, such as the cement supply system and feed and takeaway conveyors, necessary to apply cement to tread ends and to allow evaporation of solvent from the cemented tread ends.
- F. "Undertread cementing operation" means the system used to apply cement to a continuous strip of tread or combined tread/sidewall component. An undertread cementing operation consists of a cement application station and all other equipment, such as the cement supply system and feed and takeaway conveyors, necessary to apply cement to tread or combined tread/sidewall strips and to allow evaporation of solvent from the cemented tread or combined tread/sidewall.

Section 46-697 Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

1. Applicability

A. Except as provided in sub-subsections B through G of this subsection and subsection 3 of this section, this section applies to facilities in the manufacture of polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) as specified in this subsection.

(1) Polypropylene and polyethylene manufacturing. This subsection applies to emissions specified in this paragraph from all equipment at any facility used in the manufacture of polypropylene or polyethylene for which construction, modification or reconstruction commenced after January 10, 1989 or, for process units specified in 40 CFR 60.560 Table 1, after September 30, 1987. If more than one polyolefin is produced at a facility for which the applicability date is determined under 40 CFR 60.560 Table 1, the owner or operator shall select one of the polymer/production process combinations in such Table for purposes of determining applicability.

- (a) Process emissions. This subsection applies to continuous and intermittent process emissions from each raw materials preparation section, each polymerization reaction section, each material recovery section, each product finishing section, and each product storage section at facilities using a continuous manufacturing process.
  - (b) Equipment leaks. This subsection applies to each group of fugitive emissions equipment within any process unit.
- (2) Polystyrene manufacturing. This subsection applies to emissions from facilities specified in this paragraph that are used in the manufacture of polystyrene for which construction, modification or reconstruction commenced after September 30, 1987.
- (a) Process emissions. This subsection applies to continuous process emissions from each material recovery section at facilities using a continuous manufacturing process.
  - (b) Equipment leaks. This subsection applies to each group of fugitive emissions equipment within any process unit.
- (3) Poly(ethylene terephthalate) manufacturing. This subsection applies to continuous process emissions from process sections at facilities using a continuous process specified in this paragraph that are used in the manufacture of poly(ethylene terephthalate) for which construction, modification or reconstruction commenced after September 30, 1987:
- (a) each polymerization reaction section;
  - (b) each material recovery section for facilities using dimethyl terephthalate; and
  - (c) each raw materials preparation section for facilities using terephthalic acid.
- B. Any polypropylene or polyethylene facility with a September 30, 1987 applicability date as determined under 40 CFR 60.560 Table 1 with an uncontrolled emission rate at or below the rate listed in 40 CFR 60.560 Table 2 is not subject to 40 CFR 60.562-1 unless and until its uncontrolled emission rate exceeds the rate specified in 40 CFR 60.560 Table 2 or it is modified or reconstructed after January 10, 1989.
- C. Any modified or reconstructed facility used in the manufacture of polystyrene or poly(ethylene terephthalate):
- (1) with an uncontrolled emission rate at or below the rate listed in 40 CFR 60.560 Table 2 is not subject to 40 CFR 60.562-1 unless and until its uncontrolled emission rate exceeds the rate specified in 40 CFR 60.560 Table 2; or
  - (2) with an existing control device and uncontrolled emission rate greater than the rate listed in 40 CFR 60.560 Table 2 is not subject

to 40 CFR 60.562-1 unless and until the existing control device is modified, reconstructed or replaced.

D. Any process section of an experimental process line is not subject to this subsection.

E. At polypropylene or polyethylene facilities, individual vent streams that have continuous emissions with uncontrolled annual emissions of less than 1.6 megagrams per year or with a weight percent total organic compounds (measured in accordance with 40 CFR 60.564) of less than 0.10 percent are not subject to 40 CFR 60.562-1(a)(1) unless and until the uncontrolled annual emissions equal or exceed 1.6 megagrams per year or the weight percent total organic compounds equals or exceeds 0.10 percent.

F. Emergency vent streams at polypropylene or polyethylene facilities are not subject to 40 CFR 60.562-1(a)(2).

G. Facilities with a design capacity of less than 1,000 megagrams per year are not subject to 40 CFR 60.562-2.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart DDD, as adopted under Section 46-535.

3. Special provisions. Additional or replacement of fugitive emissions equipment for the purposes of improvement which is accomplished without a capital expenditure, as defined in 40 CFR 60.561, shall not by itself be considered a modification under 40 CFR 60.562-2.

4. Definitions. As used in this section:

A. "Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of process equipment.

B. "Control device" means an enclosed combustion device, vapor recovery system or flare.

C. "Fugitive emissions equipment" means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by 40 CFR Part 60, Subpart VV.

D. "Open-ended valve or line" means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

E. "Process unit" means equipment assembled to perform any of the physical and chemical operations in the production of polypropylene, polyethylene, polystyrene (general-purpose, crystal, or expandable), or poly (ethylene terephthalate) or one of their copolymers. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product. Examples of process units are raw materials handling and monomer recovery.

- F. "Polyethylene" means a thermoplastic polymer or copolymer comprised of at least 50 percent ethylene by weight.
- G. "Poly (ethylene terephthalate)" or "PET" means a polymer or copolymer comprised of at least 50 percent bis-(2-hydroxyethyl)-terephthalate (BHET) by weight.
- H. "Poly (ethylene terephthalate) manufacture using dimethyl terephthalate" means the manufacturing of poly (ethylene terephthalate) based on the esterification of dimethyl terephthalate (DMT) with ethylene glycol to form the intermediate monomer bis-(2-hydroxyethyl)-terephthalate (BHET) that is subsequently polymerized to form PET.
- I. "Poly (ethylene terephthalate) manufacture using terephthalic acid" means the manufacturing of poly (ethylene terephthalate) based on the esterification reaction of terephthalic acid (TPA) with ethylene glycol to form the intermediate monomer bis-(2-hydroxyethyl)-terephthalate (BHET) that is subsequently polymerized to form PET.
- J. "Polypropylene" or "PP" means a thermoplastic polymer or copolymer comprised of at least 50 percent propylene by weight.
- K. "Polystyrene" or "PS" means a thermoplastic polymer or copolymer comprised of at least 80 percent styrene or para-methylstyrene by weight.
- L. "Vent stream" means any gas stream released to the atmosphere directly from an emission source or indirectly either through another piece of process equipment or a material recovery device that constitutes part of the normal recovery operations in a polymer process line where potential emissions are recovered for recycle or resale, and any gas stream directed to an air pollution control device. The emissions released from an air pollution control device are not considered a vent stream unless, as noted above, the control device is part of the normal material recovery operations in a polymer process line where potential emissions are recovered for recycle or resale.

Section 46-701 Standards of Performance for Flexible Vinyl and Urethane Coating and Printing

1. Applicability. Except as provided in subsection 3, this section applies to each rotogravure printing line used to print or coat flexible vinyl or urethane products for which construction, modification, or reconstruction commenced after January 18, 1983.
2. Requirements. Facilities subject to this rule shall comply with 40 CFR Part 60, Subpart FFF, as adopted under Section 46-535.
3. Special provisions. For facilities controlled by a solvent recovery emission control device, the provisions of 40 CFR 60.584(a) requiring monitoring of operations will not apply until EPA has promulgated performance specifications under 40 CFR Part 60, Appendix B for the continuous monitoring system. After the promulgation of performance specifications, these provisions will apply to each rotogravure printing

line subject to this section. Facilities controlled by a solvent recovery emission control device that become subject to the standard prior to promulgation of performance specifications must conduct performance tests in accordance with 40 CFR 60.13(b) after performance specifications are promulgated.

4. Definitions. As used in this section, "flexible vinyl and urethane products" means those products, except for resilient floor coverings (1977 Standard Industry Code 3996) and flexible packaging that are more than 50 micrometers (0.002 inches) thick, and that consist of or contain a vinyl or urethane sheet or a vinyl or urethane coated web.

Section 46-702 Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries

1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities in petroleum refineries for which construction or modification commenced after January 4, 1983:

(1) a compressor; and

(2) the group of all the fugitive emissions equipment within a process unit.

B. Facilities subject to Section 46-680 or Section 46-708 are not subject to this section.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart GGG, as adopted under Section 46-535.

3. Special provisions. Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this rule.

4. Definitions. As used in this section:

A. "Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of process equipment.

B. "Fugitive emissions equipment" means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service. For the purposes of recordkeeping and reporting only, compressors are considered equipment.

C. "Open-ended valve or line" means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

D. "Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

E. "Petroleum refinery" means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum or through the redistillation, cracking or reforming of unfinished petroleum derivatives.

F. "Process unit" means components assembled to produce intermediate or final products from petroleum, unfinished petroleum derivatives, or other intermediates; a process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

### Section 46-704 Standards of Performance for Synthetic Fiber Production Facilities

#### 1. Applicability

A. Except as provided in sub-subsections B and C of this subsection, this section applies to each solvent-spun synthetic fiber process that produces more than 500 megagrams of fiber per year for which construction or reconstruction commenced after November 23, 1982.

B. Facilities using the reaction spinning process to produce spandex fiber or the viscose process to produce rayon fiber are not subject to this section.

C. Facilities for which modification, but not reconstruction, commenced after November 23, 1982 are not subject to this section.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart HHH, as adopted under Section 46-535.

#### 3. Definitions. As used in this section:

A. "Rayon fiber" means a manufactured fiber composed of regenerated cellulose, as well as manufactured fibers composed of regenerated cellulose in which substituents have replaced not more than 15 percent of the hydrogens of the hydroxyl groups.

B. "Reaction spinning process" means the fiber-forming process where a prepolymer is extruded into a fluid medium and solidification takes place by chemical reaction to form the final polymeric material.

C. "Solvent-spun synthetic fiber" means any synthetic fiber produced by a process that uses an organic solvent in the spinning solution, the precipitation bath, or processing of the spun fiber.

D. "Spandex fiber" means a manufactured fiber in which the fiber-forming substance is a long-chain synthetic polymer comprised of at least 85 percent of a segmented polyurethane.

E. "Viscose process" means the fiber-forming process where cellulose and concentrated caustic soda are reacted to form soda or alkali cellulose. This reacts with carbon disulfide to form sodium cellulose xanthate,

which is then dissolved in a solution of caustic soda. After ripening, the solution is spun into an acid coagulating bath. This precipitates the cellulose in the form of a regenerated cellulose filament.

Section 46-706 Standards of Performance for Petroleum Dry Cleaners

1. Applicability

A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities at a petroleum dry cleaning plant with a total manufacturers' rated dryer capacity equal to or greater than 84 pounds and for which construction or modification commenced after December 14, 1982:

(1) petroleum solvent dry cleaning dryers;

(2) washers;

(3) filters;

(4) stills; and

(5) settling tanks.

B. A dryer installed between December 14, 1982 and September 21, 1984, in a plant with an annual solvent consumption level of less than 4,700 gallons, is not subject to this section.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart JJJ, as adopted under Section 46-535.

3. Special provisions. The calculation of manufacturers' rated dryer capacity shall be in accordance with this subsection.

A. When the facility is installed in an existing plant that is not expanding the manufacturers' rated capacity of its petroleum solvent dryer(s), the total manufacturers' rated dryer capacity is the summation of the manufacturers' rated capacity for each existing petroleum solvent dryer.

B. When the facility is installed in a plant that is expanding the manufacturers' rated capacity of its petroleum solvent dryers, the total manufacturers' rated dryer capacity is the summation of the manufacturers' rated dryer capacity for each existing and proposed new petroleum solvent dryer.

C. When the facility is installed in a new plant, the total manufacturers' rated dryer capacity is the summation of the manufacturers' rated dryer capacity for each proposed new petroleum solvent dryer.

D. The petroleum solvent dryers considered in the determination of the total manufacturers' rated dryer capacity are those new and existing dryers in the plant that will be in service at any time after the proposed new source or modification commences operation.



4. Definitions. As used in this section:

- A. "Dryer" means a machine used to remove petroleum solvent from articles of clothing or other textile or leather goods, after washing and removing of excess petroleum solvent, together with the piping and ductwork used in the installation of this device.
- B. "Manufacturers' rated dryer capacity" means the dryer's rated capacity of articles, in pounds or kilograms of clothing articles per load, dry basis, that is typically found on each dryer on the manufacturer's nameplate or in the manufacturer's equipment specifications.
- C. "Petroleum dry cleaner" means a dry cleaning facility that uses petroleum solvent in a combination of washers, dryers, filters, stills, and settling tanks.
- D. "Washer" means a machine which agitates fabric articles in a petroleum solvent bath and spins the articles to remove the solvent, together with the piping and ductwork used in the installation of this device.

Section 46-707 Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes

1. Applicability. This section applies to the following facilities that produce any of the chemicals listed in 40 CFR 60.617 as a product, co-product, by-product, or intermediate and for which construction, modification, or reconstruction commenced after October 21, 1983:

- A. each air oxidation reactor not discharging its vent stream into a recovery system;
- B. each combination of an air oxidation reactor and the recovery system into which its vent stream is discharged; and
- C. each combination of two or more air oxidation reactors and the common recovery system into which their vent streams are discharged.

2. Requirements

- A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart III, as adopted under Section 46-535.
- B. Each facility with a total resource effectiveness index value greater than 4.0 shall comply with 40 CFR 60.612, 60.614(f), 60.615(h), and 60.615(i) and is exempt from all other provisions of 40 CFR Part 60, Subpart III.

3. Definitions. As used in this section:

- A. "Air oxidation reactor" means any device or process vessel in which one or more organic reactants are combined with air, or a combination of air

- and oxygen, to produce one or more organic compounds; this includes ammoxidation and oxychlorination reactions.
- B. "Recovery system" means an individual recovery device or series of such devices applied to the same process stream.
- C. "Total resource effectiveness index value" means a measure of the supplemental total resource requirement per unit reduction of TOC associated with an individual air oxidation vent stream, based on vent stream flow rate, emission rate of TOC, net heating value, and corrosion properties (whether or not the vent stream is halogenated), as quantified by the equation given under 40 CFR 60.614(e).
- D. "Vent stream" means any gas stream containing nitrogen which was introduced as air to the air oxidation reactor, released to the atmosphere directly from any air oxidation reactor recovery train or indirectly, after diversion through other process equipment. The vent stream excludes equipment leaks and relief valve discharges including, but not limited to, pumps, compressors, and valves.

Section 46-708. Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants

1. Applicability

- A. Except as provided in sub-subsections B and C of this subsection and subsection 3 of this section, this section applies to the following facilities in onshore natural gas processing plants for which construction, reconstruction, or modification commenced after January 20, 1984:
- (1) a compressor in VOC service or in wet gas service;
  - (2) the group of all fugitive emissions equipment, except compressors, within a process unit.
- B. Facilities subject to Section 46-680 or 46-702 are not subject to this section.
- C. A compressor station, dehydration unit, sweetening unit, underground storage tank, field gas gathering system, or liquefied natural gas unit which is not located at an onshore natural gas processing plant is not subject to this section.
2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart KKK, as adopted under Section 46-535.
3. Special provisions. Addition or replacement of fugitive emissions equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification for purposes of this section.

4. Definitions. As used in this section:

- A. "Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipe line and a piece of process equipment.
- B. "Field gas" means feedstock gas entering the natural gas processing plant.
- C. "Fugitive emissions equipment" means each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by 40 CFR part 60, Subpart KKK.
- D. "Natural gas processing plant" means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both.
- E. "Onshore" means all facilities except those that are located in the territorial seas or on the outer continental shelf.
- F. "Open-ended valve or line" means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.
- G. "Process unit" means equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.
- H. "Wet gas service" means that a piece of equipment contains or contacts the field gas before the extraction step in the process.

Section 46-710 Standards of Performance for SO<sub>2</sub> from Onshore Natural Gas Processing Plants

1. Applicability

- A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities that process natural gas, which are located on land, including facilities located onshore which process natural gas produced from either onshore or offshore wells and for which construction or modification commenced after January 20, 1984:
  - (1) each sweetening unit; and
  - (2) each sweetening unit followed by a sulfur recovery unit.
- B. Sweetening facilities producing acid gas that is completely reinjected into oil-or-gas-bearing geologic strata or that is otherwise not released to the atmosphere are not subject to this section.

## 2. Requirements

- A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart LLL, as adopted under Section 46-535.
- B. Facilities with a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H<sub>2</sub>S) in the acid gas (expressed as sulfur) are subject to 40 CFR 60.647(c), but are not subject to 40 CFR 60.642 through 60.646.

## 3. Definitions. As used in this section:

- A. "Acid gas" means a gas stream of hydrogen sulfide H<sub>2</sub>S and carbon dioxide (CO<sub>2</sub>) that has been separated from sour natural gas by a sweetening unit.
- B. "Natural gas" means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface. The principal hydrocarbon constituent is methane.
- C. "Onshore" means all facilities except those that are located in the territorial seas or on the outer continental shelf.
- D. "Sweetening unit" means a process device that separates the H<sub>2</sub>S and CO<sub>2</sub> contents from the sour natural gas stream.

## Section 46-713 Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

### 1. Applicability

- A. Except as provided in sub-subsection B of this subsection, this section applies to the following facilities that are part of a process unit that produces any of the chemicals listed in 40 CFR 60.667 as a product, co-product, by-product, or intermediate for which construction, modification or reconstruction commenced after December 30, 1983:
- (1) each distillation unit not discharging its vent stream into a recovery system;
  - (2) each combination of a distillation unit and the recovery system into which its vent stream is discharged; and
  - (3) each combination of two or more distillation units and the common recovery system into which their vent streams are discharged.
- B. The following facilities are not subject to this section:
- (1) any distillation unit operating as part of a process unit which produces coal tar or beverage alcohols, or which uses, contains, and produces no VOC;

(2) any distillation unit that is subject to Section 46-697; and

(3) any distillation unit that is designed and operated as a batch operation.

## 2. Requirements

A. Except as provided in sub-subsections B through D of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart NNN, as adopted under Section 46-535.

B. Each facility with a total resource effectiveness (TRE) index value greater than 8.0 is only subject to 40 CFR 60.662; 60.664(d), (e) and (f); and 60.665(h) and (i).

C. Facilities in a process unit with a total design capacity for all chemicals produced within that unit of less than one gigagram per year is only subject to the record-keeping and reporting requirements in 40 CFR 60.665(j), (l)(6), and (n).

D. Facilities operated with a vent stream flow rate less than 0.008 scm/min is only subject to the test method and procedure and the record-keeping and reporting requirements in 40 CFR 60.664(g) and 60.665(i), (l)(5), and (o).

## 3. Definitions. As used in this section:

A. "Batch distillation operation" means a noncontinuous distillation operation in which a discrete quantity or batch of liquid feed is charged into a distillation unit and distilled at one time. After the initial charging of the liquid feed, no additional liquid is added during the distillation operation.

B. "Distillation operation" means an operation separating one or more feed stream(s) into two or more exit stream(s), each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor-phase as they approach equilibrium within the distillation unit.

C. "Distillation unit" means a device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, stream jet, etc.), plus any associated recovery system.

D. "Process unit" means equipment assembled and connected by pipes or ducts to produce, as intermediates or final products, one or more of the chemicals in 40 CFR 60.667. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

E. "Product" means any compound or chemical listed in 40 CFR 60.667 that is produced for sale as a final product as that chemical, or for use in the

production of other chemicals or compounds. By-products, co-products, and intermediates are considered to be products.

F. "Recovery System" means an individual recovery device or series of such devices applied to the same vent stream.

## Section 46-714 Standards of Performance for Nonmetallic Mineral Processing Plants

### 1. Applicability

A. Except as provided in sub-subsections B through D of this subsection, this section applies to the following facilities in fixed or portable nonmetallic mineral processing plants for which construction, reconstruction, or modification commenced after August 31, 1983:

(1) each crusher;

(2) each grinding mill;

(3) each screening operation;

(4) each bucket elevator;

(5) each belt conveyor;

(6) each bagging operation;

(7) each storage bin; and

(8) each enclosed truck or railcar loading station.

B. A facility that is not located at a major source is not subject to this section.

C. A facility that is subject to Section 46-560 or Section 46-575 or that follows in the plant process any facility subject to Section 46-560 or Section 46-575 is not subject to this section.

D. Facilities at the following plants are not subject to this section:

(1) fixed sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less; and

(2) portable sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less; and

(3) common clay plants and pumice plants with capacities of 10 tons per hour or less.

## 2. Requirements.

- A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart 000, as adopted under Section 46-535.
- B. When an existing facility is replaced by a piece of equipment of equal or smaller size, the new facility is exempt from 40 CFR 60.672, 60.764 and 60.675, provided:
- (1) the owner or operator of the facility complies with reporting requirements of 40 CFR 60.676(a) and (b); and
  - (2) the owner or operator is not replacing all existing facilities in a production line with new facilities.

## 3. Definitions. As used in this section:

- A. "Belt conveyor" means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.
- B. "Bucket elevator" means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.
- C. "Capacity" means the cumulative rated capacity of all initial crushers that are part of the plant.
- D. "Size" means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.
- E. "Crusher" means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, and hammermill, and impactor.
- F. "Grinding mill" means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.
- G. "Major source" means a major source required to have a Federal Operating Permit, as defined in OAR 340-28-110 and in LRAPA Title 12.
- H. "Nonmetallic mineral" means any of the following minerals or any mixture of which the majority is any of the following minerals:

- (1) crushed and broken stone, including limestone, dolomite, granite, traprock, sandstone, quartz, quartzite, marl, marble, slate, shale, oil shale, and shell;
  - (2) sand and gravel;
  - (3) clay, including kaolin, fireclay, bentonite, Fuller's earth, ball clay, and common clay;
  - (4) rock salt;
  - (5) gypsum;
  - (6) sodium compounds, including sodium carbonate, sodium chloride, and sodium sulfate;
  - (7) pumice;
  - (8) gilsonite;
  - (9) talc and pyrophyllite;
  - (10) boron, including borax, kernite and colemanite;
  - (11) barite;
  - (12) fluorospar;
  - (13) feldspar;
  - (14) diatomite;
  - (15) perlite;
  - (16) vermiculite;
  - (17) mica; or
  - (18) kyanite, including andalusite, sillimanite, topaz, and dumortierite.
- I. "Nonmetallic mineral processing plant" means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals, except as provided in subsections 46-714-1.D and C.
- J. "Portable plant" means any nonmetallic Mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the



application of lifting or pulling force for the purpose of transporting the unit.

K. "Screening operation" means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

L. "Storage bin" means a facility for storage (including surge bins and hoppers) or metallic minerals prior to further processing or loading.

*Note: Nonmetallic mineral processing facilities which are not located at a major source may be subject to 40 CFR Part 60, Subpart 000 under authority retained by EPA.)*

#### Section 46-715 Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants

1. **Applicability.** This section applies to each rotary spin wool fiberglass insulation manufacturing line for which construction, modification, or reconstruction commenced after February 7, 1984.

2. **Requirements.** Facilities subject to this section shall comply with 40 CFR Part 60, Subpart PPP, as adopted under Section 46-535.

3. **Definitions.** As used in this section:

A. "Manufacturing line" means the manufacturing equipment comprising the forming section, where molten glass is fiberized and a fiberglass mat is formed; the curing section, where the binder resin in the mat is thermally "set"; and the cooling system, where the mat is cooled.

B. "Rotary spin" means a process used to produce wool fiberglass insulation by forcing molten glass through numerous small orifices in the side wall of a spinner to form continuous glass fibers that are then broken into discrete lengths by a high-velocity air flow.

C. "Wool fiberglass insulation" means a thermal insulation material composed of glass fibers and made from glass produced or melted at the same facility where the manufacturing line is located.

#### Section 46-720 Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems

1. **Applicability.** This section applies to the following separate facilities in petroleum refineries for which construction, modification, or reconstruction is commenced after May 4, 1987:

A. each individual drain system;

B. each oil-water separator; and

C. each aggregate facility.

2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart QQQ, as adopted under Section 46-535.
3. Special provisions. Notwithstanding 40 CFR 60.14(e)(2), the construction or installation of a new individual drain system shall constitute a modification to a facility described in subsection I.C of this section. For purposes of this section, a new individual drain system shall be limited to all process drains and the first common junction box.
4. Definitions. As used in this section:
  - A. "Aggregate facility" means an individual drain system together with ancillary downstream sewer lines and oil-water separators, down to and including the secondary oil-water separator, as applicable.
  - B. "Individual drain system" means all process drains connected to the first common downstream junction box. The term includes all such drains and common junction box, together with their associated sewer lines and other junction boxes, down to the receiving oil-water separator.
  - C. "Junction box" means a manhole or access point to a wastewater sewer system line.
  - D. "Oil-water separator" means wastewater treatment equipment used to separate oil from water consisting of a separation tank, which also includes the forebay and other separator basins, skimmers, weirs, grit chambers, and sludge hoppers. Slop oil facilities, including tanks, are included in this term along with storage vessels and auxiliary drain systems and the oil-water separator. This term does not include storage vessels or auxiliary equipment which do not come in contact with or store oily wastewater.
  - E. "Petroleum refinery" means any facility engaged in producing gasoline kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum or through the redistillation, cracking, or reforming of unfinished petroleum derivatives.

#### Section 46-723 Standards of Performance for Magnetic Tape Coating Facilities

1. Applicability. This section applies to each coating operation and each piece of coating mix preparation equipment for which construction, modification, or reconstruction commenced after January 22, 1986.
2. Requirements.
  - A. Except as provided in sub-subsection B of this subsection, facilities subject to this section shall comply with 40 CFR Part 60, Subpart SSS, as adopted under Section 46-535.
  - B. Any new coating operation that utilizes less than 38 m<sup>3</sup> of solvent or any modified or reconstructed coating operation that utilizes less than 370 m<sup>3</sup> of solvent for the manufacture of magnetic tape per calendar year is subject only to the requirements of 40 CFR 60.714(a), 60.717(b), and

60.717(c). If the amount of solvent utilized for the manufacture of magnetic tape equals or exceeds these amounts in any calendar year, the facility is subject to 40 CFR 60.712 and all other sections of 40 CFR Part 60, Subpart SSS. Once a facility has become subject to 40 CFR 60.712 and all other sections of 40 CFR Part 60, Subpart SSS it will remain subject to those requirements regardless of changes in annual solvent utilization.

3. Definitions. As used in this section:

- A. "Coating mix preparation equipment" means all mills, mixers, holding tanks, polishing tanks, and other equipment used in the preparation of the magnetic coating formulation, but does not include those mills that do not emit VOC because they are closed, sealed, and operated under pressure.
- B. "Coating operation" means any coating applicator, flashoff area and drying oven located between a base film unwind station and a base film rewind station that coat a continuous base film to produce magnetic tape.
- C. "Flashoff area" means the portion of a coating operation between the coating applicator and the drying oven where the solvent begins to evaporate from the coated base film.
- D. "Magnetic tape" means any flexible substrate that is covered on one or both sides with a coating containing magnetic particles and that is used for audio or video recording or information storage.

Section 46-725 Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines

- 1. Applicability. This section 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 for which construction, modification, or reconstruction commenced after January 8, 1986.
- 2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart TTT, as adopted under Section 46-535.
- 3. Definitions. As used in this section:
  - A. "Business machine" means a device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission.
  - B. "Color coat" means the coat applied to a part that affects the color and gloss of the part, not including prime coat or texture coat. This definition includes fog coating, but does not include conductive sensitizers or electromagnetic interference/radio frequency interference shielding coatings.
  - C. "Plastic parts" means panels, housings, bases, covers, and other business machine components formed of synthetic polymers.

- D. "Prime coat" means the initial coat applied to a part when more than one coating is applied, not including conductive sensitizers or electromagnetic interference/radio frequency interference shielding coatings.
- E. "Spray booth" means the structure housing automatic or manual spray application equipment where a coating is applied to plastic parts for business machines.
- F. "Texture coat" means the rough coat that is characterized by discrete, raised spots on the exterior surface of the part. This definition does not include conductive sensitizers or EMI/RFI shielding coatings.
- G. "Tough-up coat" means the coat applied to correct any imperfections in the finish after color or texture coats have been applied. This definition does not include conductive sensitizers or EMI/RFI shielding coatings.

#### Section 46-730 Standards of Performance for Calciners and Dryers in Mineral Industries

##### 1. Applicability

- A. Except as provided in sub-subsection B through E of this subsection, this section applies to each calciner and dryer at a mineral processing plant for which construction, modification, or reconstruction commenced after April 23, 1986.
- B. Feed and product conveyors are not subject to this section.
- C. For the brick and related clay products industry, only the calcining and drying of raw material prior to firing of the brick are subject to this section.
- D. A facility subject to Section 46-652 is not subject to this section.
- E. The following processes and process units used at mineral processing plants are not subject to this rule:
  - (1) vertical shaft kilns in the magnesium compounds industry;
  - (2) the chlorination-oxidation process in the titanium dioxide industry;
  - (3) coating kilns, mixers, and aerators in the roofing granules industry; and
  - (4) tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries included in the definition of "mineral processing plant."

- 2. Requirements. Facilities subject to this section shall comply with 40 CFR Part 60, Subpart UUU, as adopted under Section 46-535.

3. Definitions. As used in this section:

- A. "Calciner" means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.
- B. "Dryer" means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.
- C. "Mineral processing plant" means any unit that processes or produces any of the following minerals, concentrates or any mixture of which the majority (greater than 50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, Fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

Section 46-735 Standards of Performance for Polymeric Coating of Supporting Substrates Facilities

1. Applicability

- A. Except as provided in sub-subsection B of this subsection, this section applies to each coating operation and any on-site coating mix preparation equipment used to prepare coating for the polymeric coating of supporting substrates for which construction, modification, or reconstruction commenced after April 30, 1987.
- B. The following facilities are not subject to this section:
  - (1) coating mix preparation equipment used to manufacture coatings at one plant for shipment to another plant for use in a coating operation or for sale to another company for use in a coating operation;
  - (2) coating mix preparation equipment or coating operations during those times they are used to prepare or apply waterborne coatings, so long as the VOC content of the coating does not exceed 9 percent by weight of the volatile fraction; and
  - (3) wet coating operations that print an image on the surface of the substrate or any coating applied on the same printing line that applies the image.

2. Requirements

- A. Except as provided in sub-subsection B of this section, facilities subject to this section shall comply with 40 CFR Part 60, Subpart VVV, as adopted under Section 46-535.
- B. Any facility for which the amount of VOC used is less than 95 Mg per 12-month period is subject only to the requirements of 40 CFR 60.744(b), 60.747(b), and 60.747(c). If the amount of VOC used is 95 MG or greater

per 12-month period, the facility is subject to all the requirements of 40 CFR Part 60, Subpart VVV. Once a facility has become subject to the requirements of 40 CFR Part 60, Subpart VVV, it will remain subject to those requirements regardless of changes in annual VOC use.

3. Definitions. As used in this section:

- A. "Coating mix preparation equipment" means all mixing vessels in which solvent and other materials are blended to prepare polymeric coatings.
- B. "Coating operation" means any coating applicator, flashoff area, and drying oven located between a substrate unwind station and a rewind station that coats a continuous web to produce a substrate with a polymeric coating.
- C. "Flashoff area" means the portion of a coating operation between the coating applicator and the drying oven where the solvent begins to evaporate from the coated base film.
- D. "VOC used" means the amount of VOC delivered to the coating mix preparation equipment including any contained in premixed coatings or other coating ingredients prepared off the plant site for the formulation for polymeric coating to be applied to supporting substrate at the coating operation, plus any solvent added after initial formulation is complete. If premixed coatings that require no mixing at the plant site are used, "VOC used" means the amount of VOC delivered to the coating applicator.
- E. "Waterborne coating" means a coating which contains more than 5 weight percent water in its volatile fraction.
- F. "Web coating" means the coating of products, such as fabric, paper, plastic film, metallic foil, metal coil, cord, and yarn, that are flexible enough to be unrolled from a large roll, and coated as a continuous substrate by methods including, but not limited to, knife coating, roll coating, dip coating, impregnation, rotogravure, and extrusion.

Section 46-800 Compliance

Compliance with standards set forth in LRAPA Sections 46-505 through 46-800 shall be determined by performance tests and monitoring methods as set forth in the Federal Regulation adopted by reference in Section 46-530.

Section 46-805 More Restrictive Regulations

If at any time there is a conflict between Authority or Department rules and the Federal Regulations (40 CFR part 60), both shall apply.

# ATTACHMENT E

LRAPA Adoption of Title 34  
September 12, 1995

## AGENDA ITEM NO. 6

### LRAPA Board of Directors Meeting

September 12, 1995

TO: Board of Directors

FROM: Don Arkell

SUBJ: Public Hearing on Proposed Revisions to Title 34, "Stationary Source Rules and Permitting Procedures," Table A (Fee Schedules)

These proposed amendments to Title 34, Table A, were originally proposed earlier in the year, but staff determined that the proposal needed to be revised. The earlier request for amendment was therefore withdrawn, and a new rulemaking process was undertaken for this revised proposal.

### DESCRIPTION OF THE PROBLEMS AND THE PROPOSED SOLUTIONS

#### Description of Problems

As currently written, the fee rules require those sources applying for a Synthetic Minor Permit (SMP) to have an Air Contaminant Discharge Permit (ACDP), as well, and to pay all fees associated with both permits. The current rules also require the same ACDP fees for all rock crushers, regardless of volume of throughput.

#### Background

Those sources which are major sources by virtue of their potential to emit air contaminants, but wish to opt out of the Title V Operating Permit Program, can do so by agreeing to limit their emissions to a level below the Title V threshold. These sources are called "synthetic minor" sources. There are fees associated with both the review of SMP applications and the annual inspection done to determine compliance with the conditions in the SMPs.

The fee rules require these sources to also have an ACDP and to pay the permit review and annual inspection fees associated with this ACDP.

For relatively uncomplicated synthetic minor sources, the same review process can cover both permit requirements. Charging the full fees for both activities is double dipping. It is proposed to reduce the SMP fees to alleviate this problem for certain qualified synthetic minor sources.

A similar situation exists with the source category of Sand and Gravel Plants (Rock Crushers). Small rock crushing operations (less than 300,000 tons per year throughput) typically are temporary or portable, operate only part of the year, and don't have as many other dust



sources as major sand and gravel operations do. It is proposed to create a subcategory of small sand and gravel operations of less than 300,000 tons/year throughput, subject to reduced fees.

### Proposed Rule Amendments

- Subsection G of Part I of Table A in Title 34 amended so that the director may charge reduced fees for certain small synthetic minor sources that are subject to the Title V permit requirements only because they have one or two facilities with high potential to emit, but low actual emissions. Examples are small boiler and dry kiln operators. The alternate fees would be reduced from \$1,900 to \$500 for permit application or modification and from \$1,000 to \$200 for annual compliance determination.
- The ACDP fees charged for stationary or portable rock crushers with less than 300,000 tons per year throughput would be reduced to \$200 for the Application Processing Fee and \$300 for the Annual Compliance Determination Fee. Current processing and annual compliance fees for all stationary crushers are \$1,870 and \$1,960, respectively; and for all portable crushers, \$1,370 and \$1,160.

### EFFECTS OF PROPOSED AMENDMENTS ON THE PUBLIC, REGULATED BUSINESSES, AND OTHER AGENCIES

1. Public. No apparent impact.
2. Regulated Businesses. Fees for synthetic minor sources with two or less equipment types will be reduced by \$1,400 for permit applications or modifications, every five years, and by \$800 annually for compliance determinations. Fees for stationary rock crushers with an annual throughput of less than 300,000 tons would be reduced by \$1,670 for application processing fees every five years and \$1,660 for each annual compliance determination fee. Fees for portable rock crushers with an annual throughput of less than 300,000 tons would be reduced by \$1,170 for application processing fees every five years and \$860 for each annual compliance determination fee.
3. Other Agencies. No apparent impact.

### HOW THE RULE WILL BE IMPLEMENTED

Permit fees schedule will be modified to reflect fee reductions. New fees will be in effect on the effective date of the rule amendments.

### PUBLIC NOTICE AND COMMENT

Notice of this public hearing was published in the Cottage Grove Sentinel, the Oakridge Dead Mountain Echo, the Eugene Register-Guard, and the Springfield News, as well as the August

1 edition of the Secretary of State's Oregon Bulletin. Information regarding the proposed amendments was also sent to all LRAPA industrial permittees and other interested persons, and to DEQ and EPA. No comments have been received. DEQ determined that the proposed rules are at least as stringent as the state's rules and authorized LRAPA to serve as hearings officer for a joint EQC/LRAPA hearing.

#### OPTIONS FOR BOARD ACTION

1. Do nothing. The fees would remain the same, resulting in continued over-charging of permit fees for some synthetic minor sources and for some rock crushing operations.
2. Adopt amendments as proposed. Fees would more accurately reflect the amount of work involved in processing permits.
3. Direct staff to further revise the proposal. This would begin a new rulemaking procedure which would take several months to complete. Since the revised fees in this proposal represent as closely as possible the actual cost of processing permits for the affected source categories, it is unlikely that staff could develop a better proposal to address these specific needs.

#### DIRECTOR'S RECOMMENDATION

It is the director's recommendation that the board adopt the amendments to Title 34, Table A, as proposed.

DRA/LWT/mjd

## STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Nonattainment Area (OAR 340-20-047).

### Legal Authority

ORS 183, 468.065, 468A.135 and 468A.155; OAR 340-11-010 and 340-28-1750; LRAPA Titles 13, 14 and 34; and the Federal Clean Air Act Amendments of 1990.

### Need for Amendments

Current rules require sources applying for a Synthetic Minor Permit (SMP) to have an Air Contaminant Discharge Permit (ACDP), as well, and to pay all fees associated with both permits. Relatively uncomplicated SMP sources do not require the level of review reflected by the current fees. It is therefore proposed to reduce the SMP fees for certain qualified SMP sources.

The current rules also require the same ACDP fees for all rock crushers, regardless of volume of throughput. Rock crushing operations with an annual throughput of 300,000 tons or less typically operate only part of the year and don't have as many dust sources as major sand and gravel operations do. It is proposed to create a sub-category of small sand and gravel operations of less than 300,000 tons/year throughput, subject to reduce fees.

### Principal Documents Relied Upon

1. Attorney General's Uniform and Model Rules of Procedure
2. LRAPA Title 34 (Table A)
3. LRAPA Memorandum to Interested Persons, July 3, 1995
4. Clean Air Act Amendments of 1990
5. ORS 183, 468 and 468A et. seq.

## FISCAL AND ECONOMIC IMPACT STATEMENT

1. Public. No apparent impact.
2. Regulated Businesses. Fees for synthetic minor sources with two or less equipment types will be reduced by \$1,400 for permit applications or modifications, every five years, and by \$800 annually for compliance determinations. Fees for stationary rock crushers with an annual throughput of less than 300,000 tons would be reduced by \$1,670 for application processing fees every five years and \$1,660 for each annual compliance determination fee.

Fees for portable rock crushers with an annual throughput of less than 300,000 tons would be reduced by \$1,170 for application processing fees every five years and \$860 for each annual compliance determination fee.

3. Other Agencies. No apparent impact.

### LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

07/03/95



MEMORANDUM

To: Record of Adoption Proceedings, LRAPA Title 34  
From: Mike Tharpe, Hearings Officer  
Subject: Public Hearing, September 12, 1995

Summary of Procedure

Pursuant to public notice, a public hearing was convened by the Board of Directors of the Lane Regional Air Pollution Authority on September 12, 1995 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed adoption of amendments to LRAPA Title 34, "Stationary Source Rules and Permitting Procedures," Table A, "Air Contaminant Sources and Associated Fee Schedule."

Summary of Testimony

There was no public testimony presented at the hearing.

DEQ correspondence granted hearings officer authorization for EQC so that this could be a joint EQC/LRAPA hearing. DEQ also stated that the proposed rules met stringency requirements. (Note that this correspondence was received prior to hearing on an earlier proposal which was revised. Telephone communication with DEQ staff confirmed that this authorization would suffice for the revised proposal.)

Action of the LRAPA Board of Directors

Based on the information presented, the board voted unanimously to adopt the amendments to Title 34, Table A, as proposed.

DRA/MJD

## MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--JUNE 13, 1995  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

### ATTENDANCE:

Board Mark Hommer, Chair--At-Large; Steve Cornacchia--Lane County; Steve Dodrill--Eugene; Kevin Hornbuckle--Eugene; Al Johnson--Eugene; Pat Patterson--Cottage Grove/Oakridge; Ralf Walters--Springfield  
(ABSENT: None)

Staff Don Arkell--Director; Mike Tharpe; Sharon Moody; Kim Partridge; Merrie Dinteman

Advisory Com. Lorena Young, Chair

Other: Chuck Stoddard, J. H. Baxter Co.

OPENING: Hommer called the meeting to order at 12:21 p.m.

MINUTES: MSP (Dodrill/Hornbuckle)(Unanimous) approval of April 11, 1995 minutes, as submitted.

EXPENSE REPORT: Sharon Moody explained that Title V revenues are a little lower than what was anticipated, because a large source based its fees on actual emissions rather than Plant Site Emission Limits, resulting in a \$20,000 deficit in Title V for FY 94/95. June has been the biggest month, ever, for the Portable Sampler Fund, with approximately \$132,000 in sales (88 samplers) for the month. The General Fund should come out about even, with little or no deficit expected.

Dodrill asked about the grant revenue in the General Fund being lower than what was anticipated. Moody explained that LRAPA is operating on a reimbursement basis and does not receive funds until after the money has been expended and billed to EPA. In addition, some of the work being done under the large pass-through grant for the Pocatello SIP is taking longer than anticipated. This is work being done by private contractors. EPA has extended the ending dates on those projects, at least into the next fiscal year and, possibly, for another year after that. That grant is good through 1997.

The board approved the expense reports through May 31, 1995, as presented.

ADVISORY COMMITTEE: The board packets included a report of 1994 activities submitted by the 1994 committee chair. There was no discussion of that report.

**PUBLIC PARTICIPATION:** None.

**PUBLIC HEARING--** Arkell briefly explained that the reason this public hearing  
**LRAPA BUDGET** was rescheduled to today from its original date of May 9 was  
**FY 95/96;** that the newspaper did not print the hearing notice the  
**LRAPA SUPPLE-** required number of days prior to that date. He said notice  
**MENTAL BUDGET** of today's hearing was published as required, and affidavit  
**FY 94/95** of publication would be placed in the hearing record. Arkell  
**(PORTABLE** recommended that the board adopt the budget, as approved by  
**SAMPLER FUND):** the LRAPA Budget Committee in April. He also recommended board  
adoption of a supplemental budget for the Portable Sampler Fund  
for FY 94/95, to accommodate larger sales volume than was  
anticipated at the time the budget was adopted last year.

**\*\* MOTION \*\*** MSP (Dodrill/Patterson)(Unanimous) approval of LRAPA Resolution  
Number 95-14, adopting the FY 95/96 LRAPA budget.

**\*\* MOTION \*\*** MSP (Hornbuckle/Walters)(Unanimous) approval of LRAPA Resolution  
Number 95-15, adopting the FY 94/95 Supplemental Budget for the  
Portable Sampler Fund.

**PUBLIC HEARING--** Arkell briefly described the proposed changes to Title 15,  
**PROPOSED AMEND-** LRAPA's enforcement and civil penalty rules, as follows:  
**MENTS TO LRAPA**  
**TITLE 15**  
**(ENFORCEMENT)**  
**AND TITLE 34**  
**(PERMITS FEES):**

1. Separate opacity violations according to severity,  
leaving more severe violations in Class I category and  
moving less severe violations to Class II category;
2. Reduce residential open burning violations from Class II to  
Class III, changing the civil penalty range from \$200--  
\$750 down to \$50--\$250;
3. Change failure to report required permit information and  
data from a Class III to a Class II violation; and
4. Change the Notice of Noncompliance from the current non-  
punitive notice with no further action to a preliminary  
notice of violation with possible further action following  
investigation.

Arkell then spoke briefly about the proposal to reduce the fees  
for all Synthetic Minor Permits. This was proposed to avoid  
double charging for both Air Contaminant Discharge Permits and  
Synthetic Minor Permits. Since the amendments were originally  
proposed, staff had revised its proposal to limit the adjustment  
of fees to small facilities which have two or less equipment  
types (such as spray paint booth operators, small dry kiln lumber  
operators, etc.). Because this is a substantive change from the  
original proposal, Arkell said staff believes the amendments  
should go through the public comment period again, and public  
hearing should be held at another time. Arkell said staff  
wished to withdraw the proposal to amend Title 34 at this time  
and limit today's hearing to Title 15 amendments. He asked for

authorization hold public hearing at the September 12 board meeting on a revised amendment proposal for Title 34 permit fees.

Walters asked what portion of the permitting program the new fee structure would cover. Arkell said these fees are designed to offset the extra cost for processing the Synthetic Minor Permits. Those sources are already required to get a regular Air Contaminant Discharge permit, for which they pay a full set of fees. There is an extra cost involved in processing a Synthetic Minor Permit. The problem is that, for the smaller sources, the amount that is in the current fee schedule is more than what the additional cost is for the permitting process.

Patterson asked when and how interested parties are notified of the fee adjustments. Arkell responded that the rule would become effective immediate, unless there is a different effective date adopted in the rule. All sources subject to these fees are notified of the proposed changes prior to the hearing date, and the revised fee schedule is sent out following adoption.

**\*\* MOTION \*\***

MSP (Dodrill/Walters)(Unanimous) adoption of amendments to LRAPA Title 15 as proposed.

Public hearing was authorized for September 12, 1995 on a revised proposal to amend Title 34.

**MITIGATION OF  
CIVIL PENALTY--  
JOHN BARNETT:**

Arkell described the illegal open burning which led to LRAPA enforcement action. He said the original penalty of \$11,000 was based on information supplied by the respondent regarding the cost of disposing of the land clearing debris by methods other than burning. The respondent appealed the civil penalty and, prior to hearing, submitted a lower estimate of the cost of disposal. Staff determined that the revised amount was reasonable, according to prior experience with similar volumes of debris. Based on the new information, the civil penalty was recalculated at \$2,500. Staff asked the board to authorize reduction of the penalty.

**\*\* MOTION \*\***

MSP (Cornacchia/Patterson)(Unanimous) approval of reduction of civil penalty in Case Number 94-33, John N. Barnett, from \$11,000 to \$2,500.

**AUTHORIZATION TO  
EXPEND FEDERAL  
SUPPLEMENTAL  
GRANT FUNDS:**

There were seven separate requests for authorization to expend federal supplemental grant funds, as follows:

1. Number 95-7--carry-over grant of \$1,805.05 to complete a Hazardous Air Pollutant Emissions Inventory;
2. Number 95-8--\$15,000 to complete an investigation of Hazardous Air Pollutants (HAPs) around a wood treatment facility;
3. Number 95-9--carry-over grant of \$8,873.57 to complete an upgrade of LRAPA's Engineering Services Data System;



4. Number 95-10--\$16,000 for purchase of Continuous Emissions Monitoring audit apparatus for non-Title V sources;
5. Number 95-11--\$15,000 for Emissions Inventory of permitted sources;
6. Number 95-12--\$15,000 for drafting a PM10 Maintenance Plan for Eugene-Springfield, as part of redesignation to attainment status; and
7. Number 95-13--\$10,826.73 for an ozone study.

Charles Stoddard of J. H. Baxter in Eugene was present to volunteer his plant as a subject for the grant to study HAPs around a wood treatment facility. Arkell commented that J. H. Baxter has been very cooperative about the proposed study and that the study is a good way to document chemicals that might be of human health concern. Board members expressed appreciation to J. H. Baxter for their positive attitude in working with LRAPA toward a common goal.

**\*\* MOTION \*\***

MSP (Cornacchia/Hornbuckle)(Unanimous) approval of LRAPA Resolutions 95-7 through 95-13, delegating to staff the decision as to whether or not to use J. H. Baxter as a study site, as offered.

**DIRECTOR'S REPORT:** Arkell touched briefly on a few items of interest.

Hyundai Plant. The proposed Hyundai semi-conductor plant in Eugene will need three permits from LRAPA: an Authority to Construct prior to construction of the facility; an Indirect Source Permit which addresses parking, traffic patterns, etc.; and an Air Contaminant Discharge Permit under which to operate. Cornacchia said information regarding the permits would be helpful for board members to have when talking to people about projects such as the Hyundai plant. He asked Arkell to provide a brief written description of these three types of permits for that purpose.

Default Orders. There was some discussion regarding the fact that, when a respondent in an enforcement action fails to pay a civil penalty LRAPA enters a Default Order and Judgement with Lane County, placing a lien on the respondent's property. Cornacchia asked whether a property would just have a lien on it for a very long time, or whether LRAPA would try to foreclose. Arkell responded that LRAPA does not try to foreclose. The judgement shows up if the property owner tries to borrow money or sell the property. Cornacchia was concerned that simply letting a lien stand does no good for the agency. He feels that all tools need to be utilized. He asked that staff meet with legal counsel about the practice of putting liens on the properties and then doing nothing about them for years, and bring the results back to the board at a future meeting.

**OLD BUSINESS:** Mission Statement. Arkell presented draft amendments to the agency's personnel policy manual. Some changes are intended to update the manual to reflect changes in statutes. He called attention to page 8, section 10, "Department," which staff proposed to include the policy statements which the board developed over the past few months, and asked for board comments. Dodrill said he thought the changes reflected much of what the board has discussed, but he wanted to be sure that the policy reflects the consistency and timeliness issues stressed by Gretchen Nicholas and mentioned in the survey comments provided by the advisory committee. Arkell said he would find a place to include those concerns. He added that the enforcement rules just adopted address one aspect of timeliness for enforcement, and other rules, such as permitting rules, include specific time-lines for different aspects of the agency's operations. In addition, staff is in the final stages of preparing an operations manual which establishes procedures to address those issues. One specific additional change which Arkell suggested to the personnel manual was removing the words "Lane County residents and entities" from 10.A(1) and (2), because the policy should relate to everyone. Hornbuckle suggested revising C under Department to remove the gender bias.

**\*\* MOTION \*\***

MSP (Hornbuckle/Walters)(Unanimous) to change wording in section 10 to use the word "entities" instead of "community" in describing the regulated entities; and to change the phrase, "across the regulated community" to "among the regulated entities" in 10.A(3).

Eugene Ozone Ordinance. Arkell asked for direction from the board to proceed with a contract with the city to provide technical assistance and a public information program regarding the city's ozone ordinance. The public education program would be paid for by the city. Patterson reiterated his opinion that LRAPA should limit its involvement with city ordinances. He said he would agree with LRAPA providing technical assistance and support, but the terms of LRAPA's involvement must be very clear. Hornbuckle stated his opposition to LRAPA's becoming involved in any way with the ordinance. He said he voted against the ordinance because the ordinance which was adopted is weak and is not what was intended by proponents of the original ordinance proposal. Cornacchia asked whether the city asked for LRAPA's participation, or whether LRAPA volunteered. Arkell responded that the city asked for LRAPA's help. He added that staff is not interested in enforcing the ordinance but recommended that, as an air pollution control agency, LRAPA should participate in a technical role to provide information to the city.

**\*\* MOTION \*\***

MSP (Cornacchia/Walters) approval of staff's negotiating an agreement with the city to provide technical assistance and a public education program regarding the city's ozone ordinance. Hornbuckle requested a show of hands. The vote was 4 to 3, with Cornacchia, Hommer, Johnson and Walters in favor and Dodrill, Hornbuckle and Patterson in opposition.

Small Business Assistance/Compliance Advisory Panel. Following previous discussions by the board regarding recommending a person for appointment to the state's Compliance Advisory Panel, a letter of interest in appointment was submitted by Lorena Young, the current chair of the LRAPA Advisory Committee. Arkell recommended that the board approve the letter of interest and forward a recommendation to the Compliance Advisory Panel chairperson that Young be appointed as a representative on the panel.

**\*\* MOTION \*\*** MSP (Dodrill/Walters)(Unanimous) recommendation of appointment of Lorena Young to the Compliance Advisory Panel.

**NEW BUSINESS:** Election of Vice-Chair. Dodrill noted that, since Gretchen Nicholas is no longer on the board, and Hommer has taken over as Chair, the board needed to elect a new vice-chair to take over if Hommer is unavailable. He said that, according to the rotation of officers among the participating entities, the position should be held by a representative from either Springfield or Lane County.

**\*\* MOTION \*\*** Dodrill nominated Ralf Walters to serve as 1995 vice chair of the LRAPA Board of Directors. Hommer seconded the nomination. Walters accepted the nomination, and he was elected by unanimous vote.

**ADJOURNMENT:** The meeting adjourned at 1:35 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, July 11, 1995, 12:15 p.m., in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary

## MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--SEPTEMBER 12, 1995  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

### ATTENDANCE:

Board Mark Hommer, Chair--At-Large; Steve Cornacchia--Lane County; Steve Dodrill--Eugene; Pat Patterson--Cottage Grove/Oakridge; (ABSENT: Kevin Hornbuckle--Eugene; Al Johnson--Eugene; [Ralf Walters, the Springfield representative on the LRAPA board, resigned from the Springfield City Council shortly before this meeting, and the council had not yet made a new appointment])

Staff Mike Tharpe; Sharon Moody; Kim Partridge; Merrie Dinteman

Advisory Com. Fred Walter

Other Jerry Ritter--Weyerhaeuser, Springfield

OPENING: Hommer called the meeting to order at 12:32 p.m.

MINUTES: MSP (Cornacchia/Dodrill)(Unanimous) approval of August 17, 1995 minutes, as submitted.

EXPENSE REPORT: MSP (Cornacchia/Dodrill)(Unanimous) approval of expense reports through August 31, 1995, as presented.

ADVISORY COMMITTEE: MSP (Cornacchia/Patterson)(Unanimous) appointment of Steve Allen of Cottage Grove to a 3-year term on the LRAPA Advisory Committee, representing fire suppression.

PUBLIC PARTICIPATION: None.

PUBLIC HEARING-- AMENDMENTS TO TITLE 34, TABLE A (PERMIT FEES): Tharpe explained that the Title V program allows certain sources to have Synthetic Minor Permits by agreeing to limit production so that emissions are below the threshold above which they would be classified as major sources. Those sources which opt to become Synthetic Minors are subject to both Synthetic Minor Permit fees and regular Air Contaminant Discharge Permit fees. For most of these permits, there are multiple sources of air contaminants on the site, and the extra fee is justified because additional staff time is required to calculate emissions and write the Synthetic Minor Permit. However, when a plantsite has only one or two relatively simple sources of air contaminants, staff can write a "generic" permit and just insert the name, address and any other basic information specific to that permittee. Tharpe said the proposed fee amendment would reduce the fees for those smaller sources to a level which more accurately reflects the work involved in processing the permits.

A second part of the proposal would reduce fees for rock crushing operations below 300,000 tons per year throughput, also to more accurately reflect workload.

**Public Hearing** Hommer opened the public hearing at 12:40 p.m. Tharpe entered into the record affidavits of publication of hearing notice in four Lane County newspapers. There was no one present who wished to comment on the proposed amendments. Hommer closed the public hearing at 12:43 p.m.

**Discussion** Cornacchia commented that in the regulatory process involving permitting, the financial end of it needs to be revenue-neutral and not be a revenue-making process. He suggested that staff should have on file an established matrix showing how the fees relate to the workload, in order to respond to complaints regarding fees which are perceived to be higher than the workload would justify.

**\*\*ACTION\*\*** MSP (Cornacchia/Patterson)(Unanimous) adoption of amendments to LRAPA Title 34, Table A, as proposed.

**AUTHORIZATION TO MITIGATE CIVIL PENALTY (PERFORMANCE ABATEMENT SERVICES):** Tharpe explained that staff proposed to suspend \$4,000 of the original \$10,000 penalty assessed to Performance Abatement Services (PAS) for violation of rules regarding asbestos removal and handling. If PAS commits an asbestos violation in Lane County in the future, they would be required to pay the \$4,000, in addition to any new civil penalties levied for the new violation.

Cornacchia commented that the board should consider the experience and history of the respondent. He said he felt that someone who has experience working in Lane County and knows the rules should be held to a higher standard than someone who is new in the business and might not be as familiar with the rules. Tharpe responded that these factors are taken into consideration in calculating the penalties. Cornacchia said it would be helpful if staff could provide more detailed background information on these penalty mitigation requests, to help the board determine whether the violation was due to inexperience and lack of knowledge or whether the respondent was just trying to get around the regulations when the violation occurred.

Cornacchia also asked whether the stated \$4,000 limits the amount which can be levied for future violations. Tharpe said LRAPA's legal counsel had looked into that and determined that it does not limit future actions.

**\*\*ACTION \*\*** MSP (Cornacchia/Dodrill)(Unanimous) approval of Stipulated Final Order for Performance Abatement Services, as proposed.

**DIRECTOR'S REPORT:** Tharpe reported that the Indirect Source Permit had been issued for the Hyundai parking facilities and that applications had been received for the West Eugene Parkway and Ferry Street Bridge projects.

Indirect Source Permits

PSAs                    Dodrill asked what production costs would be associated with the Public Services Announcements produced by Partners for Smart Commuting. Partridge said the PSAs have an 800 number at the end for people to call to get more information. The number is for Portland. Production costs, which LTD has agreed to pay, would be to put a tag on the end of the message with local numbers for LTD and LRAPA.

Enforcement            There was also some discussion regarding reporting of the enforcement actions in the monthly director's report. The cases remain on the report until they have been resolved, and it is confusing for board members when they see the same names several months in a row. Cornacchia asked that there be some designation on the report to indicate if a particular case is a new action or if it is an update on an existing action.

Hyundai                Cornacchia asked when staff would bring the Hyundai Air Contaminant Discharge Permit before the board. Tharpe said LRAPA has asked for additional information for the permit application, and Hyundai has not yet submitted the information. Once all information is received, staff will evaluate it and draft a permit which will be placed on 30 days' public notice. The rules state that if ten or more people, or a group representing ten or more people, request public hearing on a permit, the agency must hold a public hearing. Staff anticipates holding a hearing sometime during the 30-day notice period. The board does not ordinarily preside over such hearings, although any board members who wish to attend would be welcome to do so. Following public hearing and closure of the notice period, staff will evaluate and respond to all comments and prepare a final permit. Tharpe said the Hyundai permit probably will not be issued until mid-December, at the earliest. Cornacchia said his concern is being kept up-to-date on the Hyundai permit so that he can respond adequately to constituents who ask him about it. He said he is not comfortable with his current level of knowledge about what is being regulated and why, and would like staff to prepare something to give the board a good basic understanding of the process and the status of Hyundai. Tharpe said staff would prepare something for presentation at the next board meeting.

Patterson asked about the list of chemicals to be used by Hyundai, which was printed in the Register-Guard that day, September 12. Tharpe said the list came from the application submitted by Hyundai. He explained that some of the chemicals are regulated directly by the Clean Air Act. Some others currently are not specifically regulated by federal standards, and those are the ones for which the emergency revisions to Title 32 were adopted by the board on August 17. Under the revised rules, LRAPA will apply TACT to those chemicals when writing the permit.

Patterson expressed concern that Hyundai might introduce some chemical at the last minute that no one has been aware of before. Tharpe responded that staff has worked with consultants in this

regard and that two staff members traveled to the Bay Area to get information from a similar plant in that area, and from the air pollution control authorities which write permits for similar facilities in the Bay Area. The company knows that there will be limits in the permit for each of the chemicals used. If they wish to increase or decrease emissions or introduce new chemicals, they must go through a whole new permitting process with a new public comment period. Patterson asked how LRAPA knows that the company is telling them about all the chemicals they will use. Tharpe said there are ways to tell what is being used. For instance, any substances shipped to or from the plant must be included on a shipping manifest. Also, water quality records would show differences in ingredients. It would be possible for a company to use something that they have not told LRAPA about; however, if they did so and were caught, it would be a very serious violation resulting in possible criminal charges and extremely high penalties. Companies know that the consequences are far too grave for such actions to be worth the risk. Cornacchia said people have asked him how Hyundai will be monitored to be sure they use only the permitted substances. He asked that staff prepare a one-page document to show, in layman's terms, what "monitoring" means and how it will be done. Tharpe said a good time to do that would be when the permit is drafted.

**OLD BUSINESS:** None.

**NEW BUSINESS:** None.

**ADJOURNMENT:** Hommer adjourned the meeting at 1:17 p.m. Cornacchia informed the board that he will not be available for the October 12 meeting. Dodrill suggested changing the meeting date to the following Tuesday, October 17.

**REOPENING:** Hommer opened the meeting back up at 1:20 p.m. to discuss the meeting date.

Tharpe reminded board members that they need to take action regarding the two appeals of hearings officers opinions which were brought up last month, so that these actions may be finalized. Cornacchia said he expected discussion on each case to take at least half an hour, and Dodrill said the last discussion and decision on an appeal which came before the LRAPA board took about 45 minutes. Board members present said they should be able to get through the information and be ready to discuss the two cases and take action at the October meeting.

Board members present all agreed that Tuesday, October 17 would be acceptable for the next board meeting.

Tharpe also reminded the board that a public hearing on amendments to LRAPA Title 47 (open burning rules) is scheduled for October 12. Because notice has been published, the hearing must be held on that date; however the board does not need to be present. The director can act as hearings officer for the

hearing and prepare a hearings officer's report of all comments received and LRAPA's responses. The report would be distributed to the board prior to the October 17 meeting, at which time the board would be asked to act on the proposed rule amendments.

**ADJOURNMENT:** The meeting adjourned at 1:24 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, October 17, 1995, 12:15 p.m., in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary



TABLE A  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE

REVISED DRAFT  
07/03/95

PART I

NOTE: Fees in A-I are in addition to any other applicable fees.

<p>A. Late Payment</p> <p>(1) 8-30 days 10%</p> <p>(2) Greater than 30 days 25%</p> <p>B. Ambient Monitoring Network Review \$900</p> <p>C. Modeling Review \$2,000</p> <p>D. Alternative Emission Control Review \$1,500</p> <p>E. Non-technical permit modification (name change, ownership transfer, similar) \$50</p> <p>F. Construction Review (see Section 34-050 for definition of level of construction review)</p> <p>(1) Level I \$200</p> <p>(2) Level II \$2,000</p> <p>(3) Level III \$10,000</p> <p>(4) Level IV \$20,000</p>	<p>G. Elective Permits--Synthetic Minor Sources</p> <p>(1) Permit application or modification \$1,900 (\$500)*</p> <p>(2) Annual compliance assurance \$1,000 (\$200)*</p> <p>H. Emission Banking Review</p> <p>(1) Initial setup \$1,000</p> <p>(2) Annual review \$500</p> <p>I. Emission Offsetting Review \$1,000</p>
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\* These fees may apply where a source electing to be a synthetic minor would otherwise require a federal operating permit due to its potential to emit air contaminants above the major source threshold and the source has two or less equipment types. The applicability of these fees will be determined by the Director.

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in Part II, in addition to fee for other applicable category.

Table A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
42. Sand and Gravel Plants: Rock Crusher			
(a) Stationary	1429, 1442, 1446 & 3295	1,870	1,960
(b) Portable	1429, 1442, 1446 & 3295	1,370	1,160
(c) Stationary or Portable < 300,000 Tons/Year Throughput	1429, 1442, 1446 & 3295	200	300

TABLE A  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE

PART I

NOTE: Fees in A-I are in addition to any other applicable fees.

<p>A. Late Payment</p> <p>(1) 8-30 days 10%</p> <p>(2) Greater than 30 days 25%</p> <p>B. Ambient Monitoring Network Review \$900</p> <p>C. Modeling Review \$2,000</p> <p>D. Alternative Emission Control Review \$1,500</p> <p>E. Non-technical permit modification (name change, ownership transfer, similar) \$50</p> <p>F. Construction Review (see Section 34-050 for definition of level of construction review)</p> <p>(1) Level I \$200</p> <p>(2) Level II \$2,000</p> <p>(3) Level III \$10,000</p> <p>(4) Level IV \$20,000</p>	<p>G. Elective Permits--Synthetic Minor Sources</p> <p>(1) Permit application or modification \$1,900 *(\$ 500)</p> <p>(2) Annual compliance assurance \$1,000 *(\$ 200)</p> <p>H. Emission Banking Review</p> <p>(1) Initial setup \$1,000</p> <p>(2) Annual review \$500</p> <p>I. Emission Offsetting Review \$1,000</p>
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\* These fees may apply where a source electing to be a synthetic minor would otherwise require a federal operating permit due to its potential to emit air contaminants above the major source threshold and the source has two or less equipment types. The applicability of these fees will be determined by the Director.

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in Part II, in addition to fee for other applicable category.

TABLE A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
1. Seed cleaning located in Air Quality Maintenance Areas, commercial operations only (not elsewhere classified)	0723	490	750
2. RESERVED			
3. Flour and other grain mill products in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2041	1,600	1,480
(b) Less than 10,000 tons per year	2041	1,230	630
4. Cereal preparations in Air Quality Maintenance Areas	2043	1,600	1,070
5. Blended and prepared flour in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2045	1,600	1,070
(b) Less than 10,000 tons per year	2045	1,230	620
6. Prepared feeds for animals and fowl in Air Quality Maintenance Areas			
(a) 10,000 or more tons per year	2048	1,600	1,480
(b) Less than 10,000 tons per year	2048	990	1,160
7. Beet sugar manufacturing	2063	2,090	7,340

Note: A filing fee of \$75 is required for all sources.

**TABLE A**

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
8. Rendering plant			
(a) 10,000 or more tons per year	2077	1,970	2,370
(b) Less than 10,000 tons per year	2077	1,480	1,280
9. Coffee roasting			
(a) 1 to 40 Kg. roasting capacity	2095	320	480
(b) Greater than 40 Kg. roasting capacity	2095	990	970
10. Sawmill and/or planing mill			
(a) 25,000 or more board feet per shift	2421	990	1,480
(b) Less than 25,000 board feet per shift	2421	330	690
11. Hardwood mills	2426	330	930
12. Shake and shingle mills with air transfer systems	2429	330	350
13. Mill work (including kitchen cabinets and structural wood members) 25,000 or more board feet per shift	2431, 2434 & 2439	740	1,160
14. Plywood manufacturing			
(a) 25,000 or more square feet per hour (3/8" basis finished product)	2435 & 2436	3,080	2,980

**Note:** A filing fee of \$75 is required for all sources.

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(b) Less than 25,000 square feet per hour (3/8" basis finished product)	2435 & 2436	1,490	1,740
15. Veneer manufacturing only (not elsewhere classified)	2435 & 2436	330	930
16. Wood preserving	2491	1,950	1,740
17. Particleboard manufacturing (including strandboard, flakeboard and waferboard)			
(a) $\geq$ 10,000 sq.ft./hr--3/4" basis finished product	2492	3,080	3,510
(b) < 10,000 sq.ft./hr--3/4" basis finished product	2492	1,480	1,680
18. Hardboard manufacturing			
(a) $\geq$ 10,000 sq.ft./hr--1/8" basis finished product	2493	3,080	2,880
(b) < 10,000 sq.ft./hr--1/8" basis finished product	2493	1,480	1,480
19. Battery separator manufacturing	3069	1,230	2,560
20. Furniture and fixture manufacturing 25,000 or more board feet/shift	2511	740	1,160

Note: A filing fee of \$75 is required for all sources.

**TABLE A**

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
21. Pulp mills, paper mills and paperboard mills	2611, 2621 & 2631	6,160	12,760
22. Building paper and building board mills	2661	990	970
23. Alkalies and chlorine manufacturing			
(a) Simple Permit *	2812	1,730	2,540
(b) Complex Permit *	2812	3,020	3,390
24. Calcium carbide manufacturing			
(a) Simple Permit *	2819	1,850	2,540
(b) Complex Permit *	2819	3,230	3,390
25. Nitric acid manufacturing			
(a) Simple Permit *	2819	1,230	1,280
(b) Complex Permit *	2819	2,160	1,710
26. Ammonia manufacturing			
(a) Simple Permit *	2819	1,230	1,480
(b) Complex Permit *	2819	2,160	1,970
27. Industrial inorganic and organic chemicals manufacturing (not elsewhere classified)			
(a) Simple Permit *	2819 & 2869	1,600	1,820

**Note:** A filing fee of \$75 is required for all sources.

TABLE A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(b) Complex Permit *	2819 & 2869	2,800	2,410
28. Synthetic resin manufacturing			
(a) Simple Permit *	2821	1,230	1,480
(b) Complex Permit *	2821	2,160	1,970
29. Charcoal manufacturing	2861	1,730	3,080
30. Pesticide/Herbicide manufacturing	2879	3,080	12,760
31. Petroleum refining	2911	6,160	12,760
32. Asphalt production by distillation	2951	1,230	1,480
33. Asphalt blowing plants	2951	1,230	1,920
34. Concrete Paving Plants: Asphalt Production			
(a) Stationary	2951	1,640	1,760
(b) Portable	2951	1,640	1,970
35. Asphalt felts or coating	2952	660	1,460
36. Blending, compounding or refining of lubricating oils and reprocessing of oils and solvents for fuel	2992	1,110	1,380
37. Glass container manufacturing	3221	1,230	1,820

Note: A filing fee of \$75 is required for all sources.



TABLE A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
38. Cement manufacturing	3241 & 3251	3,940	9,350
39. Concrete Manufacturing including Redimix and CTB	3271, 3272 & 3273	250	390
40. Lime manufacturing	3274	1,850	970
41. Gypsum products	3275	990	1,070
42. Sand and Gravel Plants: Rock Crusher			
(a) Stationary	1429, 1442, 1446 & 3295	1,870	1,960
(b) Portable	1429, 1442, 1446 & 3295	1,370	1,160
(c) Stationary or Portable < 300,000 Tons/Year Throughput	1429, 1442, 1446 & 3295	200	300
43. Steel works, rolling and finishing mills, electrometallurgical products	3312 & 3313	3,080	2,540
44. Incinerators	4953 & 7261		
(a) 250 or more ton/day capacity or an off-site infectious waste incinerator		14,780	6,370
(b) 50 or more but less than 250 tons/day capacity		3,700	1,930
(c) 0.5 or more but less than 50 tons/day capacity		620	750
(d) crematoriums and pathological waste			

Note: A filing fee of \$75 is required for all sources.

## AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE

## PART II

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
(e) incinerators not elsewhere classified PCB and/or off-site hazardous waste incinerator		620	750
		14,780	6,370
45. Gray iron and steel foundries, malleable iron foundries, steel investment foundries, steel foundries (not elsewhere classified)	3321 & 3322 & 3324 & 3325		
(a) 3,500 or more tons per year production		3,080	2,230
(b) Less than 3,500 tons per year production		740	1,160
46. Primary aluminum production	3334	6,160	12,760
47. Primary smelting of zirconium or hafnium or primary smelting and refining of other ferrous or non-ferrous metals not elsewhere classified			
(a) $\geq$ 2,000 TPY production	3339	6,160	12,760
(b) < 2,000 TPY production	3339	1,000	2,000
48. Primary smelting of silicon	3339	2,610	5,880
49. Secondary smelting and refining of nonferrous metals	3341	1,480	1,480
50. Nonferrous metal foundries (100 or more tons/year metal charged)	3361, 3362 & 3369	740	1,280
51. Electroplating, polishing and anodizing	3471	500	960

Note: A filing fee of \$75 is required for all sources.

**TABLE A**

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
52. Galvanizing and pipe coating--exclude all other activities	3479	620	970
53. Battery manufacturing	3691	740	1,280
54. Grain elevators--intermediate storage only, located in Air Quality Maintenance Areas			
(a) 20,000 or more tons per year	4221	1,110	2,010
(b) Less than 20,000 tons per year	4221	620	970
55. Electric power generation or cogeneration			
(a) Solid fuel--25 MW or greater	4911	24,640	12,760
(b) Solid Fuel--less than 25 MW	4911	11,670	6,270
(c) Oil or gas fired	4911	2,200	3,080
56. Fuel burning Equipment at gas production and/or distribution facilities	4925	2,340	1,480
57. Grain elevators--terminal elevators primarily engaged in buying and/or marketing grain in Air Quality Maintenance Areas			
(a) 20,000 or more tons per year	5153	3,080	2,540
(b) Less than 20,000 tons per year	5153	860	970

**Note:** A filing fee of \$75 is required for all sources.

## AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE

## PART II

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
58. Fuel-Burning Equipment (gas or oil), Aggregate Heat Input			
(a) >250 million BTU/hr	4961	2,220	3,080
(b) >100 and <250 million BTU/hr	4961	1,510	1,730
(c) >10 and <100 million BTU/hr	4961	990	1,210
(d) <10 million BTU/hr	4961	330	350
59. Fuel-Burning Equipment Inside the AQMA (Wood or Coal Only) Aggregate Heat Input			
(a) >250 million BTU/hr	4961	3,510	3,020
(b) >100 and <250 million BTU/hr	4961	2,490	2,320
(c) >10 and <100 million BTU/hr.	4961	1,810	1,530
(d) <10 million BTU/hr	4961	1,220	1,010
60. Fuel-Burning Equipment Outside the AQMA (Wood or Coal Only) Aggregate Heat Input			
(a) >250 million BTU/hr	4961	2,640	2,410
(b) >100 and <250 million BTU/hr	4961	1,970	2,130
(c) >10 and <100 million BTU/hr	4961	1,190	1,310
(d) <10 million BTU/hr	4961	490	1,070
61. Sources not listed herein which would emit 10 or more tons per year of the aggregate of any air contaminants, including including but not limited to: particulates, SO <sub>x</sub> , NO <sub>x</sub>			

Note: A filing fee of \$75 is required for all sources.

TABLE A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
or hydrocarbons, if the source were to operate uncontrolled			
(a) Complex Permit *		5,200	5,200
(b) Simple Permit *		1,000	1,000
62. Sources not listed herein which would emit significant malodorous emissions as determined by Authority review of sources which are known to produce similar air contaminant emissions			
(a) Complex Permit *		5,200	5,200
(b) Simple Permit *		1,000	1,000
63. Sources not listed herein for which an air quality problem is identified by the Authority, including but not limited to: open storage of dusty or odorous material, dry material handling air transfer systems and sandblasting operations			
(a) Complex Permit *		5,200	5,200
(b) Simple Permit *		1,000	1,000
64. Bulk gasoline plants	5100 & 5171	490	630
65. Bulk gasoline terminals	5171	4,930	2,380

Note: A filing fee of \$75 is required for all sources.

TA 2 A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
66. Liquid storage tanks--39,000 gallons or more capacity (not elsewhere classified) except for water	4200, 5169 & 5171	250/tank	440/tank
67. Can or drum coating			
(a) $\geq$ 50,000 units/mon.	3411 & 3412	7,390	3,830
(b) < 50,000 units/mon.	3411 & 3412	1,900	1,200
68. Paper or other substrate coating	2641 & 3861	7,390	3,830
69. Coating flat wood	2400 & 2672	2,460	1,700
70. Surface coating manufacturing			
(a) 100 tons or more of VOC per year	2851	2,460	1,700
(b) 10 tons or more but less than 100 tons/year VOC	2951	740	850
(c) Less than 10 tons VOC per year	2851	250	360
71. Flexographic or rotogravure printing 10 tons or more VOC per year per plant	2751, 2754 & 2759	390	840
72. RESERVED			
73. Sources subject to federal NESHAPS rules under Section 112 of the federal Clean Air Act (except demolition or renovation)		490	620

Note: A filing fee of \$75 is required for all sources.

TABLE A

**AIR CONTAMINANT SOURCES AND ASSOCIATED FEE SCHEDULE**

**PART II**

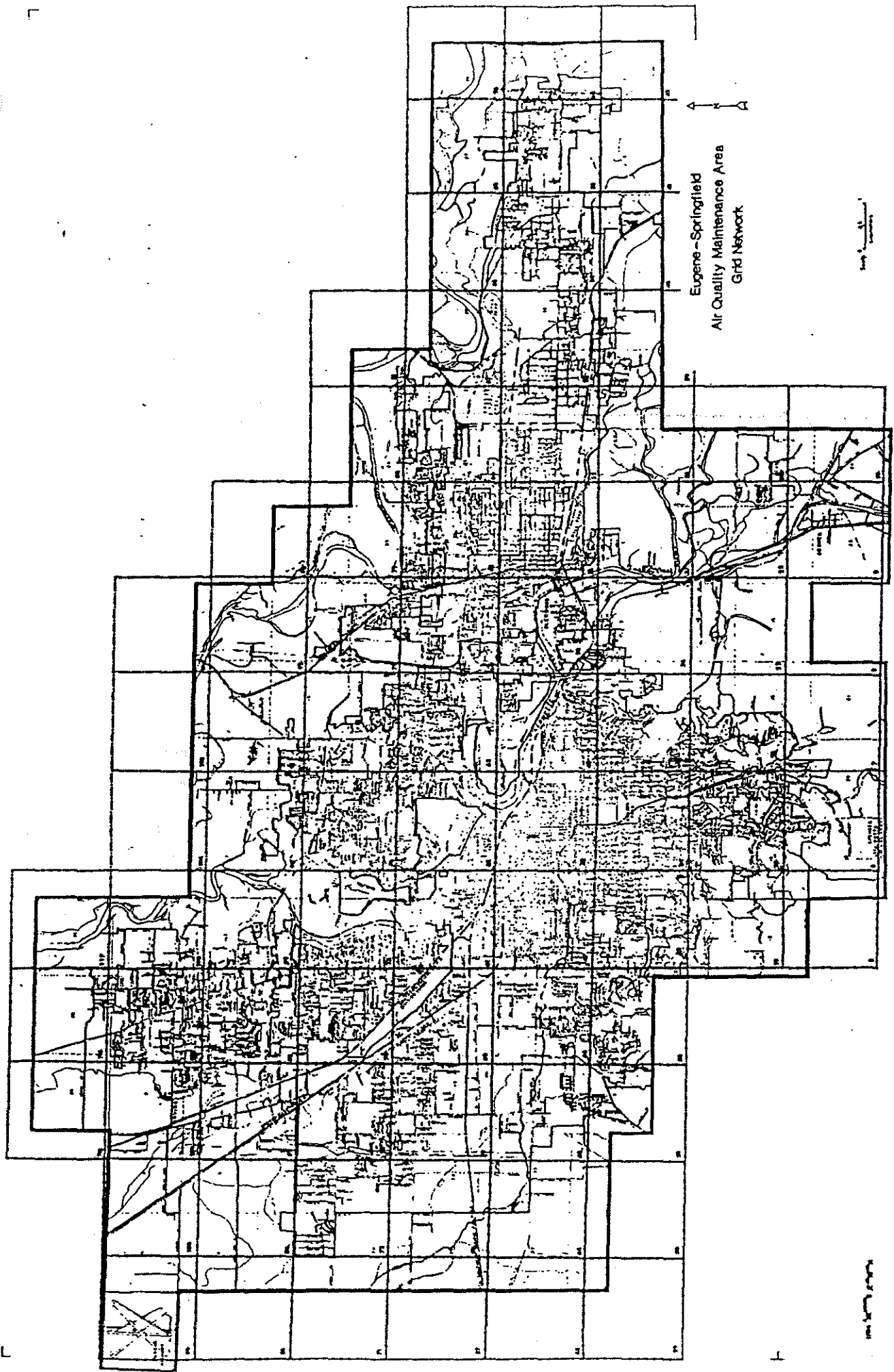
Air Contaminant Source	Standard Industrial Classification Number	Application Processing Fee	Annual Compliance Determination Fee
74. Sources of toxic air pollutants, including Maximum Available Control Technology (MACT) (not elsewhere classified)			
(a) High Toxicity **		1,230	1,180
(b) Moderate Toxicity **		830	990
75. Soil remediation Plants			
(a) Stationary (emissions $\geq$ SER)	1799	1,230	1,160
(b) Portable (emissions $\geq$ SER)	1799	1,230	1,480
(c) Stationary (emissions $<$ SER)	1799	300	400
(d) Portable (emissions $<$ SER)	1799	300	500

- \* **Complex Permit:**
- sources requiring PSD or NSR review or
  - sources requiring source-specific MACT/GACT determination or
  - sources requiring a large amount of staff time to complete the permitting process

- Simple Permit:**
- sources which are not complex

\*\* New York State Air Guide-1 1985-86 Edition

Note: A filing fee of \$75 is required for all sources.





# AIR CONTAMINANT DISCHARGE PERMIT ISSUANCE PROCEDURES (for Regular, Minimal & Letter Permits) NEW or RENEWAL APPLICATIONS

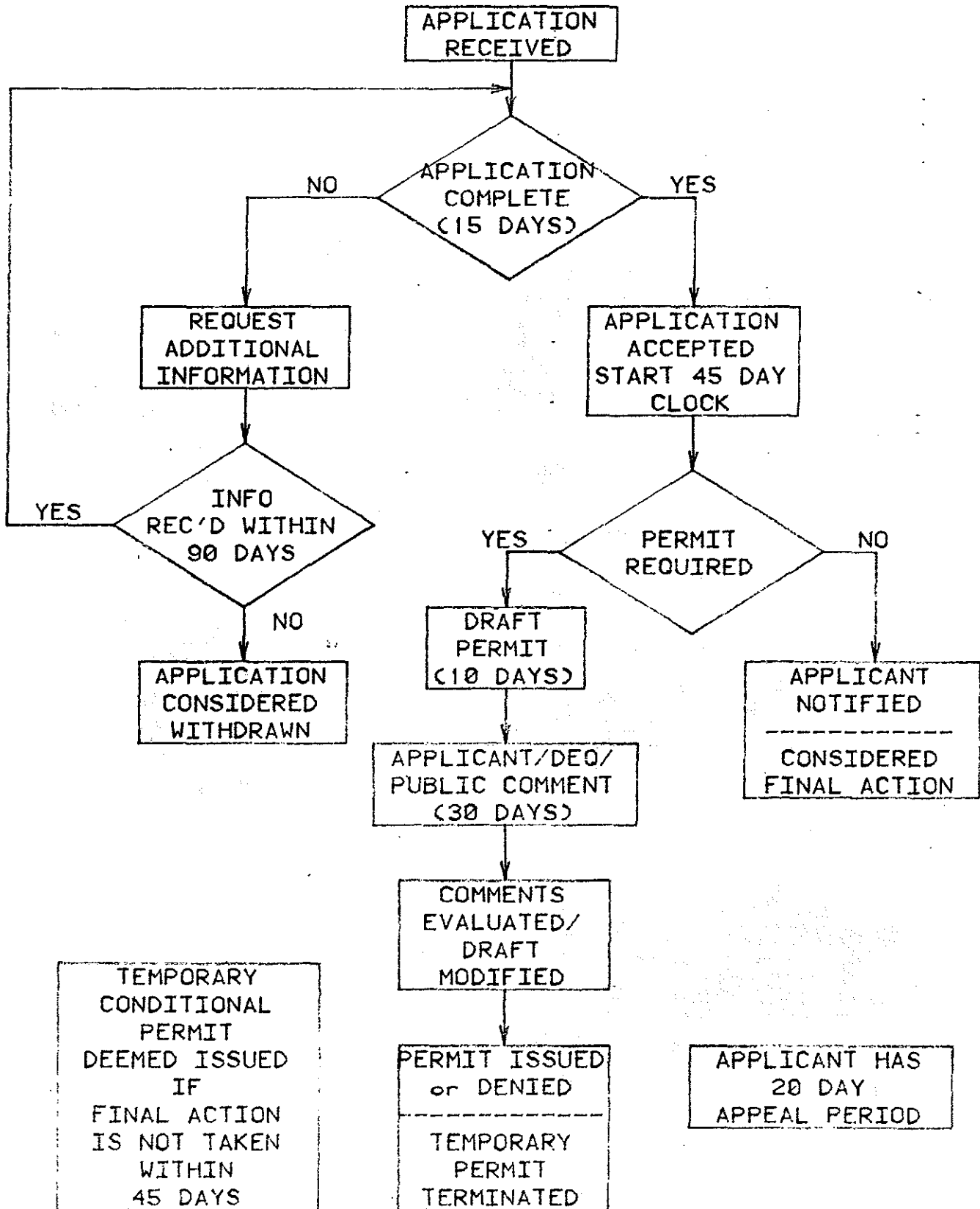


FIGURE 1

# ATTACHMENT F

LRAPA Adoption of Title 47  
October 17, 1995

## **AGENDA ITEM NO. 6**

### **LRAPA Board of Directors Meeting**

**October 17, 1995**

**TO:** Board of Directors  
**FROM:** Don Arkell, Director  
**SUBJ:** Request for Adoption of Amendments to LRAPA Title 47, Open Burning Rules

#### **SUMMARY OF PROPOSED RULE AMENDMENTS**

It is proposed to adopt rule amendments regarding open burning in Lane County to provide rules under which LRAPA could regulate slash burning on properties not covered in the Oregon Department of Forestry's Smoke Management Plan. The proposed amendments would also change the beginning date for the residential open burning season from October 1 to October 15, add some definitions, update an Oregon Administrative Rules citation, and provide some minor housekeeping changes.

#### **DESCRIPTION OF PROBLEMS AND PROPOSED SOLUTIONS**

1. The Oregon Department of Forestry (ODOF) has exclusive statutory jurisdiction over forest slash burning in Oregon on lands within the Forest Protection Zones (FPZs) throughout the state. Regulation of smoke is according to ODOF's Smoke Management Plan, which applies only within the FPZs. There are private lands in Lane County which are in timber production but which are not included in FPZs or the Smoke Management Plan. The ODOF does not issue slash burning permits for those properties; consequently, slash burning may occur without consideration of air quality impact on nearby population centers which are otherwise protected by the Smoke Management Plan. As a result of discussions with ODOF personnel, LRAPA is proposing to assume responsibility for air quality permitting for slash burning for only those areas in Lane County outside the FPZs. Slash burning would be added as a category of burning for which special letter permits are issued under Section 47-020. Implications for persons harvesting timber on lands which will remain in timber production are that salvage and leave-in-place alternatives would need to be evaluated as first choices; and where open burning is still the only alternative, smoke reduction measures such use of air curtain destructors or other combustion enhancement measures would be required. As is currently

done with other types of land clearing projects, a letter permit would be sent to the appropriate fire district, if any, or would be issued directly to the applicant. Permitted burning would then be scheduled to avoid smoke impact. It is envisioned that fire safety restrictions would still be handled by the appropriate fire district or under contract with the ODOF. It is necessary for the LRAPA board to adopt rules to implement this arrangement.

2. Under current rules, residential open burning is allowed in Lane County from October 1 through June 15. In recent years (except for 1995), dry conditions in September and October have prompted Lane County's Fire Defense Board to ask LRAPA to postpone the beginning of the residential open burning season until mid-October, or even the first of November, due to high fire danger. It is proposed to amend the rules to push the season opening back from October 1 to October 15. The June 15 ending date would remain the same.
3. Agricultural open burning is under the jurisdiction of the Department of Agriculture (DOA) and the Department of Environmental Quality (DEQ). LRAPA receives many requests for open burning permits for land clearing, and staff must determine in each instance whether the request falls under LRAPA's rules or qualifies as agricultural open burning. The current rules include a definition for agricultural open burning but do not include definitions for agricultural operation or agricultural waste. Addition of definitions for "agricultural operations" and "agricultural waste" would provide clearer guidelines for staff to use in making those determinations. These proposed definitions are consistent with state statutory and regulatory definitions.
4. Section 47-015-1.G cites a DEQ rule regarding burning at solid waste disposal sites. DEQ has renumbered its solid waste rules since this section of LRAPA's rules was last amended. It is necessary to amend the section to include the correct rule citation.

## EFFECTS ON THE PUBLIC, REGULATED COMMUNITY AND OTHER AGENCIES

1. **Slash Burning**
  - A. Public. There is currently no air quality permit written for slash burning on properties in Lane County which are not included in the ODOF Smoke Management Plan. The proposed amendments to LRAPA rules would provide the same or greater protection of populated areas within Lane County as ODOF's Smoke management Plan, resulting in enhanced protection of public health for Lane County citizens.

- B. Regulated Community. On forest land located outside FPZs, greater restrictions would be placed on slash burning than is currently the case. This may involve alternative plans for logging operations, and possibly some additional expense to persons engaged in forest slash burning on forest land. It would, however, also give them clear guidelines to enhance combustion and minimize smoke impact in the surrounding areas.
- C. Other Agencies. LRAPA would assume responsibility for air quality considerations associated with slash burning. Fire districts would continue to deal with fire safety issues.

2. Change of Burning Season Dates

- A. Public. Persons who conduct open burning in areas where residential open burning is allowed would have to delay the start of burning activities for two weeks longer. In recent years (except for 1995), however, burning has not been allowed until mid-October, anyway. There would be no actual change.
- B. Regulated Community. (See item 2.A, above.)
- C. Other Agencies. Postponing the opening of the residential open burning season until mid-October would help local fire districts to minimize problems associated with dry weather and high fire danger at that time of year.

3. Agricultural Burning

- A. Public. The proposed amendments would have no direct effect on the general public.
- B. Regulated Community. The added clarification provided by the proposed amendments would make it easier for LRAPA to respond to open burning inquiries involving agricultural open burning versus other types of land clearing open burning.
- C. Other Agencies. The added clarification provided by the proposed amendments would help LRAPA staff to coordinate open burning requests between LRAPA and DOA/DEQ.

- 4. Change of Rule Citation. Would have no direct effect on anyone. This simply updates the rules according to renumbered state rules.

## PUBLIC NOTICE AND COMMENT

Information regarding these proposed amendments was sent out to the agency's standard mailing list for rule changes. In addition, the draft rule amendments, themselves, were sent out to the all Lane County fire districts and to the ODOF offices in Salem, Veneta and Springfield, with a request for review and comment. The comments received were integrated into a revised draft which was again sent out to all fire districts and to ODOF (see attached "Written Comments and LRAPA Responses," dated August 4, 1995, for specific comments.). Public hearing was scheduled for October 10, 1995.

Notice of the hearing was published in the Cottage Grove Sentinel, the Eugene Register Guard, the Oakridge Dead Mountain Echo, and the Springfield News, and in the September 1, 1995 edition of the Secretary of State's Oregon Bulletin. Comments were solicited from DEQ and EPA, and DEQ authorized LRAPA to serve as hearings officer for the Oregon EQC at a joint EQC/LRAPA hearing.

Oral comment from Randall Hledik of Wildish Land Co., who had earlier filed a request to burn slash materials, revealed that the wording of the draft rule amendments did not accomplish one of the main objectives of the amendment proposal for Title 47; namely, to regulate air pollution from forest slash burning on properties in Lane County which are not covered by the ODOF Smoke Management Plan. In addition, there were a few other minor changes which needed to be made in the listing of fire districts in 47-015-2.F. As a result, the following changes were made in the amendment proposal:

1. Section 47-015
  - A. Subsection 2.F--The city of Cottage Grove and the South Lane Rural Fire Department are one fire district. The two separate listings have been consolidated in this draft.
  - B. Subsection 2.F--In the existing rule, the Fernridge Fire Dept. includes the phrase, "east of Range 7 West Willamette Meridian." The Fernridge and Crow Valley districts have merged to create Lane County Fire District #1. In making that change in the proposed amendments, the reference to Range 7 West was left off. It has been restored in this draft, without the words, "Willamette Meridian," which refers to a different geographic location.
  - C. Subsection 6.B(3)--As presented in the previously distributed revised draft, forest slash open burning would be allowed outside the specific fire districts listed in Subsection 2-F, subject to general requirements of Section 47-015-1. Since the objective is to control this type of burning

in areas which are not covered by ODOF, this item is changed in this revision to prohibit slash burning in areas not covered by ODOF which are also outside the referenced fire districts, without a special letter permit from LRAPA, issued under Section 47-020. The rest of Subsection 6 is the same as in the previous draft but has been renumbered.

2. Section 47-030 (summary matrix). The far-right column, "All Other Areas," in the last line, for forest slash open burning, has been changed to require letter permit from LRAPA for slash burning on any property in Lane County which is outside the affected fire districts and is not covered by ODOF's Smoke Management Plan. This corresponds to the change described in item number 1.C, above.

## **PUBLIC HEARING**

See Hearings Officer's report of October 10 public hearing.

## **OPTIONS FOR BOARD ACTION**

1. Do nothing. The biggest impact of this action is that slash burning could continue to occur on properties outside ODOF's Smoke Management Plan, with no air quality controls. The opening date for the residential open burning season would remain October 1, continuing to create to confusion when the Fire Defense Board requests that LRAPA postpone the season until fire danger decreases. In addition, minor errors and outdated information would remain in the rules.
2. Ask staff to develop a revised proposal. These rule amendments have been in process since March of this year and have received thorough review by fire district and forestry personnel, as well as the interested general public. Since these are the same people who would be asked to provide input on another draft, it is unlikely that a significantly different or better proposal would result.
3. Adopt the revised rule amendment proposal as presented. LRAPA could assume control of air quality aspects of slash burning in areas where such burning is currently uncontrolled. The residential open burning season opening date would be moved to October 15, thus eliminating the confusion created when the Fire Defense Board requests a postponement. The additional minor errors and outdated information would be corrected, presenting a clearer set of rules.

**DIRECTOR'S RECOMMENDATION**

It is the director's recommendation that the board adopt the revised rule amendments as presented.

DRA/MJD



## STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

### Legal Authority

ORS 183, 468A.135 and LRAPA Section 14-150

### Need for Amendments

1. The Oregon Department of Forestry (DOF) has exclusive statutory jurisdiction over forest slash burning in Oregon on lands within the Forest Protection Zones (FPZs) throughout the state. Regulation of smoke is according to DOF's Smoke Management Plan, which applies only within the FPZs. There are private lands in Lane County which are in timber production but which are not included in FPZs or the Smoke Management Plan. The DOF does not issue slash burning permits for those properties; consequently, slash burning may occur without consideration of air quality impact on nearby population centers which are otherwise protected by the Smoke Management Plan. As a result of discussions with DOF personnel, LRAPA is considering assuming responsibility for air quality permitting for slash burning for only those areas in Lane County outside the FPZs. Slash burning would be added as a category of burning for which special letter permits are issued under Section 47-020. Implications for persons harvesting timber on lands which will remain in timber production are that salvage and leave-in-place alternatives would need to be evaluated and, where feasible, air curtain destructors or other combustion enhancement measures would be required. As is currently done with other types of land clearing projects, a letter permit would be sent to the appropriate fire district, if any, or would be issued directly to the applicant. Permitted burning would then be scheduled to avoid smoke impact. Fire safety restrictions would still be handled by the appropriate fire district. It is necessary for the LRAPA board to adopt rules to implement this arrangement.
2. Under current rules, residential open burning is allowed in Lane County from October 1 through June 15. In recent years, dry conditions in September and October have prompted Lane County's Fire Defense Board to ask LRAPA to postpone the beginning of the residential open burning season until mid-October, or even the first of November, due to high fire danger. It is proposed to amend the rules to push the season opening back from October 1 to October 15. The June 15 ending date would remain the same.
3. Agricultural open burning is under the jurisdiction of the Department of Agriculture (DOA) and the Department of Environmental Quality (DEQ). LRAPA receives many requests for open burning permits for land clearing, and staff must determine in each instance whether the request falls under LRAPA's rules or qualifies as agricultural open burning. The current rules include a definition for agricultural open burning but do not

include definitions for agricultural operation or agricultural waste. The proposed additional definitions would provide clearer guidelines for staff to use in making those determinations. These definitions are consistent with state statutory and regulatory definitions.

4. Section 47-015-1.G cites a DEQ rule regarding burning at solid waste disposal sites. DEQ has renumbered its solid waste rules since this section of LRAPA's rules was last amended. It is necessary to amend the section to include the correct rule citation.

#### Principal Documents Relied Upon

1. Attorney General's Uniform and Model Rules of Procedure
2. LRAPA Titles 14 and 47
3. LRAPA Notice to Interested and Affected Parties, dated May 12, 1995
4. Eugene-Springfield PM10 SIP
5. ORS 183, 468 and 468A et. seq.

#### FISCAL AND ECONOMIC IMPACT STATEMENT

1. **Slash Burning**
  - A. **Public.** There is currently no air quality permit written for slash burning on properties in Lane County which are not included in the DOF Smoke Management Plan. The proposed amendments to LRAPA rules would provide the same protection of populated areas within Lane County as ODOF's Smoke Management Plan, resulting in enhanced protection of public health for Lane County citizens.
  - B. **Regulated Community.** On forest land located outside FPZs, greater restrictions would be placed on slash burning than is currently the case. This may involve some additional expense to persons engaged in forest slash burning on forest land. It would, however, also give them clear guidelines to enhance combustion and minimize smoke impact in the surrounding areas.
  - C. **Other Agencies.** LRAPA would assume responsibility for air quality considerations associated with slash burning. Fire districts would continue to deal with fire safety issues.
2. **Change of Burning Season Dates**
  - A. **Public.** Persons who conduct open burning in areas where residential open burning is allowed would have to delay the start of burning activities for two weeks longer. In recent years, however, burning has not been allowed until mid-October, anyway.

There would be no actual change. There would be less public confusion regarding the start of burning season.

- B. Regulated Community. (See item 2.A, above.)
  - C. Other Agencies. Postponing the opening of the residential open burning season until mid-October would help local fire districts to minimize problems associated with dry weather and high fire danger at that time of year. Fire districts would have a more uniform start date and would not have to contend as much with public confusion.
3. Agricultural Burning
- A. Public. The proposed amendments would have no direct effect on the general public.
  - B. Regulated Community. The added clarification provided by the proposed amendments would make it easier for LRAPA to respond to open burning inquiries involving agricultural open burning versus other types of land clearing open burning.
  - C. Other Agencies. The added clarification provided by the proposed amendments would help LRAPA staff to coordinate open burning requests between LRAPA and DOA/DEQ.
4. Change of Rule Citation. Would have no direct effect on anyone. This simply updates the rules according to renumbered state rules.

#### LAND USE CONSISTENCY STATEMENT

The proposed rule amendments are consistent with land use as described in applicable land use plans in Lane County.

DRA/mjd

Proposed Amendments to LRAPA Title 47  
"Outdoor Open Burning"  
Hearing Date: October 10, 1995

August 4, 1995

WRITTEN COMMENTS AND LRAPA RESPONSES

A draft amendment proposal was sent out to ODEQ, EPA, ODOF and all fire districts in Lane County, with a request for their review and comment. In addition, an informational memorandum regarding the proposed changes was sent to a list of interested persons which includes all industrial permitted sources in Lane County, local governments and chambers of commerce, asbestos abatement contractors, environmental consultants, and others who have expressed an interest in LRAPA's rulemaking. Attached are copies of comments received from:

- Chuck Gottfried, Eugene
- Wildish Land Co., Eugene
- Oregon Department of Energy, Salem
- Oregon Department of Environmental Quality, Portland
- Oregon Department of Forestry, Eastern Lane District, Springfield
- Oregon Department of Forestry, Western Lane District, Veneta
- Oregon Department of Forestry, State Forester's Office, Salem

LRAPA has considered the comments received and incorporated some of them into a revised draft. LRAPA's responses to each of the written comments are as follows:

**CHUCK GOTTFRIED**

Mr. Gottfried contends that the existing rules give LRAPA the flexibility to delay the season due to high fire danger, if necessary. In years when fire danger is not high on October 1, burning can be allowed to begin under the existing rules, while material to be burned is likely to be drier and burn faster and cleaner. He does not think LRAPA should change the burning season dates in response to a few years of unseasonably dry weather.

LRAPA Response: Mr. Gottfried's point that dry materials burn better than wet materials is well taken; however, there is no attempt to regulate residential burning according to fuel moisture. Likewise, there is no assurance that all materials are dry at the end of September. Increases in fuel moisture due to exposure to rain may be offset somewhat by better atmospheric ventilation which is associated with storm fronts and wet weather.

We have cooperated with fire districts by announcing to the general public at the beginning of the residential open burning season that burning is prohibited due to high fire danger. But LRAPA rules do not specifically provide for season delays, and there is public confusion whenever the season is delayed suddenly. The reason for the request to move the season's beginning back two weeks is to reduce public confusion and the incidence of unlawful burning. Furthermore, the fire districts make the point that high fire danger frequently exists well into October or even November. According to information submitted by ODOF (see letter from Don Bowsby), fire seasons in Lane County have been closed well into October or November every year since 1987. The revised draft rule amendments retain the change in season date.

#### **WILDISH LAND CO. (RANDALL S. HLEDIK)**

Mr. Hledik has requested a "grandfather" clause in the proposed rule amendments to allow less stringent conditions for burning of logging slash materials on properties where the logging and piling of slash materials have taken place before the rules take effect. This is because those projects were done according to standard logging practices which have different requirements than what is proposed in LRAPA's rule amendments. Compliance with these amendments would require slash piles to be pulled apart and relocated, causing disturbance of areas that have revegetated and significantly increasing the cost to the permit applicant.

LRAPA Response: LRAPA staff does not recommend "grandfathering" slash that's already on the ground as of the effective date of the rule amendments. There is no way to know how many properties this might apply to at the time these rule amendments take effect. We believe "grandfathering" would allow existing slash in and around populated areas to be burned without regard for wind direction or potential public exposure. Even though there is no regulation for smoke management in the unprotected areas, we would hope, in the interest of protecting populated areas, that logging operations would make all reasonable efforts to minimize smoke impacts to surrounding populated areas. Salvaging and air curtains have been known for years as reasonable means to reduce fuel loading and promote efficient combustion. The revised rule draft amendments do not include a "grandfather" clause.

#### **OREGON DEPT. OF ENERGY (JOHN G. WHITE)**

Mr. White supports the proposed rule amendments, indicating his view that burning should be the last option considered after leave-in-place and salvage options have

been eliminated. He suggests that the proposed rule amendments include a definition of "salvage" to include collection of forest biomass for utilization as an energy resource.

LRAPA Response: Staff concurs with Mr. White's preferred order of slash handling options. The hierarchy of options he suggests is similar to what LRAPA uses to issue letter permits for other types of open burning. The term "salvage" can include a wide variety of operations intended to utilize downed slash, either as fire wood, reduced to fiber for soil amendments or mulch, or other purposes, and chipping for use as fuel. A definition is included in the revised draft rule amendments.

#### **OREGON DEPT. OF ENVIRONMENTAL QUALITY (GREGORY A. GREEN)**

DEQ determined that the proposed rule amendments are at least as stringent as state rules, and authorized the LRAPA board to act as hearings officer for public hearing on the amendments. They had one minor point regarding use of different terminology and recommending that consistent terminology be used in the rule.

LRAPA Response: We concur. Consistent terminology, "forest slash open burning," to be consistent with other terms, such as "commercial open burning," "residential open burning," etc., is used in the revised rule amendments.

#### **OREGON DEPT. OF FORESTRY, EASTER LANE DISTRICT (DON BOWLSBY)**

Mr. Bowlsby supports the proposal to change the beginning date of the residential open burning season, due to fire safety concerns at the beginning of October. His written comments include statistics to back up the need for this change.

#### **OREGON DEPT. OF FORESTRY, WESTERN LANE DISTRICT (DARREL SPIESSCHAERT)**

Mr. Spiesschaert supports the proposal that LRAPA regulate forest slash open burning on properties outside the Oregon Smoke Management Plan (OSMP). He encourages LRAPA to make its regulations compatible and consistent with the OSMP.

LRAPA Response. We concur and would intend to consult with the appropriate fire protection district for advice on reasonable salvage and combustion enhancement techniques.

The purpose for LRAPA's assuming responsibility for forest slash open burning projects is to protect air quality from slash burning near populated areas. The proposed rule amendment would treat forest slash open burning similarly to other types of permitted open burning, with air quality consideration being the first priority. Letter permits are issued where reasonable efforts have been made to reduce fuel loading through salvage and provisions are made to enhance combustion and resultant burning is not expected to be accomplished with minimal air quality impact in areas where the public may be exposed. Some judgement is used about what reasonable efforts are, based on case-by-case inspection and review of each site. Our consultation with fire protection district personnel would assist us making those judgements.

**OREGON DEPT. OF FORESTRY, STATE FORESTER'S OFFICE (MIKE ZIOLKO)**

Mr. Ziolkko listed eight comments in his letter. Please see the attached letter for specific comments. The first is a statement of agreement with the proposal and so requires no response from LRAPA.

LRAPA Response: LRAPA staff agrees with comments numbers 2, 3 and 7 and has incorporated those comments into the revised rule draft, as suggested.

In response to comment number 4, Section 47-015-2.F has been revised, removing Crow Valley RFPD and Fernridge Fire Department and inserting Lane County Fire District #1, which is the name given to a joint district formed recently by Crow Valley and Fernridge districts.

The first part of comment number 5 has been included in the revised draft. The second part, regarding the terminology for slash burning used in the rule, has been addressed in response to DEQ comments. The words, "forest slash open burning" are used for consistency with other types of burning referenced in the rules.

The intent of comment number 6 is not quite clear as stated in the letter. A telephone conversation with Mr. Ziolkko confirmed that ODOF's concern is that LRAPA not allow slash burning to occur on days when ODOF has prohibited it under the Oregon Smoke Management Plan. Section 47-015-6.B(3) of the rule amendment was revised to provide for consistency between ODOF and LRAPA burning advisories

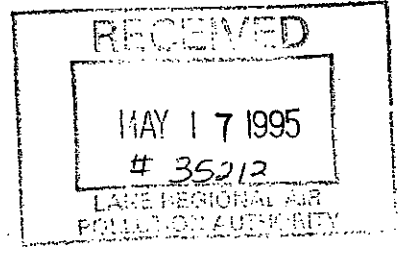
under which forest slash open burning is to be accomplished. We also inserted language stating that LRAPA will coordinate such permits with Lane County ODOF districts. This would be the case, anyway, according to staff policy, but adding it to the rule makes it clearer.

Comment number 8 could not be accommodated exactly as suggested, either. Most properties outside the seasonal open burning control area are included in the Oregon Smoke Management Plan, but there could be a few which would be outside ODOF's jurisdiction and would require local fire district or LRAPA permits. Consequently, that section was revised to include either local fire district or ODOF permit, whichever is appropriate.

DRA/MJD



11/1/95



May 15, 1995

Lane Regional Air Pollution Authority  
225 N. 5th, Suite 501  
Springfield, OR 97477

Ms. Dinteman:

Please include my comments for consideration in the matter of the proposed LRAPA rule changes. They are directed specifically at proposed rule change 2, **Change of Burning Season Dates**.

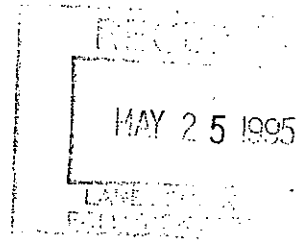
There is limited rationale for incorporating a rule change to modify the date for allowing open burning. Burning is already regulated by LRAPA's day-to-day burning advisory within the open burning season, and is not a 'blanket' approval of all open burning during the season. The fact that Oregon has experienced high fire danger during the last several years is not a reason to assume that this short-term weather pattern is relevant to future weather patterns. The proposed rule change will address a situation which may occur only infrequently.

Low-emission, rapid combustion depends in large part, on fuel moisture. Where seasonal rains reduce fire danger to acceptable levels, LRAPA should, in the interest of air quality, implement regulations to suit the conditions. Material which has been rained on for weeks is less likely to burn cleanly than material which is still reasonably dry.

Lane County Fire Defense Board's request to delay open burning in prior years is appropriate. However, it was made during recent unseasonably dry years, and is by no means to be considered the 'norm' for Western Oregon. Where appropriate, they should request this delay; however, Oregon weather is not now, nor has it ever been, subject to a regulatory agency or legislative body.

Choose reasonable, intelligent choice, based on situations at the time, and not rigid, short-term regulation resulting in more incidences of wet, smokey, fires being conducted in a rainstorm.

  
Chuck Gottfried



**WILDISH LAND CO.**

P.O. BOX 7428  
EUGENE, OREGON 97401  
(503) 485-1700  
FAX: (503) 683-7722

May 22, 1995

Don Arkell, Director  
Lane Regional Air Pollution Authority  
225 North 5th, Suite 501  
Springfield, OR 97477-4671

Dear Don:

**Subject: Rule Making Proposal  
Revisions to Open Burning Rules**

This is in reference to your memo dated May 12, 1995, subject as above, and our recent telephone conversation.

As you know, the selective logging operation we conducted on Mt. Pisgah last year created a number of slash piles. The area is outside a Forest Protection Zone, and when you and I originally discussed the issue, LRAPA rules did not specifically address slash burning. As a result, we had agreed that we would contract with the Eastern Lane Fire Protection District for fire protection service, and abide by the Department of Forestry smoke management plan for the area.

By the time we were ready to burn the slash piles, the rains began and we were unable to get started.

We have no objection to the concepts outlined in your memo for future slash burning situations. We do, however, request insertion of a grandfather clause in the rules to apply to slash already on the ground at the time of rule adoption. This clause should allow burning under less stringent conditions than those outlined in the proposal.



Don Arkell, Director  
May 22, 1995  
Page 2 of 2

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Our reasoning follows:

1. The slash on our operation was accumulated under standard logging practices.
2. When we obtained permission to conduct the logging, we were unaware of any requirement to obtain a permit from LRAPA. (In fact, the rules did not specify requirements for slash burning.)
3. To require alternate salvage methods and air curtaining at this time is impractical. The slash piles would have to be pulled apart and relocated, disturbing areas that have revegetated.
4. Compliance with smoke management weather conditions and flame enhancement using fans can be employed to minimize particulate impact in the airshed.

Had the proposed rules been in place before timber harvest, we could have adjusted the operation to accommodate the agency's concerns. Retroactive application of the conditions, however, is impractical, costly and potentially disruptive to the environment.

Your consideration of the adoption of a grandfather clause as requested is appreciated.

Very truly yours,

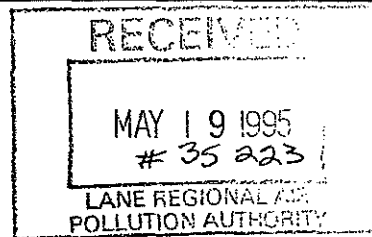
WILDISH LAND CO.



Randall S. Hledik  
Director, General Services

RSH:cao

May 18, 1995



Oregon

DEPARTMENT OF  
ENERGY

Mr. Donald R. Arkell, Director  
Lane Regional Air Pollution Authority  
225 North 5th, Suite 501  
Springfield, OR 97477-4671

Dear Mr. Arkell:

I am writing in reference to your May 12 notice of rulemaking proposal on revisions to open burning rules. I am supportive of the general proposal to bring slash burning within your permitting process for those Lane County lands outside of Forest Protection Zones. The notice does not include any specific rule language to comment on, and I would like to be added to your mailing list when the proposed rule language has been drafted and is available for public comment.

Although any slash burning on the affected lands should be subject to LRAPA permit, slash burning should always be considered a last resort. Use of slash biomass as an energy resource should be the preferred choice when the leave-in-place option is not feasible or not desirable for reasons of ecosystem health. The description of the proposed rule states only that "salvage and leave-in-place alternatives would need to be evaluated."

The proposed rule should define "salvage" to include collection of forest biomass for utilization as an energy resource. The applicant for a slash burning permit should be required to explain why productive use of the slash for biomass fuel is not possible. Burning of slash piles is not only an air pollution problem, it is also a waste of valuable natural resources. Your rules should therefore discourage the practice of slash burning when there is a productive, and cleaner, alternative.

I appreciate having this opportunity to comment. Thank you for considering the issue I have addressed in this letter.

Sincerely,

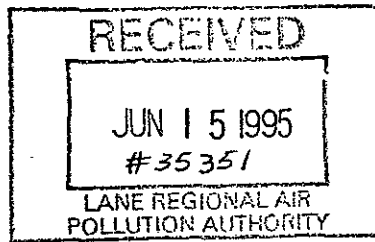
A handwritten signature in dark ink, appearing to read "John G. White".

John G. White  
Bioenergy Program Manager

John A. Kitzhaber  
Governor



625 Marion Street N.E.  
Salem, OR 97310  
(503) 378-4040  
FAX (503) 373-7806  
Toll-Free 1-800-221-8035



Oregon

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

June 10, 1995

Don Arkell, Director  
Lane Regional Air Pollution Authority  
225 North 5th  
Suite 501  
Springfield, OR 97477

Re: Hearing Authorization: Title 47

Dear Mr. Arkell:

On May 10, 1995, you requested authorization for your board to act as an Environmental Quality Commission hearings officer for a rulemaking. The rulemaking entails amendments to Lane Regional Air Pollution Authority's (LRAPA) outdoor open burning rules (Title 47). After reviewing these amendments, one minor point. The word "open" does not appear in the definition of "Forest Slash Burning" while it is used in other definitions of categories of open burning (Section 47-010). Also, in Section 47-015.6 "forest slash burning" is also referred to as "forest slash open burning". Consistent use of terms is essential for clarity. I suggest that you choose the phrase you prefer and use it consistently.

Otherwise, the Air Quality Division has determined that these rules are at least as stringent as the Department of Environmental Quality's rules in these areas. I authorize the LRAPA board to act as hearings officer at the public hearing on these amendments.

Sincerely,

Gregory A. Green  
Division Administrator  
Air Quality Division

GAG:YCM;j  
LTR\AH74481

cc: Yone McNally/Patti Seastrom, DEQ  
Paul Koprowski, EPA OOO



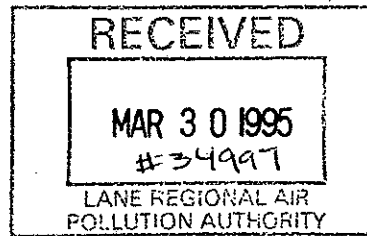
811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1



# Oregon

DEPARTMENT OF  
FORESTRY

Eastern Lane District



TO: Don Arkell, Lane Regional Air Pollution Authority

FROM: Don Bowlsby, Assistant District Forester

*Don*

DATE: March 22, 1995



"STEWARDSHIP IN  
FORESTRY"

ODF (Eastern Lane and Western Lane districts) is responding to your request for additional input on the subject of "backing off" the start of Fall back yard debris burning from October 1 to October 15 or later. We are very much in favor of this proposal. It seems that for the past 3 or 4 years, we, along with the Fire Defense Board have requested that LARAPA postpone the October 1 opening to a later time, or, until our burning conditions have moderated.

Since 1987, Eastern Lane's fire season has extended beyond October 1. The 1987 and 1988 seasons went into November. We do not end fire season until there has been a sufficient amount of rainfall or weather conditions have moderated enough to end the possibility of accidental fire start and subsequent spread.

Fire occurrence and weather statistics are included as attachments from Eastern Lane and Western Lane districts.

- Attachment 1 - Eastern Lane fire danger and incidence occurrence.
- 2 - Eastern Lane Duration of Fire Seasons.
- 3 - Rainfall summary from the National Weather Service.
- 4 - Western Lane Late Season Fire Summary.

Thanks for considering this proposal.



3150 Main Street  
Springfield, OR 97478  
(503) 726-3588

ATTACHMENT 1  
3/95

FIRE DANGER (Oregon System)

	<u>9/15 to 9/30</u>	<u>10/1 to E.O.S</u>	
1991	Low to High	High	10/25
1992	Mod. to High	Low	10/21
1993	Mod. to High	Mod. to High	10/14

(NFDRS System)

1994	High	Mod. to High	10/21
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DISTRICT INCIDENCE OCCURRENCE

9/15 to 9/30                      10/1 to E.O.C.

1991 - Stat.	2	3
Non-stat.	3	2
S. Chase	6	4
1992 - Stat.	2	6
Non-stat.	2	0
S. Chase	2	2
1993 - Stat.	4	5
Non-stat.	2	1
S. Chase	3	7
1994 - Stat.	5	6
Non-stat.	0	0
S. Chase	<u>3</u>	<u>5</u>
1991 to 1994 Totals		
Stat.	13	20
Non-stat.	7	3
S. Chase	14	18

- (1) STAT. - Statistical fires that ODF is responsible for fire control action.
- (2) NON-STAT - Non-statistical fires are those fires that are in another district and ODF assists in the fire control effort.
- (3) SMOKE CHASES - Smoke Chases or Non Crew Action fire responses. ODF responds and either finds a smoke in other jurisdiction or are unable to find the reported "smoke".

ATTACHMENT 2

DURATION OF CLOSED FIRE SEASONS

<u>YEAR</u>	<u>ON</u>	<u>OFF</u>	<u>DURATION</u>
1984	7/5	9/28	85 DAYS
1985	7/1	9/18	80 DAYS
1986	6/16	9/22	98 DAYS
1987	6/19	11/6	132 DAYS
1988	6/20	11/2	135 DAYS
1989	6/8	10/12	126 DAYS
1990	6/25	10/6	103 DAYS
1991	6/24	10/25	123 DAYS
1992	5/26	10/21	148 DAYS
1993	7/1	10/14	106 DAYS

1984 - 1993 AVERAGE      114 DAYS

1994      6/22      10/21      118 DAYS



ATTACHMENT 3

RAINFALL SUMMARY

	1977	1978	1979	1980	1981	1982	1983	1984	1985
JAN.	1.11	9.05	2.98	7.45	2.13	9.31	6.75	2.11	.31
FEB.	5.05	3.25	9.52	4.68	4.35	8.14	12.28	9.58	5.15
MAR.	4.66	1.68	3.12	5.11	4.16	4.88	10.58	6.36	5.65
APR.	1.47	6.56	4.71	4.20	2.69	6.89	3.35	5.41	.49
MAY	2.84	2.12	2.61	1.39	3.27	.26	1.81	3.91	1.53
JUNE	.97	.74	.56	2.06	3.51	1.92	1.78	3.88	2.51
JULY	.11	.72	.41	.39	.08	.54	1.77	.27	1.37
AUG.	1.70	2.17	3.46	.13	TRACE	.72	3.19	.03	.04
SEPT.	2.39	3.45	2.32	.75	3.15	2.81	.54	.94	2.13
OCT.	2.84	.29	8.12	1.90	5.42	3.95	1.36	6.05	4.83
NOV.	9.12	6.61	9.09	8.66	9.51	7.07	13.13	18.67	6.31
DEC.	14.60	2.86	7.17	14.73	17.62	13.53	7.47	4.56	3.51
TOT.	46.88	39.50	54.07	51.45	55.89	60.02	64.01	61.77	33.83

	1986	1987	1988	1989	1990	1991	1992	1993	1994
JAN.	6.97	9.66	8.72	6.68	15.09	3.73	4.57	6.85	5.50
FEB.	14.22	4.47	1.59	3.45	6.32	3.58	5.15	2.64	5.58
MAR.	4.41	2.81	4.78	10.93	3.34	9.79	2.10	8.58	5.58
APR.	1.85	2.04	5.65	1.73	2.44	5.22	7.82	7.85	2.02
MAY	3.21	2.00	3.71	3.85	2.99	6.03	.14	6.92	1.10
JUNE	.33	.07	2.37	1.03	2.01	.99	1.68	3.70	1.14
JULY	.42	3.00	.11	.49	.88	.64	1.32	1.14	.02
AUG.	.04	.26	.04	1.21	2.38	.68	.05	1.80	TRACE
SEPT.	4.65	.24	1.22	.64	.28	.10	.99	TRACE	2.04
OCT.	2.46	.24	.11	2.95	7.59	1.93	4.60	1.35	7.49
NOV.	11.04	4.65	14.27	5.00	7.59	10.47	6.54	1.98	9.58
DEC.	3.30	15.40	5.18	2.70	4.47	5.28	12.59	10.82	6.10
TOT.	52.90	44.84	47.75	40.66	55.47	48.44	47.55	53.63	46.15

	1995	1996	1997	1998	1999	2000	2001	2002	2003
--	------	------	------	------	------	------	------	------	------

JAN.  
 FEB.  
 MAR.  
 APR.  
 MAY  
 JUNE  
 JULY  
 AUG.  
 SEPT.  
 OCT.  
 NOV.  
 DEC.

TOT.

3/17/95

LATE SEASON FIRES  
(Sept. 15 to Year's End)  
Western Lane District  
1990-1994



*Burning Index  
\* Category*

Date	Fire Name	Acres	BI	Cat	TWN	RNG	SEC	General Cause
<b>1990</b>								
09-16-90	Rubber Fire	.50	23	2	17S	04W	33	Misc-Other
09-21-90	Smith River U Fire	25.00	38	1	20S	07W	28	Misc-Other
09-21-90	Transformer	.25	38	1	18S	05W	07	Powerline
09-22-90	Paradise View	.50	47	1	17S	06W	01	Camper
10-04-90	Crisp Ln.	5.00	NN	1	19S	04W	13	Debris
10-07-90	Old 126	.50	NN	1	17S	06W	34	Debris
10-08-90	EFS+3	.25	NN	1	17S	06W	26	Debris
10-09-90	Grant-Schrum	4.00	NN	1	19S	11W	18	Slash Burn
10-17-90	Alma Lane	.10	NN	1	19S	07W	25	Incendiary
-----								
Total Fires: 9 (								
<b>1991</b>								
09-19-91	Lusk Road (Peacefull Valley)	4.00	NN	1	18S	04W	34	Logging
09-22-91	Chapman South	1.00	56	1	19S	12W	22	Debris
09-23-91	Domsea Tower	.10	55	1	18S	12W	09	Smokers
09-24-91	Friendly End	1.00	55	1	18S	12W	02	Debris
09-25-91	Fisk Rd.	.01	78	1	16S	07W	25	Smokers
09-26-91	Birthday Mears St.	1.00	29	1	18S	12W	04	Incendiary
09-28-91	Central Rd.	1.00	48	1	18S	05W	08	Debris
09-28-91	Mercer Cr. Oops	1.00	30	1	18S	12W	26	Building
10-02-91	Greenridge	.01	63	1	18S	05W	07	Misc-Other
10-09-91	Chardonng Ridge	4.00	54	1	16S	05W	19	Misc-Other
11-05-91	Calico Cr. Rd.	.10	NN	1	20S	04W	11	Camper
11-20-91	Nov. Moon	.01	NN	1	19S	05W	29	Lightning
-----								
Total Fires: 12								
<b>1992</b>								
09-17-92	Briggs Hill	.20	58	1	18S	05W	35	Misc-Other
09-17-92	Chickahomeny #1	.10	58	1	17S	07W	29	Powerline
09-20-92	Smoke Chase	.01	56	3	17S	06W	29	Debris
09-20-92	Wolf Crk Ivy	.10	55	1	18S	06W	25	Smokers
09-21-92	Alderwood	.01	52	3	16S	06W	28	Misc-Other
09-21-92	Condon Creek	.25	28	2	17S	11W	28	Electric Fence

*\* Category:  
1 - STATISTICAL  
2 - NON-STATISTICAL  
3 - Smoke Chase or Non-Extinguished*

03/17/95 11:36 ATTACHMENT - 4

3/17/95

**LATE SEASON FIRES**  
(Sept. 15 to Year's End)  
Western Lane District  
1990-1994

Page 2

Date	Fire Name	Acres	BI	Cat	TWN	RNG	SEC	General Cause
<b>1992</b>								
09-23-92	C G Hill	.02	46	1	20S	04W	10	Powerline
09-26-92	Erdman Fire	.20	27	1	17S	06W	06	Electric Fence
09-29-92	Smoke Chase	0.00		3	18S	05W	19	Powerline
09-29-92	Smoke Chase	.01		3	18S	04W	21	Smokers
10-03-92	David Ridge	0.00		3	18S	10W	04	Debris
10-06-92	Dillard Road	0.00		3	18S	03W	28	Powerline
10-06-92	S.Bank Stand By			3	18S	10W	10	Debris
10-10-92	Appletree			3				Debris
10-10-92	Russell Drive	.10	21	1	19S	12W	23	Debris
10-11-92	Central Fleck	.50	25	1	17S	05W	04	Debris
10-11-92	Moyer Road Fire	.20	25	2	17S	05W	18	Debris
10-11-92	Templeton			3				Debris
10-13-92	Jackson Road			3	20S	04W	04	Debris
10-13-92	N Modesto	.50	25	1	18S	04W	18	Debris
10-19-92	N.Gillespie Cor	1.00	31	1	19S	05W	14	Debris
10-19-92	Perkins #3	.25		3	18S	05W	05	Debris
11-25-92	Turner Creek	.40	NN	1	18S	09W	24	Logging

Total Fires: 23

<b>1993</b>								
09-19-93	Bayberry Smk Chase			3	17S	12W	35	Debris
09-22-93	Christian Knight	.50	39	1	17S	06W	28	Debris
09-22-93	No Fk Smoke Chase	.01		3	18S	12W	8	
09-22-93	Texaco	.01	39	2	19S	12W	10	Misc-Other
09-28-93	Long Time Burn	.25	23	1	19S	12W	26	Debris
10-01-93	Territorial			3				
10-02-93	Cherry Creek Fire	.01	66	1	18S	08W	10	Smokers
10-03-93	Vineyard Lane	.10	47	1	17S	06W	34	Logging
10-09-93	Pataha View	1.00	60	1	18S	08W	11	Smokers
10-10-93	Bear Creek			3	16S	05W	17	Debris
10-10-93	Ham Smoke Chase			3	19S	04W	29	
10-10-93	Lorane/McBeth			3	18S	04W	15	Misc-Other
10-19-93	Misty Ln	.25		2	17S	05W	32	Debris
10-28-93	Vinyard View	4.50	NN	1	19S	05W	36	Slash Burn

3/17/95

LATE SEASON FIRES  
(Sept. 15 to Year's End)  
Western Lane District  
1990-1994

page 3

Date	Fire Name	Acres	BI	Cat	TWN	RNG	SEC	General Cause
<b>1993</b>								
11-09-93	Malibu Knob			3	16S	07W	09	
11-10-93	Alsea South Fork	.10	NN	1	15S	06W	20	Logging
11-22-93	Wolf Crk #3			3	19S	06W	03	
11-26-93	Cook Road	2.00	NN	1	17S	07W	02	Logging
12-18-93	Upper Wolf Cr.	.01	NN	1	19S	05W	18	Camper
-----								
Total Fires: 19								
<b>1994</b>								
09-16-94	Glaze Rd	.01	32	1	17S	06W	31	Misc-Other
09-20-94	Evers Road	.50	35	1	17S	06W	26	Misc-Other
09-22-94	Job Fire	.25	35	1	18S	05W	17	Misc-Other
09-22-94	Perkins Rd	.01	39	1	18S	05W	06	Misc-Other
09-23-94	Passed Up Fire	1.50	37	1	20S	05W	32	Logging
09-24-94	Push Over Fire	.01	37	1	17S	07W	24	Misc-Other
10-09-94	Lookout Car Fire	.01	37	1	21S	06W	23	Misc-Other
10-11-94	Bank Fire	.01	19	1	17S	09W	21	Camper
10-12-94	West Briggs Hill	.10	33	1	19S	05W	03	Misc-Other
10-20-94	Modesto	1.00	14	1	18S	04W	18	Debris
10-25-94	Muddy Road Fire	.25	n/a	1	17S	08W	02	Logging
-----								
Total Fires: 11								
-----								
Five Year Total: 74								

# Oregon

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FEB 27 1995  
LANE REGIONAL AIR  
POLLUTION AUTHORITY

DEPARTMENT OF  
FORESTRY

WESTERN LANE DISTRICT

February 24, 1995

Don Arkell  
Lane Regional Air Pollution Authority  
225 North 5th, Suite 501  
Springfield, Or 97477



"STEWARDSHIP IN  
FORESTRY"

Dear Don

This letter is a follow-up to the discussion on slash burning that occurred at the February 21, 1995 meeting of the Lane Regional Air Pollution Authority's Board of Directors.

The Department of Forestry recognizes that slash burning outside of a forest protection district established under Chapter 477 of Oregon Revised Statutes is unregulated and concurs with your effort to provide regulation in those areas in Lane County. We would encourage you to make your regulations compatible with and, to the extent possible, consistent with the Oregon Smoke Management Plan for slash burning. And, if needed, we are available to provide assistance to you in the development and/or administration of your regulations.

Sincerely,

A handwritten signature in cursive script that reads "Darrel Spiesschaert".

Darrel Spiesschaert  
District Forester

CC:  
Dan Shults  
Don Matlick

PO Box 157  
Veneta, OR 97487-0157  
(503) 935-2283

August 02, 1995

Mr. Donald R. Arkell  
Lane Regional Air Pollution Authority  
225 North 5th, Suite 501  
Springfield, Oregon 97477-4671

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#35630

LANE REGIONAL AIR  
POLLUTION AUTHORITY

# Oregon

DEPARTMENT OF  
FORESTRY

STATE FORESTER'S  
OFFICE



"STEWARDSHIP IN  
FORESTRY"

Dear Don:

The Oregon Department of Forestry has the following comments to offer in support of the proposed amendments to the LRAPA open burning rules. Suggested wording changes are underlined.

1. ODF supports the proposal to change the beginning date of open burning from October 1 to October 15 because of fire safety issues.
2. Section 47-005 (4): change wording to "...permitted under the Oregon Department of Forestry Smoke Management Plan (OAR 629-43-043)..."
3. Section 47-010: "Forest Slash Burning" should be rewritten to read:  
  
"means burning of vegetative debris and refuse on forest land related to the growing and/or harvesting of forest tree species where there is no change in the use of the land from timber production. Forest slash burning does not include burning for commercial or individual use, or for any other type of land clearing not related to the growing and harvesting of forest tree species."
4. Section 47-015 (2) (F): The Crow Valley RFPD no longer exists and the Fernridge Fire Department is changing its name.
5. Section 47-015 (6): The correct reference is ORS "477.515" instead of "477-515." Also, both of the terms "forest slash burning" and "forest slash open burning" are used, perhaps confusingly. "Forest slash burning" should be the terminology used since it is defined and used elsewhere in the proposed rules.
6. Section 47-015 (6) (B) (3) should also state:



2600 State Street  
Salem, OR 97310  
(503) 945-7200  
TDD (503) 945-7213  
TDD 1-800-437-4490

Letter - Don Arkell  
August 02, 1995  
Page 2

"Forest slash burning will occur as consistently as possible with forest slash burning that is accomplished in the Oregon Department of Forestry's East Lane and Western Lane districts operating under the Smoke Management Plan."

7. Section 47-015 (6)(B): a subparagraph (4) should be added which reads as follows:

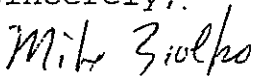
(4) A written plan, approved by the Oregon Department of Forestry, is required under the Forest Practices Act when burning is to be conducted: (a) within 100 feet of type D or F streams, lakes or significant wetlands, or (b) on highly erosive soils. The Oregon Department of Forestry should be contacted for all Forest Practices Act requirements.

8. Section 47-030 Summary of Season: The wording in the last row pertaining to slash burning and in the "All Other Areas" column should be:

"Burning of approved material is allowed year around on approved burning days with a valid permit from the Oregon Department of Forestry."

Thank you for the opportunity to comment on the proposed amendments to the open burning rules. LRAPA's proposal is a step in the right direction to meet fire safety and air pollution concerns.

Sincerely,



Mike Ziolkowski  
Meteorology Manager

MEZ:bn

cc: Clark Seely  
Don Matlick  
Dan Shults, EL  
Darrel Spiesschaert, WL  
file

LANE REGIONAL AIR POLLUTION AUTHORITY  
TITLE 47  
[Outdoor] Open Burning

Open burning in compliance with the rules in this Title 47 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.

Section 47-001 General Policy

In order to restore and maintain Lane County air quality in a condition as free from air pollution as is practicable, consistent with the overall public welfare of the County, it is the policy of the Lane Regional Air Pollution Authority to eliminate open burning disposal practices where alternative disposal methods are feasible. As a result, all open burning is prohibited in Lane County except as expressly allowed by these rules or if exempted from these rules by Oregon Statute. Contained in these rules are the requirements for the open ~~[outdoor]~~ burning of residential, construction, demolition, commercial, and industrial waste, and forest slash waste on properties outside the Oregon Smoke Management Plan.

Section 47-005 Statutory Exemptions from These Rules

Due to Oregon statutory exemptions, these rules shall not apply to the following:

1. The operation of residential barbecue equipment for the purpose of cooking food for human consumption.
2. Fires set or permitted by any public agency in the performance of its official duty for the purpose of weed abatement, prevention or elimination of a fire hazard, a hazard to public health or safety, or for the instruction of employees in the methods of fire fighting.
3. Agricultural open burning.
4. Open burning on forest land permitted under the ~~[Forest Practices]~~ Oregon Department of Forestry (ODOF) Smoke Management Plan filed with the Secretary of State.

Section 47-010 Definitions

The following definitions apply to this title, and additional general definitions can be found in Title 12 of these Rules and Regulations.

- "Agricultural open burning" means the open burning of "agricultural wastes," which are materials actually generated or used by an agricultural operation.



- "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.
- "Agricultural waste" means any material actually generated or used by an agricultural operation but excluding those materials described in Section 47-015-E.
- "Commercial open burning" means the open burning of "commercial wastes," which are materials actually generated or used by a commercial operation.
- "Construction open burning" means the open burning of "construction wastes," which are materials actually resulting from or produced by a building or construction project.
- "Demolition open burning" means the open burning of "demolition wastes," which are materials 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, or land clearing for site preparation for development.
- "Eugene-Springfield Urban Growth Area (ESUGA)" means the area within and around the cities of Eugene and Springfield, as described in the August 23, 1982 acknowledged Eugene-Springfield Metropolitan Area General Plan, as amended.
- "Forest slash open burning" means burning of vegetative debris and refuse on forest land related to the growing and/or harvesting of forest tree species where there is no change in the use of the land from timber production. Forest slash open burning does not include burning for commercial or individual use, or for any other type of land clearing not related to the growing and harvesting of forest tree species.
- "Garbage" means putrescible animal and vegetable wastes resulting from the handling, preparation, cooking, and serving of food.
- "Industrial open burning" means the open burning of "industrial wastes," which are materials produced as a 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.
- "Leaves" means needle or leaf materials which have fallen from trees, shrubs, or plants on the property around a dwelling unit.
- "Open [outdooer] burning" includes burning in open [outdooer] fires, burn barrels, incinerators which do not meet emission limitations specified in Section 33-010 of these Rules and Regulations, and any other outdoor 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.

- "Residential open burning" means the open burning of clean wood, and woody yard trimmings and prunings which are actually generated in or around a dwelling for four (4) or fewer family living units. Once this material is removed from the property of origin it becomes commercial waste. Such materials actually generated in or around a dwelling of more than four (4) family living units are commercial wastes.
- "Responsible person" means each person who is in ownership, control, or custody of the property on which the open burning occurs, including any tenant thereof; or who is in ownership, control, or custody of the materials which are burned; or any person who causes or allows open burning to be initiated or maintained.
- "Salvage," as used in open burning rules, means the recovery, processing or use of woody debris for purposes including, but not limited to, energy production (such as fire wood or fuel), fiber production (such as soil amendments or mulch), or as a raw material for chemical or manufacturing processes.
- "Woody Yard Trimmings" means woody limbs, branches and twigs, with any attached leaves, which have been cut from or fallen from trees or shrubs from the property around a dwelling unit.

#### Section 47-015 Open Burning Requirements

1. General requirements--to be met by all open burning conducted in accordance with these Rules and Regulations:
  - A. All open burning shall be constantly attended by a responsible person or an expressly authorized agent, until extinguished.
  - B. It shall be the duty of each responsible person to promptly extinguish any burning which is in violation of any rule of the LRAPA Board or of any permit issued by the Authority.
  - C. No person shall cause, or allow to be initiated or maintained, any open burning which is prohibited by the burning advisory because of meteorological or air quality conditions.
  - D. No person shall cause, or allow to be initiated or maintained, any open burning which creates a private or public nuisance or a hazard to public safety.
  - E. No person shall cause, or allow to be initiated or maintained, open burning of any garbage, plastics, wire insulation, automobile parts, asphalt, petroleum by-products, petroleum-treated materials, rubber products, 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, noxious odors, or hazardous air contaminants.

- F. To promote efficient burning and prevent excessive emissions of smoke, each responsible person shall assure that all combustible material is dried to the extent practicable and loosely stacked or windrowed to eliminate dirt, rocks and other non-combustible materials; and periodically restack or feed the burning pile to enhance combustion.
- G. 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]~~97040. The Authority shall be notified by the responsible person prior to such burning.
- H. Fires involving materials less than three (3) cubic yards of volume, set for recreational purposes in designated recreational areas (such as parks, recreational campsites, and campgrounds) are allowed, except that prohibited materials listed in Section 47-015-1.E. shall not be burned.
- I. Outdoor barbecuing connected with group outings, festivals, fairs or similar occasions is allowed, except that prohibited materials listed in Section 47-015-1.E. shall not be burned.

## 2. Residential Open Burning Requirements

The residential open burning season is October ~~[1]~~15 through June 15, with the following restrictions:

- A. All open burning is prohibited within the Eugene city limits.
- B. All open burning is prohibited within the Springfield city limits, except that burning of woody yard trimmings is allowed on lots of one-half acre or more.
- C. Within the ESUGA, burning is prohibited if required by local fire codes.
- D. Residential open burning outside the city limits of Eugene and Springfield but within the Eugene-Springfield Urban Growth Area is permitted subject to the general requirements of Section 47-015-1, with the following restrictions:
  - (1) The burning of yard debris is limited to the woody yard trimmings from trees and shrubs growing upon the same premises where the burning occurs;
  - (2) Open Burning of leaves and grass clippings is prohibited; and
  - (3) The premises upon which such burning is to take place must be a private lot, as identified in the Lane County tax records, of one half acre in size or more.
- E. Residential open burning is allowed only on approved burning days, between sunrise and sunset, with a valid fire permit (if required by fire district). The beginning time for burning varies and is set as part of the daily burning advisory; however, fires must always be out by sunset.

F. Residential open burning of woody yard trimmings, leaves and grass clippings is allowed within the fire districts identified below:

- (1) Bailey-Spencer RFPD
- (2) Coburg RFPD
- (3) Cottage Grove/~~South Lane Fire District~~
- (4) Creswell RFPD
- ~~(5) Crow Valley RFPD]~~
- (~~6~~5) Dexter RFPD west of the Willamette Meridian
- (~~7~~6) Eugene RFPD #1
- ~~(8) Fernridge Fire Dept. east of Range 7 West Willamette Meridian]~~
- (~~9~~7) Goshen RFPD
- (~~10~~8) Junction City Fire District
- (~~11~~9) Junction City RFPD
- (~~10~~) Lane County Fire District #1, east of Range 7 West
- (~~12~~11) Lane RFPD #1 outside the ESUGA
- (~~13~~12) Lowell RFPD
- (~~14~~13) Marcola RFPD
- (~~15~~14) McKenzie RFPD outside the ESUGA
- (~~16~~15) Monroe RFPD, that portion within Lane County
- (~~17~~16) Oakridge RFPD
- (~~18~~17) Pleasant Hill RFPD
- (~~19~~18) Santa Clara RFPD outside the ESUGA
- ~~(20) South Lane RFPD]~~
- (~~21~~19) Westfir RFPD
- (~~22~~20) Willakenzie RFPD
- (~~23~~21) Zumwalt RFPD

*(Note: Some fire districts require burning permits. Persons wishing to conduct residential open burning should check first with their fire district.)*

G. Residential open burning is allowed year-round outside of the affected areas defined in 47-015-2.A through F of this section.

H. Failure to conduct residential ~~[outdoor]~~ open burning in accordance with this section is a violation of these rules and shall be cause for assessment of civil penalties. Citations will be issued by authorized enforcement agents to responsible person(s) upon site inspection where residential ~~[outdoor]~~ open burning rules are violated pursuant to this section.

3. Construction/Demolition Open Burning Requirements

- A. Construction/demolition open burning is prohibited inside the ESUGA.
- B. Construction/demolition open burning is prohibited inside the affected areas described in 47-015-2.F, unless authorized pursuant to Section 47-020.
- C. Construction/demolition open burning is allowed elsewhere in Lane County, subject to the general requirements of Section 47-015-1.

4. Commercial Open Burning Requirements

- A. Commercial open burning is prohibited inside the ESUGA.
- B. Commercial open burning is prohibited elsewhere, unless authorized pursuant to Section 47-020.

5. Industrial Open Burning Requirements

- A. Industrial open burning is prohibited inside the ESUGA.
- B. Industrial open burning is prohibited elsewhere, unless authorized pursuant to Section 47-020.

6. Forest Slash Open Burning

A. Forest slash open burning in areas covered by the Oregon Smoke Management Plan is regulated by the Department of Forestry pursuant to ORS 477.515.

B. Forest slash open burning in Lane County which is in areas outside the Oregon Smoke Management Plan is treated by LRAPA as follows:

(1) Forest slash open burning is prohibited inside the ESUGA;

(2) Forest slash open burning is prohibited inside the affected areas described in 47-015-2.F, unless authorized pursuant to Section 47-020; and

(3) Forest slash open burning elsewhere in Lane County, on properties which are not covered by the ODOF Smoke Management Plan, is prohibited unless authorized pursuant to Section 47-020.

(4) Forest slash open burning will be coordinated with the Oregon Department of Forestry's East Lane and Western Lane districts and will occur as consistently as possible with slash burning advisories issued by the Oregon Department of Forestry.

(5) A written plan, approved by the Oregon Department of Forestry, is required under the Forest Practices Act (ORS 527) when burning is to be conducted:

(a) within 100 feet of type D or F streams (domestic water supply or fish-bearing streams), lakes or significant wetlands (see OAR 629-24-113 and 629-24-302); or

(b) on highly erosive soils.

The Oregon Department of Forestry should be contacted for all Forest Practices Act requirements.

Section 47-020 Letter Permits

1. Open burning of commercial, industrial, construction, [ø] demolition, or forest slash wastes on a singly occurring or infrequent basis, which is otherwise prohibited, may be permitted by a letter permit issued by the Authority in accordance with this rule and subject to the general requirements in Section 47-015-1.
2. Prescribed burning of standing vegetation for the purpose of species or wetland conversion; pursuant to federal or state laws or programs to promote or enhance habitat for indigenous species of plants or animals, which is otherwise prohibited, may be permitted by a letter permit issued by the Authority in accordance with section 47-020.
3. Prior to any burning, the applicant must also obtain a valid fire permit issued by the fire permit issuing agency having jurisdiction.
4. Permits issued for commercial or industrial operations to conduct commercial, industrial, construction, [ø] demolition, or forest slash open burning require a permit fee of \$100.
5. The following factors shall be evaluated in determining whether a letter permit will be approved or denied:
  - A. The quantity, type, and combustibility of the materials proposed to be burned;
  - B. The costs and practicability of alternative disposal methods, including on-site and landfill disposal and salvage;
  - C. The seasonal timing and expected duration of the burn;
  - D. The willingness and ability of the applicant to promote efficient combustion by using heavy equipment, fans, pit incineration, or other appropriate methods;
  - E. The location of the proposed burn site with respect to potential adverse impacts;
  - F. The expected frequency of the need to dispose of materials by burning in the future;
  - G. Any prior open burning violations by the applicant;
  - H. Any additional relevant information.
6. Upon receipt and review of the required information, the Authority 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 material exists;

- B. The proposed burning will not cause or contribute to significant degradation of air quality;
  - C. There will be no actual or projected violation of any statute, rule, regulation, order, permit, ordinance, judgment, or decree.
7. The Authority may revoke or suspend an issued letter permit, with no refund of the fee, via written or verbal notice, on any of the following grounds:
- A. Any material misstatement or omission in the required application information;
  - B. If the conditions of the permit are being violated;
  - C. Any actual or projected violation of any statute, rule, regulation, order, permit, ordinance, judgment, or decree;
  - D. Any other relevant factor.
8. Failure to conduct open burning according to the conditions, limitations, or terms of a letter permit, or any open burning in excess of that permitted by the letter permit, shall be a violation of the permit and shall be cause for assessment of civil penalties or for other enforcement action by the Authority.
9. Each letter permit issued by the Authority pursuant to this rule shall contain at least the following elements:
- A. The location at which the burning is permitted to take place;
  - B. A description of the material that may be burned;
  - C. The calendar period during which the burning is permitted to take place;
  - D. The equipment and methods required to be used by the applicant to insure efficient burning;
  - E. The limitations, if any, based upon meteorological conditions required before burning may occur;
  - F. Reporting requirements for both starting the fire and completion of the requested burning;
  - G. A statement that Section 47-015-1 is fully applicable to all burning under the permit;
  - H. Such other conditions that the Authority considers to be desirable.
10. Letter permits issued by the Authority pursuant to this rule shall be forwarded to the fire permit issuing agency having jurisdiction.
11. Letter permits are valid only for the specified burning period and shall not be renewable unless there were no approved burning days during that period. Any requests to conduct additional burning shall require a new permit.

Section 47-030 Summary of Seasons, Areas, and Permit Requirements for Open Burning

Type of Burning	Inside City Limits of Eugene	Inside City Limits of Springfield	Elsewhere Inside the ESUGA	Inside Affected Fire Districts and Outside ESUGA	All Other Areas
Residential Open Burning (Section 47-015-2)	Prohibited by City Ordinance and by LRAPA Section 47-015-2.A	Prohibited by City Ordinance, except that tree trimmings and shrub prunings, only, may be burned on lots of one-half acre or greater in size. Burning of grass clippings and fallen leaves is prohibited. Also prohibited by LRAPA Section 47-015-2.B	Prohibited by LRAPA Title 47, except that, between October 1 and June 15, tree trimmings and shrub prunings, only, may be burned on lots of one-half acre or greater in size. Burning of grass clippings and fallen leaves is prohibited.	Burning of woody yard trimmings, leaves, and grass clippings is allowed between October 1 and June 15 on approved burning days with a valid permit from the local fire district (where required by fire district)	Burning of clean wood and yard debris is allowed year round on approved burning days with a valid permit from the local fire district (where required by fire district)
Construction/ Demolition Open Burning (Section 47-015-3)	Burning is prohibited by city ordinance and by LRAPA Section 47-015-3	Burning is prohibited by city ordinance and by LRAPA Section 47-015-3	Burning is prohibited by LRAPA Section 47-015-3	Burning is prohibited, except by letter permit from LRAPA	Burning of approved materials is allowed year round on approved burning days with a valid permit from the local fire district (where required by fire district)
Commercial Open Burning (Section 47-015-4)	Burning is prohibited by city ordinance and by LRAPA Section 47-015-4	Burning is prohibited by city ordinance and by LRAPA Section 47-015-4	Burning is prohibited by LRAPA Section 47-015-4	Burning is prohibited, except by letter permit from LRAPA	Burning is prohibited, except by letter permit from LRAPA
Industrial Open Burning (Section 47-015-5)	Burning is prohibited by city ordinance and by LRAPA Section 47-015-5	Burning is prohibited by city ordinance and by LRAPA Section 47-015-5	Burning is prohibited by LRAPA Section 47-015-5	Burning is prohibited, except by letter permit from LRAPA	Burning is prohibited, except by letter permit from LRAPA
Forest Slash Open Burning (Section 47-015-6)	Burning is prohibited by city ordinance and by LRAPA Section 47-015-6	Burning is prohibited by city ordinance and by LRAPA Section 47-015-6	Burning is prohibited by LRAPA Section 47-015-6	Burning is prohibited, except by letter permit from LRAPA	Burning is prohibited, except by letter permit from LRAPA or Under the ODOH Smoke Management Plan

General open burning requirements are contained in section 47-015. In case of apparent conflict between this summary and the text of section 47-001 through 47-020, inclusive, the text shall apply.



## MINUTES

LANE REGIONAL AIR POLLUTION AUTHORITY  
BOARD OF DIRECTORS MEETING  
TUESDAY--OCTOBER 17, 1995  
SPRINGFIELD CITY COUNCIL CHAMBERS  
225 North 5th Street  
Springfield, Oregon

### ATTENDANCE:

**Board** Mark Hommer, Chair--At-Large; Steve Cornacchia--Lane County; Steve Dodrill--Eugene; Kevin Hornbuckle--Eugene; Al Johnson--Eugene; Pat Patterson--Cottage Grove/Oakridge; (ABSENT: Springfield City Councillor Stu Burge had been appointed to the LRAPA board but was unable to attend this meeting)

**Staff** Don Arkell--Director; Mike Tharpe; Sharon Moody; Kim Partridge; Merrie Dinteman

**OPENING:** Hommer called the meeting to order at 12:25 p.m.

**MINUTES:** Dodrill said he wanted to clarify the record with respect to his comments regarding the length of discussion dedicated to the last appeal the board dealt with. He said that, while the minutes accurately reflected his comments at the September 12 meeting, he recalled, after thinking about it further, that the board had read the material prior to the meeting, and the decision was made to deny the appeal with no discussion at the board meeting.

**\*\* ACTION \*\*** MSP (Hommer/Patterson) approval of September 12, 1995 minutes, as submitted. The minutes were approved with four affirmative votes. Hornbuckle and Johnson abstained because they were not present at the September meeting.

**EXPENSE REPORT:** MSP (Cornacchia/Dodrill)(Unanimous) approval of expense reports through September 30, 1995, as presented.

**ADVISORY COMMITTEE:** Kim Partridge informed the board that there was nothing new to report since the committee did not meet in September.

**PUBLIC PARTICIPATION:** None.

**REQUEST FOR ADOPTION OF AMENDMENTS TO LRAPA TITLE 47 (OPEN BURNING RULES):** Arkell reported that the public hearing on the proposed amendments to Title 47 was held, as scheduled, on October 10. Staff served as hearings officer for the board because the board meeting had to be postponed a week, but the legal notices of the October 10 hearing date had already been published. Arkell said there was no one present at the hearing to comment on the proposal. Staff recommendation was to adopt the amendments as proposed.

Discussion

Cornacchia said he was not comfortable with adopting rules which include a distinction between commercial logging operations which are close to populated areas and those which are not. He said he would support stricter regulation on burning slash material when the land is being cleared for building. He also had no objection to placing greater restrictions on the large commercial logging companies. However, he was opposed to placing greater restrictions on small wood lot owners wishing to burn logging slash in areas where the urban area has crept ever nearer these wooded properties. Cornacchia said he felt that there are times when the airshed is capable of handling the smoke from slash burning and that small wood lot owners should be allowed to burn under those conditions. He objected to burning being the last resort, after all salvage and leave-in-place options have been eliminated, regardless of the capacity of the airshed. He added that he understands that there are times when burning should not be allowed because other alternatives make more sense. But he wants to be sure that the assessment of whether or not burning should be allowed is done in a reasonable way to allow burning when the materials can't be used or disposed of in any other way and would end up in a landfill if burning were not allowed. He pointed out that landfills don't have room for large quantities of logging slash. Cornacchia commented that it appeared to him that slash burning would never be allowed under the proposed rules. He said he felt that the proposed rules were more political than they should be. Hornbuckle agreed that there is a political decision to be made. He said the status quo does not require alternatives to using the airshed for a dumping ground, and the LRAPA board needs to make the right political decision to require applicants to exhaust recycling and leave-in-place options prior to being allowed to burn. Johnson agreed that, since the potential cumulative human health impacts are significantly greater within the urban area than in the less populated areas, LRAPA needs to be very conservative in allowing burning in these situations.

There was some discussion among board members regarding the two major amendments being proposed. Arkell explained that one is the fire safety issue which is addressed with the delay in the start date for the residential burning season. The other is whether there should be some criteria that are met by individuals who are doing legitimate commercial logging on property that is outside the Forest Protection Zones. Arkell said that Cornacchia was correct in that the proposed rules create a hierarchy of examining alternate means of disposal before burning is allowed. Consideration is given to feasibility and to technical ability of the slash material to be disposed of by some other method. If other alternatives have been considered and are not feasible, and there is still a need to burn, then burning may be allowed. Arkell stressed that the goal is to minimize the need for burning where it's feasible and, if burning is allowed, to minimize the air impact from that burning.

A second point which Cornacchia brought up was the fact that there was very little news media attention given to the proposal.

He was concerned as to whether affected land owners even knew that LRAPA planned to adopt rules which would restrict their ability to dispose of logging slash by burning. He suggested that LRAPA should be more proactive in getting the media to get the word out on rulemaking activities. Dodrill suggested that staff take a more proactive stance in targeting affected individuals and get the message to them. Arkell responded that staff consulted with DOF during development of the amendment proposal and that there are only a few privately owned properties which are currently in logging production and outside the Forest Protection Zones, which would be affected by the proposed amendments. DOF identified a few properties located east of the coast range, one south of Dorena Lake, one off of Highway 58, and some by Mount Pisgah. Arkell added that LRAPA would rely on DOF to notify individuals engaged in commercial logging who might be affected by these rules, prior to the time they do the logging, so that the logging can be done in a manner which minimizes the need to burn. He said staff could also develop an outreach program to contact those landowners and, likewise, inform them of the requirements and air quality considerations before they log the property.

Hommer expressed concern that Wildish already did logging on one of the affected properties (just south of the Springfield city limits) and that the rules are being changed in the middle of their project. He asked why staff opted not to recommend a grandfather of such projects in the proposed rule amendments. Arkell explained that Wildish had originally believed that the slash material would have to be burned to eliminate a fire hazard and comply with the Forest Practices Act. However, DOF has informed LRAPA that they do not consider the subject property to be a fire hazard, and there is plenty of room to replant for compliance with the Forest Practices Act. Therefore, there may be no need for Wildish to burn the material. Arkell said LRAPA has not heard from Wildish since that information was transmitted to him and he asked Wildish to reconsider its request to burn. He explained further that the piled material would take several days to burn, according to the burning plan submitted by Wildish. At the time of year when it would take place (October or November), the area often experiences nightly temperature inversions which could cause a lot of smoke to impact the urban area. This possibility is of concern both for immediate public health reasons and because it could push particulate levels above the federal ambient air quality standards, putting the area back in non-attainment of the standards. Arkell said that, if Wildish persists in its request to burn the material, the matter will be treated like any commercial or industrial burn is treated. There may be some requirements for additional salvage or other activity and for enhanced combustion to minimize the smoke.

**\*\*ACTION\*\***

Hornbuckle MOVED adoption of the amendments to Title 47, as proposed. Johnson SECONDED. The amendments were adopted by a vote of 4 to 2, with Dodrill, Hommer, Hornbuckle and Johnson in favor, and Cornacchia and Patterson opposed.

**DISPOSITION OF APPEAL TO BOARD, TERRY HILL:** Board members agreed that it was necessary to allow an additional month for more thorough review of the record prior to making a final decision on the appeal. The matter was rescheduled for action at the November board meeting.

**DISPOSITION OF APPEAL TO BOARD, INSULATION REMOVAL SPECIALISTS:** This appeal was also rescheduled for action at the November board meeting.

**PERMITTING PROCESS AND STATUS OF HYUNDAI APPLICATION:** Mike Tharpe reported that Hyundai had submitted additional information which was requested by staff for processing the construction permit. The Authority to Construction will be issued after staff reviews the completed application package.

Cornacchia asked whether staff had been involved with the Eugene city council's subcommittee whose actions were reported in the newspaper that day. Arkell responded that he had been involved with the subcommittee and had, in fact, met with the group the previous day.

The board had no other questions regarding the permitting process described in the staff report.

**DIRECTOR'S REPORT:** There was some discussion regarding severity of penalties for repeat violations. Cornacchia expressed his belief that persons who know what the rules are and violate them anyway should receive the harshest penalties possible. Tharpe and Arkell explained the penalty matrixes in the rules and how the penalty amount escalates when there are prior violations. Tharpe added that there is a statutory limit of \$10,000 per day of violation unless the offense results in extreme environmental damage, was intentional, etc. Larger penalties may be assessed under certain extreme conditions. Cornacchia said he wanted to give some additional thought to this issue.

**OLD BUSINESS:** None.

**NEW BUSINESS:** None.

**ADJOURNMENT:** Hommer adjourned the meeting at 1:17 p.m. The next regular meeting of the LRAPA Board of Directors is scheduled for Tuesday, November 14, 1995, 12:15 p.m., in the Springfield City Council Chambers.

Respectfully submitted,



Merrie Dinteman  
Recording Secretary

LANE REGIONAL

(503) 726-2514 • FAX (503) 726-1205  
225 North 5th, Suite 501  
Springfield, OR 97477-4671



AIR POLLUTION AUTHORITY

Donald R. Arkell, Director

**To:** Record of Adoption Proceedings, LRAPA Title 47  
**From:** Donald R. Arkell, *DR* Hearings Officer  
**Subject:** Public Hearing, October 10, 1995

#### SUMMARY OF PROCEDURE

Pursuant to public notice, a public hearing was convened by Donald Arkell, Director of the Lane Regional Air Pollution Authority, on October 10, 1995 in the Springfield City Council Chamber at 225 North 5th, Springfield. LRAPA had received designation from the DEQ Director as hearings officer for the Oregon Environmental Quality Commission, and this was a concurrent EQC/LRAPA hearing. The purpose of the hearing was to receive testimony concerning proposed adoption of amendments to LRAPA Title 47, "Outdoor Open Burning."

#### SUMMARY OF TESTIMONY

Arkell noted for the record seven pieces of written correspondence (see attached document dated August 4, 1995 which includes the written comments and LRAPA responses). There was no one present at the hearing to testify regarding the proposed amendments.

DRA/MJD

**Questions to be Answered to Reveal  
Potential Justification for Differing from Federal Requirements.**

This document is being prepared by DEQ to comply with OAR Chapter 340, Division 11. The regulations it pertains have been legally adopted by the Lane Regional Air Pollution Authority (LRAPA) Board of Directors. Because the regulations are at least as stringent as state regulations pursuant to ORS 468A.135, these regulations are currently in effect in Lane County.

- 1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?**

Under Section 110 of the Clean Air Act, states are required to submit and maintain State Implementation Plans (SIP). LRAPA Titles 12, 32, 33, 34 and 47 are part of the SIP. Amendments to these titles must be treated as revisions to the SIP. Under Section 111 of the Clean Air Act, state and local authorities may apply for delegation of the New Source Performance Standards from the EPA. LRAPA Title 47 adopts the NSPS.

- 2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?**

Both.

- 3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?**

LRAPA has the authority to address the issues that are of concern in Lane County and have done so in its rulemaking.

- 4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?**

Yes.

- 5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?**

No.

ATTACHMENT C

6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?

Yes.

7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)

Yes.

8. Would others face increased costs if a more stringent rule is not enacted?

No.

9. Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?

No.

10. Is demonstrated technology available to comply with the proposed requirement?

Yes.

11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?

Yes.

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

**Agenda Item G**  
**November 14, 1996 Meeting**

<b>Title:</b> Portland Area Enhanced Vehicle Emissions Testing Rules
<b>Summary:</b> The DEQ is proposing rule changes needed to accomodate the new enhanced vehicle emissions test. These rules must be part of the Portland Ozone Maintenance Plan before EPA can approve the plan. The Vehicle Inspection Program would not implement these rules until at least 9/1/97.
<b>Department Recommendation:</b> Adopt the draft as proposed.
Report Author <i>Ed Wood</i> Division Administrator <i>Gregory A. Gre</i> Director <i>Gregory West</i>



State of Oregon  
Department of Environmental Quality Memorandum

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**Date:** November 14, 1996  
**To:** Environmental Quality Commission  
**From:** Langdon Marsh  
**Subject:** Agenda Item G, November 14, 1996, EQC Meeting

**Background**

On 7/12/96, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules and modifications to the State Implementation Plan which would implement enhanced vehicle emission testing in the Portland area.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on 8/1/96. The Hearing Notice and informational materials were 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 July 23, 1996.

A Public Hearing was held on August 28 and 29, 1996 with Jeff Armstrong serving as Presiding Officer. Written comment was received through September 6, 1996. The Presiding Officer's Report (Attachment C) summarizes the oral testimony presented at the hearing and lists all the written comments received. (A copy of the comments is available upon request.)

Department staff have evaluated the comments received (Attachment D). Based upon that evaluation, no changes to the initial rulemaking proposal or proposed modifications to the State Implementation Plan are being recommended by the Department.

The following sections summarize the issues 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.

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Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503) 229-5317 (voice)/(503) 229-6993 (TDD).

**Issues this Proposed Rulemaking Action is Intended to Address**

The Department is in the process of submitting a ten year maintenance plan required by the Clean Air Act for the Portland area to be redesignated to attainment status for ozone. The proposed enhanced vehicle emissions testing program is a major component of this maintenance plan.

Redesignation will allow for repeal of Clean Air Act growth sanctions for new and expanding industry and establish a more flexible process for local government to show that their transportation plans are consistent with air quality plans. Thus a maintenance plan is needed to:

- Protect public health and welfare by maintaining air quality;
- Allow the Environmental Protection Agency (EPA) to redesignate the Portland area to attainment for ozone;
- Replace costly Lowest Achievable Emission Rate (LAER) and emission offset requirements for new and expanding industry with less costly Best Available Control Technology (BACT); and
- Establish a transportation emission budget to avoid potential sanctions of federal highway funds.

The rules also set a maximum test fee of \$21. Customers would be charged the same for the basic and the enhanced tests, even though the cost to the Department for the enhanced test is more than twice the cost of the basic test. Approximately, 62 percent of the tests will be enhanced and 38 percent will be basic in the 1997-99 biennium. When the legislature first included enhanced testing in the maintenance plan statute, the test fee was estimated to be about \$35. Improvements in technology and changes in the test procedures have enabled the Department to reduce the test fee significantly.

**Relationship to Federal and Adjacent State Rules**

The implementation of enhanced vehicle emissions testing in the Portland area is not mandated by EPA. Under the federal Clean Air Act, since Portland is currently in marginal non-attainment for ozone, only a basic Inspection/Maintenance (I/M) testing program is required. However, the legislature directed DEQ to include enhanced vehicle emission testing as an element of the Portland Area Ozone Maintenance Plan. These proposed rules will allow DEQ to implement that directive.

The ozone standard was adopted by the EPA and EQC. The EPA designated the Portland area nonattainment for ozone on March 3, 1978. For an area to be redesignated to attainment, the Clean Air Act requires a demonstration that the area attained the standard and EPA approval of a ten year maintenance plan. There is no deadline for submittal of a maintenance plan. Once the area is

redesignated, a new maintenance plan must be submitted two years prior to the expiration of the existing plan. A maintenance plan will allow EPA to drop industrial growth impediments (LAER and offsets), and will allow establishment of a transportation emission budget that will alleviate the possibility of sanctions on federal transportation funds.

Portland attained the ozone standard by the Clean Air Act deadline of November 15, 1993. If a subsequent violation occurs prior to redesignation, the area will be automatically "bumped-up" to a higher level of nonattainment. This will require submittal of a new attainment plan with more stringent requirements in a shorter time than proposed in the maintenance plan including requirements for existing industry to install NO<sub>x</sub> RACT.

The Vancouver, Washington area is part of the Portland metro air shed. Washington has developed emission reduction strategies designed to achieve proportionate reductions. Their strategies are very similar to those in Oregon's maintenance plan. While Washington is not proposing exactly the same vehicle testing program, they will have enhanced testing in a significantly expanded testing boundary.

#### **Authority to Address the Issue**

ORS 468A.363(4)(c) directs the DEQ to develop an enhanced vehicle emission testing program as part of the ozone maintenance plan.

#### **Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

DEQ considered several versions of enhanced testing. The program developed by EPA called I/M 240 and other testing options had some disadvantages. After reviewing an option called BAR 31, DEQ conducted over 400 tests comparing I/M 240 and BAR 31. BAR31 achieves nearly the same level of emission reductions as I/M 240 but is faster and cheaper to operate. It also has some safety advantages and is an easier test to administer. Testing options and test costs were evaluated by a consultant hired by the DEQ.

HB 2175 (1991) established the blue-ribbon Governor's Task Force on Motor Vehicle Emission Reductions to develop the Ozone Maintenance plan. The Task Force met during 1992 and recommended a plan which included enhanced vehicle testing to the 1993 Legislature. HB 2214 (1992) endorsed the Task Force's plan to implement enhanced vehicle testing.

During 1995-96, an Advisory Committee, made up of automotive specialists including auto repair training instructors, fleet operators and auto repair technicians was convened to provide guidelines for the Department in developing the enhanced testing program. They established the required

training to adequately repair vehicles to pass the enhanced test and developed fleet testing requirements.

**Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.**

The proposed rule changes incorporate the new test procedures and standards needed to implement enhanced testing in Portland. The rules also require the self-testing fleets upgrade their test procedures and equipment so that fleets use substantially the same test as DEQ Clean Air Stations.

**Summary of Significant Public Comment and Changes Proposed in Response**

Most comments at the public hearings were regarding the self-testing fleet requirements. The required upgraded equipment may cost up to \$50,000. This is a large investment for many fleets compared to the number of vehicles they test each month. Some suggested that fleets continue to use the current test and equipment. Current rules acknowledge that fleet vehicles are generally better maintained by allowing the test equipment to be slightly less sophisticated and less costly than that used by DEQ. DEQ assumes that this results in about the same level of emission reductions for fleets and public vehicles. The proposed rules maintain this assumption by allowing fleets to use less sophisticated but upgraded equipment. The fleets would be required to upgrade their equipment by July 1, 1998. DEQ has not proposed any changes to the draft rules.

It was proposed that private fleets be allowed to join together to set up test facilities to be used by several fleets. There are some additional requirements on fleets and fleet inspectors but EPA assumes that vehicles tested and repaired in the same facility will achieve only 50% of the emission reductions achieved by vehicles tested in test only facilities. The Portland area Ozone Maintenance Plan is a combination of strategies designed to achieve certain levels of emission reductions that will enable the area to remain in compliance with public health standards. Increasing the number of vehicles tested outside DEQ Clean Air Stations will jeopardize efforts to maintain healthy air quality. No changes to the draft rules are proposed.

Increased flexibility in hours and designated lanes at Clean Air Stations was proposed as an alternative for fleets that can not afford to upgrade their equipment. This kind of flexibility is currently available. No rule changes would be necessary to implement such changes. DEQ will contact fleet representatives to see if changes can meet fleet needs so additional equipment need not be purchased and DEQ resources necessary to accommodate those changes will be fully utilized.

As a result of written comments submitted by the EPA, two changes were made in the proposed rules and in the State Implementation Plan.

Credit received from EPA for VOC is slightly lower than DEQ has claimed in the maintenance plan. Therefore, DEQ has proposed to expand the evaporative control system test to include an additional component. This addition will be made only to the extent that is necessary to maintain air quality in the Portland area.

The second change is DEQ will commit to EPA that additional data be collected and forwarded to EPA to verify the emission reduction credit claimed by DEQ.

#### **Summary of How the Proposed Rule Will Work and How it Will be Implemented**

Enhanced vehicle emission testing would remain a centralized testing process, just as it is now. New stations and additional inspectors will be needed to accommodate the new equipment and minimize customer waiting times. As the new stations are built, the enhanced testing equipment will be installed and operated for voluntary testing of the public's vehicles. After authorization by the Legislature, additional inspectors will be hired and trained. The hiring should take place about 2 months before the expected start of mandatory enhanced testing on September 1, 1997.

#### **Recommendation for Commission Action**

It is recommended that the Commission adopt the rule amendments and corresponding modifications to the State Implementation Plan regarding Portland area enhanced vehicle emission testing as presented in Attachment A of the Department Staff Report.

#### **Attachments**

- A. Rule (Amendments) and State Implementation Plan Changes Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Fiscal and Economic Impact Statement
  - 3. Land Use Evaluation Statement
  - 4. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
  - 5. Cover Memorandum from Public Notice
- C. Presiding Officer's Report on Public Hearing
- D. Department's Evaluation of Public Comment
- E. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- F. Rule Implementation Plan

#### **Reference Documents (available upon request)**

Memo To: Environmental Quality Commission  
**Agenda Item G, November 14, 1996, EQC Meeting**  
Page 6

Written Comments Received (listed in Attachment C)  
(Other Documents supporting rule development process or proposal)

Approved:

Section:

Ed Woods

Division:

Report Prepared By: Ed Woods

Phone: 731-3050 x 225

Date Prepared: 10/25/96

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10/19/95

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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**DIVISION 024**

**MOTOR VEHICLES**

**Visible Emissions**

340-024-0005	Definitions
340-024-0010	Visible Emissions - General Requirements, Exclusions
340-024-0015	Visible Emissions - Special Requirements For Excluded Motor Vehicles
340-024-0020	Uncombined Water - Water Vapor
340-024-0025	Motor Vehicle Fleet Operation
340-024-0030	Dealer Compliance
340-024-0035	Method of Measurement
340-024-0040	Adoption of Alternative Methods of Measuring Visible Emissions

**Pertaining to Motor  
Vehicle Inspection**

340-024-0100	County Designations
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**Criteria for Certification  
of Motor Vehicle Pollution  
Control Systems**

340-024-0200	Criteria for Certification of Motor Vehicle Pollution Control Systems
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**Motor Vehicle Emission Control  
Inspection Test Criteria,  
Methods and Standards**

340-024-0300	Scope
340-024-0301	Boundary Designations
340-024-0305	Definitions
340-024-0306	Government-Owned Vehicle, and Permanent Fleet Vehicle and United States Government Vehicle Testing Requirements
340-024-0307	Motor Vehicle Inspection Program Fee Schedule
340-024-0309	State of Oregon Facilities Light Duty Motor Vehicle And Heavy Duty Gasoline Motor Vehicle Emission Control Test Method For Basic Program
340-024-0310	Motor Vehicle Fleet Operation Light Duty Motor Vehicle Emission Control Test Method
340-024-0312	Light Duty Motor Vehicle Emission Control Test Method For Enhanced Program
340-024-0314	Motorcycle Noise Emission Control Test Method
340-024-0315	Motor Vehicle Fleet Operation Heavy Duty Gasoline Motor Vehicle Emission Control Test Method
340-024-0318	Renewal of Registration for Light Duty Motor Vehicles and Heavy Duty Gasoline Motor Vehicles Temporarily Operating Outside of Oregon
340-024-0320	Light Duty Motor Vehicle Emission Control Test Criteria For Basic Program
340-024-0325	Heavy Duty Gasoline Motor Vehicle Emission Control Test Criteria
340-024-0330	Light Duty Motor Vehicle Emission Control Standards For Basic Program
340-024-0332	Light Duty Motor Vehicle Emission Control Standards For Enhanced Program
340-024-0335	Heavy-Duty Gasoline Motor Vehicle Emission Control Emission Standards
340-024-0337	Motor Vehicle Propulsion Exhaust Noise Standards
340-024-0340	Criteria for Qualifications of Persons Eligible to Inspect Motor Vehicles and Motor Vehicle Pollution Control Systems and Execute Certificates
340-024-0350	Gas Analytical System Licensing Criteria
340-024-0355	State of Oregon Facilities Gas Analytical System Licensing Criteria For Basic Program
340-024-0360	Agreement With Independent Contractor; Qualifications Of Contractor; Agreement Provisions

**DIVISION 24**  
**MOTOR VEHICLES**

**Visible Emissions**

**Definitions**

**340-024-0005** As used in OAR 340-024-0005 through 340-024-0040:

- (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 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**.
- (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. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & ef. 3-10-93

**Visible Emissions - General Requirements, Exclusions**

**340-024-0010**

- (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 468A.075.

Stat. Auth.: ORS Ch. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & ef. 3-10-93

**Visible Emissions - Special Requirements for Excluded Motor Vehicles**

**340-024-0015** 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 OAR 340-024-0010 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. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & ef. 3-10-93

**Uncombined Water - Water Vapor**

**340-024-0020** Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of OAR 340-024-0010 or 340-024-0015, such rules shall not apply.

Stat. Auth.: ORS Ch. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & ef. 3-10-93



## Motor Vehicle Fleet Operation

### 340-024-0025

- (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 OAR 340-024-0010 and 340-024-0015.
- (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. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93

## Dealer Compliance

**340-024-0030** No dealer shall sell or offer for sale, exchange, or lease, any motor vehicle which operates in violation of OAR 340-024-0010 or 340-024-0015, except as permitted by federal regulations.

Stat. Auth.: ORS Ch. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93

## Method of Measurement

**340-024-0035** The opacity observation for purposes of OAR 340-024-0010 through 340-024-0030 shall be made by a person trained as an observer; provided, however, that a Ringlemann Smoke Chart may be used in measuring the opacity of emissions for purposes of OAR 340-024-0010 through 340-024-0030.

[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; DEQ 4-1993, f. & cert. ef. 3-10-93

## Adoption of Alternative Methods of Measuring Visible Emissions

### 340-024-0040

- (1) The Department may permit the use of alternative methods of measurement to determine compliance with the visible emissions standards in OAR 340-024-0010 and 340-024-0015 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. 468 & 468A  
Hist.: DEQ 8, f. 4-7-70, ef. 5-11-70; DEQ 4-1993, f. & cert. ef. 3-10-93

## Enforcement

**340-024-0045** [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

**340-024-0100** Pursuant to the requirements of ORS 468A.360, Clackamas, Columbia, Jackson, Marion, Multnomah, and Washington and Yamhill 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.

Stat. Auth.: ORS Ch. 468 & 468A  
Hist.: DEQ 51, f. 3-20-73, ef. 4-1-73; DEQ 62, f. 12-5-73, ef. 12-25-73; DEQ 4-1993, f. & cert. ef. 3-10-93

## Criteria for Certification of Motor Vehicle Pollution Control Systems

**340-024-0200** Pursuant to the requirements of ORS 468A.365, the following are the criteria for certification of motor vehicle pollution control systems as defined by ORS 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; DEQ 4-1993, f. & cert. ef. 3-10-93

## Motor Vehicle Emission Control Inspection Test Criteria, Methods, and Standards

### Scope

**340-024-0300** Pursuant to ORS 467.030, 468A.350 to 468A.400, 803.350, and 815.295 to 815.325, OAR 340-024-0300 through 340-024-0350 establish the criteria, methods, and standards for inspecting motor vehicles to determine eligibility for obtaining a Certificate of Compliance or inspection.

- (1) After September 1, 1997, in addition to the basic test, an enhanced test may be established in the Portland Vehicle Inspection Area.
  - (a) A light duty vehicle that is five (5) or less model years old or is a 1975 through 1980 model year is required to meet the basic test requirements of OAR 340-024-0309, 340-024-0320, 340-024-0330 and 340-024-0337.
  - (b) A light duty vehicle that is six (6) or more model years old and is a 1981 or newer model year is required to meet the enhanced test requirements of OAR 340-024-0312 and 340-024-0332. These vehicles found to be safe but unable to be dynamometer tested due to drive line configuration and these vehicles equipped with All Wheel Drive (AWD) shall meet the basic test requirements of OAR 340-024-0309, 340-024-0320, 340-024-0330 and 340-024-0337.
  - (c) A heavy duty vehicle is required to meet the basic test requirements of OAR 340-024-0309, 340-024-0325 and 340-024-0335.
- (2) A basic test shall continue in the Medford-Ashland Air Quality Maintenance Area for vehicles to meet the requirement of OAR 340-024-0309, 340-024-0320, 340-024-0325, 340-024-0330 and 340-024-0335.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 467, 468 & 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; DEQ 4-1993, f. & cert. ef. 3-10-93

### Boundary Designations

#### **340-024-0301**

- (1) In addition to the area specified in ORS 815.300, pursuant to ORS 468A.390, the following geographical areas, referred to as the Portland Vehicle Inspection Area and the Medford-Ashland AQMA, are designated as areas within which motor vehicles are subject to the requirement under ORS 815.300 to have a Certificate of Compliance issued pursuant to ORS 468A.380 to be registered or have the registration of the vehicle renewed.
- (2) As used in this section, "Portland Vehicle Inspection Area" means the area of the state included within the following census tracts, block groups, and blocks as used in the 1990 Federal Census. In Multnomah County, the following tracts, block groups, and blocks are included: Tracts 1, 2, 3.01, 3.02, 4.01, 4.02, 5.01, 5.02, 6.01, 6.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10, 11.01, 11.02, 12.01, 12.02, 13.01, 13.02, 14, 15, 16.01, 16.02, 17.01, 17.02, 18.01, 18.02, 19, 20, 21, 22.01, 22.02, 23.01, 23.02, 24.01, 24.02, 25.01, 25.02, 26, 27.01, 27.02, 28.01, 28.02, 29.01, 29.02, 29.03, 30, 31, 32, 33.01, 33.02, 34.01, 34.02, 35.01, 35.02, 36.01, 36.02, 36.03, 37.01, 37.02, 38.01, 38.02, 38.03, 39.01, 39.02, 40.01, 40.02, 41.01, 41.02, 42, 43, 44, 45, 46.01, 46.02, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.01, 60.02, 61, 62, 63, 64.01, 64.02, 65.01, 65.02, 66.01, 66.02, 67.01, 67.02, 68.01, 68.02, 69, 70, 71, 72.01, 72.02, 73, 74, 75, 76, 77, 78, 79, 80.01, 80.02, 81, 82.01, 82.02, 83.01, 83.02, 84, 85, 86, 87, 88, 89, 90, 91, 92.01, 92.02, 93, 94, 95, 96.01, 96.02, 97.01, 97.02, 98.01, 98.02, 99.01, 99.02, 99.03, 100, 101, 102, 103.01, 103.02, 104.02, 104.04, 104.05, 104.06, 104.07; Block Groups 1, 2 of Tract 105; Blocks 360, 361, 362 of Tract 105; that portion of Blocks 357, 399 of Tract 105 beginning at the intersection of the Oregon-Washington State Line ("State Line") and the northeast corner of Block Group 1 of Tract 105, thence east along the State Line to the intersection of the State Line and the eastern edge of Section 26, Township 1 North, Range 4 East, thence south along the section line to the centerline of State Highway 100 to the intersection of State Highway 100 and the western edge of Block Group 2 of Tract 105. In Clackamas County, the following tracts, block groups, and blocks are included: Tracts 201, 202, 203.01, 203.02, 204.01, 204.02, 205.01, 205.02, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216.01, 216.02, 217, 218, 219, 220, 221.01, 221.02, 222.02, 223, 224, 225, 226, 227.01, 227.02, 228, 229, 230, 231, 232, 233, 234.01, 234.02, , 235, 236, 237, 238; Block Groups 1, 2 of Tract 241; Block Groups 1, 2, 3, 4 of Tract 242; Block Groups 1, 2 of Tract 243.02. In Marion County, the following

tracts, block groups, and blocks are included: Tract 102. In Yamhill County, the following tracts, block groups, and blocks are included: Tracts 301, 302; Block Groups 1, 2, 3, 4 of Tract 303; Blocks 1, 2B, 3B, 27B of Tract 303. In Washington County the following tracts, block groups, and blocks are included: Tracts 301, 302, 303, 304.01, 304.02, 305.01, 305.02, 306, 307, 308.01, 308.02, 309, 310.03, 310.04, 310.05, 310.06, 311, 312, 313, 314.01, 314.02, 315.01, 315.04, 315.05, 315.06, 315.07, 315.08, 316.03, 316.04, 316.05, 316.06, 316.07, 317.02, 317.03, 317.04, 318.01, 318.02, 318.03, 319.01, 319.03, 319.04, 320, 321.01, 321.02, 322, 323, 324.02, 324.03, 324.04, 325, 326.01, 326.02, 328, 329, 330, 331, 332, 333; Block Groups 1, 2 of Tract 327; Block Group 1 of Tract 334; Block Group 2 of Tract 335; Block Group 1 of Tract 336. In Columbia County the following tracts, block groups, and blocks are included: Tract 9710.98; Block Groups 2, 3 of Tract 9709.98; Blocks 146B, 148, 152 of Tract 9709.98.

- (3) As used in this section, "Medford-Ashland Air Quality 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, T39S, 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, T38S, 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 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.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 1-1995, f. & ef. 1-10-95

## Definitions

**340-024-0305** As used in OAR 340-024-0300 through 340-024-03560:

- (1) "Basic test" means an inspection and maintenance program designed to measure exhaust emission levels during an unloaded idle or an unloaded raised idle mode as described in OAR 340-24-309.
- (2) "Carbon dioxide" means a compound consisting of the chemical formula (CO<sub>2</sub>).
- (3) "Carbon monoxide" means a compound consisting of the chemical formula (CO).
- (4) "Certificate of Compliance" means a certification issued by a Private Business Fleet or a Public Agency Fleet ~~Vehicle~~ Emission Inspector or a Vehicle Emissions Inspector employed by the Department of Environmental Quality or an Independent Contractor 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.
- (5) "Certified Repair Facility" means an automotive repair facility, possessing a current and valid certificate issued by the Department, that employs automotive technicians certified by the Department's Automotive Technician Emission Training Program (ATETP).
- (6) "Commission" means the Environmental Quality Commission.
- (7) "Crankcase emissions" means substances emitted directly to the atmosphere from any opening leading to the crankcase of a motor vehicle engine.
- (8) "Department" means the Department of Environmental Quality.
- (9) "Diesel motor vehicle" means a motor vehicle powered by a compression-ignition internal combustion engine.
- (10) "Director" means the director of the Department.
- (11) "Electric vehicle" means a motor vehicle which uses a propulsive unit powered exclusively by electricity.
- (12) "Emissions Inspection Station" means an inspection facility, operated by the Department of Environmental Quality or an Independent Contractor, for the purpose of conducting emissions inspections of all vehicles required to be inspected pursuant to this Division.
- (13) "Enhanced test" means an inspection and maintenance program designed to measure exhaust and fuel evaporative system emissions levels using a loaded transient driving cycle and other measurement techniques as described in OAR 340-24-312.
- (14) "Exhaust emissions" means substances emitted into the atmosphere from any opening downstream from the exhaust ports of a motor vehicle engine.
- (15) "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.
- (16) "Gas analytical system" means a device which 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 OAR 340-024-0350 and ORS 468A.380.
- (17) "Gaseous fuel" means, but is not limited to, liquefied petroleum gases and natural gases in liquefied or gaseous forms.
- (18) "Gasoline motor vehicle" means a motor vehicle powered by a spark-ignition internal combustion engine.
- (19) "GPM" means Grams Per Mile.

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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- (1520) "Gross vehicle weight rating" or "GVWR" means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.
- (1621) "Heavy duty motor vehicle" means any motor vehicle 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.
- (1722) "Hydrocarbon gases" means a class of chemical compounds consisting of hydrogen and carbon.
- (1823) "Idle speed" means the unloaded engine speed when accelerator pedal is fully released.
- (24) "Independent Contractor" means any person, business firm, partnership or corporation with whom the Department enters into an agreement providing for the construction, equipment, maintenance, personnel, management or operation of emissions inspection stations or activities pursuant to ORS 468A.370.
- (25) "Inspection and Maintenance Program (I/M) means a program of conducting regular inspections of motor vehicles, including measurement of air contaminants in the vehicle exhaust and an inspection of emission control systems, to identify vehicles that do not meet the standards of this Division or which have malfunctioning, maladjusted or missing emission control systems, and, when necessary, of requiring the repair or adjustment of vehicles to make the emission control systems function as intended and to reduce tailpipe emissions of air contaminants
- (1926) "In-use motor vehicle" means any motor vehicle which is not a new motor vehicle.
- (207) "Light duty motor vehicle" means any motor vehicle rated at 8500 pounds GVWR or less and has an actual vehicle curb weight as delivered to the ultimate purchaser of under 6000 pounds.
- (218) "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.
- (229) "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.
- (2330) "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 of resale.~~
- (2531) "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 affect the overall motor vehicle pollution control system.
- (2632) "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.
- (2733) "Noise level" means the sound pressure level measured by use of metering equipment with an "A" frequency weighting network and reported as dBA.
- (2834) "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.
- (35) "Oxides of Nitrogen" or NOx means oxides of nitrogen except nitrous oxides.
- (2936) "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.
- (307) "PPM" means parts per million by volume.
- (38) "Private Business Fleet" means ownership by any person of 100 or more Oregon-registered, in-use, motor vehicles, excluding those vehicles held primarily for the purpose of resale.
- (39) "Private Business Fleet Vehicle Emissions Inspector" means any person employed on a full-time basis by a Private Business Fleet that possesses a current and valid license issued by the Department pursuant to OAR 340-024-0340 and ORS 468A.380.
- (3140) "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.
- (41) "Public Agency Fleet" means ownership of 50 or more government-owned vehicles registered pursuant to ORS 805.040.
- (42) "Public Agency Fleet Vehicle Emissions Inspector" means any person employed on a full-time basis by a Public Agency Fleet that possesses a current and valid license issued by the Department pursuant to OAR 340-024-0340 and ORS 468A.380.
- (3243) "Public roads" means any street, alley, road, highway, freeway, thoroughfare, or section thereof used by the public or dedicated or appropriated to public use.
- (3344) "RPM" means engine crankshaft revolutions per minute.
- (345) "Two-stroke cycle engine" means an engine in which combustion occurs, within any given cylinder, once each crankshaft revolution.
- (3546) "Vehicle Emission Inspector" means any person employed by the Department or an Independent Contractor that possesses a current and valid license issued by the Department pursuant to OAR 340-024-0340 and ORS 468A.380.

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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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 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 15-1994, f. 6-6-94 & ef. 7-1-94

**Government-Owned Vehicle, and Permanent Fleet Vehicle and United States Government Vehicle Testing Requirements**

**340-024-0306**

- (1) All motor vehicles registered as government-owned vehicles under ORS 805.040 which are required to be certified ~~annually~~ pursuant to ORS 815.300 shall, as means of that certification, obtain a Certificate of Compliance.
  - (a) Government-owned vehicles in a fleet of 50 or more vehicles must be certified annually.
  - (b) Government-owned vehicles in a fleet of less than 50 vehicles must be certified bi-annually.
- (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) All motor vehicles owned by the United States Government and operated in the Portland Vehicle Inspection Area or the Medford-Ashland Air Quality Maintenance Area (AQMA) shall annually obtain a Certificate of Compliance.
  - (a) United States Government tactical military vehicles are not required to be certified.
  - (b) Federal installations located within the Portland Area Vehicle Inspection Program and the Medford-Ashland AQMA must provide a listing to the Department of all federal employee-owned vehicles operated on the installation and demonstrate that these vehicles have complied with this Division. Inspection results shall be reported to the Department on a quarterly basis and the list is be updated annually.
- (45) 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 (56) of this rule, be on the basis of the final numerical digit contained on the vehicle license plate. Such certification shall be completed by the last day of the month as provided below (last digit and month or year, respectively):
  - (a) 1 ..... January;
  - (b) 2 ..... February;
  - (c) 3 ..... March;
  - (d) 4 ..... April;
  - (e) 5 ..... May;
  - (f) 6 ..... June;
  - (g) 7 ..... July;
  - (h) 8 ..... August;
  - (i) 9 ..... September;
  - (j) 0 ..... October;
  - (k) even...even numbered years for vehicles that are tested bi-annually;
  - (l) odd.....odd numbered years for vehicles that are tested bi-annually.
- (56) 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~~ a Public Agency Fleet or Private Business Fleet licensed under the self-inspection program, OAR 340-024-0340.
- (7) Every agency or organization owning vehicles described in this rule shall annually report, in either electronic or printed form, to the Department the following information:
  - (a) The vehicle make;
  - (b) The vehicle model;
  - (c) The vehicle identification number (VIN);
  - (d) The number of Certificates of Compliance issued; and
  - (e) The date on which the motor vehicles were issued Certificates of 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 340-020-0047.]

Stat. Auth.: ORS Ch. 183, 468 & 468A

Hist.: DEQ 3-1978, f. 3-1-78, ef. 4-1-78; DEQ 19-1983, f. 11-29-83, ef. 12-31-83; DEQ 4-1993, f. & cert. ef. 3-10-93

### Motor Vehicle Inspection Program Fee Schedule

**340-024-0307** This rule sets out the fee schedule for Certificates of Compliance, and licenses issued by the Department of Environmental Quality, Vehicle Inspection Program:

- (1) The cost of each Certificate of Compliance issued at an Emissions Inspection Station
  - (a) In the Portland Vehicle Inspection Area will be a maximum of— \$1021, or
  - (b) in the Medford-Ashland Air Quality Maintenance Area will be a maximum of \$10.Issued by Department
- (2) The cost of each Certificate of Compliance—\$5  
Issued by a Licensed Motor Vehicle Private Business Fleet Operation or Public Agency Fleet
  - (a) In the Portland Vehicle Inspection Area will be a maximum of \$10, or
  - (b) in the Medford-Ashland Air Quality Maintenance Area will be a maximum of \$5.
- (3) The cost of each License issued to a Motor Vehicle Private Business Fleet Operation or Public Agency Fleet is as follows:
  - (a) Initial \$5.
  - (b) Annual renewals—\$1.
- (4) The cost of each License issued to a Private Business Fleet Operation or Public Agency Fleet Vehicle Emission Inspectors is as follows:
  - (a) Initial \$5.
  - (b) Annual renewal—\$1.
- (5) The cost of each License issued for a Exhaust Gas Analyzertical System is as follows:
  - (a) Initial \$5.
  - (b) Annual renewal—\$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 340-020-0047.]

Stat. Auth.: ORS Ch. 183, 468 & 468A  
Hist.: DEQ 20-1981, f. 7-28-81, ef. 8-1-81; AQ 16-1992, f & ef. 2-4-92; DEQ 4-1993, f. & cert. ef. 3-10-93

### Department of Defense Personnel Participating in the Privately Owned Vehicle Import Control Program

#### **340-024-0308**

- (1) U.S. Department of Defense (DOD) personnel participating in the DOD Privately Owned Vehicle (POV) Import Control Program operating a 1975 or newer model year vehicle, are exempt from the prohibition of ORS 815.305 insofar as it pertains to catalytic converter systems, and, if applicable, exhaust gas oxygen (O<sub>2</sub>) sensor(s), if one of the following conditions is met:
  - (a) The vehicle will be driven to the port and surrendered for export under the above program within ten (10) working days of disconnection, deactivation, or inoperability of the catalytic converter system or exhaust gas oxygen (O<sub>2</sub>) sensor(s); or
  - (b) The reconnection, reactivation, or reoperability of the catalytic converter systems and exhaust gas oxygen (O<sub>2</sub>) sensor(s), is made within 10 working days from the time the owner picked up the vehicle at the port.
- (2) Persons disconnecting, deactivating or rendering inoperable any catalytic converter system or exhaust gas oxygen (O<sub>2</sub>) sensor(s) on 1975 or newer model year vehicle of DOD personnel participating in the DOD POV Import Control Program which will be driven to the port and surrendered for exportation under said program within ten (10) working days are exempt from the prohibition of ORS 815.305.
- (3) Unless otherwise exempt under this Division, vehicles must be configured as a vehicle certified by the EPA for sale and use within the United States pursuant to 40 CFR, part 86, subpart A.
- (4) Documentation shall be kept with the vehicle at all times while the vehicle is operated in the United States which provides sufficient information to demonstrate compliance with all appropriate qualifications and conditions of this exemption, including the following:
  - (a) The unique vehicle identification number (VIN) of the subject vehicle;
  - (b) the agency or organization which employs the owner of the subject vehicle;
  - (c) the country to which the owner of the subject vehicle is being transferred;
  - (d) the date(s) when applicable alterations were performed on the subject vehicle;
  - (e) the date when the subject vehicle is scheduled to be delivered to the appropriate port for shipment out of the United States; and
  - (f) the date when the subject vehicle is picked up from the port of importation upon returning to the United States.

**State of Oregon Facilities Light Duty Motor Vehicle And Heavy Duty Gasoline Motor Vehicle  
Emission Control Test Method For Basic Program**

**340-024-0309**

(1) General Requirements

- (a) Vehicles having coolant, oil or fuel leaks or any other such defect that is unsafe to allow the emission test to be conducted shall be rejected from the testing area. The Inspector is prohibited from conducting the emissions test until the defects are corrected.
- (b) The vehicle transmission is to be placed in neutral 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/or behind the vehicle's tires.
- (c) All accessories are to be turned off.
- (d) The Inspector must insure that the motor vehicle is equipped with the required functioning motor vehicle pollution control system in accordance with the criteria of OAR 340-024-0320 or OAR 340-024-0325. For vehicles not meeting this criteria upon completion of the testing process, the Inspector shall issue a report to the driver stating all reasons for noncompliance.
- (ae) Exhaust gas sampling algorithm. The analysis of exhaust gas concentrations shall will begin 10 seconds after the applicable test mode begins. Exhaust gas concentrations will shall be analyzed at a rate of two times per second. The measured value for pass/fail determinations will shall be a simple running average of the measurements taken over five seconds.
- (bf) Pass/fail determinations. A pass or fail determination shall will be made for each applicable test mode based on a comparison of the applicable standards listed in OAR 34-24-330 and OAR 340-024-0335 and the measured value for HC and CO and described in subsection (1)(a) of this rule. A vehicle will shall pass the test mode if any pair of simultaneous values for HC and CO are below or equal to the applicable standards. A vehicle will shall fail the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.
- (eg) Void test conditions. The test shall will immediately end and any exhaust gas measurements will shall be voided if the measured concentration of CO plus CO2 falls below the applicable standards listed in OAR 340-024-0320 and OAR 340-024-0325 or the vehicle's engine stalls at any time during the test sequence.
- (dh) Multiple exhaust pipes. Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes will shall be sampled simultaneously.
- (ei) The test will shall be immediately terminated upon reaching the overall maximum test time.

(2) Test sequence.

- (a) The test sequence will shall consist of a first-chance test and a second chance test as follows:
  - (A) The first-chance test, as described in section (3) of this rule, will shall consist of an idle mode followed by a high-speed mode.
  - (B) The second-chance high-speed mode, as described in section (3) of this rule, will shall immediately follow the first-chance high-speed mode. It will shall be performed only if the vehicle fails the first-chance test. The second-chance idle mode, as described in section (4) of this rule, will shall follow the second chance high speed mode and be performed only if the vehicle fails the idle mode of the first-chance test.
- (b) The test sequence will shall begin only after the following requirements are met:
  - (A) The vehicle will shall be tested in as-received condition with the transmission in neutral or park and all accessories turned off. The engine will shall be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation for overheating).
  - (B) The tachometer will shall be attached to the vehicle in accordance with the analyzer manufacturer's instructions.
  - (C) The sample probe will shall be inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension will shall be used.
  - (D) The measured concentration of CO plus CO2 will shall be greater than or equal to the applicable standards listed in OAR 340-024-0320 and OAR 340-024-0325.

(3) First-chance test and second-chance high-speed mode. The test timer will shall start (tt=0) when the conditions specified in section (2)(b) of this rule are met. The first-chance test and second-chance high-speed mode will shall have an overall maximum test time of 390 seconds (tt=390). The first-chance test will shall consist of an idle mode following immediately by a high-speed mode. This is followed immediately by an additional second-chance high-speed mode, if necessary.

(a) First-chance idle mode.

- (A) Except for diesel vehicles, the mode timer will shall start (mt=0) when the vehicle engine speed is between 550 and 1300 rpm. If engine speed exceeds 1300 rpm or falls below 550 rpm, the mode timer will shall reset to zero and resume timing. The minimum idle mode length will shall be determined as described in section (3)(a)(B) of this rule. The maximum idle mode length will shall be 30 seconds (mt=30) elapsed time.
- (B) The pass/fail analysis will shall begin after an elapsed time of 10 seconds (mt=10). A pass or fail determination will shall be made for the vehicle and the mode terminated as follows:

- (i) The vehicle ~~will~~ pass the idle mode and the mode ~~will~~ be immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less or equal to the applicable standards listed in OAR 340-024-0330 and OAR 34-24-335.
  - (ii) The vehicle ~~will~~ fail the idle mode and the mode ~~will~~ be terminated if the provisions of section (3)(a)(B)(i) of this rule is not satisfied within an elapsed time of 30 seconds (mt=30).
  - (iii) The vehicle may fail the first-chance and second-chance test ~~will~~ be omitted if no exhaust gas concentration less than 1800 ppm HC is found by an elapsed time of 30 seconds (mt=30).
- (b) First-chance and second-chance high-speed modes. This mode includes both the first-chance and second-chance high-speed modes, and follows immediately upon termination of the first-chance idle mode.
- (A) Except for diesel vehicles, the mode timer ~~will~~ reset (mt=0) when the vehicle engine speed is between 2200 and 2800 rpm. If engine speed falls below 2200 rpm or exceeds 2800 rpm for more than two seconds in one excursion, or more than six seconds over all excursions within 30 seconds of the final measured value used in the pass/fail determination, the measured value ~~will~~ be invalidated and the mode continued. If any excursion lasts for more than ten seconds, the mode timer ~~will~~ reset to zero (mt=0) and timing resumed. The minimum high-speed mode length ~~will~~ be determined as described under paragraphs (3)(b)(B) and (C) of this rule. The maximum high-speed mode length ~~will~~ be 180 seconds (mt=180) elapsed time.
  - (B) Ford Motor Company and Honda vehicles. For 1981-1987 model year Ford Motor Company vehicles and 1984-1985 model year Honda Preludes, the pass/fail analysis ~~will~~ begin after an elapsed time of 10 seconds (mt=10) using the following procedure.
    - (i) A pass or fail determination, as described below, ~~will~~ be used, for vehicles that passed the idle mode, to determine whether the high-speed test should be terminated prior to or at the end of an elapsed time of 180 seconds (mt=180).
      - (I) The vehicle ~~will~~ pass the high-speed mode and the test ~~will~~ be immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), the measured values are less than or equal to the applicable standards listed in OAR 34-24-330 and OAR 34-24-335.
      - (II) Restart. If at an elapsed time of 30 seconds (mt=30) the measured values are greater than the applicable standards listed in OAR 340-024-0330- and OAR 340-024-0335, the vehicle's engine ~~will~~ be shut off for not more than 10 seconds after returning to idle and then ~~will~~ be restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. The mode timer will stop upon engine shut off (mt=30) and resume upon engine restart. The pass/fail determination ~~will~~ resume as follows after 40 seconds have elapsed (mt=40).
      - (III) The vehicle ~~will~~ pass the high-speed mode and the test ~~will~~ be immediately terminated if, at any point between an elapsed time of 40 seconds (mt=40) and 60 seconds (mt=60), the measured values are less than or equal to the applicable standards listed in OAR 340-024-0330 and OAR 340-024-0335.
      - (IV) The vehicle ~~will~~ pass the high-speed mode and the test ~~will~~ be immediately terminated if, at a point between an elapsed time of 60 seconds (mt=60) and 180 seconds (mt=180) both HC and CO emissions continue to decrease and measured values are less than or equal to the applicable standards listed in OAR 340-024-0330 or OAR 340-024-0335.
      - (V) The vehicle ~~will~~ fail the high-speed mode and the test ~~will~~ be terminated if neither of sections (3)(b)(B)(i)(I), (III) or (IV) of this rule is not satisfied by an elapsed time of 180 seconds (mt=180).
    - (ii) A pass or fail determination ~~will~~ be made for vehicles that failed the idle mode and the high-speed mode terminated at the end of an elapsed time of 180 seconds (mt=180) as follows:
      - (I) The vehicle ~~will~~ pass the high-speed mode and the mode ~~will~~ be terminated at an elapsed time of 30 seconds (mt=30) if any measured values of HC and CO exhaust gas concentrations during the high-speed mode are less than or equal to the applicable standards listed in OAR 340-024-0330 and OAR 340-024-0335.
      - (II) Restart. If at an elapsed time of 30 seconds (mt=30) the measured values of HC and CO exhaust gas concentrations during the high-speed mode are greater than the applicable short test standards as described in subsection (1)(b) of this rule, the vehicle's engine ~~will~~ be shut off for not more than 10 seconds after returning to idle and then ~~will~~ be restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. The mode timer will stop upon engine shut off (mt=30) and resume upon engine restart. The pass/fail determination ~~will~~ resume as follows after 40 seconds (mt=40) have elapsed.
      - (III) The vehicle ~~will~~ pass the high-speed mode and the mode ~~will~~ be terminated at an elapsed time of 60 seconds (mt=60) if any measured values of HC and CO exhaust gas concentrations during the high-speed mode are less than or equal to the applicable standards listed in OAR 340-024-0330 and OAR 340-024-0335.



- (IV) The vehicle will pass the high-speed mode and the test will be immediately terminated if, at a point between an elapsed time of 60 seconds (mt=60) and 180 seconds (mt=180) both HC and CO emissions continue to decrease and measured values are less than or equal to the applicable standards listed in OAR 340-024-0330 or OAR 340-024-0335.
- (V) The vehicle will fail the high-speed mode and the test will be terminated if neither of sections (3)(b)(B)(i)(I),(II) or (IV) of this rule is satisfied by an elapsed time of 180 seconds (mt=180).
- (C) All other light-duty vehicles. The pass/fail analysis for vehicles not specified in section (3)(b)(B) of this rule will begin after an elapsed time of 10 seconds (mt=10) using the following procedure.
  - (i) A pass or fail determination will be used for 1981 and newer model year vehicles that passed the idle mode, to determine whether the high-speed mode should be terminated prior to or at the end of an elapsed time of 180 seconds (mt=180). For pre-1981 model year vehicles, no high speed idle mode test will be performed.
    - (I) The vehicle will pass the high-speed mode and the test will be immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), the measured values are less than or equal to the applicable standards listed in OAR 34-24-330 and OAR 340-024-0335.
    - (II) The vehicle will pass the high-speed mode and the test will be immediately terminated if emissions continue to decrease after an elapsed time of 30 seconds (mt=30) and if, at any point between an elapsed time of 30 seconds (mt=30) and 180 seconds (mt=180), the measured values are less than or equal to the applicable standards listed in OAR 340-024-0330 and OAR 340-024-0335.
    - (III) The vehicle will fail the high-speed mode and the test will be terminated if neither the provisions of section (3)(b)(C)(i)(I) or (II) of this rule is satisfied.
  - (ii) A pass or fail determination will be made for 1981 and newer model year vehicles that failed the idle mode and the high-speed mode terminated prior to or at the end of an elapsed time of 180 seconds (mt=180). For pre-1981 model year vehicles, the duration of the high speed idle mode will be 30 seconds and no pass or fail determination will be used at the high speed idle mode.
    - (I) The vehicle will pass the high-speed mode and the mode will be terminated at an elapsed time of 30 seconds (mt=30) if any measured values are less than or equal to the applicable standards listed in OAR 340-024-0330 and OAR 340-024-0335.
    - (II) The vehicle will pass the high-speed mode and the test will be immediately terminated if emissions continue to decrease after an elapsed time of 30 seconds (mt=30) and if, at any point between an elapsed time of 30 seconds (mt=30) and 180 seconds (mt=180), the measured values are less than or equal to the applicable standards listed in OAR 340-024-0330 and OAR 340-024-0335.
    - (III) The vehicle will fail the high speed mode and test will be terminated if neither the provisions of section (3)(b)(C)(ii)(I) or (II) is satisfied.
- (4) Second-chance idle mode. If the vehicle fails the first-chance idle mode and passes the high-speed mode, the mode timer will reset to zero (mt=0) and a second chance idle mode will commence. The second-chance idle mode will have an overall maximum mode time of 30 seconds (mt=30). The test will consist on an idle mode only.
  - (a) The engines of 1981-1987 Ford Motor Company vehicles and 1984-1985 Honda Preludes will be shut off for not more than 10 seconds and restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure.
  - (b) Except for diesel vehicles, the mode timer will start (mt=0) when the vehicle engine speed is between 550 and 1300 rpm. If the engine speed exceeds 1300 rpm or falls below 550 rpm the mode timer will reset to zero and resume timing. The minimum second-chance idle mode length will be determined as described in section (4)(c) of this rule. The maximum second-chance idle mode length will be 30 seconds (mt=30) elapsed time.
  - (c) The pass/fail analysis will begin after an elapsed time of 10 seconds (mt=10). A pass or fail determination will be made for the vehicle and the second-chance mode will be terminated as follows:
    - (A) The vehicle will pass the second-chance idle mode and the test will be immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), any measured values are less than or equal to 100 ppm HC and 0.5 percent CO.
    - (B) The vehicle will pass the second-chance idle mode and the test will be terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (4)(c)(A) of this rule are not satisfied and the measured values during the time period between 25 and 30 seconds (mt=25-30) are less than or equal to the applicable short test standards listed in OAR 340-024-0330 and OAR 340-024-0335.
    - (C) The vehicle will fail the second-chance idle mode and the test will be terminated if neither of the provisions of sections (4)(c)(A) or (B) of this rule are satisfied by an elapsed time of 30 seconds (mt=30).
- (5) If the vehicle is capable of being operated with both gasoline and gaseous fuels, then the steps in section (2) of this rule are to be followed so that emission test results are obtained from both fuels.
- (6) The Inspector must remove the fuel cap from the vehicle and test it to insure the cap is capable of properly sealing the fuel tank's fumes. The Inspector must insert the cap onto a container with fittings representing that of the vehicle's fuel filler

pipe. The container will be pressurized with inert gas to detect any leaks. The gas cap leak test standard will be equivalent to the United States Environmental Protection Agency (EPA) leak down standard; however, the time for leak down or the leak detection method may vary from the EPA specified time and method. The provisions of this section will apply only within the Portland Vehicle Inspection Area.

- (67) If it is judged that the vehicle may be emitting propulsion exhaust noise in excess of the noise standards of OAR 340-024-0337, 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 (3)(b)(A) 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 the Portland Vehicle Inspection Area inspection boundaries located within Clackamas, Multnomah and Washington counties.
- (78) If it is determined that the vehicle complies with OAR 340-024-0320 through 340-024-0337, 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 Private Business Fleet Vehicle Emission Inspector, Public Agency Fleet Vehicle Emission Inspector or ~~Vehicle e~~mission iInspector shall issue the required Certificate of Compliance.

[NOTE: This rule, excluding section (6) is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 183, 468 & 468A  
Hist.: DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94

### ~~Motor Vehicle Fleet Operation Light Duty Motor Vehicle Emission Control Test Method~~

#### ~~340-024-0310~~

- (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 the motor vehicle is inspected.~~
- (3) ~~Vehicles having coolant, oil, or fuel leaks or any other such 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 are corrected.~~
- (4) ~~The vehicle transmission is to be placed in neutral 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.~~
- (5) ~~All vehicle accessories are to be turned 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 in OAR 340-024-0320(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 2,800 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 OAR 340-024-0330.~~
- (12) ~~If the vehicle does not comply with the standards specified in OAR 340-024-0330, and it is a 1981 through 1987 Ford Motor Company vehicle, or if it is a 1984 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 OAR 340-024-0337, 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 counties.~~
- (15) ~~If it is determined that the vehicle complies with OAR 340-024-0320, 340-024-0330, and 340-024-0337, 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 Certificates of Compliance.~~

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - 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 340-020-0047.]

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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93

### **Light Duty Motor Vehicle Emission Control Test Method For Enhanced Program**

#### **340-024-0312**

#### **(1) General Requirements.**

(a) **Data Collection.** The following information shall be determined for the vehicle being tested and used to automatically select the dynamometer inertia and power absorption settings:

- (A) **Vehicle type:** LDPC, LDT1 or LDT2,
- (B) **Chassis model year,**
- (C) **Make,**
- (D) **Model,**
- (E) **Gross vehicle weight rating, and**
- (F) **Number of cylinders, or cubic inch displacement of the engine.**

(b) **Ambient Conditions.** The ambient temperature, absolute humidity, and barometric pressure shall be recorded continuously during the transient driving cycle or as a single set of readings up to 4 minutes before the start of the transient driving cycle.

(c) **Restart.** If shut off, the vehicle shall be restarted as soon as possible before the test and shall be running at least 30 seconds prior to the transient driving cycle.

#### **(2) Pre-inspection and Preparation.**

(a) **Accessories.** The Inspector must insure that all accessories (air conditioning, heat, defogger, radio, automatic traction control if switchable, etc.) will be turned off.

(b) **Leaks.** The vehicle shall be inspected for exhaust leaks. Vehicles with leaking exhaust systems shall be rejected from testing. Vehicles having coolant, oil or fuel leaks or any other such defect that is unsafe to allow the emission test to be conducted shall be rejected from the testing area. The Inspector is prohibited from conducting the emission test until the defects are corrected.

(c) **Operating Temperature.** Vehicles in overheated condition shall be rejected from testing.

(d) **Tire Condition.** Vehicles will be rejected from testing if the tire cords, or bubbles, cuts, or other damage are visible. Vehicles will be rejected that have space-saver spare tires on the drive axle. Vehicles may be rejected that do not have reasonably sized tires. Vehicle tires will be visually checked for adequate pressure level. Drive wheel tires that appear low will be inflated to approximately 30 psi, or to tire sidewall pressure, or manufacturers recommendations.

(e) **Ambient Background.** Background concentrations of hydrocarbons, carbon monoxide, oxides of nitrogen, and carbon dioxide (HC, CO, NO<sub>x</sub>, and CO<sub>2</sub>, respectively) will be sampled to determine background concentration of constant volume sampler dilution air. The sample will be taken for a minimum of 15 seconds within 120 seconds of the start of the transient driving cycle, using the same analyzers used to measure tailpipe emissions. Average readings over the 15 seconds for each gas will be recorded in the test record. Testing will be prevented until the average ambient background levels are less than 20 ppm HC, 35 ppm CO, and 2 ppm NO<sub>x</sub>.

(f) **Sample System Purge.** While a lane is in operation, the CVS will continuously purge the CVS hose between tests, and the sample system will be continuously purged when not taking measurements.

(g) **Negative Values.** Negative gram per second readings will be integrated as zero and recorded as such.

#### **(3) Equipment Positioning and Setting.**

(a) **Roll Rotation.** The vehicle will be maneuvered onto the dynamometer with the drive wheels positioned on the dynamometer rolls. Prior to test initiation, the rolls will be rotated until the vehicle laterally stabilizes on the dynamometer. Drive wheel tires will be dried if necessary to prevent slippage during the initial acceleration.

(b) **Purge Equipment.** After the vehicle is positioned on the dynamometer, the vehicle gas cap is removed. A replacement cap with a ported hole through the cap is installed on the vehicle and the tubing to duct Helium to vehicle is connected to the port on the replacement cap. Helium flow into the cap is computer controlled to match the timing of the transient driving cycle. The evaporative canister purge will be measured during the transient driving cycle by inputting Helium under pressure into the test vehicle's fuel tank. Helium is measured

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

in the vehicle exhaust with a detection device and accumulated volume of Helium is compared with the standard of 0.45 liters of Helium to determine pass/fail.

- (c) **Cooling System.** Testing will not begin until the test-cell cooling system is positioned and activated. The cooling system will be positioned to direct air to the vehicle cooling system, but will not be directed at the catalytic converter.
- (d) **Vehicle Restraint.** Testing will not begin until the vehicle is restrained. In addition, the parking brake will be set for front wheel drive vehicles prior to the start of the test.
- (e) **Dynamometer Settings.** Dynamometer power absorption and inertia weight settings will be automatically chosen from an EPA supplied electronic look-up table that will be referenced based upon the vehicle identification information obtained in section (1)(a) of this rule. Vehicles not listed will be tested using default power absorption and inertia settings as follows:

VEHICLE TYPE	NUMBER OF CYLINDERS	ACTUAL ROAD LOAD HORSEPOWER	TEST INERTIA WEIGHT
All	3	8.3	2000
All	4	9.4	2500
All	5	10.3	3000
All	6	10.3	3000
LDPC	8	11.2	3500
LDT	8	12.0	4000
LDPC	10	11.2	3500
LDT	10	12.7	4500
LDPC	12	12.0	4000
LDT	12	13.4	5000

- (f) **Exhaust Collection System.** The exhaust collection system will be positioned to insure complete capture of the entire exhaust stream from the tailpipe during the transient driving cycle.

**(4) Vehicle Emission Test Sequence.**

- (a) **Transient Driving Cycle.** The Oregon enhanced test cycle consists of a single 31 second symmetrical peak with a maximum speed of 30.1 miles per hour (MPH). If the vehicle exceeds the emission standards established in OAR 340-024-0332, additional cycles up to a maximum of four (4) will be driven. If the vehicle passes the standards during any of the four cycles, the test will be terminated. After receipt of the required fees, the Inspector will issue the required Certificate of Compliance. If after four cycles the vehicle still has not passed the test, an algorithm is used to extrapolate the emission readings through a sixth testing cycle. If the algorithm shows the vehicle meets the standards in the hypothetical sixth cycle, the vehicle will pass the enhanced emissions test. The extrapolation algorithm consists of extrapolating the emissions readings linearly from the first four cycles to the hypothetical sixth cycle using least squares regression line. The vehicle will be driven over the following cycle:

Time/Second	Speed/MPH	Time/Second	Speed/MPH
0	0.0	16	28.5
1	0.0	17	29.5
2	0.0	18	30.1
3	0.0	19	30.0
4	0.0	20	29.7
5	0.0	21	29.3
6	2.6	22	28.8
7	5.9	23	28.0
8	9.2	24	25.0
9	12.5	25	21.7
10	15.8	26	18.4
11	19.0	27	15.1
12	21.5	28	11.8
13	23.7	29	8.5
14	25.6	30	5.2
15	27.2	31	1.9

- (b) **Driving Trace.** The Inspector will follow an electronic, visual depiction of the time/speed relationship of the transient driving cycle (hereinafter, the trace). The visual depiction of the trace will be of sufficient magnification and adequate detail to allow accurate tracking by the Inspector and will permit the

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Inspector to anticipate upcoming speed changes. The trace will also clearly indicate gear shifts as specified in section(4)(c) of this rule.

- (c) Shift Schedule. For vehicles with manual transmissions, Inspectors will shift gears according to the following shift schedule:

Shift Sequence	Speed	Nominal Cycle Time
GEAR	Miles Per Hour	Seconds
1 - 2	15	10.0
2 - 3	25	14.0
De-clutch	15	27.0

Gear shifts will occur at the points in the driving cycle where the specified speeds are obtained.

- (d) Speed Excursion Limits. Speed excursion limits will apply as follows:

- (A) The upper limit is 2 mph higher than the highest point on the trace within 1 second of the given time.
- (B) The lower limit is 2 mph lower than the lowest point on the trace within 1 second of the given time.
- (C) Speed variations greater than the tolerances (such as may occur during gear changes) are acceptable provided they occur for no more than 2 seconds on any occasion.
- (D) Speeds lower than those prescribed during accelerations are acceptable provided the vehicle is operated at maximum available power during such accelerations until the vehicle speed is within the excursion limits.
- (E) Exceedances of the limits in (A) through (C) of this section will automatically result in a void test. The station manager can override the automatic void of a test if the manager determines that the conditions specified in section (4)(d)(D) of this rule occurred. Tests will be aborted if the upper excursion limits are exceeded. Tests may be aborted if the lower limits are exceeded.

- (e) Speed Variation Limits.

- (A) A linear regression of feedback value on reference value will be performed on each transient driving cycle for each speed using the method of least squares, with the best fit equation having the form:

$y = mx + b$ , where:

- (i)  $y$  = The feedback (actual) value of speed;
- (ii)  $m$  = The slope of the regression line;
- (iii)  $x$  = The reference value; and
- (iv)  $b$  = The y-intercept of the regression line.

- (B) The standard error of estimate (SE) of  $y$  on  $x$  will be calculated for each regression line. A transient driving cycle lasting the full 31 seconds that exceeds the following criteria will be void and the test will be repeated:

- (i) SE = 2.0 mph maximum.
- (ii)  $m = 0.96 - 1.01$ .
- (iii)  $r^2 = 0.97$  minimum.
- (iv)  $b = +2.0$  mph.

- (f) Distance Criteria. The actual distance traveled for the transient driving cycle and the equivalent vehicle speed (i.e., roll speed) will be measured. If the absolute difference between the measured distance and the theoretical distance for the actual test exceeds 0.05 miles, the test will be void.

- (g) Vehicle Stalls. Vehicle stalls during the test will result in a void and a new test. Three (3) stalls will result in test failure or rejection from testing.

- (h) Dynamometer Controller Check. For each test, the measured horsepower, and inertia if electric simulation is used, will be integrated from 55 seconds to 81 seconds (divided by 26 seconds), and compared with the theoretical road-load horsepower (for the vehicle selected) integrated over the same portion of the cycle. The same procedure will be used to integrate the horsepower between 189 seconds to 201 seconds (divided by 12 seconds). The theoretical horsepower will be calculated based on the observed speed during the integration interval. If the absolute difference between the theoretical horsepower and the measured horsepower exceeds 0.5 hp, the test will be void. Alternate error checking methods may be used if shown to be equivalent.

- (i) Inertia Weight Selection. Operation of the inertia weight selected for the vehicle will be verified as specified in OAR 340-024-0357. For systems employing electrical inertia simulation, an algorithm identifying the actual inertia force applied during the transient driving cycle will be used to determine

proper inertia simulation. For all dynamometers, if the observed inertia is more than 1% different from the required inertia, the test will be void.

(j) Constant Volume Sampling (CVS) Operation. The CVS operation will be verified for each test for a Critical Flow Venturi (CFV) type CVS by measuring either the absolute pressure difference across the venturi or measuring the blower vacuum behind the venturi for minimum levels needed to maintain choke flow for the venturi design. The operation of an Subsonic Venturi (SSV) type CVS will be verified throughout the test by monitoring the difference in pressure between upstream and throat pressure. The minimum values will be determined from system calibrations. Monitored pressure differences below the minimum values will void the test.

(k) Fuel Economy. For each test, the health of the overall analysis system will be evaluated by checking a test vehicle's fuel economy for reasonableness, relative to upper and lower limits, representing the range of fuel economy values normally encountered for the test inertia and horsepower selected. For each inertia selection, the upper fuel economy limit will be determined using the lowest horsepower setting typically selected for the inertia weight, along with statistical data, test experience, and engineering judgment. A similar process for the lower fuel economy limit will be used with the highest horsepower setting typically selected for the inertia weight. For test inertia selections where the range of horsepower settings is greater than 5 horsepower, at least two sets of upper and lower fuel economy limits will be determined and appropriately used for the selected test inertia. Tests with fuel economy results in excess of 1.5 times the upper limit will result in a void test.

(5) Emission Measurements.

(a) Exhaust Measurement. The emission analysis system will sample and record dilute exhaust HC, CO, CO<sub>2</sub>, and NO<sub>x</sub> during the transient driving cycle.

(b) Purge Measurement. The analysis system will sample and record the purge flow by measuring Helium concentration observed in the vehicle exhaust sample. The total volume of Helium flow will be calculated over the course of the actual driving cycle.

(c) Pressure Measurement. The Department may include the fuel system vapor leak test as an element of the evaporative control system test if it is necessary to maintain the ozone standard as specified in OAR 340-031-0030.

(d) Fuel Cap test. The Inspector must remove the fuel cap from the vehicle and test it to insure the cap is capable of properly sealing the fuel tank's fumes. The Inspector must insert the cap onto a container with fittings representing that of the vehicle's fuel filler pipe. The container will be pressurized with inert gas to detect any leaks. The gas cap leak test standard will be equivalent to the United States Environmental Protection Agency (EPA) leak down standard; however, the time for leak down or the leak detection method may vary from the EPA specified time and method.

(6) If it is determined that the vehicle complies with OAR 340-024-0330 and ORS 815.310 through 815.325, then, following receipt of the required fees, the Private Business Fleet Vehicle Emission Inspector, Public Agency Fleet Vehicle Emission Inspector or Vehicle Emission Inspector shall issue the required Certificate of Compliance.

## Motorcycle Noise Emission Control Test Method

### 340-024-0314

- (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 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 OAR 340-024-0337, 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 OAR 340-024-0337, then, following receipt of the required fees, the Vehicle Emission Inspector shall issue the required Certificates of Compliance.
- (5) No Certificate of Compliance shall be issued unless the vehicle complies with all requirements of OAR 340-024-0300 through 350 and those applicable provisions of ORS 467.030, 468A.350 to 468A.400, 803.350, and 815.295 to 815.325.

Stat. Auth.: ORS Ch. 467, 468 & 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; DEQ 4-1993, f. & cert. ef. 3-10-93

[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 Fleet Operation Heavy Duty Gasoline Motor Vehicle Emission Control Test Method~~  
~~340-024-0315~~

- ~~(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) Vehicles having defects which make it 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 are corrected.~~
- ~~(4) The vehicle transmission is to be placed in neutral 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.~~
- ~~(5) All vehicle accessories are to be turned 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 OAR 340-024-0325.~~
- ~~(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. The idle speed at which the gas measurements were made shall also be recorded.~~
- ~~(9) The engine is to be accelerated, with no external loading applied, to a speed of between 2,200 RPM and 2,800 RPM. The engine speed is to be maintained at a constant speed within this 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.~~
- ~~(10) The steady state levels of the gases measured at idle 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.~~
- ~~(11) 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 be averaged to determine a single reading for each gas measured in the steps in sections (8) and (9) of this rule.~~
- ~~(12) The reading from the exhaust outlet, or the average reading from the exhaust outlets obtained in the steps in sections (8) and (9) of this rule are to be compared to the standards of OAR 340-024-0335.~~
- ~~(13) 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.~~
- ~~(14) 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.~~
- ~~(15) If it is determined that the motor vehicle complies with OAR 340-024-0325 and 340-024-0335, 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 Certificate of Compliance.~~
- ~~(16) 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 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 four consecutive quarterly periods.~~

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]~~

~~Stat. Auth.: ORS Ch. 183, 468 & 468A~~

~~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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93~~

**Renewal of Registration for Light Duty Motor Vehicles and Heavy Duty Gasoline Motor Vehicles  
Temporarily Operating Outside of Oregon**  
**340-024-0318**

- (1) Vehicles registered in the boundaries described in OAR 340-024-0301 that are being operated in another state and are at an address located at least 150 miles outside the Oregon border shall comply with the following requirements.
  - (a) For vehicles operated within another Environmental Protection Agency approved Inspection and Maintenance (I/M) program area, the Department of Environmental Quality shall establish reciprocity provisions to ensure motor vehicle compliance with the other state's I/M requirements. Compliance with the other state's I/M program requirements ~~is~~ shall be considered equivalent to the issuance of a Certificate of Compliance.
  - (b) For vehicles registered ~~operated~~ in another state, but not within another Environmental Protection Agency approved Inspection and Maintenance (I/M) area, the Department of Environmental Quality shall issue a temporary exemption from I/M testing requirements until such time as the vehicle returns to Oregon. Within 30

calendar days of the date the vehicle returns to Oregon it shall be required to comply with the Oregon I/M program's test criteria, methods and standards.

- (2) ~~Notwithstanding the provisions of subsection (1), the Oregon Drivers and Motor Vehicles Services (DMV) will continue to accept and process DMV 1402 forms (Statement Of Vehicle Outside Of Oregon) for vehicles located at addresses outside the state of Oregon during the transition period in which the responsibility for screening out of state vehicles is passed from DMV to DEQ. DMV will accept and process any DMV 1402 form from the vehicle owner until November 1, 1994. After November 1, 1994, vehicle owners will be required to be screened by DEQ.~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

[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 & 468A  
Hist: DEQ 15-1994, f. 6-8-94 & ef. 7-1-94

### **Light Duty Motor Vehicle Emission Control Test Criteria For Basic Program** **340-024-0320**

- (1) No vehicle emission control test ~~shall be considered~~ is 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 the emission control tests conducted at state facilities, except for diesel vehicles, tests ~~will not be considered~~ are invalid 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~~ six 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~~ is valid if the engine idle speed exceeds the manufacturer's idle speed specifications by over 200 RPM.
- (3) (a) No vehicle emission control test for a 1975 or newer model vehicle ~~is~~ 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 that for 1975 through 1980 model year vehicles the inspection shall be limited to the catalytic converter system ~~and fuel filler inlet restrictor listed below, and gas cap component of the evaporative control system and~~ except as noted in ORS 815.305(2) or as provided for by 40 CFR 85.1701-1709 (published July 1, 1991). The gas cap component of the evaporative control system will not be checked in the Medford-Ashland Air Quality Maintenance Area. 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;
    - (ii) Thermal reactor system; and
    - (iii) Catalytic converter system;
  - (C) Exhaust gas recirculation (EGR) systems;
  - (D) Evaporative control system including the gas cap;
  - (E) Spark timing system, including:
    - (i) vacuum advance system; and
    - (ii) vacuum retard system;
  - (F) Special emission control devices, 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 control computer; and
  - (G) Maintenance indicators or on-board diagnostic indicators on 1996 or newer model year vehicles.
- (b) The Department may provide alternative criteria for those required under subsection (a) of this section when it can be determined that the component or an acceptable alternative is unavailable. 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 1981 or newer model year vehicle ~~is~~ 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 ORS 815.305(2). For the purposes of this section, the following apply:



- (a) The use of a nonoriginal 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 ~~that~~ which have been determined to adversely effect emission control efficiency;
  - (b) The use of a nonoriginal equipment aftermarket part or system as a add-on, auxiliary, augmenting, or secondary part of system, is not considered to be a violation of ORS 815.305, if such part or system is on the exemption list of "Modifications to Motor Vehicle Emission Control Systems 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 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 1981 ~~and~~ newer model vehicle ~~that~~ which has been converted to operate on gaseous fuels ~~shall not be considered~~ is not 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) ~~If a vehicle older than the 1981 model year is now equipped with other than the original engine and factory installed vehicle 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. For a 1975 through 1980 model year vehicle in which the original engine has been replaced, if either the vehicle body/chassis original engine, as per registration/title or replacement engine as manufactured had a catalytic converter system, it must be present, intact and operational before a Certificate of Compliance may be issued.~~
  - (7) ~~A 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. For a 1981 or newer model year vehicle in which the original engine has been replaced, the emission test standards and applicable emissions control equipment for the year, make and model of the vehicle body/chassis, as per registration/title, or replacement engine, whichever is newer, apply. For those diesel powered vehicles that have been converted to operate on gasoline or gasoline equivalent fuel(s), the emission test standards and applicable emission control equipment for the year, make and model of the gasoline equivalent powered engine as originally manufactured, for the vehicle body/chassis, per the registration or replacement engine, whichever is newer, shall apply.~~
  - (8) ~~For those vehicles registered/titled as a 1981 or newer model year that were assembled by other than a licensed motor vehicle manufacturer, such as an Assembled, Reconstructed or Replica Vehicle, Department personnel must determine the applicable emission test standards based upon the vintage of the vehicle engine. The year of the engine is presumed to be that stated by the vehicle owner unless Department personnel determine, after physical inspection, that the year of the engine is other than stated by the owner.~~
  - (9) ~~An imported nonconforming motor vehicle that has been imported under a certificate of conformity or modification/test procedure pursuant to 40 CFR Part 85, Subpart P, must comply with the emission control equipment requirements of such certificate or procedure.~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

[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 & 468A

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. 9-30-85; DEQ 21-1988, f. & cert. ef. 9-12-88; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94

## Heavy Duty Gasoline Motor Vehicle Emission Control Test Criteria

### 340-024-0325

- (1) No vehicle emission control test ~~is~~ 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~~ six percent or less.
- (2) No vehicle emission control test ~~is~~ shall be considered valid if the engine idle speed exceeds 1300 RPM.
- (3) (a) No vehicle emission control test for a 1981 or newer model vehicle ~~is~~ 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 ORS 815.305(2):
  - (A) Positive crankcase ventilation (PVC) system;

- (B) Exhaust modifier system, including:
  - (i) Air injection system;
  - (ii) Thermal reactor system; or
  - (iii) Catalytic converter system;
- (C) Exhaust gas recirculation (EGR) system;
- (D) Evaporative control system including the gas cap;
- (E) Spark timing system, including:
  - (i) Vacuum advance system; or
  - (ii) Vacuum retard system; or
- (F) Special emission control devices, 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.
- (G) Maintenance indicators or on-board diagnostic indicators on 1996 or newer model year vehicles.

(b) The Department may provide alternative criteria for those required under subsection (a) of this section when it can be determined that the component or an acceptable alternative is unavailable. 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 1981 or newer model vehicle ~~is~~ 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 ORS 815.305(2). For the purposes of this section, the following apply:

- (a) The use of a nonoriginal 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 affect emission control efficiency. The Department will maintain a listing of those parts ~~that~~ which have been determined to adversely effect emission control efficiency;
- (b) The use of a nonoriginal 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 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 1981 or newer model motor vehicle which has been converted to operate on gaseous fuels ~~shall not be considered~~ is 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 340-020-0047.]

Stat. Auth.: ORS Ch. 183, 468 & 468A

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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94

### **Light Duty Motor Vehicle Emission Control Standards For Basic Program**

#### **340-024-0330**

- (1) Light Duty Diesel Motor Vehicle Emission Control Standards: All - 1.5% CO - No HC Check
- (2) Light Duty Gasoline Motor Vehicle Emission Control Standards: Two Stroke Cycle: All - 7.0% CO - No HC Check
- (3) Light Duty Gasoline Motor Vehicle Emission Control Standards: Four Stroke Cycle - Passenger Cars:

(a) ~~Pre 1968 Model Year:~~

~~(A) Four or less cylinders: All 7.0% CO 1,600 ppm HC~~

~~(B) More than four cylinders: All 6.5% CO 1,300 ppm HC~~

(b) ~~1968 - 1969 Model Year:~~

~~(A) Four or less cylinders: All 6.0% CO 900 ppm HC~~

~~(B) More than four cylinders: All 5.5% CO 700 ppm HC~~

(c) ~~1970 - 1971 Model Year: All 5.0% CO 600 ppm HC~~

(d) ~~1972 - 1974 Model Year:~~

~~(A) Four or less cylinders: All 4.5% CO 500 ppm HC~~

~~(B) More than four cylinders: All 3.5% CO 400 ppm HC~~

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

- (ea) 1975 - 1980 Model Year:
  - (A) With Catalyst: All 1.0% CO - 220 ppm HC
  - (B) Without Catalyst: All 2.5% CO - 300 ppm HC
- (fb) 1981 and Newer Model Year: All:
  - (A) At idle - 1.0% CO - 220 ppm HC
  - (B) At 2,500 RPM - 1.0% CO - 220 ppm HC
- (4) Light Duty Gasoline Motor Vehicle Emission Control Standards - Light Duty Trucks:
  - (a) 6,000 GVWR or less:
    - ~~(A) Pre 1968 Model Year:~~
      - ~~(i) Four or less cylinders: All 7.0% CO 1,600 ppm HC~~
      - ~~(ii) More than four cylinders: All 7.0% CO 1,300 ppm HC~~
    - ~~(B) 1968 - 1969 Model Year:~~
      - ~~(i) Four or less cylinders: All 6.0% CO 900 ppm HC~~
      - ~~(ii) More than four cylinders: All 5.5% CO 700 ppm HC~~
    - ~~(C) 1970 - 1971 Model Year: All 5.0% CO 600 ppm HC~~
    - ~~(D) 1972 - 1974 Model Year:~~
      - ~~(i) Four or less cylinders: All 4.5% CO 500 ppm HC~~
      - ~~(ii) More than four cylinders: All 3.5% CO 400 ppm HC~~
    - ~~(EA) 1975 - 1980 Model Year:~~
      - ~~(i) With Catalyst: All - 1.0% CO - 220 ppm HC~~
      - ~~(ii) Without Catalyst: All - 2.5% CO - 300 ppm HC~~
    - ~~(FB) 1981 and Newer Model Year: All:~~
      - ~~(i) At idle - 1.0% CO - 220 ppm HC~~
      - ~~(ii) At 2,500 rpm - 1.0% CO - 220 ppm HC~~
  - (b) 6,001 to 8,500 GVWR:
    - ~~(A) Pre 1968 Model Year: All 6.5% CO 1,300 ppm HC~~
    - ~~(B) 1968 - 1969 Model Year: All 5.5% CO 700 ppm HC~~
    - ~~(C) 1970 - 1971 Model Year: All 5.0% CO 600 ppm HC~~
    - ~~(D) 1972 - 1974 Model Year: All 3.5% CO 400 ppm HC~~
    - ~~(EA) 1975 - 1978 Model Year: All - 2.5% CO - 300 ppm HC~~
    - ~~(EB) 1979 - 1980 Model Year:~~
      - ~~(i) With Catalyst: All - 1.0% CO - 220 ppm HC~~
      - ~~(ii) Without Catalyst: All - 2.5% CO - 300 ppm HC~~
    - ~~(GC) 1981 and Newer: All:~~
      - ~~(i) At idle - 1.0% CO - 220 ppm HC~~
      - ~~(ii) At 2,500 rpm - 1.0% CO - 220 ppm HC~~
- (5) 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.
- (6) The Director may establish specific separate standards, differing from those listed in sections (1) through (5) of this rule for vehicle classes which are determined to present prohibitive inspection problems using the listed standards.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 89, f. 4-22-75, ef. 5-25-75; DEQ 115(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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93

**Light Duty Motor Vehicle Emission Control Standards For Enhanced Program**

**340-024-0332**

**(1) Grams Per Mile (GPM) for Light Duty Passenger Cars (LDPC):**

Model Year	Hydrocarbons (HC)	Carbon Monoxide (CO)	Oxides of Nitrogen (NOx)
1996 and Newer	0.9	20	2.25
1983 - 1995	1.2	30	3.00
1981 - 1982	1.2	60	3.00

**(2) Grams Per Mile (GPM) for Light Duty Truck 1 (LDT1) 6,000 GVWR or Less:**

Model Year	Hydrocarbons (HC)	Carbon Monoxide (CO)	Oxides of Nitrogen (NOx)
1996 and Newer 3750 Loaded Vehicle Weight or Less	0.9	20	2.25

<u>1996 and Newer</u>			
<u>3751 Loaded Vehicle</u>			
Weight or More	1.2	26	2.70
1988 - 1995	2.4	80	3.75
1984 - 1987	2.4	80	6.75
1981 - 1983	5.1	140	6.75
<b>(3) Grams Per Mile (GPM) for Light Duty Truck 2 (LDT2) 6,001 to 8500 GVWR:</b>			
Model Year	Hydrocarbons (HC)	Carbon Monoxide (CO)	Oxides of Nitrogen (NOx)
<u>1996 and Newer</u>			
<u>5750 Loaded Vehicle</u>			
Weight or Less	1.2	26	2.70
<u>1996 and Newer</u>			
<u>5751 Loaded Vehicle</u>			
Weight or More	1.2	30	3.00
1988 - 1995	2.4	80	5.25
1984 - 1987	2.4	80	6.75
1981 - 1983	5.1	140	6.75
<b>(4) The Director may establish specific separate standards, differing from those listed in sections (1) through (3) of this rule for vehicle classes which are determined to present prohibitive inspection problems using the listed standards.</b>			

### Heavy-Duty Gasoline Motor Vehicle Emission Control Standards

#### 340-024-0335

- (1) Carbon monoxide idle emission values not to be exceeded:
  - ~~(a) Pre 1970 Model Year: 6.5%~~
  - ~~(b) 1970 - 1973 Model Year: 5.0%~~
  - (ea) 1974<sup>5</sup> - 1978 Model Year: 4.0%
  - (eb) 1979 and Newer Model Year without catalyst: 3.0%
  - (ec) 1985 and Newer Model Year with catalyst: 1.0%
- (2) Carbon Monoxide nominal 2,500 rpm emission values not to be exceeded:
  - ~~(a) Pre 1970 Model Year: 4.0%~~
  - (ba) 1970<sup>5</sup> and Newer Model Year without catalyst with carburetor: 3.0%
  - (eb) 1970<sup>5</sup> and Newer Model Year without catalyst with fuel injection: No Check.
  - (d) 1985 and Newer Model Year with catalyst: 1.0%
- (3) Hydrocarbon idle emission values not to be exceeded:
  - ~~(a) Pre 1970 Model Year: 900 PPM~~
  - ~~(b) 1970 - 1973 Model Year: 700 PPM~~
  - (ea) 1974<sup>5</sup> - 1978 Model Year: 500 PPM
  - (d) 1979 and Newer Model Year without catalyst: 350 PPM
  - (e) 1985 and Newer Model Year with catalyst: 220 PPM
- (4) Hydrocarbon nominal 2,500 rpm emission values not to be exceeded: 1985 and Newer Model Year with catalyst: 220 PPM
- (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) through (4) of this rule for vehicle classes which are determined to present prohibitive inspection problems using the listed standards.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

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; DEQ 4-1993, f. & ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94

### Motor Vehicle Propulsion Exhaust Noise Standards

#### 340-024-0337

- (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
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<del>1972 - 1974 Ferrari GTB, GTC and GTS with 4390 cc engine</del>	<del>102 dBA</del>
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OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

<del>1973</del> 1974 Ford De Tomaso	101 dBA
<del>1972</del> 1974 Ford Pantera	101 dBA
<del>1972</del> 1974 Jaguar XKE	96 dBA
<del>1972</del> 1973 Pontiac Firebird TransAM with 455 CID engine	99 dBA
All Other Front Engine Vehicles	93 dBA
All Other Rear and Mid Engine Vehicles	95 dBA

- (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 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 & 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; DEQ 4-1993, f. & cert. ef. 3-10-93

### Criteria for Qualifications of Persons Eligible to Inspect Motor Vehicles and Motor Vehicle Pollution Control Systems and Execute Certificates

#### 340-024-0340

- (1) ~~Three~~Five separate classes of licenses are established as follows:
- (a) ~~Motor vehicle~~Private Business Fleet operations;
  - (b) ~~Public Agency Fleet~~;
  - (bc) ~~Private Business Fleet operation~~Vehicle eEmission iInspector;
  - (d) ~~Public Agency Fleet Vehicle Emission Inspector~~;
  - (ee) ~~State-employed~~Vehicle eEmission iInspector.
- (2) Application for a license must be completed on a form provided by the Department.
- (3) (a) ~~Each motor vehicle fleet's operation license shall be~~ valid for not more than a one year period and shall expire on December 31 of each year unless revoked, suspended, or returned to the Department;
- (b) ~~Each vehicle emission iInspector's license shall be~~ valid for not more than a two year period and shall expire on December 31 of every other year unless revoked, suspended, or returned to the Department.
- (4) ~~No license shall be issued~~The Department shall not issue any license 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 this Division or ORS 468A.350 to 468A.400, 815.295 to 815.325.
- (8) A ~~fleet operation~~Private Business ~~or~~Vehicle eEmission iInspector ~~or~~Public Agency Fleet Vehicle Emission Inspector license shall be valid only for inspection of, and execution of eCertificates of Compliance for, motor vehicle pollution control systems and motor vehicles of the ~~motor vehicle~~Private Business ~~Fleet or~~Public Agency Fleet~~operation~~ by which the ~~Private Business Fleet Vehicle Emission iInspector or~~Public Agency Fleet Vehicle Emission Inspector is employed on a full time basis, ~~except~~. A ~~Public Agency~~ ~~Fleet operation~~ ~~or~~Vehicle eEmission iInspector 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) ~~Inspector training and licensing or certification~~. To initially receive or renew a license as a ~~Private Business Fleet~~ ~~or~~Vehicle eEmission iInspector, a ~~Public Agency Fleet Vehicle Emission Inspector~~ or a Vehicle Emission Inspector, the applicant must be an employee of a ~~Private Business Fleet~~, a ~~Public Agency Fleet~~, the Vehicle Inspection Program of the Department or an employee of an ~~Independent Contractor-licensed motor vehicle fleet operation~~ and submit a completed application. All iInspectors shall receive formal training and be licensed or certified to perform inspections pursuant to this Division. The duration of the training program for persons employed by a ~~Private Business Fleet or a Public Agency Fleet~~motor vehicle fleet operation shall not be less than 16 hours.
- (a) Training.
    - (A) Inspector training shall ~~impart knowledge of~~include the following subjects:
      - (i) The air pollution problems, its causes and effects;
      - (ii) The purpose, function and goal of the inspection program;
      - (iii) Inspection regulations and procedures;

- (iv) Technical details of the test procedure and the rationale for their design;
  - (v) Test equipment operation, calibration and maintenance;
  - (vi) Emission control device function, configuration and inspection;
  - (vii) Quality control procedures and their purpose;
  - (viii) Public relations; and
  - (ix) Safety and health issues related to the inspection process.
- (B) In order to complete the training requirement, a trainee shall pass (minimum of 80% correct responses) a written test covering all aspects of the training. In addition, a hands-on test shall be administered in which the trainee demonstrates without assistance the ability to conduct a proper inspection, to properly utilize equipment and to follow other procedures. Inability to properly conduct all test procedures shall constitute failure of the test. The Department shall take appropriate steps to insure the security and integrity of the testing process.
- (b) Licensing and certification.
- (A) All inspectors shall be either licensed or certified by the Department in order to perform official inspections.
  - (B) Completion of inspector training and passing required tests shall be a condition of licensing or certification.
  - (C) Inspector licenses and certificates shall be valid for no more than 2 years, at which point refresher training and testing shall be required prior to renewal. Alternative approaches based on more comprehensive skill examination and determination of inspector competency may be used.
  - (D) Licenses or certificates shall not be considered a legal right but rather a privilege bestowed by the Department conditional upon adherence to Department requirements.
- (c) Enforcement against inspectors. Enforcement against licensed inspectors shall include swift, sure, effective, and consistent penalties for violation of program requirements.
- (A) Substantial penalties shall be imposed on the first offense for violations that directly affect emission reduction benefits. At a minimum, whenever a vehicle is intentionally improperly passed for any required portion of the test, inspectors shall be removed from inspector duty for at least 6 months or a retainage penalty equivalent to the inspector's salary for that period shall be imposed.
  - (B) License or certificate suspension or revocation shall mean the individual is barred from direct or indirect involvement in any inspection operation during the term of the suspension or revocation.
- (10) To be licensed as a Private Business motor vehicle Fleet operation or a Public Agency Fleet, the applicant must:
- (a) ~~Be the owner of 100 or more Oregon registered in use motor vehicles, or 50 or more government-owned vehicles registered pursuant to ORS 805.040~~ Employ on a full time basis a Private Business Fleet Vehicle Emission Inspector ~~or;~~
  - (b) Employ on a full time basis a Public Agency Fleet Vehicle Emission Inspector and;
  - (c) ~~Be equipped with an exhaust gas analyzer~~ Be equipped with an exhaust gas analyzer ~~vertical system~~ vertical system complying with criteria established in OAR 340-024-0355 or 0357;
  - (d) ~~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 Private Business motor vehicle Fleet or Public Agency Fleet operation shall advertise or represent himself as being licensed to inspect motor vehicles to determine compliance with the criteria and standards of OAR 340-024-0320 and 340-024-0330.

[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 340-020-0047.]

Stat. Auth.: ORS Ch. 183, 468 & 468A

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; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 15-1994, f. 6-8-94 & ef. 7-1-94

### ~~Motor Vehicle Fleet Operation Gas Analytical System Licensing Criteria~~

~~340-024-0350~~

- (1) ~~To be licensed, an exhaust gas analyzer must:~~
- (a) ~~Conform substantially with 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.~~
- (b) ~~Be owned by the licensed motor vehicle fleet operation;~~
- (c) ~~Be span gas calibrated and leak checked within a 14 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~~

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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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.~~
- ~~(8) Effective January 1, 1999, gas analytical systems used by licensed motor vehicle fleet operations must meet the criteria established in OAR 340-024-0355.~~

~~[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]~~

~~[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 & 468A

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; DEQ 4-1993, f. & ef. 3-10-93; DEQ 16-1993, f. & cert. ef. 11-4-93

### **State of Oregon Facilities Gas Analytical System Licensing Criteria For Basic Program 340-024-0355**

- (1) Test equipment. Computerized test systems are required for performing any measurement on subject vehicles.
  - (a) Performance features of computerized test systems. The test equipment shall be certified to meet the requirements contained in **40 CFR Part 51 Appendix D (November 5, 1992)** and new equipment shall be subjected to acceptance test procedures to ensure compliance with program specifications.
    - (A) Emission test equipment shall be capable of testing all subject vehicles and shall be updated from time to time to accommodate new technology vehicles as well as changes to the Vehicle Inspection Program.
    - (B) At a minimum, emission test equipment:
      - (i) Shall be automated to the highest degree commercially available to minimize the potential for intentional fraud and/or human error;
      - (ii) Shall be secure from tampering and/or abuse;
      - (iii) Shall be based upon written specifications; and
      - (iv) Shall be capable of simultaneously sampling dual exhaust vehicles.
    - (C) The vehicle owner or driver shall be provided with a computer-generated record of test results, including all of the items listed in **40 CFR Part 85, subpart W** as being required on the test record. The test report shall include:
      - (i) A vehicle description, including license plate number, vehicle identification number, and odometer reading;
      - (ii) The date and time of the test;
      - (iii) The name or identification number of individual(s) performing the tests and the location of the test station and lane;
      - (iv) The type of test performed, including emission tests, visual checks for the presence of emission control components, and functional, evaporative checks;
      - (v) The applicable test standards;
      - (vi) A statement indicating the availability of warranty coverage as required in section 207 of the Clean Air Act;
      - (vii) Certification that tests were performed in accordance with the regulations; and
      - (ix) For vehicles that fail the tailpipe emission test, information on the possible causes of the specific pattern of high emission levels found during the test.
- (2) Functional characteristics of computerized test systems. The test system is composed of emission measurement devices and other motor vehicle test equipment controlled by a computer.
  - (a) The test system shall automatically:
    - (A) Make a pass/fail decision for all measurements;

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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- (B) Record test data to an electronic medium;
- (C) Conduct regular self-testing of recording accuracy;
- (D) Perform electrical calibration and system integrity checks before each test, as applicable; and
- (E) Initiate system lockouts for:
  - (i) Tampering with security aspects of the test system;
  - (ii) Failing to conduct or pass periodic calibration or leak checks; and
  - (iii) A full data recording medium or one that does not pass a cyclical redundancy check.
- (b) The test system shall insure accurate data collection by limiting, cross-checking; and/or confirming manual data entry.
- (3) Gas analytical systems used by Private Business Fleets or Public Agency Fleets must meet the criteria established in this rule by not later than January 1, 1998.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-020-0047.]

[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 & 468A  
Hist.: DEQ 16-1993, f. & cert. ef. 11-4-93; DEQ 15-1994, f. 6-8-94 & cert. 7-1-94

### Gas Analytical System Licensing Criteria For Enhanced Program 340-024-0357

- (1) Light Duty vehicles described in OAR 340-024-0300(1)(a)(B) may be tested with a gas analytical system that meets the equipment specification described in the United States Environmental Protection Agency (EPA) High-Tech I/M Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications, April 1994. This equipment is referred to as Laboratory Grade Inspection/Maintenance 240 (IM240) testing equipment.
- (2) Alternatively, gas analytical systems meeting the EPA "Inspection Grade" (IG) criteria may be utilized. This system, capable of duplicating the IM240 driving cycle, consists of four main pieces of equipment:
  - (a) Computer system.
  - (b) Infrared exhaust gas analyzer capable of measuring at least CO, CO<sub>2</sub>, HC and NO<sub>x</sub>.
  - (c) CVS system to capture exhaust flow during testing needed to convert the grams per mile readings and fuel economy, and
  - (d) A dynamometer capable of simulating the IM240 driving cycle.
- (3) Gas analytical systems used by Private Business Fleets or Public Agency Fleets must meet the criteria established in this rule by not later than July 1, 1998.

### Agreement With Independent Contractor; Qualifications Of Contractor; Agreement Provisions 340-024-0360

- (1) The Director is authorized to enter into an emissions inspection agreement with one or more independent contractors, subject to public bidding, to provide for the construction, equipment, establishment, maintenance and operation of any emissions inspection stations or activities in such numbers and locations as may be required to provide vehicle owners reasonably convenient access to inspection facilities for the purpose of obtaining compliance with rules contained in this Division.
- (2) The Director is prohibited from entering into an emissions inspection agreement with any independent contractor who:
  - (a) Is engaged in the business of manufacturing, selling, maintaining or repairing vehicles, except that the independent contractor shall not be precluded from maintaining or repairing any vehicle owned or operated by the independent contractor.
  - (b) Does not have the capability, resources or technical and management skill to adequately construct, equip, operate or maintain a sufficient number of emissions inspection stations to meet the demand for inspection of every vehicle which is required to be submitted for inspection pursuant to this Division.
- (3) All persons employed by the independent contractor in the performance of an emissions inspection agreement are employees of the independent contractor and not of this state. An employee of the independent contractor shall not wear any badge, insignia, patch, emblem, device, word or series of words which would tend to indicate that such person is employed by this state. Employees of the independent contractor are specifically prohibited under this subsection from wearing the flag of this state, the words "state of Oregon", the words "emissions inspection program" or any similar emblem or phrase.
- (4) The emissions inspection agreement authorized by this rule shall contain at least the following provisions:
  - (a) A contract term or duration of not more than ten years with reasonable compensation to the contractor if the provisions of this rule are repealed during the ten year term.



OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 24 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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- (b) That nothing in the agreement or contract requires the state to purchase any asset or assume any liability if such agreement or contract is not renewed.
  - (c) The minimum requirements for adequate staff, equipment, management and hours and place of operation of emissions inspection stations.
  - (d) The submission of such reports and documentation concerning the operation of emissions inspection stations as the Director and the Attorney General may require.
  - (e) Surveillance by the Department of Environmental Quality and the Department of Administrative Services to ensure compliance with vehicle emissions testing standards, procedures, rules and laws.
  - (f) The right of this state, upon providing reasonable notice to the independent contractor, to terminate the contract with the independent contractor and to assume operation of the vehicle emissions inspection program.
  - (g) The right of this state upon termination of the term of the agreement or upon assumption of the operation of the program to have transferred and assigned to it for reasonable compensation any interest in land, buildings, improvements, equipment, parts, tools and services used by the independent contractors in their operation of the program.
  - (h) The right of this state upon termination of the term of the agreement or assumption of the operation of the program to have transferred and assigned to it any contract rights, and related obligations, for land, buildings, improvements, equipment, parts, tools and services used by the independent contractors in their operation of the program.
  - (i) The obligation of the independent contractors to provide in any agreement to be executed by them, and to maintain in any agreements previously executed by them, for land, buildings, improvements, equipment, parts, tools and services used in their operation of the program for the right of the independent contractors to assign to this state any of their rights and obligations under such contract.
  - (j) The amounts of liquidated damages payable by this state to the independent contractor if the state exercises its right to terminate the contract at the conclusion of the first, second, third or fourth year of the contract pursuant to section (f) of this rule. The damages recoverable by the independent contractor if the state exercises its right to terminate the contract shall be limited to the liquidated damages specified in the contract.
  - (k) Any other provision deemed necessary by the Department of Administrative Services for enforcement of the emissions inspection agreement.
- (5) In conjunction with the Attorney General and the Department of Administrative Services, the Department of Environmental Quality shall establish bid specifications or contract terms for a contract with an independent contractor as provided in this rule, review bids for award of a contract with the independent contractors and negotiate any terms of a contract with the independent contractors.
- (6) Before entering into any contract the Director shall inquire into the marketplace of independent contractors and based upon this review shall select the independent contractor who in the sole discretion of the Director is best qualified to perform the duties required by this rule and can be operational on January 1, 1998. After a contract is awarded to an independent contractor, the Director may modify the contract with the independent contractor to allow the contractor and the state to comply with amendments to applicable statutes or rules. This modification is exempt from public bidding and may include the addition, deletion or alteration of any contract provision in order to make compliance feasible, including inspection fees and services rendered. Provisions relating to contract term or duration may be amended, except that the term or duration of the contract shall not be extended more than three and one-half years beyond the term of the original contract as awarded. If the Director cannot negotiate an acceptable modification of the contract, the state may terminate the contract.

## SIP REVISION

## 5.4 \_\_\_\_\_ Motor Vehicle Inspection and Maintenance

## 5.4.1 \_\_\_\_\_ Applicability

Inspection/Maintenance (I/M) programs are operated in the Portland and Medford urban areas within the ~~s~~State of Oregon. A program meeting basic I/M requirements will be operated in ~~both~~the Medford areas. A program meeting enhanced I/M requirements will be operated in the Portland area. This I/M program will remain in effect until a redesignation is made that demonstrates that the subject areas can maintain the ambient carbon monoxide and ozone standards for the maintenance period without the emission reductions attributable to the I/M program.

The Portland I/M boundary ~~is that of the Metropolitan Service District (MSD), incorporating~~ es portions of Clackamas, Columbia, Multnomah and Washington, and Yamhill Counties. The 1990 population of the ~~MSD~~Portland I/M boundary, estimated from the 1990 federal census is ~~1,051,817~~1,130,703. Appendix A contains a list of all the U.S. postal zip codes included in whole or in part within the Portland I/M area. It also contains a map of the Portland I/M area. ~~The~~ Portland I/M program consists of ~~six~~seven testing centers and a total of ~~21~~7 test lanes.

The Medford I/M boundary is that of the Medford-Ashland Air Quality Maintenance Area (AQMA) which includes approximately 85 percent of the population of Jackson County. The 1990 AQMA population, estimated from the 1990 federal census is 124,430. Appendix A contains a list of all the U.S. postal zip codes included in whole or in part within the Medford I/M area. It also contains a map of the Medford I/M area. The Medford

I/M program consists of one testing center with three test lanes.

The legal authority for the I/M program is found in Oregon Revised Statutes 468A.360 to 468A.405, ORS 803.070 through 803.375 and ORS 815.095 through 815.325. These statutes are included in Section 2.2.11 of the State Implementation Plan (SIP). Regulations for program operations, Oregon Administrative Rules 340-24-005 through 340-24-3560, are in Section 2.2.7 of the SIP. The rules were revised to meet the requirements for a basic and enhanced programs as outlined in EPA Inspection/Maintenance Program Requirements; Final Rule (40 CFR Part 51, 1993). This final rules revision was approved by the Oregon Environmental Quality Commission on ~~June 3,~~ November 14, 1996.

#### 5.4.2 Basic I/M Performance Standard

Appendix B contains the input and output files for Mobile 5A runs performed to evaluate the emission reduction benefits of the I/M areas in the State of Oregon. Appendix C shows the local inputs to the model including their source and derivation. The table below summarizes the projected emission factor levels at the attainment date for the program for each I/M area:

##### Portland I/M Area

	Summer	1997
VOC		
Without I/M Program		3.05 g/mi
Performance Standard		2.72 g/mi
Program Target		2.54 g/mi
	Winter	1996
CO		
Without I/M Program		28.04 g/mi
Performance Standard		24.07 g/mi

Program Target	22.09 g/mi
Summer	1997
NOx	
Without I/M Program	2.45 g/mi
Performance Standard	2.42 g/mi
Program Target	2.38 g/mi

Medford I/M Area

Winter	1996
CO	
Without I/M Program	33.73 g/mi
Performance Standard	28.98 g/mi
Program Target	27.30 g/mi

The I/M programs meet the emission reduction targets in the attainment year. The State of Oregon commits to meeting the performance standard during actual implementation of the revised basic programs.

In addition, calculated emissions reductions for the proposed enhanced test are displayed in the Ozone Maintenance Plan and Redesignation Requirements for the Oregon portion of the Portland/Vancouver AQMA in Section 4.50 of Volume 2.

5.4.3 Network Type and Program Evaluations

In both the Portland and Medford areas, the I/M programs will be basic centralized, test-only programs operated by the Department of Environmental Quality (DEQ). In the Portland area, the I/M program will be enhanced centralized, test-only operated by DEQ.

The Oregon I/M programs, in both Portland and Medford, operate fleet self-testing programs with oversight by DEQ employees. In Portland, there are currently 503 fleets which test approximately 10,30613,350 vehicles. —In Medford, there are currently 10 fleets, testing approximately 1,069 vehicles.

5.4.4 Adequate Tools and Resources

The I/M program as stipulated in ORS 468A.405 is funded solely by collection of fees from vehicle owners. In the Medford area the test fee is collected at the time of passing the I/M test as stipulated in ORS 468A.405. In the Portland area, collection of fees will be altered to allow collection for each emission test. Statutory authority for this collection is pending in the Oregon Legislature. The Department proposes to offer one free retest for vehicles repaired at authorized automotive shops.—These amount of these fees areis to be adjusted by the Oregon Environmental Quality Commission to cover the costs of administering the I/M program. The ~~current~~—fee for the Medford program is \$10 per certificate issued for DEQ inspected vehicles and \$5 each for certificates issued by fleets. The fee for all Portland area tests (both basic and enhanced) is proposed as \$18 per test.

The fees are collected and deposited on a monthly basis into the Department of Environmental Quality Motor Vehicle Pollution Account. The monies from this account are continuously appropriated to the Department to be used solely for operations related to the I/M program.

Appendix D shows the proposed budget for the vehicle inspection program operations. DEQ expects to maintain staffing levels approximately as follows:

Overt and covert auditing	<u>01.80</u>	FTE
Data Collection and analysis	<u>0.24</u>	FTE
Performance monitoring	<u>02.8</u>	FTE
Technician assistance	<u>0.57</u>	FTE
Consumer assistance	<u>10.63</u>	FTE
Waiver oversight	N/A	
Employee management	<u>13.70</u>	FTE
Building Maintenance	2.0	FTE
Testing Equipment Maintenance		

and Quality Control	25.0	FTE
Special Technical Projects	0.48	FTE
Rule Development	0.45	FTE
Fleet Oversight	0.65	FTE
Public Response & Records Keeping	12.0	FTE
DEQ Testing Inspectors	4495.0	FTE

The DEQ Vehicle Inspection Program operates the I/M program including overseeing the construction of testing facilities, purchasing of testing equipment, development of testing procedures, actual testing of vehicles and oversight of program operations. Currently, none of the vehicle testing operations (except self-inspecting fleet testing) is contracted to a source outside the Department.

The DEQ expects to allocate 0.2 FTE to the oversight of the registration denial enforcement mechanism. This is included in above FTE summary.

#### 5.4.5 Test Frequency and Convenience

The test frequency is biennial for all subject vehicles. For new vehicles the first test is required for reregistration two years after initial registration. Since the inspection program has been operating in this manner since 1975, no special vehicle testing sequence scheme is required to accomplish a steady month to month flow of vehicles. Vehicles are merely reregistered periodically two years after the previous registration. Used vehicles newly arriving into the I/M area are required to be inspected and registered within 30 days of establishing residence if the vehicle does not have an Oregon license plate. Such vehicles with Oregon plates are not tested until current registration expires. Statutory authority is contained in ORS 803.400, 803.415 and 803.350 which are shown in Appendix E.

The inspection is required within 90 days prior to expiration of vehicle registration. Registration is

good for two years and expires on the anniversary of initial titling. Vehicles that change ownership receive a shortened registration, valid only until the next anniversary of initial titling.

The test stations are located such that approximately 85 percent of all motorists are within five miles of a test facility and 95 percent are within 12 miles of a facility. Monthly average waiting times range between 5 minutes and 12 minutes varying with station location and time of month. Regular testing hours are posted at all stations. The public is notified of station closure in the case of holidays by posting signs at stations two weeks in advance.

The Oregon basic two speed idle test procedure offers a second chance idle test for all vehicles. Certain Ford Motor Company and Honda vehicles are allowed a key off/restart if the first idle test is failed.

#### 5.4.6 \_\_\_\_\_ Vehicle Coverage

Vehicle tests must be performed on all the following types of vehicles:

- Passenger cars (gasoline, diesel, and alternative fuels except electric)
- Light duty trucks (gasoline, diesel, and alternative fuels except electric)
- Medium and heavy duty trucks (all gasoline, diesels up to 8,500 GVWR, all alternative fuels except electric)

The total estimated number of vehicles licensed for road use in the I/M areas in Oregon is ~~839,000~~ 1,110,000 vehicles. Approximately 450,000 of these vehicles appear to avoid the I/M test by improperly registering outside the test area.

The following types of vehicles, with estimated numbers in parenthesis, are exempt from the testing requirement:

All vehicles model year 1974 and older  
(~~23,584~~36,000 in Portland, ~~3,216~~4000 in Medford)

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All vehicles less than 2 years old (151,000 in  
Portland, 18,000 in Medford).

Electric Vehicles (N/A)

Farm Vehicles (3,520 in Portland, 480 in  
Medford)

Fixed load vehicles (1,056 in Portland, 114 in  
Medford)

Apportioned plate vehicle (N/A)

Motorcycles (14,080 in Portland, 1,920 in  
Medford)

Snowmobiles (2,816 in Portland, 384 in Medford)

All terrain vehicles (6,512 in Portland, 888 in  
Medford)

DEQ will not test rental car agency and private and public fleets that operate vehicles in the I/M areas, but whose fleets are not registered in the I/M areas. Instead DEQ will accept a reduction in emissions benefits calculated by Mobile 5A based on the associated reduced vehicle coverage compared to the EPA standard "basic I/M program. DEQ estimates the quantity of fleet vehicles in this category to be approximately 10,000 vehicles (8,800 in Portland, 1,200 in Medford). Vehicle coverage was reduced by this quantity in the "program target" Mobile 5A computer calculations.

Federal fleet vehicles garaged in I/M areas are required to be tested. The federal General Services Administration reported approximately 800 vehicles fall into this category (704 in Portland, 96 in Medford). It is estimated that 100 federal vehicles are registered to agencies based outside of the I/M program areas, but are routinely operated within the program



area (88 in Portland and 12 in Medford). All of these vehicles will not be required to be tested. ~~Also~~  ~~Vehicles~~ owned by federal employees living outside the program areas, but working at federal facilities inside the program areas with employee parking provided, will ~~not~~ be tested. It is estimated this will impact about 250 vehicles (220 in Portland and 30 in Medford). As discussed above under private fleet vehicles, DEQ will accept a reduction in emissions testing benefits in the Mobile 5A model via a reduction in vehicle coverage by the amounts indicated.

Private fleets and local government fleets are allowed to test their own vehicles. Test records are tracked by the DEQ. DEQ employees visit fleet operations on a periodic basis to insure proper test procedures are used and testing equipment is properly calibrated. Fleet licenses can be removed if fleet operations do not meet standards.

Alternatively, fleets can be tested in the DEQ operated centralized testing facilities.

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DEQ has procedures for testing vehicles registered in an Oregon I/M area but temporarily driven in an I/M area of another state. Prior to registration of such vehicles, the out of state vehicle owner will be notified that an I/M test certification of compliance from the other state will be required before Oregon registration can proceed. If a vehicle is temporarily located in another state, but not based in an I/M area of that state, the owner will be required to complete an Oregon DEQ form DEQ/VIP9401. This form will allow registration without an I/M test. The owner is required on the form to notify DEQ when the vehicle is scheduled back into Oregon. At that time the vehicle

will require an I/M test. DEQ will insure that such delayed testing is completed by the vehicle owner.

A table showing the number of vehicles in each weight class in each model year in 1992 is contained in Appendix F.

#### 5.4.7 Test Procedures and Standards

The authority to establish test procedures and standards is contained in Oregon statutes ORS 468A.360 through 468A.460 in Section 2.2.11 of the Oregon SIP. The test procedures and test standards are specified in the regulation in Section 2.2.7 of the Oregon SIP.

~~In the Portland area all 1975 model and newer vehicles are subject to a two speed idle test as outlined in the test procedure the following testing scenario will be used:-~~

1st two model year vehicles - exempt,

Next three model year vehicles - basic test,

1981 - 6 year old vehicles - enhanced test,

1975 - 1980 model year vehicles - basic test. For the Medford area all 20 year old vehicles must be tested.

For the basic test, vehicles 1981 and newer are required to pass both an idle and 2500 rpm emissions standards for carbon monoxide and hydrocarbon. Subject vehicles with model years older than 1981 are not judged at the 2500 rpm test point. All basic tested vehicle are given a second chance idle test. A gas cap pressure test will also be performed for all basic tests.

The enhanced test is a 31 second loaded transient cycle as outlined in the test procedures. It includes a canister purge test and a gas cap leak test.

Vehicles shall be rejected for unsafe conditions, including overheating, fluid leaks, or other conditions

determined to be unsafe to the inspection program operations.

Detailed testing procedures for the basic test are shown in Appendix H Section 710.00 and Appendix K. Detailed testing procedures for the enhanced test will be developed after equipment is received.

#### 5.4.8 Test Equipment

All basic tests will be conducted with garage style idle emissions measuring equipment with computer timed measurements, automatic calibration and computerized test data storage. Equipment must meet California BAR 90 accuracy standards. Vehicles failing an initial tailpipe emissions test for any pollutant or pollutants must pass a retest for all pollutants in order to receive a certificate of compliance.

All 1975 and newer vehicles are examined to insure original factory pollution control equipment is in place. Vehicles 1975-1980 are required to maintain ~~fuel restrictors and catalytic converters~~ only. Vehicles newer than 1980 are required to maintain all factory installed pollution control equipment.

Test equipment will have access lock-outs to insure inspectors do not alter test parameters. VIN codes are intended to be read with a bar code reader where possible. Other procedures will be streamlined as much as possible within the guidelines of the program regulations.

The test process is completely computer controlled. The process begins with vehicle identification data entry, including full VIN and license number. ~~DEQ plans to establish a~~ An I/M vehicle data base with full vehicle identification and test history accessed by entry of vehicle license plate has been established. The inspector ~~will verify~~ ies vehicle identity with license plate and VIN. The inspector ~~will then~~

initiates the test procedure with the customer operating the vehicle. The test ~~will~~ proceeds as programmed by the computer. After vehicle readings are taken, the computer ~~will~~ establishes pass/fail and prints out the emission report. Detailed equipment specifications are shown as Appendix I and Appendix J.

The enhanced testing equipment will meet the requirements specified in EPA's "High-Tech I/M Test Procedures, Emissions Standards, Quality Control Requirements, and Equipment Specifications" or EPA specified Inspection Grade (IG) 240 equipment.

#### 5.4.9 Quality Control

The Department's quality control, record keeping and security procedures for the computerized testing program are shown as Appendix H Section 700.04 and Appendix I Sections 4.5, 5, and 6.. Authorization and funding for computerized-enhanced testing equipment was granted by the 1993 and personnel is currently pending before the Oregon Legislature in July 1993. Final legislative approval for equipment is anticipated prior to July, 1996. Final legislative approval for personnel is anticipated prior to July, 1997. The Department has initiated the purchasing of new equipment and anticipates it will be on line before July 1, 1994 written specifications for purchasing equipment and is prepared to issue the document as soon as legislative approval is granted. Final implementation of mandatory enhanced testing is anticipated between July and September, 1997.

#### 5.4.10 Waivers and Compliance Via Diagnostic Inspection

The Oregon I/M program does not allow vehicles to bypass the test with use of a waiver. All vehicles must be repaired and meet testing standards before a

certificate is issued and registration can be accomplished.

The test report will alert motorists that failed the vehicle test that they should pursue warranty repairs if the vehicle meets the age and mileage criteria.

#### 5.4.11 Motorist Compliance Enforcement

The legal authority in Appendix E includes the authority necessary to develop and implement the enforcement element of the I/M program. A penalty schedule for violation of the regulation is included.

The motorist compliance enforcement program is to be implemented, in part, by the Oregon Drivers and Motor Vehicle Services Branch (DMV), which will take the lead in ensuring that owners of all subject vehicles are denied registration unless they provide valid proof of having received a certificate indicating they passed an emissions test in Oregon. State and local police agencies have the authority to cite motorists with expired registration tags. Periodic parking lot surveys will be used to evaluate motorist compliance with the I/M program.

The following vehicle types are exempt from the I/M program:

All vehicle model years 1974 and older (in Portland),  
All vehicle model years older than 20 years (in Medford),  

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First two model years,  
Electric vehicles,  
Farm Vehicles,  
Fixed load vehicles,  
Apportioned plate vehicles,  
Motorcycles,  
Snowmobiles,

All terrain vehicles (not licensed for street use).

Studies were conducted of vehicles parked in I/M areas in 1983 and 1987. This data was reviewed with DMV registration records and phone book address look-up and tracing of vehicles that initially failed the DEQ test and did not return for retest, but were found to be registered. Based on these studies it is estimated that the current compliance rate is 95 percent in the Portland I/M area and 90 percent in the Medford I/M area. Studies are shown in Appendix G. It is estimated that essentially all of the non-compliance is due to test avoidance either by people who knowingly register inappropriately outside the inspection area or those who unknowingly register at the correct address inside the test area but indicate to DMV the address is outside the I/M area.

Oregon commits to a level of motorist enforcement necessary to ensure a compliance rate of no less than 90% among subject vehicles in the Portland I/M program and no less than 80% in the Medford I/M program. Mobile 5A calculations for these compliance rates are shown in Appendices B and C. If compliance rate is not achieved, Oregon commits to work with DMV to establish a specific strategies to insure compliance is achieved.

#### 5.4.12 Motorist Compliance Enforcement Program Oversight

The Department will periodically review the compliance rates of both the Portland and Medford area I/M programs via parking lot surveys.

#### 5.4.13 Quality Assurance

The Department's quality assurance program is shown in Appendix H Section 709.00. It will be used by program auditors for conducting overt and covert audits.

#### 5.4.14 Enforcement Against Inspectors

Oregon Revised Statute 815.320 "Unlawful certification of compliance with pollution control requirements; penalty" describes that the unlawful certification of compliance with pollution control requirements is a Class A misdemeanor. This statute would apply when an Inspector is found to have intentionally improperly passed a vehicle that would not otherwise have been issued a Certificate of Compliance. The maximum penalty for a Class A misdemeanor is a \$2,500.00 fine and/or a 1 year jail sentence. Additionally, Article 12 of the current collective bargaining agreement between the Department and American Federation of State, County and Municipal Employees (AFSCME) Local 3336 details the process for disciplining and discharging State Employed Vehicle Emission Inspectors.

Oregon Administrative Rule 340-24-340 provides the Inspector's license may be suspended, revoked or removed if the Inspector fails to follow proper test procedures. This would include removal from testing duties for up to 6 months. However, Article 52 of the DEQ/AFSCME agreement requires that an State Employed Vehicle Emission Inspector shall be given at least fifteen (15) calendar days notice before any permanent change of an Inspector from one duty station to another. Where both parties agree, the required notice may be waived.

#### 5.4.15 Data Collection

Oregon commits to collect the data elements listed in EPA regulations 40 CFR 51.365. The test equipment will be capable of tying specific test results to a specific vehicle, test site, test lane and inspector. The details of this record keeping are shown as Appendix I Sections 4.5, 5 and 6.

Oregon will summarize and report to EPA the results of quality control checks performed on testing equipment, the concentration values of the calibration gases used and the time of the quality control check.

During the first four years after initiation of the enhanced vehicle inspection program, DEQ will conduct an IM240 test on a randomly selected sample of 0.1% of vehicles that are tested with the BAR31 test. DEQ will submit the test results to EPA Office of Mobile Sources and EPA Region 10 after each year of testing. At the end of the four year period, DEQ will confer with EPA Region 10 to determine if any changes are needed to the Ozone Maintenance Plan for the Portland AOMA because of the test results.

#### 5.4.16 Data Analysis and Reporting

Beginning July 1, 1996 and annually thereafter the Department shall report to EPA summary data based upon program activities taking place from January through December of the previous year. This report will provide statistics for the testing program, the quality control program, the quality assurance program, and the enforcement program. At a minimum, Oregon commits to address all of the data elements listed in 51.366 of the federal EPA's November 5, 1992 I/M rule.

Beginning with July 1, 1996 and biennially thereafter the DEQ shall report to EPA on all changes made in the program design, funding, personnel levels, procedures, regulations and legal authority, and shall supply a detailed discussion of the impact of such changes upon the program. This report shall also detail and discuss any weaknesses or problems discovered in the program over the previous two-year period, as well as the steps that were taken to address those problems, the result of those corrective actions, and any future efforts planned.

#### 5.4.17 Inspector Training and Licensing or Certification



Section 2.2.7 of the SIP contains rules requiring vehicle inspector to be formally trained and licensed to conduct inspection. Refresher training and relicensing is required every two years thereafter. Training will include all the elements required by 51.367(a) of the EPA I/M rule. Inspector candidates must pass a written test with at least 80 percent correct responses and a hands-on test to be certified.

The Department will be responsible for training and testing all inspectors.

#### 5.4.18 Public Information and Consumer Protection

DEQ commits to an ongoing public information and consumer protection program. DEQ dispenses warranty information with each failed test report. The DEQ currently operates a referee facility capable of conducting basic I/M tests. When the enhanced testing is implemented, DEQ will operate an enhanced/basic referee lane at each of the seven Portland area test stations. In Medford, a basic only referee lane will be operated at the single Medford test station. DEQ accepts smokey vehicle reports from the general public and sends a letter to the subject vehicle owner to resolve the problem. This program has been effective in correcting the problems of some smoking vehicles.

#### 5.4.19 Improving Repair Effectiveness

As in the past, the program's engineering and supervisory staff will continue to work with both motor vehicle owners and the automotive service industry regarding their vehicles failing to meet the exhaust emission levels. As such, a significant amount of staff time will be devoted to direct interactions with the customers. These direct contacts are normally

either by telephone or person-to-person. The customers vary from the typical vehicle owner/operator to the automotive service industry technician that is trying to accomplish the necessary repairs within reasonable costs and still maintain a satisfied customer.

Customers with vehicles that present unusual testing problems or situations are referred by the inspector staff to the program's field supervisors. Initially, the problems are attempted to be resolved over the telephone through the staff's utilization of program's reference and technical manuals. ±If the problems can not be resolved over the telephone, an appointment can be made to have a vehicle brought into the program's Tech Center, 1301 SE ~~M~~Morrison Street, Portland or to the Rogue Valley station for further testing. At that time, a diagnostic evaluation to identify the cause(s) of failure may be done.

For the new enhanced testing program to succeed, trained technicians will be needed to repair cars with computerized air pollution control systems that fail the new test. DEQ expects more vehicles to fail the test and some of the failures will present more difficult diagnosis and repair problems.

Since November 1995, a volunteer advisory committee representing a cross section of the auto repair industry, has been working to develop a DEQ Auto Technician Emissions Training. The DEQ Auto Technician Emissions Training Advisory Committee has evaluated training programs from other states and will make recommendations for Oregon's program.

The program will be designed to help improve technicians' skills in diagnosing and repairing modern vehicle emissions systems. Another goal of the program is to ensure that trained technicians receive recognition that will distinguish them from mechanics who have not gone through the DEQ approved training program.

The committee is proposing the training program be voluntary and consist of two certification levels of proficiency: Emission Technician (Level 1) and Advanced Emission Specialist (Level 2).

Direct personal contacts by the program's field supervisors with customers who have encountered difficulties in meeting the testing program standards and criteria is expected to average between 20 and 25 per week. Although these personal contacts in addition to the telephone contacts are extremely time consuming, it enhances the staff's ability to effectively relate to and understand the customer's concerns about the operation of the inspection and maintenance program.

5.4.20 Compliance with Recall Notices

DEQ does not intend to require vehicle owners to comply with recall notices in order to complete vehicle registration.

5.4.21 On-road Testing

DEQ does not intend to perform on-road testing of motorist vehicles as an enhancement to DEQ's basic program.

5/2/945/1/96

JC:je

SIP14

State of Oregon  
Department of Environmental Quality

## Memorandum

Date: July 9, 1996

To: Interested and Affected Public

Subject: Rulemaking Proposal and Rulemaking Statements - Portland Area Enhanced Vehicle Emissions Testing

This memorandum contains information on a proposal by the Department of Environmental Quality (DEQ) to adopt rule amendments to the Vehicle Inspection Program regarding enhanced emissions testing of vehicles in the Portland area. Pursuant to ORS 183.335, this memorandum also provides information about the Environmental Quality Commission's intended action to adopt a rule.

This proposal would redesign the vehicle emissions testing requirements for vehicles in the Portland area. Currently, all 1975 and newer model year vehicles in the Portland area (except the newest two model years which are exempt) are required to pass a "basic" emissions test prior to vehicle registration. The basic test consists of measurement of exhaust emissions at idle and 2500 RPM to meet an emissions standard. In the basic test, the engine is examined for disconnected pollution control equipment. The basic test also includes a visible emissions (smoke) standard and standards for noise. This basic test is currently performed in both the Medford and Portland areas.

The new Portland area enhanced program would require 65 percent of the vehicles to be tested with the new enhanced testing procedure, while other vehicles would continue to receive the basic test. The selection of vehicles to receive the enhanced test was designed to gain the most emissions reduction benefit at the least cost to the public. The enhanced test consists of driving the test vehicle on a dynamometer under normal vehicle loaded conditions through a series of 31 second driving cycles.

The Department has the statutory authority to address this issue under Oregon Revised Statutes (ORS) Chapter 468A, which gives the Commission the power to adopt plans and programs to achieve and maintain federal and state ambient air quality health standards. In particular the elements of the enhanced testing program are specified in ORS 468A.363.

#### What's in this Package?

Attachments to this memorandum provide details on the proposal as follows:

- Attachment A: The official statement describing the fiscal and economic impact of the proposed rule. (required by ORS 183.335)
- Attachment B: A statement providing assurance that the proposed rules are

Memo To: Interested and Affected Public  
August 3, 1996  
Page 2

consistent with statewide land use goals and compatible with local land use plans.

- Attachment C: Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.  
Attachment D: The actual language of the proposed rule (amendments).  
Attachment E: State Implementation Plan (SIP) Revisions

### Hearing Process Details

You are invited to review these materials and present written or oral comment in accordance with the following:

**Date:** Wednesday, August 28, 1996

**Time:** 7:00 p.m. (Question and answer session from 6:00 p.m. to 7:00 p.m.)

**Place:** City of Tigard Water Department Auditorium  
8777 SW Burnham Street, Tigard, Oregon

**Date:** Thursday, August 29, 1996

**Time:** 10:00 a.m. (Question and answer session from 9:00 a.m. to 10:00 a.m.)

**Place:** Department of Environmental Quality Conference Room 3A  
811 SW Sixth Avenue, Portland, Oregon

**Deadline for submittal of Written Comments:** September 6, 1996, 5:00 p.m.

In accordance with ORS 183.335(13), no comments from any party can be accepted after the deadline for submission of comments has passed. Thus if you wish for your comments to be considered by the Department in the development of these rules, your comments must be received prior to the close of the comment period. The Department recommends that comments are submitted as early as possible to allow adequate review and evaluation of the comments submitted.

Jeff Armstrong will be the Presiding Officer at the hearing. Following close of the public comment period, the Presiding Officer will prepare a report which summarizes the oral testimony presented and identifies written comments submitted. The Environmental Quality Commission (EQC) will receive a copy of the Presiding Officer's report and all written comments submitted. The public hearing will be tape recorded, but the tape will not be transcribed.

If you wish to be kept advised of this proceeding and receive a copy of the recommendation that is presented to the EQC for adoption, you should request that your name be placed on the mailing list for this rulemaking proposal.

### What Happens After the Public Comment Period Closes?

The EQC will consider the Department's recommendation for rule adoption during one of their regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is November 15, 1996. This date may be delayed if needed to provide additional time for evaluation and response to testimony received in the hearing process. You will be notified of the time and place for final EQC action if you present oral testimony at the hearing or submit written comment during the comment period or ask to be notified of the proposed final action on this rulemaking proposal.

The EQC expects testimony and comment on proposed rules to be presented during the hearing process so that full consideration by the Department may occur before a final recommendation is made. In accordance with ORS 183.335(13), no comments can be accepted after the public comment period has closed by either the EQC or the Department. Thus the EQC strongly encourages people with concerns regarding the proposed rule to communicate those concerns to the Department prior to the close of the public comment period so that an effort may be made to understand the issues and develop options for resolution where possible.

### Background on Development of the Rulemaking Proposal

#### Why is there a need for the rule?

Implementation of the enhanced testing program is a major component of the DEQ's ten year ozone maintenance plan. Without early implementation of the new emission reduction measures, DEQ projections indicate that the Portland AQMA will once again exceed the federal ambient ozone standards within the next few years because of unprecedented population growth. Metro expects more than 300,000 new residents and driving will increase by over 4.8 million miles per day.

To redesignate the AQMA from nonattainment to attainment, EPA requires an enforceable maintenance plan that demonstrates how the Portland area will continue to meet the federal ozone standard for a minimum of ten years. The advantages of redesignation are:

- Assurance that public health will be protected from adverse impacts of ozone;
- Protection against possible Clean Air Act sanctions of federal transportation funds;
- Removal of industrial growth impediments including costly Lowest Achievable Emission Rate (LAER) add emission offset requirements;

Memo To: Interested and Affected Public  
August 3, 1996  
Page 4

- Avoidance of federally-imposed prescriptive and more costly control strategies, such as retrofit NO<sub>x</sub> controls on existing industries.

#### How was the rule developed?

An extensive public process covering a four year period was used to develop the enhanced testing program option. The process including the following steps:

- 1992 - Governor's Task Force recommended enhanced testing as a part of the DEQ's 10 year Maintenance Plan;
- 1993 - The Oregon Legislature adopted House Bill 2214, which endorsed the enhanced testing recommendation of the Governor's Task Force;
- 1995 - The Legislature confirmed its approval of the enhanced testing component of the recommendations of the Governor's Task Force.
- 1995-96 - An Advisory Committee made up of automotive specialists including auto repair training instructors, fleet operators and auto technicians was convened to provide guidelines for the Department in developing the enhanced testing program, to establish the required training to adequately repair vehicles to pass the enhanced test and to develop fleet testing requirements.
- August 1996 - A final public comment/hearing process is scheduled.
- November 1996 - The Environmental Quality Commission (EQC) is scheduled to take final action on the rules.

#### Whom does this rule affect including the public, regulated community or other agencies, and how does it affect these groups?

The enhanced test will affect Portland area motorists and automotive repair facilities and technicians.

To improve the test method from a "basic" to an "enhanced" test will require an increase in the testing fee. The existing fee of \$10 will have to increase to a range of \$15 to \$21 per test to cover the cost of the program. DEQ's best estimate is that the fee will increase to \$18 per test. Because of the improved test, the failure rate and average repair costs will increase, but this will be somewhat offset by savings from improved fuel economy. Fleet operators will have to upgrade their testing equipment or rely on DEQ testing. Automotive repair technicians may opt

Memo To: Interested and Affected Public  
August 3, 1996  
Page 5

to take additional training and upgrade testing equipment.

**How will the rule be implemented?**

The enhanced test will be implemented by the existing Vehicle Inspection Program (VIP). VIP is currently in the process of developing leases on larger testing facilities to house the enhanced testing operations. VIP has developed specifications for enhanced testing equipment and will issue a Request for Proposal on the specifications.

Enhanced testing is scheduled to begin September 1, 1997, pending approval of the 1997 Legislature for allocation of positions and funding for additional Vehicle Inspection Program staff to operate the enhanced testing program. It is currently estimated that a doubling of inspection staff (from 45 to 95 FTE) will be required to operate the enhanced testing program.

**Are there time constraints?**

The enhanced testing program is a major component of the Department's ozone maintenance plan. The Legislature directed the Department to submit the 10 year ozone maintenance plan for 1996 - 2006 so that the AQMA can be redesignated to attainment and impediments to industrial growth can be removed.

**Contact for more information**

If you would like more information on this rulemaking proposal, obtain copies of the proposed rule language, or would like to be added to the mailing list, please contact:

Eric Polson  
Vehicle Inspection Program  
Department of Environmental Quality  
1301 SE Morrison Street  
Portland, OR 97214-2422

(503) 731-3050



Attachment A  
State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Enhanced Vehicle Emissions Testing

Fiscal and Economic Impact Statement

Introduction

The Portland area enhanced testing program is a major component of the Department's Ozone Maintenance Plan designed to maintain compliance with the federal ambient ozone standards in the Portland Air Quality Maintenance Area (AQMA) for the next ten years. The federal Clean Air Act requires maintenance plans for all areas seeking redesignation from nonattainment to attainment of national ambient air quality standards.

The vehicle enhanced testing program will have significant fiscal and economic impacts for the Portland area. It will also provide significant economic benefits to the Portland area by protecting public health, preventing imposition of prescriptive federal emission control requirements, allowing the removal of Clean Air Act impediments to industrial growth, and reducing the potential for Clean Air Act sanctions of federal highway funds.

GENERAL PUBLIC

The new rules would require enhanced testing beginning in 1997 for 12 model years of vehicles. This represents about 600,000 vehicles or 51 percent of the registered vehicles in the region. Approximately 30 percent of the registered vehicles will continue to be given the same basic test that has been used since 1975. Any new motor vehicle, when the registration results from the initial retail sale, will continue to be exempt from any testing, as well as vehicles with model years older than 1975. The exempt vehicles represent 19 percent of region's vehicle population.

All light duty vehicles are currently tested every other year. This will be continued under the proposed rules. All tested vehicles will be assessed the same test fee, whether the test is a basic or enhanced test. This fee is estimated to range between \$18 and \$21. DEQ's preferred fee is \$18 per test, but this would require a change in statute to charge for each test. The fee would be assessed for the first test. If the vehicle fails the first test, it would be given one free re-test if repairs are done at a DEQ Certified Repair Facility where the technicians received emissions repair training. DEQ recognizes that some individuals are skilled in do-it-yourself (DIY) motor vehicle maintenance, however advanced training and proper equipment are needed to ensure that vehicles

are repaired correctly the first time. All subsequent tests on the vehicle during the current inspection period will be assessed the test fee. The current fee of \$10 is presently charged only when a vehicle passes the test and a Certificate of Compliance is issued.

Individuals will also experience a significant increase in the cost of repairs. Due to the improved test, the failure rate is expected to increase from approximately 20 to 38 percent of tested vehicles. However, the failure rate will decline over time as vehicles are better maintained. The Federal Environmental Protection Agency (EPA) estimates that it costs an average of \$75 to repair a vehicle to pass the current basic test, compared to a range of \$100 to \$150 to repair a vehicle to pass the enhanced test. It is also anticipated that some citizens who currently do their own vehicle repair may need to bring the vehicle to a qualified automotive technician for repairs because of the complexity of the repairs required for the new test.

EPA estimates an average fuel economy improvement of 13 percent for vehicles that have been repaired to meet enhanced test standards. The average biennial fuel cost savings for vehicles repaired to pass the enhanced test is expected to approximately cover the average cost of these repairs.

There would not be an increase in fees for the Medford program because enhanced testing is not proposed for the Medford area.

### SMALL BUSINESS

Small businesses are defined as businesses with 50 or fewer employees. An estimated 95 percent of the garages that will repair vehicles to meet the more stringent test procedure are considered small businesses. Most automotive technicians, to be competitive in repairing vehicles for the enhanced test, will need additional emission repair training courses. Most of the training will be required at or before the start-up of the new program, which is proposed to start in July 1997. Continual training will be required as new emissions systems are unveiled by the auto manufacturers and as shops grow or experience turnover. Training will be available through ASE, community colleges and other training providers. The initial training costs are estimated at \$500 per employee. Annual cost for ongoing training is estimated at \$50 per employee per year. In a five person shop, it is estimated that two service people will be working on emissions repairs and require the training. In summary, the initial training cost of an average shop with five repair persons will be approximately \$1,000 with an ongoing training cost of \$100 per year.

At the start of the program, vehicles with model years 1981 through 1992 will be given enhanced testing, and training will be required to achieve proper repairs. Some small shops may opt to specialize in repairing only the 30 percent of vehicles that will continue to receive the basic test and the 19 percent of vehicles that do not require testing and thereby bypass the new training and still remain competitive.

In addition to training, some shops may opt to purchase "repair grade" (RG) enhanced testing equipment, which will allow the shop to better insure the vehicle will pass the Oregon enhanced test. Experience in enhanced testing in Colorado and Arizona indicate very few shops (approximately 5 percent, most of which are large) have found the purchase of this equipment to be necessary. Most shops have continued to rely on tuning the vehicle to manufacturer's specifications, and used their existing "BAR90" exhaust analyzer to estimate pass/fail of the vehicle. The cost for the repair grade equipment, which includes a dynamometer to simulate vehicle load and an exhaust analyzer, averages about \$35,000 to \$40,000.

The enhanced test is expected to more than double the amount of emission repair work done by shops as the average cost for emissions repairs jumps from an average of \$75 per vehicle to \$125 (estimated) per vehicle, and at the same time, the percent of vehicles failed increases from the current 20 percent to the anticipated 38 percent.

### LARGE BUSINESS

Auto dealerships and other large garages will incur similar training costs as the small business. The large shop with over 50 employees might have 5 employees trained for emissions repair. This training would incur an initial cost of \$2,500 and an ongoing cost of \$250 per year.

The large shop may also be more inclined to spend the money for the RG testing equipment at a cost of \$35,000 to \$40,000.

Some large private companies with greater than 100 vehicles currently do their own vehicle testing. DEQ proposes allowing the shops to continue self-testing for the enhanced test as long as EPA specified "inspection grade" (IG) testing equipment is used. This equipment consists of a full transient load dynamometer with infra-red testing analyzers and a sophisticated exhaust handling system. The cost ranges from \$50,000 to \$55,000.

Some existing self-testing fleets will opt to begin using the state operated centralized test instead of purchasing new IG testing equipment.

The current costs to fleets for self-testing is \$5 per vehicle for the certificate. The shop labor for the test is estimated at about \$10 per test. Assuming a 100 vehicle fleet, the cost for equipment amortization and repair cost add an additional \$25 per test (assuming 10 year equipment life). The estimated current cost per test would then be about \$40 per test.

After the enhanced testing begins, the certificate fee for self-testing fleets is anticipated to rise to \$10, and shop labor cost would likely double to \$20 per test. However, equipment amortization and repairs would add large additional costs estimated at approximately \$100 per test. The total estimated cost to the business would be about \$130 per test.

At the request of the Legislature, a contractor evaluated the cost-effectiveness of privatizing the vehicle inspection program.

#### Other State Agencies

State agencies with self-testing vehicle fleets will need to purchase equipment as discussed under large business above or bring their vehicles to DEQ for testing. Also, fleets that do their own maintenance will need to consider additional training for mechanics. State agency fleets that contract out vehicle repairs will likely incur higher vehicle emissions repair costs.

Whereas private shops will experience a benefit from the added emissions testing work, state agencies will incur added expense.

Attachment B

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Enhanced Vehicle Emissions Testing

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

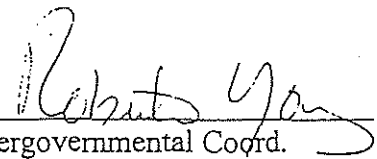
The Portland area enhanced testing program is a major component of the Department's Ozone Maintenance Plan which is designed to maintain compliance with the federal ambient ozone standards in the Portland Air Quality Maintenance Area (AQMA) for the next ten years. The federal Clean Air Act requires maintenance plans for the areas seeking redesignation from nonattainment to attainment of national ambient air quality standards.

The rules would provide for enhanced testing of vehicles in the Portland area yielding vehicle emissions reduction of hydrocarbons, nitrogen oxides and carbon monoxide.

2. Assessment of land use impacts and procedures for statewide goal compliance and local plan compatibility

As previously determined through the Land Conservation and Development Department (LCDC) approved DEQ State Agency Coordination (SAC) agreement, the Vehicle Inspection and Maintenance Program is not a program that significantly affects land use. The proposed changes are to the type of inspection conducted under Vehicle Inspection and Maintenance program, and as such, are consistent with the current SAC determination.

Division

  
Intergovernmental Coord.

7/10/96  
Date

## Attachment C

### Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.

#### Portland Area Enhanced Vehicle Emissions Testing

1. Are there federal requirements that are applicable to this situation? If so, exactly what are they?

There are no specific federal requirements governing the need to perform enhanced testing or the type of enhanced vehicle testing that will be performed by the Department. Such specific requirements are mandated under the federal Clean Air Act for state Air Quality Maintenance Areas (AQMA) which are designated moderate or more severe for ozone. The Portland AQMA is currently designated as marginal nonattainment.

However, the enhanced testing program is a component of the Department's Maintenance Plan for ozone. Under the federal Clean Air Act, for an area to be redesignated from "nonattainment" to "attainment," states must submit a plan that will ensure that air quality standards are not violated for 10 years after Environmental Protection Agency (EPA) approval of the plan. These plans are called Maintenance Plans.

2. Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?

The requirements are performance based. The Ozone Maintenance Plan must demonstrate that future emissions will not cause a violation of the ozone standard. As long as the Portland area stays in attainment with the federal ozone standard, the Clean Air Act allows states to identify the specific emission reduction strategies that will be used to maintain compliance. Selected emission reductions strategies are required to meet EPA enforceability requirements.

EPA requires that enhanced testing programs are able to demonstrate that claimed emission reductions actually occur.

3. Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?

The applicable federal requirements do not specifically address issues that are of concern to Oregon. The federal requirements are specifically designed to give each

7. Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)

The proposed maintenance plan establishes greater equity because it includes requirements applicable to emissions from all major source categories. Historically, industry has been more heavily regulated than other source categories. The ozone maintenance plan contains requirements that will reduce emissions from all four major source categories (i.e. motor vehicles, nonroad engines, area sources and industry).

8. Would others face increased costs if a more stringent rule is not enacted?

If a maintenance plan is not adopted and a future violation of the ozone standard occurs, a new attainment plan will be required including prescriptive federal control requirements on existing industry and other sources. In addition, Metro could experience difficulty demonstrating conformity of their transportation plan with air quality plans. If conformity can not be demonstrated, Metro would not be eligible to receive federal transportation funds.

9. Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?

No. The procedural requirements in the maintenance plan are required to meet EPA enforceability requirements.

10. Is demonstrated technology available to comply with the proposed requirement?

Yes. Demonstrated technology exists to comply with all state emission reduction strategies in the maintenance plan.

11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?

The proposed maintenance plan is designed to prevent air pollution. In particular, motor vehicle trip reduction strategies (i.e. ECO, parking ratios, Metro's Region 2040 growth concept and the Public Education and Incentive Program) are cost-effective ways to prevent air pollution. These strategies generally increase the use of lower-cost transportation alternatives and reduce road congestion and maintenance costs. The maintenance plan will also reduce the cost of controls on new business that are interested in locating in the Portland area.

The enhanced testing program prevents pollution by encouraging regular maintenance of pollution control components.

state the flexibility to adopt emission reduction strategies that are best suited for that area.

4. Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?

The emission reduction strategies included in the Maintenance Plan will ensure that air quality standards are maintained and will allow EPA to redesignate the Portland area to attainment for ozone. Once the area is redesignated, the existing stringent control requirements for major new and expanding industry will be replaced with less stringent and less expensive control requirements. In addition, the Portland area will be shielded from potential "bump-up" to a more stringent nonattainment classification. Such a bump-up would result in the imposition of prescriptive federal control requirements, including the costly retrofit of NO<sub>x</sub> controls on existing industry.

The enhanced testing program will provide data which will assist the motorist or automotive technician to diagnose and repair emission component failures.

5. Is there a timing issue which might justify changing the time frame for implementation of federal requirements?

There is no deadline in the Clean Air Act for submitting a maintenance plan. However, the Legislature directed DEQ to submit an approvable ozone maintenance plan for 1996 - 2006 to EPA as soon as possible so that the area can be redesignated to attainment and impediments to industrial growth imposed in the Clean Air Act can be removed.

6. Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?

The rate of ozone formation is dependent on temperature and other weather conditions. The maintenance plan is designed to address expected weather fluctuations over a 10-year period, but does not include surplus VOC emission reductions (there is a slight surplus NO<sub>x</sub> emission reduction). The maintenance plan is also designed to accommodate projected growth. Emission forecasts are based on growth rates for all emission source categories, and a growth allowance is included for major new and modified industry. Further, the maintenance plan includes a contingency plan as required by the Clean Air Act to address unforeseen growth in emissions and other uncertainties.

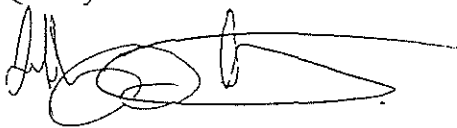
The enhanced testing program will accommodate growth by adding lanes to minimize waiting times.



State of Oregon  
Department of Environmental Quality

## Memorandum

Date: September 10, 1996

To: Environmental Quality Commission  
From: Jeff Armstrong   
Subject: Presiding Officer's Report for Rulemaking Hearing, Attachment C

Hearings Date and Time: August 28, 1996, beginning at 7:00 p.m.  
August 29, 1996, beginning at 10:00 a.m.

Hearings Location: City of Tigard Water Dept. Auditorium  
8777 S.W. Burnham Street  
Tigard, OR

D.E.Q. Headquarters, Room 3A  
811 S.W. Sixth Avenue  
Portland, OR

Title of Proposal: Portland Area Enhanced Vehicle Emissions Testing

Two rulemaking hearings were held on the above titled proposal. The rulemaking hearings on the above titled proposal were convened at 7:00 p.m. on August 28, 1996 and at 10:00 a.m. on August 29, 1996. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

At the Tigard Hearing on August 28, 1996, four (4) people were in attendance, and three (3) people signed up to give testimony. Ed Woods and Stan Sumich conducted a one hour information session before the hearing, briefly explaining the specific rulemaking proposal and the reason for the proposal, and then responding to questions from the audience. After the one hour informational session, people were called in the order of receipt of witness registration forms and presented oral testimony as noted below.

At the Portland Hearing on August 29, 1996, fifteen (15) people were in attendance, and three (3) people signed up to give oral testimony. One of those people also chose to submit written testimony. Ed Woods, Stan Sumich, and Jerry Cofer conducted a one hour information session before the hearing, briefly explaining the specific rulemaking proposal and the reason for the proposal, and then responding to questions from the audience. After the one hour informational

Memo To: Environmental Quality Commission  
September 10, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 2

session, people were called in the order of receipt of witness registration forms and presented oral testimony as noted below.

Tigard, August 28, 1996, 7:00 p.m.

1. Mac Pennington, Lake Oswego Public School District 7-J

Mr. Pennington expressed concerns over the proposal. Specifically, Mr. Pennington was concerned about the "Bar 90 System" requirement and the need for a dedicated modem line to be used solely for communication with the Department's Vehicle Inspection section. Mr. Pennington stated that they generally only certified six (6) to seven (7) vehicles a month out of their fleet and that, in light of budget concerns arising from Measure 5 and others, it would be too expensive for the school district to establish a dedicated modem line for the sole purpose of communicating with DEQ. Mr. Pennington would like to be able to use the school district's existing modem line because it does not have much traffic on it.

Mr. Pennington also testified that, because of the \$50,000 expense involved with necessary equipment upgrades in order to keep their private certification, the school district would like the proposed program to allow private fleet partnerships similar to those allowed for government agencies. He stated that this would allow many fleets to use the same dynamometer for testing and would be very advantageous for many smaller fleets.

2. Dennis Slothower, P.G.E., Oregon City

Mr. Slothower is a fleet tester for P.G.E. and expressed concern over the additional costs this proposal would place on those private fleets that wished to maintain their ability to independently certify fleet vehicles. He claimed that the enhanced test would raise their testing costs by approximately ninety-five (95) percent. Mr. Slothower also stated that his vehicle were on the road throughout Oregon for much of the time and are thus not generally readily available for testing at a DEQ Certification station.

Mr. Slothower supported vehicle testing in general because it helps with the maintenance of their vehicles as well general air quality, but stated that getting the vehicles in for testing and the additional costs of the testing would be a large burden on them because they did not budget for the enhanced test and are on a tight budget.

Memo To: Environmental Quality Commission  
September 10, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 3

Mr. Slothower said that approximately forty-two (42) per cent of P.G.E. Oregon City's fleet would be subject to the enhanced test and then stated that they would like to see some alternatives to the enhanced test considered. The alternative he put forth was for a "print-out" test so that P.G.E. Oregon City would not have to purchase a dynamometer since less than half of their fleet would be using the dynamometer. Mr. Slothower concluded by expressing a willingness to work with the Department in the hopes of coming up with something that was not quite so severe for them.

3. Rob Meiwes, G.T.E.

Mr. Meiwes is the fleet operations supervisor for the Portland Metro Division for G.T.E. Mr. Meiwes agreed that emissions testing was an important part of vehicle maintenance and pointed out that G.T.E. tested twice as often as required by law. Mr. Meiwes went on to state that everyone was cutting budgets in today's business climate and that it was quite a strain on already-tight budgets to purchase a dynamometer or to have mechanics making \$50 per hour spend an hour or more to take a fleet vehicle through a DEQ Certification station.

Mr. Meiwes pointed out that several states had already unsuccessfully tried to implement an IM 240 program, and that businesses that had trained employees and bought the equipment necessary to perform in-house vehicle testing were now stuck with expensive equipment that they no longer needed.

Mr. Meiwes posed several questions. He wanted to know if the equipment they would have to buy to maintain their in-house testing program would be outdated by OBD (On Board Diagnostic) equipment within the next few years. He stated that equipment upgrades for vehicle inspection in the past were not much of a hardship, but expressed concern that future improvements in vehicle emissions systems would outstrip their financial ability to upgrade their testing equipment.

Mr. Meiwes also wanted to know whether the test lanes available tap into automobiles' onboard computers and whether the "Bar 90" computers at these lanes tested for "trouble codes" in the automobiles' computers. He pointed out that part of California's test is to hook up a "Bar 90" computer to a modem dedicated to testing, eliminating the dynamometer portion of the emissions test. He stated that this test tapped into the automobile's computer and registered any stored "trouble codes," and seemed to be working for California.

Memo To: Environmental Quality Commission  
September 10, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 4

Mr. Meiwes made several suggestions for the record that would make the proposal less burdensome to fleet operators. He suggested that allowing a test in Oregon similar to that allowed in California (mentioned above) would make it much easier on them, taking into account the people and resources available to them. Mr. Meiwes also proposed having a lane at a DEQ Certification station dedicated for fleet use only, so that each fleet did not have to bear the brunt of maintaining their own dynamometer. He also advocated private fleet partnerships, wherein several fleets could share the same dynamometer. The final suggestion Mr. Meiwes had was for "after-hours" testing at a DEQ station for fleets, the site to be rotated among the DEQ stations throughout the area.

There was no further testimony and the hearing was closed at 7:45 p.m.

Portland, August 29, 1996, 10:00 a.m.

1. Bill Smith, American Lung Association of Oregon

Mr. Smith and the American Lung Association of Oregon support the enhanced testing program. Mr. Smith testified that the program is an investment in the future health of the state, making the program worth the additional costs and possible inconveniences associated with the enhanced testing program.

Mr. Smith also averred that other states that have unsuccessfully attempted to implement an enhanced vehicle emissions appeared to have done a poor public relations job. He expressed confidence in DEQ's ability to do an adequate public relations job in the promotion of the enhanced program.

Mr. Smith went on to address contentions that the enhanced test has only been proven effective in a computer model. He explained that the enhanced test has been proven effective in a laboratory setting and in the state of Colorado.

Mr. Smith also submitted written testimony supporting the proposal for the record. Please see Attachment C1

Memo To: Environmental Quality Commission  
September 10, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 5

2. Jim Moore, Northwest Natural Gas Company

Mr. Moore is the fleet manager for Northwest Natural Gas Company. He expressed concern that the cost of the enhanced program would be too high. He stated that the cost of installing the required testing system would be inordinate and beyond his budget.

Mr. Moore wanted to know whether DEQ could "mobilize" a testing unit that could then travel through the fleets in the area or whether DEQ could set up a "night service center" for fleets in order to somewhat lower the costs of the new program for fleet operators.

Mr. Moore stated that he and his organization are in favor of clean air, but that the costs and expenses from the proposed program were just too high. He estimated that the minimum cost of compliance for his company would be between \$35,000 and \$40,000 per year because his company would probably have to hire two people to drive fleet vehicles through a DEQ Certification center.

3. Tom Fitzgerald, U.S. West

Mr. Fitzgerald is the fleet manager for U.S. West in Oregon and southwest Washington. Mr. Fitzgerald expressed support for good air quality and pointed out that, as a fleet manager, he does everything he can to make sure his vehicles do not contribute to a problem. He also indicated that he had no problem with the new guidelines set out in the proposal.

Mr. Fitzgerald testified that he was concerned over keeping his technicians productive and eliminating "down time," so that there would be no interference with their service to their customers. Mr. Fitzgerald testified that, in order to maintain his productivity, he needed more flexibility within the enhanced program. Mr. Fitzgerald stated that the new equipment that would be necessary to perform in-house testing is too expensive and that he would have to start utilizing DEQ Certification centers. He claimed flexibility in the hours of operation would be necessary for him to maintain the productivity levels that he needs.

There was no further testimony and the hearing was closed at 10:30 a.m.

Memo To: Environmental Quality Commission  
September 10, 1996  
Presiding Officer's Report on  
August 15 & 16, 1996 Rulemaking Hearings  
Attachment C, Page 6

Attachments:

Written Testimony Submitted for the Record. (Attachment C1)

- Testimony submitted by William H. Smith



**OFFICERS**  
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Esther A. Nelson  
U S WEST Communications  
President Elect  
Scott Jonsson, Esq.  
Schwabe, Williamson & Wyatt  
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**When You Can't  
Breathe,  
Nothing Else  
Matters®**

**TESTIMONY RE: ENHANCED VEHICLE INSPECTION TEST**

The American Lung Association of Oregon is pleased to support the new Portland area enhanced Vehicle Emissions Testing Program.

We are aware that the new test will take a bit longer and cost more --we urge the public to consider this an investment in cleaner air and better health for our future and our children's future.

The new test will help us to keep up with growth and maintain acceptable and good air quality at the same time.

We talked to other states that have tried the enhanced test. Those that failed to achieve public acceptance appear to have done a poor PR job with the public. In Colorado the new program is doing well and accomplishing positive results.

In Colorado and in a laboratory testing situation the enhanced test was shown to do a more thorough job in finding cars which need adjustments -- such adjustments ultimately save the car owners money and help to reduce air pollution. We are all winners!!

Thanks very much.

A handwritten signature in cursive script that reads "William H. Smith".

**When You Can't  
Breathe,  
Nothing Else  
Matters®**



Portland General Electric Company

August 30, 1996

RECEIVED  
SEP 06 1996

Vehicle Emission Testing Program  
Oregon Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, Oregon 97201

AIR QUALITY DIVISION  
Dept. Environmental Quality

Re: Rulemaking Proposal and Rulemaking Statements - Portland Area Enhanced Vehicle Emissions Testing

Portland General Electric (PGE) appreciates the opportunity to comment on the proposed rules for Enhanced Vehicle Emissions testing. The following are comments on this proposal:

Economic Impacts: The proposed Enhanced IM240 Vehicle Emission Testing program would be extremely expensive for Portland General Electric and others in both the regulated and unregulated community to implement. Forty two percent of PGE light duty fleet (273 vehicles) would fall under the enhanced testing guidelines.

At this time PGE does not foresee purchasing and installing new analyzers in the locations currently testing for compliance since the equipment cost is prohibitive. Additionally, hiring extra personnel to ferry PGE vehicles to the DEQ enhanced testing centers would increase fleet operation costs by 126 percent.

This, in turn, increases the workload (by 273 vehicles) for DEQ's local test centers who have previously not tested PGE fleet vehicles.

Energy Act of 1992: Under the Energy Act of 1992, the DOE requires "energy providers" to purchase alternative fueled vehicles for 30 % of new vehicle purchases in 1997, 50% in 1998, 70% in 1999, and 90% in 2000. This regulation plus the enhanced IM240 testing burdens PGE and our ratepayers with additional costs making the operation less competitive.

National Highways Systems Bill: In November 1995, President Clinton signed the National Highway System (NHS) bill forbidding the EPA from forcing states to use the IM240 test, and also preventing it from applying a 50% reduction in allowable emissions reductions credits from states that allow decentralized testing. This legislation came about in part because the preliminary testing of IM240 by states like Maine, who discontinued testing amid public outcry. Several Northeastern states and the District of Columbia have decided, in principle, to adopt the California zero emission standards to meet emissions reduction obligations under the Clean Air Act as good-faith estimates of emissions reductions. The NHS bill mandates the EPA to consider these alternative plans as good-faith strategies for states to reduce their CO emissions.

Experience from Other Areas: IM240 has been implemented in Denver and Boulder, Colorado and Phoenix, Arizona. An editorial in the Rocky Mountain News entitled "Evaluating Envirotest" states that within the last twelve months, volunteers have reviewed air quality data at the worst monitoring station in Denver and found CO levels actually increased by 8%. Thus, the program did not produce the 58% reduction claimed by the Colorado Department of Public Health and Environment. Likewise, a three-year independent study by University of Minnesota scientists found their enhanced IM program had no measurable impact on air quality.

Health Risks Incomplete: The latest issue of Runzheimer's Fleet Maintenance and Safety magazine reports the federal EPA's own advisory committee (Clean Air Scientific Advisory Committee), sent a letter to EPA Administrator Carol Browner, stating more research is needed on specific health risks of particulate matter, before the government should proceed with plans to implement stricter emission standards. This committee, composed of scientists from a wide range of disciplines representing a diverse group of interests, concluded the current basic test is reasonable at this time.



# Oregon

DEPARTMENT OF  
TRANSPORTATION

Driver and Motor Vehicle  
Services  
1502 SW 6th  
Portland, Oregon 97201  
(503) 229-6032

Dick Leffler  
Service Manager  
Westland

Dick Leffler  
14292 SW 114th  
Tigard, OR 97224  
9-5-96

DEQ  
Vehicle Inspection Program  
1301 SE Morrison ST.  
Portland, OR 97214-2422

RECEIVED

SEP 06 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

Dear sir:

I am office manager at West Portland DMV. I am supplying written comments in response to your request for public input.

I feel that you are taking the wrong approach in merely enhancing the test standards.

Suggestions:

- Issue windshield stickers as some states do instead of a paper for registration.
- Police will enforce the windshield stickers.
- All cars subject to DEQ (1975 and newer, etc) that are driven in the DEQ area. Literally thousands of cars commute daily into the area from Marion, Yamhill, Columbia and other counties. Yet it is not fair to require all those counties be required to go through DEQ, since many may not drive into the DEQ area.
- The windshield sticker method would resolve the many cases that I witness here at DMV of people using addresses outside of DEQ to avoid DEQ under the present system. And many of these are the worst polluting cars that contribute much to air pollution.
- Being separated from DMV, this will enable DEQ to require annual DEQ tests, if this becomes necessary.
- Being separated from DEQ, DMV customers can renew their registrations by mail instead of, after finally passing DEQ, standing in line for an hour at DMV because the plates are expired. Secondly, our customer will not need to apply for trip permits to keep the the car going legally. Many offices issue 50-100 trip permits a day for DEQ reasons.
- Please accept these logical suggestions and change the law. If you do not, we will contact our local legislator and convince them of common sense, which apparently you will not do.

Dick Leffler



RECEIVED

SEP 05 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

6570 S.W. Dale Avenue  
Beaverton, Oregon 97008  
Sept. 3, 1996

DEQ Vehicle Testing Program  
1301 S.E. Morrison At.  
Portland, Oregon 97214-2422

Gentlemen:

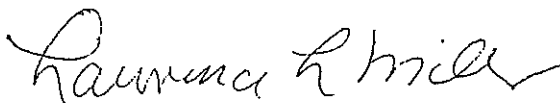
I am opposed to your proposed enhanced vehicle testing program.

Some time ago The Oregonian had an item that stated that with the advent of widespread newer cars with their emission controls, catalytic converters, and the use of unleaded gasoline that the current testing program's value was primarily that of checking that cars were kept tuned.

A recent item quoted DEQ as saying the enhanced program was to provide room for future pollution and that one third of cars currently passing present tests would fail and that costs to repair would be large - almost certainly in the hundreds of dollars.

Why then do you propose more rigorous controls when current programs are sufficient? Why should we spend large amounts of money testing and controlling small increments of pollution when no need has been shown? What is the cost/benefit relationship? Just because technology exists or can be found with large expenditures is no reason to do so when no real need exists.

Yours very truly,

  
Lawrence L. Miller

EARL SVELA  
MANUFACTURING REPRESENTATIVE  
18615 S.W. JOHNSON STREET  
ALOHA, OREGON 97006  
(503) 649-5714

September 2, 1996

RECEIVED

SEP 05 1996

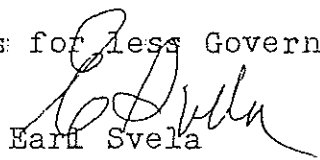
DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

DEQ Inspection Program  
1301 S.E. Morrison St.  
Portland, Oregon 97214

Invited Comments:

I do not go along with this proposed new emission standards. The people I visit within my precinct as well as others, are of the opinion, that the type of card made today and for the past several years; not only are new standards not necessary but the DEQ car testing should be done away with entirely.

Yours for Less Government

  
Earl Svela

RECEIVED

SEP 05 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM

James H. Persey Portland OR  
12345 SW Davies Rd.  
Beaverton, OR 97008  
September 2, 1996

DEQ Vehicle Inspection Program  
1301 S.E. Morrison St.  
Portland, OR 97214-2422

Re: Portland-area Enhanced Vehicle Emissions Testing program

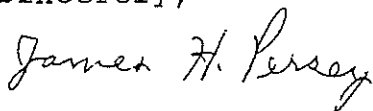
Dear DEQ:

I would like to input my opposition to the proposed rule implementing a Portland-area Enhanced Vehicle Emissions Testing program. This proposed test is the enhanced I/M 240 testing program. The implementation of this test in other states has caused many negative responses and Maine has actually suspended their program. The problem is the high failure rate combined with the difficulty of repairing the failed vehicles. Several TV shows, such as Prime Time and 20/20 have proved that both incompetent mechanics and outright fraud are very prevalent in the automobile repair industry. A local TV station did their own investigative reporting on repair fraud in Portland and we sure have our share. I do not think the public will support these enhanced tests. While the EPA may be claiming a 30% reduction in emissions, I do not think you will see that in the Portland area as many people will register their cars in non DEQ cities.

I will support the I/M 240 Basic test which does not require a dynamometer and failed cars can be repaired in most shops with reasonably priced testing equipment.

Since I believe the decision has already been made to proceed with the enhanced testing I would like to see some consumer friendly policies adopted. California has achieved some acceptance of their program by requiring licensing of technicians who perform the needed emission-system repairs. The only way to get a license is to pass a fairly difficult technical test. California was also publishing the names of the shops that were doing the best job of repairing failed vehicles. I would like to see Oregon adopt these two ideas as well as investigate and prosecute shops that do unnecessary service work.

Sincerely,



James H. Persey

RECEIVED

SEP 05 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

Greg Rieben

39125 NW Mindale Rd.

Banks OR 97106

September 3, 1996

DEQ Vehicle Inspection Program

1301 SE Morrison St.

Portland OR 97214-2422

DEQ Vehicle Inspection Program:

I am writing to express my opinion on expansion of motor vehicle emission testing. First, I am not opposed to monitoring and attempting to control vehicle emissions, but I feel there must be a better way to accomplish this goal than the current (or proposed) systems.

My major complaint involves underhood inspections. It is my understanding that no modifications may be made to the vehicle emission control system. I do not believe this is necessary. If the exhaust analysis is within the specified limits, it should not matter if the emission control system exactly conforms to factory specifications. Older vehicle (Pre-1986) emission systems are primitive, and in some cases modification may even be beneficial. Further, as the vehicle ages, these emission systems become increasingly difficult to maintain. Forcing people to maintain costly and ineffective emission systems may take many perfectly good inexpensive vehicles off the road. It is far more taxing on the environment to produce new vehicles than to operate properly tuned older vehicles. Hot Rod magazine confirmed that an engine can be made to run clean without many of the complicated and

31 Aug 1996

Sir/Madam,

I wish to offer the following thoughts pertaining to the Portland area vehicle testing program:

The currently-active regulations have begun a trend toward considering the personally-owned vehicle a luxury item. Specifically I refer to the fact that all vehicles dated 1975 or newer must be eternally inspected, instead of the previous rolling 20-year guideline. This places an excessive (almost punitive) financial burden on lower income people. This part of society must own older cars, and often cannot afford either the sometimes-astronomical repair bills arising from a DEQ visit, or the purchase of a replacement car. Realize that mass public transportation can never fit the needs of all such people, either. The net effect of this current approach is that the poor are targeted to pay for clean air, while higher income people, with their newer, cleaner cars, pay the loan companies to drive cars which would be clean whether or not DEQ inspected them. We go on and on about low-income housing, low-income health care; what about realistic low-income transportation?

Therefore, I request that DEQ return to the rolling 20-year inspection plan. But since we know that a law is never rescinded once in place, I also request that DEQ keep in mind the impact of the current program on the lives of the millions of lower-income Oregonians. Target the most numerous polluting vehicles: those in the rolling 5-to-20 year range.

Sincerely,

*Doug Panzer*

Doug Panzer

2737 SW 199th Pl  
Aloha OR 97006

RECEIVED  
SEP 3 1996  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

MS. HELEN J. TOTH  
11992 SW ROYALTY CT. #14  
KING CITY, OR 97224-2472

August 27, 1996

RECEIVED

AUG 28 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

DEQ Vehicle Inspection Program  
1301 S. E. Morrison St.  
Portland, OR 97214-2422

Re: Enhanced Vehicle Emissions Testing Program

Sirs:

Again, a proposal for more regulation that will result in increased fees and costs. Why is this always the approach taken to any problem? The simple and most obvious solution is ENFORCEMENT. All the added rules and fees will not solve the problem - ENFORCEMENT - cite the non-compliers and make them clean up their vehicles or get them off the roads.

I am sure that you, drivers like the rest of us, daily see cars in violation driving along our streets and freeways without being stopped. Go after them, get out of our pockets.

*Helen Toth*



DEPARTMENT OF ENVIRONMENTAL QUALITY 8-15-96

VEHICLE INSPECTION PROGRAM RECEIVED

1301 SE MORRISON ST. AUG 16 1996

PORTLAND, OR 97214-2425 DEPARTMENT OF ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

A COMMENT FOR YOUR HEARINGS THAT  
will take place 8-28 and 8-29.

I BELIEVE AUTO INSPECTIONS ARE FINE  
FOR CITIZENS WHO CARE ABOUT THE  
ENVIRONMENT AND THEIR AUTOS. MY GRIPE  
IS THE AMOUNT OF OLDER CARS AND SOME  
NEWER CARS THAT ARE ALLOWED BY DMU  
TO GET TRIP PERMITS MORE THAN A  
TIME FOR VEHICLES THAT WILL NOT  
PASS THE DEQ REQUIREMENTS.  
THESE VEHICLES ARE OBVIOUSLY  
PUTTING POLLUTANTS INTO THE AIR  
AND ARE BEING ALLOWED TO CONTINUE  
TO DO SO BY THE ISSUANCE  
OF TRIP PERMITS FOR MORE THAN  
A SHORT TIME.

THANK YOU  
(OVER PLEASE) *Richard M. Wilson*  
5500 SE 139, PORTLAND, OR 97236 (503) 762-7657



19 Aug. 96

D.E.Q.

I am very upset with the D.E.Q. car inspection. I use to be out of the testing area, then the boundary was expanded to include my area. There was no big problem, my cars passed fine, it's rather fast and not too expensive.

The new test is going to be long, expensive, and difficult to pass.

All these changes without a vote of the people.

From what I read it seems Oregon is buying testing equipment from other states that ~~they~~ tried this system and are giving it up. Why should we adopt a system that failed elsewhere?

I suggest that motorhomes be exempt from the new test because they are not usually used in the metro area.

Also, cars that are not driven much should be exempt, say 8,000 miles in 2 years.

Sincerely,

Ron Keller

22333 SW Mountain Rd

West Linn, OR

97068

RECEIVED

AUG 20 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

DEQ VEHICLE  
INSPECTION PROGRAM

29, Aug. 1996

Gentlemen:

ID REQUEST TO YOUR PROPOSED  
NEW TESTING PROGRAM:

I BELIEVE MORE EXTENSIVE  
VEHICLE TESTING IS NOT NECESSARY.  
IT WILL ONLY RESULT IN LONGER  
LINES OF VEHICLES WAITING FOR  
THE LONGER TEST, WITH MOTORS  
IDLING NEGATING ANY CLEANER  
AIR IMPROVEMENT!

E.E. Quetta

9223 SW. MORRISON ST

PORTLAND OREGON

97225

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SEP 3 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

Aug 28-96

## DEQ Vehicle Inspection Program —

In regards to our input on your proposal to tighten the vehicle inspection in the Portland area and of course charge us larger fees.

What good is it going to do?

You have grid lock in and out of Portland everyday, accidents that close-down highways, people shooting at each other because of driving incidents.

There are too many cars in the area now.

And still they are building more factories, housing projects and apartments. With no end in sight. This should of been stopped years ago.

The developments brings more cars in the area everyday

If every car was clean burning, you will still have pollution — because of the volume of cars.

over

DEC  
VEHICLE Insp. Prog.  
1301 S.E. MORRISON ST.  
PORTLAND, OR 97214-24

RECEIVED  
SEP 3 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
- Portland OR

I AM VERY NEGATIVE CONCERNING  
NEW TEST FEES AND A MORE STRINGENT  
TEST PROGRAM. THE PRESENT TEST PROGRAM  
IS MORE THAN ADEQUATE AND THE FEES  
ARE REASONABLE, THE AVERAGE WORKING  
PERSON CAN'T AFFORD IT ANYMORE.  
COMPANIES AND UPPER INCOME INDIVIDUALS  
WRITE IT OFF ON TAXES. A BETTER  
PROGRAM WOULD BE A SAFETY CHECK  
BY STATE PATROL TO GET OLDER,  
DANGEROUS & POLLUTING VEHICLES OFF  
THE ROAD, BY MAKING INCENTIVES  
AVAILABLE, PERHAPS IN CONJUNCTION  
WITH AUTO. MANUFACTURING. ALSO  
EVEN IF I IMPROVE THE BREATHING  
& HYDROCARBONS W/HEADERS (EXHAUST)  
I WOULDN'T PASS, WHICH IS VERY UN-  
FORTUNATE. ALL I KNOW IS THAT  
WHEN YOU PASS NEW RULES & MORE  
FEES I WANT TO VOTE REPUBLICAN.

PS:  
THANKS FOR  
LISTENING  
AND HELPING

(503)  
579-4271

Sincerely,  
Ron Anderson  
11667A SW TEAL BLVD.  
BEAVERTON, OR 97007



RECEIVED

SEP 3 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

August 30, 1996

31077 S W Laurelview Rd.  
Hillsboro, OR 97123

Dept. of Environmental Quality

Dear Sirs,

I object to your proposed rule to implement a Portland-Area Enhanced Vehicle Emissions Testing program.

Additional costs and frustration to the people of this area are uncalled for. We have put up with your bureaucratic garbage for too long and the time has come to say "that's it".

Do something about the continuing development of this area that brings in hoardes of people and their vehicles.

Do something about all the cars with one person in them going to and coming from work. It's called car-pooling.

Do something about all the Mexicans bringing old beaters into the area and driving them until the tags expire or they die.

I am a native Oregonian and I have built a sizeable estate over the years. It's DEQ, Metro, and other parasitic organizations that make me consider taking my money out of this state. If you keep making it more difficult to live here, that will surely come to pass.

Sincerely,

*Donell M Vandenberg*

10935 SW Highland Drive  
Tigard, OR 97224  
\*\*\*\*\*

August 27, 1996

RECEIVED

SEP 3 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

DEQ Vehicle Inspection Program  
1301 S. E. Morrison  
Portland, OR 97214-2422

Dear Sir:

A REMONSTRANCE AGAINST The Implementation of an  
Enhanced Vehicle Emission Testing program.

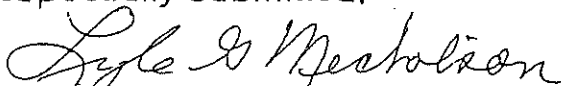
With the increasing preponderance of late model cars on the road, the need for even the present level of testing is decreasing. These cars are manufactured to meet or exceed Federal standards and to maintain that performance. Instead of taxing the owners with additional expense and loss of time, a substitute system of on the move testing with mobile equipment and photographic recording as done in other states should be instituted. This would apprehend the offenders without penalizing the properly operating vehicles.

Since older vehicles are rapidly disappearing from the streets, the need for stringent testing should be decreasing at the same rate. In addition most of these older vehicles are driven only limited amounts by their senior citizen owners and do not contribute much to pollution.

Apparently other areas have tried and abandoned these new stringent testing procedures. If it is unsuccessful elsewhere, it would undoubtedly be a bad decision to implement it here.

Before the DEQ testing program gets so large and has so much physical edifices, equipment and employees that it is unalterably entrenched, a halt to any increase should be formulated.

Respectfully submitted,

  
Lyle G. Nicholson, D.V.M.



## TOWN & COUNTRY CHEVROLET OLDSMOBILE, INC.

2045 HIGHWAY 99 NORTH  
P.O. BOX 249  
ASHLAND, OREGON 97520  
503/482-2411

August 23, 1996

RECEIVED  
SEP 1 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

Department of Environmental Quality  
ATTN: Eric Polson  
Vehicle Inspection Program  
1301 SE Morrison St.  
Portland, OR 97214-2422

Dear Eric:

I would like this letter to be included in the hearing scheduled for August 28th and 29th in Portland concerning implementing the Portland Area Enhanced Vehicle Emissions Testing program. I am against the state requiring enhanced testing for several reasons.

As one of the few new car dealers in southern Oregon who owns a dynamometer I am very concerned about the immense cost to the state to purchase and operate this piece of equipment. I feel that there is great pressure by the equipment manufacturers lobbying for the state to purchase dynamometers. I also assume that one of the reasons for the purchase is the hopes that more cars will fail. If that was not the objective there would certainly be no increase in air quality. I seriously question whether this new test will be a significant improvement over the current test. I am also concerned about the potentially higher cost of the enhanced test to the consumer in order to provide reimbursement to the state for this very expensive equipment.

When vehicle emission testing came to Medford, Ashland residents were told that it would eventually come to Ashland, which has not happened. Both Ashland new car dealers make an average of four to five trips per day to the Medford testing station to have cars inspected. This is a problem for several reasons: it is expensive and time consuming to drive to Medford, the north Medford I-5 interchange already has a huge traffic problem, and multiple daily trips are putting more emissions into the air. I would certainly be against spending any more money on a new program when the promises made to tax payers have yet to be fulfilled on the previous program.

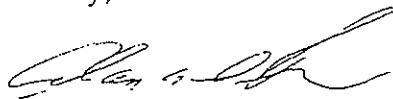
Furthermore, I feel it would be better for the tax payers to have basic vehicle testing handled by private enterprise rather than by government. I feel that local business could decrease the cost to the consumer and provide a good check at the same time. I think it would also be more convenient for a customer to have repair capabilities available at a testing station, although they would be free to take their vehicle anywhere for needed repairs.

Page 2

My final area of concern is the current financial status of these testing stations. I have been asking for a number of years for a cash flow report from the Medford testing station with no success. Before the state commits to spending a large sum of money on new, expensive equipment taxpayers need answers to questions such as: What are revenue and expenses at the testing stations and is this a net cost to the tax payer in Oregon? Do the testing stations make a profit or do they break even?

Thank you for providing this opportunity for communication.

Sincerely,



Alan W. DeBoer

AD/jd

cc: Judy Uherbelau  
Lenn Hannon





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth /  
Coastline, Washin

FAX TRANSMITTAL

# of pages 1

To: Ed Woods	From: Sue Ennes
Dept./Agency: ODEQ	Phone #: 206 553 6249
Fax #: 503 731 3869	Fax #: " 0404
NSN 7540-01-317-7368	5099-101

GENERAL SERVICES ADMINISTRATION

SEP 6 - 1996

Reply To  
Attn Of: OAQ-107

RECEIVED

SEP 06 1996

Ed Woods, Manager  
Vehicle Inspection Program  
Oregon Department of Environmental Quality  
1301 SE Morrison St.  
Portland, Oregon 97214

DEPARTMENT OF ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

Dear Mr. Woods:

The purpose of this letter is to provide comments on the rule package for enhanced vehicle testing in Oregon dated July 8, 1996 and received by EPA July 12, 1996.

DEQ has been working with EPA Region 10 and our Office of Mobile Sources to resolve the credit issue for the Inspection and Maintenance (I&M) program. Oregon currently is claiming 95% of IM240 credits, or equal to fast-pass/fast-fail IM240. It is critical that if the I&M credit is decided to be less than 95%, then Oregon will have to glean credit reductions from some other mechanism (other IM test procedure or adjustments, or even point or area sources). Oregon needs to resolve the credit issue prior to full approval of the Ozone Maintenance Plan, Redesignation Request.

We will continue to work closely with you to resolve this issue. Please call me at (206) 553 2963 or have your staff contact Ed Jones at (206) 553-1743 or Stephanie Cooper at (206) 553 6917 if you have any questions.

Sincerely,

Gil Haselberger, Manager  
Idaho-Oregon Air Unit

- cc: Greg Green ODEQ
- Andy Ginsberg ODEQ
- Sue Ennes EPA R10
- Ed Jones EPA R10
- Stephanie Cooper EPA R10
- Doug Schneider WDOE
- Jennifer Brown SWAPCA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Reply To  
Attn Of:     OAQ-107

SEP 8 1996  
RECEIVED

SEP 11 1996

DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
VEHICLE INSPECTION PROGRAM  
Portland OR

Ed Woods, Manager  
Vehicle Inspection Program  
Oregon Department of Environmental Quality  
1301 SE Morrison St.  
Portland, Oregon 97214

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We will continue to work closely with you to resolve this issue. Please call me at (206) 553 2963 or have your staff contact Ed Jones at (206) 553-1743 or Stephanie Cooper at (206) 553 6917 if you have any questions.

Sincerely,

Gil Haselberger, Manager  
Idaho-Oregon Air Unit

cc: Greg Green ODEQ  
Andy Ginsberg ODEQ  
Sue Ennes EPA R10  
Ed Jones EPA R10  
Stephanie Cooper EPA R10  
Doug Schneider WDOE  
Jennifer Brown SWAPCA

State of Oregon  
Department of Environmental Quality

## Memorandum

Date: 10/25/96

**To:** Environmental Quality Commission

**From:** Langdon Marsh

**Subject:** Response to Comments

Comments received during the public comment period on proposed revisions to the rules on testing of motor vehicles (340-24) and the Department of Environmental Quality's responses.

1 Comment: Under hood inspections, especially for older vehicles are not necessary. Engines can run clean without pollution controls.

Response: The current inspection program requires that a vehicle pass both a tailpipe emission test and an inspection of the pollution control equipment. Because the current tailpipe emission test is conducted only while the vehicle is not under load, it is important that the emission control equipment be in place and operational so emissions are minimized during on road conditions where the engine is under load.

The proposed rules for enhanced testing keep the current test in place for vehicle model years 1975 through 1980 and for the newest 5 model years of vehicles. Because the under hood inspection is effective in reducing emissions, it should be retained for those vehicles. For those vehicles that get the enhanced test, no under hood test will be needed. The loaded transient test procedure will simulate on-road driving conditions. Vehicles without the factory equipped pollution control equipment are not likely to pass the test.

While some engines can meet the standards without some pollution control equipment in some circumstances, the vehicle must be vigorously maintained and repaired to continue the low emissions during daily operation. Very few people maintain their vehicles in such a manner. With pollution controls, well maintained vehicles can be even cleaner.

2 Comment: Some vehicles, such as motor homes and low mileage vehicles, should be exempt from the test.

Response: While some vehicles travel fewer miles and therefore emit less total pollutants, the goal of the inspection program is to insure that all vehicles are running as cleanly as they can. Other possible methods of identifying vehicles that might need testing are difficult to implement and more costly than the current program. In these other options, the cost of identifying and tracking low mileage vehicles is more costly and less effective than testing those vehicles. Vehicles that pass the test get better gas mileage and better performance.

3 Comment: DMV trip permits allow some vehicles to go without testing. Older cars should be tested.

Response: DMV does issue trip permits for a variety of reasons including when someone needs additional time to repair their vehicle to pass the test. However, trip permits are to be issued only for 120 days or less. Older vehicles are not tested because most had no emission control systems to test and most travel very few miles. Emission reductions from older vehicles would not be significant.

4 Comment: Most fleets will not be able to afford to purchase the new equipment required to be a self-testing fleet. Since fleets generally maintain their vehicles better than the public, fleets should be able to continue the current level of testing.

Response: The proposed rules require that self-testing fleets upgrade their current equipment. As with the public's vehicles, 1975 through 1980 and the newest 5 model years require the current test and vehicles newer than 1980 and more than 5 model years old require the enhanced test. A fleet could choose to test all, part or none of their vehicles. If they choose not to test some or all of their vehicles, those vehicles would need to go to a DEQ Clean Air Station for testing.

The proposed rules allow the fleet enhanced testing equipment to be slightly less sophisticated and less expensive than the equipment DEQ will use for enhanced testing. Fleet testing equipment would be computerized. It would use a dynamometer and constant velocity sampling system and an 'inspection grade' emission analyzer. The DEQ has allowed this less expensive alternative because fleet vehicles generally receive better maintenance than the public's vehicles. While this equipment is less expensive, it will still identify many emission control problems that the basic test would miss. DEQ feels that with this combination of better maintenance and less expensive testing equipment fleet vehicles would be held to the same standards as the public's vehicles.

5 Comment: Private fleets should be allowed to test vehicles from other fleets.

Response: Current rules do not allow privately owned fleets to test vehicles owned by others. There are some additional requirements on fleets and fleet inspectors but EPA assumes that vehicles tested and repaired in the same facility will achieve only 50% of the emission reductions achieved by vehicles tested in test only facilities. The Portland area Ozone Maintenance Plan is a combination of strategies designed to achieve certain levels of emission reductions that will enable the area to remain in compliance with public health standards. Increasing the number of vehicles tested outside DEQ Clean Air Stations will jeopardize efforts to maintain healthy air quality.

6 Comment: Fleets should be allowed to use a printout from the on board computer (OBD) as a substitute for the enhanced test. Fleets are concerned that if they purchase enhanced equipment it will quickly be outdated by OBD technology.

Response: On board computers with diagnostic capabilities were mandated by EPA for all 1996 model year and newer cars. DEQ Clean Air Stations will be taking data from those computers. While the technology is promising, it has not yet been demonstrated that it is an adequate substitute for the enhanced test. If it is eventually demonstrated to be equivalent to enhanced testing, DEQ will also be interested in using this technology and reducing costs to motorists.

Most fleets take a number of years to replace all their vehicles with newer ones. If enhanced equipment is purchased now, it is likely that the fleet will have vehicles to test for several years before all its vehicles are replaced with 1996 or newer vehicles.

7 Comment: If the proposed rules do not achieve the emission reductions predicted, additional strategies will be needed.

Response: The Department has resolved the credit issues with EPA Office of Mobile Sources in Ann Arbor, Michigan. As a result, two changes were made in the proposed rules and in the State Implementation Plan.

Credit received from EPA for VOC is slightly lower than DEQ has claimed in the maintenance plan. Therefore, DEQ has proposed to expand the evaporative control system test to include an additional component. This addition will be made only to the extent that is necessary to maintain air quality in the Portland area.

The second change is DEQ will commit to EPA that additional data be collected and forwarded to EPA to verify the emission reduction credit claimed by DEQ.

See Attachment E for an detailed explanation of these changes.

8 Comment: Some states have failed in the implementation of enhanced testing programs because they did a poor public relations job. The enhanced test has been proven effective in practice, not just in computer models. Slightly higher costs should be considered an investment in clean air.

Response: Several states currently operate successful enhanced testing programs. DEQ has plans to explain all aspects of the test in advance of mandatory testing and to provide the public information on any and all concerns they might have.

Other comments received which do not directly address the proposed rule changes:

A Comment: Separate DEQ emission testing from the DMV registration process. Use windshield stickers and police enforcement to identify vehicles that operate in the Portland area. This will speed the DMV registration process and eliminate the need for trip permits.

Response: In order to be approved by the EPA, the Vehicle Inspection Program must have an enforcement mechanism that assures that the testing and repair of vehicles take place and air pollution reduction goals are attained. In ORS 468A the legislature directed the Department of Environmental Quality and the Department of Transportation (ODOT) to ensure that vehicles registered inside the designated boundary get a Certificate of Compliance from DEQ before registration or renewal of registration. This requirement was adopted by the Legislature and is not addressed in the proposed rules. Although there are other possible enforcement mechanisms, the method selected by the Legislature builds on existing capabilities and databases in ODOT and is a minimal increase in cost to affected drivers.

B Comment: The current program is sufficient and there is no need for an enhanced test. New vehicles are cleaner.

Response: New cars are cleaner than older cars. Significant emission reductions have been achieved by the advanced technology used in new vehicles. However, without proper maintenance and repair, even new car emissions can increase dramatically. In addition, gains made by cleaner new cars are off-set by the increase in the number of vehicles operating in the air shed and the increasing number of miles driven per car. These increases caused the Legislature to direct DEQ to include enhanced testing as one of the strategies in the Ozone Maintenance Plan. The proposed rules implement that direction from the Legislature.

The proposed enhanced vehicle emission test is designed to test all the components of the emission control system. The new test better simulates the emissions during actual driving conditions. While the old test was effective in identifying some high emitting vehicles at idle and without a load on the engine, the new test achieves additional emission reductions by identifying vehicles with high emissions during normal driving conditions.

C Other states have dropped their enhanced vehicle emission testing. Oregon should do the same.

Response: As a result of the Clean Air Act Amendments of 1990, the worst ozone contaminated areas were required to implement a specific enhanced emission test called I/M 240. A number of states tried this program and for various reasons decided that some modifications would work better in their state. EPA has granted the flexibility to develop modified programs and most of these states are in the process of doing that. Because motor vehicles are such a significant source of contaminants which form ozone and vehicle emission testing programs are very cost effective, areas with significant ozone problems will need to look for some way to reduce vehicle emissions. Although some states have stopped enhanced testing, most will restart with a slightly modified test procedures. Oregon has had the advantage of being able to learn from the experiences of other states before developing the proposed enhanced vehicle emission test.

D Comment: Auto repair technicians should be licensed.

Response: Although not a part of the proposed rules, a technician training and certification program is a part of the ozone maintenance plan. Studies have shown that significant additional emission reductions occur when auto repair technicians have adequate training in the newer, more sophisticated, computerized emission control systems. The Oregon program will allow technicians and shops to become certified after demonstrating that they have minimum training and equipment requirements. This program is entirely voluntary. A list of certified shops and technicians will be provided to customers at the DEQ Clean Air Stations.

E Comment: Additional enforcement should replace testing

Response: Unfortunately the sophisticated equipment used in enhanced testing is not portable. Enforcement of emission standards solely through on-road monitoring would not be possible. It is also unlikely that state and local police departments have enough officers to stop and test the necessary number of vehicles.

F Comment: Low income drivers are unfairly targeted by testing 1975 and newer vehicles. DEQ should return to the rolling 20 year cutoff for testing.

Response: The 1993 Legislature changed the statute so that 1975 and newer vehicles inside the boundary are required to be tested. This replaced the rolling 20 year cutoff for testing. The proposed rules cannot override this statute.

1975 and newer vehicles are targeted because they have pollution control systems that when properly maintained and repaired can significantly reduce air pollution. 1975 through 1980 vehicles will be tested using the current test that should result in generally lower repair costs. In an area with pollution problems like the Portland area, properly operating pollution control equipment is important, just like tires or headlights.

G Comment: Continuing development and single occupancy vehicles are the cause of the air quality problem. Do something about those problems instead of increasing costs.

Response: Managing growth is very difficult but Metro has developed a long term plan to do just that. Metro and DEQ along with other agencies have developed programs that encourage commuters to carpool or take public transportation. The Legislature considered alternate emission reduction plans that would have placed higher costs on single occupancy vehicles and commuters in an effort to reduce the number of miles driven but rejected those in favor of an enhanced emission test. The enhanced emission test is more cost effective and results in greater emission reductions than the alternatives. The estimated increase in the emission test fee is \$11 or about \$0.46 per month.

H Comment: Vehicles waiting in line create more air pollution than is reduced by the test.

Response: For an average vehicle, the time driving on the road is more than 600 times greater than the time spent in line at a DEQ Clean Air Station. Reduced emissions achieved through maintenance and repair are in effect whenever the vehicle is driven.

I Comment: Instead of enhanced testing, use on-the-move testing as other states do.

Response: On-the-move testing or remote sensing has been proposed by several other states as a part of their enhanced testing program. Remote sensing can give an indication of emissions but it is not as accurate as transient dynamometer testing. In the other programs, remote sensing is used in addition to transient dynamometer testing. It attempts to identify high emitting vehicles between regular test periods. In states with remote sensing, vehicles identified by remote sensing are then given an emission test to determine whether they pass or fail.

Changes in state law would be needed to require high emitting vehicles identified by remote sensing to be retested.

J Comment: Vehicle testing should be handled by private enterprise. Drivers should be able to get their car tested and repaired at the same location.

Response: Some states have used contractors to operate the vehicle testing programs. In Oregon, the DEQ has operated the Vehicle Inspection Program since 1975. The 1995 Legislature directed the DEQ to conduct a study of this issue. DEQ hired a contractor to conduct the study. The study covered a number of issues and the authors concluded that they "...could not make a strong recommendation to adopt a contractor operated system, based upon cost considerations."

Some states have a program where vehicle testing and repair are done at the same site. EPA studies of this type of program have shown that they achieve about 50% of the emission reductions when compared with programs where testing and repair are separated. In addition, the testing costs more because the repair shop must charge fewer customers for the cost of the equipment.

K Comment: Fleets could avoid the costs of new equipment if there were some accommodations for them at DEQ Clean Air Stations.

Response: DEQ is willing to consider accommodations for fleets such as special lanes or times which would be available to fleets only. Such accommodations will not necessitate any changes in the proposed rules.

L Comment: The requirement for fleets to have a dedicated computer line is too expensive when only a few cars are tested each month.

Response: DEQ will consider alternatives to a dedicated computer line. Alternatives would not likely require a change in the rules.

Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment

As a result of comments received from the Environmental Protection Agency (EPA), the following changes have been made to the proposed rules and to the State Implementation Plan (SIP).

Attachment A, Page 15 Proposed Rules OAR340-024-312

- (5) Emission Measurements.
- (a) Exhaust Measurement. The emission analysis system will sample and record dilute exhaust HC, CO, CO<sub>2</sub>, and NO<sub>x</sub> during the transient driving cycle.
  - (b) Purge Measurement. The analysis system will sample and record the purge flow by measuring Helium concentration observed in the vehicle exhaust sample. The total volume of Helium flow will be calculated over the course of the actual driving cycle.
  - (c) Pressure Measurement. The Department may include the fuel system vapor leak test as an element of the evaporative control system test if it is necessary to maintain the ozone standard as specified in OAR 340-031-0030.
  - (6) (d) The Inspector must remove the fuel cap from the vehicle and test it to insure the cap is capable of properly sealing the fuel tank's fumes. The Inspector must insert the cap onto a container with fittings representing that of the vehicle's fuel filler pipe. The container will be pressurized with inert gas to detect any leaks. The gas cap leak test standard will be equivalent to the United States Environmental Protection Agency (EPA) leak down test standard; however, the time for leak down or the leak detection method may vary from the EPA specified time and method.
  - (67) If it is determined that the vehicle complies with OAR 340-024-0330 and ORS 815.310 through 815.325, then, following receipt of the required fees, the Private Business Fleet Vehicle Emission Inspector, Public Agency Fleet Vehicle Emission Inspector or Vehicle Emission Inspector shall issue the required Certificate of Compliance.

Attachment A, Page 15 State Implementation Plan Changes 5.14.15

Oregon will summarize and report to EPA the results of quality control checks performed on testing equipment, the concentration values of the calibration gases used and the time of the quality control check.



During the first four years after initiation of the enhanced vehicle inspection program, DEQ will conduct an IM240 test on a randomly selected sample of 0.1% of vehicles that are tested with the BAR31 test. DEQ will submit the test results to EPA Office of Mobile Sources and EPA Region 10 after each year of testing. At the end of the four year period, DEQ will confer with EPA Region 10 to determine if any changes are needed to the Ozone Maintenance Plan for the Portland AQMA because of the test results.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Enhanced Vehicle Emissions Testing

Rule Implementation Plan

Summary of the Proposed Rule

The proposed rules establish the test standards and detailed test procedures for the enhanced vehicle emission testing program.

Proposed Effective Date of the Rule

The new test standards and procedures will not be used to evaluate vehicle emissions until at least September, 1997.

Proposal for Notification of Affected Persons

Drivers of about 65% of the vehicles in the Portland area will be affected by these new rules. They will be notified of the new procedures when DMV mails out the registration renewal forms. There will also be a public information campaign to explain the need for the new test and describe the new procedures.

Proposed Implementing Actions

We will build new inspection stations and install the new test equipment by July, 1997. Contractors will be hired for equipment installation and software development. VIP will begin hiring additional supervisors and a few additional inspectors in early 1997. Most of the new inspectors will be hired after July 1, 1997.

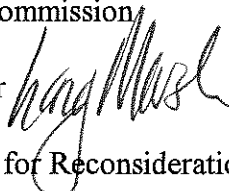
Proposed Training/Assistance Actions

VIP has hired a Personnel Officer to develop training plans for the new inspectors and supervisors to be hired before implementation of the new enhanced test. Training will include technical, health and safety and customer service issues.

State of Oregon  
Department of Environmental Quality

Memorandum

Date: November 7, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director   
Subject: Agenda Item H, Request for Reconsideration of Renewal of WPCF Permit No. 3533 (SFFI)

Staff has reviewed the petition submitted by Umatilla Water Quality Protective Association (UWPA), the Columbia Basin Institute (CBI) and Robert Ehmann regarding the renewal of WPCF permit No. 3533 issued to Smith Frozen Foods, Inc. Based on the fact that the petitioners have not raised any new issues that were not raised in their comments during the permit renewal process, the Department will deny the petition for reconsideration, if the Commission remands this petition to the Director for a decision.

**Overview of the Major Provisions of the Renewed Permit**

Smith Frozen Foods, Inc.'s WPCF permit was renewed on July 19, 1996. The following provisions were incorporated into the permit renewal

**SCHEDULE C - COMPLIANCE CONDITIONS AND SCHEDULES**

**REQUIRED BY AUGUST 31, 1996**

1. A wastewater disposal facility Operations, Monitoring and Management (OM&M) plan.
2. A Preliminary Groundwater Assessment Report pertaining to the facility's wastewater land application sites.
3. A Work Plan for performance of a Hydrogeologic Characterization and/or Supplemental Hydrogeologic Characterization pertaining to the site of the Brine and Process Wastewater Lagoons.
4. An assessment of Pine Creek water quality based on the permittee's historical and current Pine Creek water quality database.
5. A Work Plan for performance of an assessment of the storage capacity of the process wastewater lagoon including an assessment of the significance of organic solids accumulation in the lagoon as related to storage capacity and to the control of odors.

NOTE: These 5 submittals have been received by the Pendleton office in accordance with the WPCF permit. The Eastern Region of the Department has prioritized the reports for review and comment by technical staff. Some of the comments have been prepared - once all comments have been prepared and compiled, they will be provided to Smith Frozen Foods. The Department has commented in the past that the schedule for submittal of these initial reports was rather

aggressive considering that the permit was renewed on July 19, 1996 -- the schedule was proposed by Smith Frozen Foods.

**REQUIRED BY DECEMBER 31, 1996**

6. A Work Plan for performance of a Hydrogeologic Characterization and leak test pertaining to the Hansell Lagoon or a proposal and schedule for replacing the Hansell lagoon with a lined lagoon.

**REQUIRED BY FEBRUARY 28, 1997**

7. A proposed program for continuing evaluation of the integrity of the facility wastewater conveyance infrastructure and the criteria under which separate components of the infrastructure will be prioritized for repair or replacement.

**Overview of Umatilla Water Quality Protective Association's Comments on the Proposed WPCF Permit and the Department's Response to Comments**

**UMATILLA WATERQUALITY PROTECTIVE ASSOCIATION (UWPA) COMMENTS ON THE PROPOSED WPCF PERMIT**

Within the public comment process, UWPA proposed an alternative facility monitoring schedule (Schedule B) for the WPCF permit. UWPA's proposed facility monitoring approach differed from that proposed by the Department in that it included routine groundwater monitoring using wells which, to the Department's knowledge, had not been monitored since their 1987 installation when they were used as part of the investigation of impacts caused by the old (unlined) brine pond. UWPA also proposed an expanded Pine Creek monitoring program.

**·DEQ's RESPONSE TO UWPA's COMMENTS ON THE PROPOSED WPCF PERMIT**

In responding to UWPA's comments, along with others received during the 30 day public comment period, the Department recognized the validity of certain of the UWPA's comments on Schedule B of the proposed WPCF permit. In our response, we identified that our approach in structuring the proposed permit was largely investigative. We noted that a technically well supported approach to facility monitoring, particularly groundwater monitoring, should be structured to reflect the information developed in the investigative (characterization) phase. We also responded that as more information about the facility was developed from the investigations, evaluations and assessments required under Schedule C of the (then) proposed WPCF permit, the Department would reconsider the UWPA's approach to Schedule B facility monitoring at a point in the process when it was most appropriate to do so.

**Key Points of the Petition and the Department's Analysis**

A. UWPA alleges that by admitting the validity of some of UWPA's comments on Schedule B but refusing to include any of them in the WPCF permit, the Department acted in an arbitrary and capricious manner and/or otherwise not in accordance with the law.

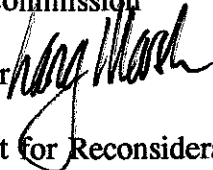
ANALYSIS: UWPA proposes to perform expanded facility monitoring without supporting their

approach to monitoring with information developed from a precursory investigative/characterization phase. Monitoring data collected using this approach cannot be readily supported as valid. The Department structured the renewed WPCF permit to include a thorough investigative/characterization component (Schedule C provisions) with combined intent to prevent premature collection of data of questionable validity -- "for the sake of collecting data" -- an allegation we must avoid. The Department has commented that we may reopen the WPCF permit (or utilize other administrative authority) to effect implementation of additional characterization (Schedule C) or to expand facility monitoring (Schedule B) if and after we can support that it is appropriate to do so based on information developed in the initial investigative/characterization phase.

B. UWPA alleges that the manner in which DEQ issued the permit to Smith Frozen Foods indicates that the process was politically driven --- that the permit was expired for 8 years but it was only after UWPA filed a CWA citizen suit against Smith Frozen Foods that we began to process the WPCF permit for renewal.

ANALYSIS: May 4, 1995 - Letter from Stephanie Hallock to Smith Frozen Foods advising the company that their WPCF permit had been prioritized for renewal. NOTE: This date preceded the resignation of Sen. Robert Packwood and, thus, the Smith / Wyden special U.S. Senate election. This fact has been provided to the press and many other interested parties and was noted at the public hearing for the proposed renewal of the WPCF permit. Smith Frozen Foods' permit was prioritized for renewal based only on environmental concerns including the recurrent problems/spills associated with the facility's wastewater conveyance system.

Date: October 30, 1996

To: Environmental Quality Commission  
From: Langdon Marsh, Director   
Subject: Agenda Item H, Request for Reconsideration of Renewal of WPCF Permit No. 3533 (SFFI)

### Background

On September 17, 1996, the Umatilla Water Quality Protective Association (UWPA) the Columbia Basin Institute (CBI) and Robert Ehmann petitioned the Environmental Quality Commission for reconsideration of the decision renewing the water pollution control facility permit for the Smith's Frozen Foods, Inc. facility in Weston Oregon. The Petition also seeks a stay of the permit decision pending reconsideration. (A copy of the petition is Attachment 1 to this report.) The petition alleges that DEQ acted in an arbitrary and capricious manner and failed to comply with the law because: (1) the permit did not include a schedule for monitoring and reporting proposed by UWPA, (2) the permit violates the antidegradation provision in the Clean Water Act and (3) the permit was process was politically driven.

Attorneys representing SFFI, submitted a letter in response to the Petition. SFFI argues that neither the Commission nor the Director has authority to reconsider the Petition. A copy of the letter is Attachment 2 to this report. The legal arguments raised in the letter are discussed below in the section of this report addressing the Commission's authority.

In a related matter, Petitioner UWPA also has filed a Clean Water Act Citizen Suit against SFFI. In the suit, UWPA alleges that the SFFI facility discharges wastes to the Pine Creek and thus is required to have an NPDES permit rather than a WPCF permit. UWPA argues that brine (salt water used in processing vegetables) is leaching into the ground water and then into the creek. The brine pond in question was lined in 1987. UWPA argues, however, that salts that leached into the ground water before the facility was lined continue to reach Pine Creek. DEQ is not a party to this lawsuit.

### Authority of the Commission with Respect to the Issue

The authority of the commission with respect to this matter is at issue. Larry Knudsen, AAG, has advised that a court would be likely to conclude that the Commission does not have jurisdiction over this matter. He has advised, however, that the Director probably would have authority to reconsider the permit decision, although he is not required to do so.

Under ORS 468B.050, a WPCF permit is issued by the Director, not the Commission. *See also* OAR 340-14-010(1) and 340-45-025. (In this instance, the Director delegated that authority to the regional administrator.) The Director's decision is an "order in other than a contested case" under the Administrative Procedures Act, and thus may be reconsidered under ORS 183.484(2). Reconsideration, however, ordinarily would be undertaken by the entity responsible for the initial permit decision. In this case, the Director.

Of course, the Commission may review the Director's decision on appeal if a contested case hearing is held. That is not the posture of the case at this time, however, as no contested case hearing has been requested or held.

SFFI also argues that the Director lacks authority to consider the Petition. It relies on a recent decision of the Oregon Supreme Court that held organizations do not have "representational standing" for judicial review under the APA. *Local No. 290 v. DEQ*, 323 Or 559 (1996). Whatever the merits of that argument might be as to UWPA and CBI, one of the Petitioners in this matter is an individual who would not be relying on representational standing.

### **Department Recommendation**

The Department recommends that the Commission either take no action on this item, or determine that it has no jurisdiction in the matter and formally transfer the matter to the Director for disposition.

### **Attachments**

Attachment 1 UWPA, CBI and Robert Ehmann's petition

Attachment 2 Letter dated September 23, 1996 to Larry Knudsen from Lynne Perry

### **Reference Documents (available upon request)**

ORS 468B.050; ORS chapter 183; OAR 137, Division 4; *Local No. 290 v. DEQ*, 323 Or 559 (1996)

**Received**  
SEP 17 1996

**BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF OREGON**

IN THE MATTER OF THE RENEWAL OF  
SMITH FROZEN FOODS, INC.'S WATER  
POLLUTION CONTROL FACILITY  
PERMIT NO. 3533, RENEWAL  
APPLICATION NO. 999297

OFFICE OF THE DIRECTOR  
PETITION FOR RECONSIDERATION OR  
REHEARING IN AN OTHER THAN  
CONTESTED CASE

Pursuant to ORS 183.484 and OAR 137-03-080, the Umatilla Waterquality Protective Association (UWPA), the Columbia Basin Institute (CBI) and Robert Ehmann, an individual, hereby petition the Environmental Quality Commission (Commission) to reconsider or rehear the matter at issue in the Department of Environmental Quality's (DEQ) order of on or about July 19, 1996 (Order), wherein the DEQ granted a renewal of WPCF permit no. 3533, renewal Application No 999297 (dated March 30, 1987). Petitioners seek reconsideration or rehearing as an administrative remedy prior to seeking judicial review as a matter of right pursuant to ORS 183.484.

Columbia Basin Institute (CBI) is a Washington nonprofit corporation with members in Oregon and Washington who use and enjoy the beneficial uses of the state and federal waters comprising the Columbia River Basin, including Pine Creek which flows into the Walla Walla River in Washington state. UWPA is an Oregon nonprofit corporation with members in Oregon and Washington who use and enjoy the beneficial uses of the state and federal waters comprising the Columbia River Basin, including Pine Creek. CBI and UWQPA, their members and their interests, individually and collectively, have been adversely affected and are aggrieved by the DEQ's order renewing SFFI's WPCF permit as issued.

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## I. HISTORY OF THE CASE PRESENTLY BEFORE THE COMMISSION

Prior to the issuance of the permit at issue in this petition, SFFI held a Water Pollution Control Facility (WPCF) permit No. 3533, issued in 1982. Like all WPCF permits, it was a 5-year permit with a 1987 expiration date. SFFI filed a timely renewal application on March 30, 1987. For more than eight years, the Department of Environmental Quality (DEQ) took no action on the application. This allowed SFFI to continue to operate under the old permit. SFFI's is the oldest permit in the state that has not been updated by DEQ. In 1985 and 1986, testing by DEQ and SFFI confirmed that SFFI's unlined ponds were leaking to Pine Creek. The DEQ required SFFI to line its brine ponds with plastic and to line its process water pond with clay. This lining was done in 1987. The UWPA sent its notice of intent to file a citizens' suit under the Clean Water Act in January, 1996. It was only after UWPA sent this notice that the DEQ began processing the renewal of the WPCF Permit that it had let sit idle for eight years. UWPA filed suit in federal court on May 3, 1996, alleging violations of the Clean Water Act. See Umatilla Waterquality Protective Association, Inc. v. Smith Frozen Foods, Inc., Civil Case No. 96-657-AS (D.Or.).

The Clean Water Act suit alleges that SFFI causes two kinds of discharge that violates the Act -- pipe failures that cause process water to run to the creeks and chronic discharge to the creek of groundwater polluted with wastes leaking from the ponds. The pipeline failures that result in discharges to the creeks have occurred on the average of one and one-half (1.5) times per year in recent years. Some of these leaks are small while others have been massive, affecting miles of the creek. The larger, more chronic problem is the continued seepage to the creek of groundwater polluted by leakage from SFFI ponds.

Once UWPA's citizen suit was underway, the DEQ shifted into high gear to reissue the WPCF permit to SFFI. On May 24, 1996, the DEQ staff issued a 31-page evaluation of the SFFI permit situation (DEQ evaluation). It also issued a draft renewal permit (Draft Permit) for public comment. The DEQ scheduled a July 1, 1996 public hearing on the proposed renewal permit. At that hearing, Lori Jewell and Bob Ehmann testified on behalf of the UWPA. In addition, Bill Kloos submitted comments on behalf of the UWPA.

In the comments submitted by Bill Kloos, UWPA proposed an alternative Schedule B for the DEQ's consideration for inclusion in the proposed WPCF permit. The proposed schedule differed from that proposed by the DEQ as follows:

- A. Process Wastewater: The UWPA proposed process wastewater monitoring for fewer parameters than required by the DEQ but at an increased frequency than required by the DEQ.
- B. Groundwater Monitoring: The UWPA proposed a routine groundwater monitoring program for SFFI including weekly check of groundwater depth and monthly analysis of groundwater for a suite of parameters. The DEQ did not prescribe a groundwater monitoring program in the WPCF permit for SFFI.
- C. Pine Creek Surface Water Monitoring: The UWPA proposed monitoring of Pine Creek water quality at the same locations as required by the DEQ but for more numerous parameters than required by the DEQ. The UWPA also proposed semi-quantitative assessment of biological diversity in Pine Creek which the DEQ did not include in the WPCF permit.
- D. Brine and Wastewater Lagoon Monitoring: The UWPA proposed a lagoon monitoring

program which included daily monitoring of inflow, outflow, storage volume, precipitation and evaporation. The DEQ requires visual lagoon inspections (for integrity) every 24 hours when SFFI is operating and once per week when not operating.

- E. Wastewater Conveyances: The UWPA did not propose to monitor SFFI wastewater conveyances. The DEQ requires wastewater conveyance system monitoring (for integrity) every 24 hours when SFFI is pumping to the Hansell Farms or Johnson Ranches and once per week when not pumping to those sites.
- F. The UWPA proposed monthly as well as annual reporting of data and data summaries. The DEQ requires only annual reporting in the WPCF permit.

## II. GROUNDS FOR RECONSIDERATION

The DEQ failed to adopt the conservative alternative Schedule B submitted by UWPA in issuing the permit renewal. DEQ claimed that "it is premature to incorporate significant provisions into the renewed permit pertaining to [groundwater and surface water] issues." In response to UWPA's comments, DEQ recognized the validity of the UWPA's comments, but refused to incorporate any of them into the final permit. By admitting the validity of certain of UWPA's comments but refusing to adopt any of them, DEQ has acted in an arbitrary and capricious manner and/or otherwise not in accordance with the law. The DEQ's stated approach to structuring the proposed permit was largely investigative. However, to do proper investigation, increased monitoring would be advisable. DEQ wishes to use a technically well-supported approach to facility monitoring, where a low-tech approach in some cases would be easy to implement and provide valuable and useful information.

One example of a valuable, low-tech approach to monitoring in UWPA's proposed

schedule B is the Brine and Wastewater Lagoon Monitoring program. There, UWPA proposed to have install water meters to check inflow and outflow. Also, UWPA proposed to have one person go out to the lagoon and check the pond volume with a staff gage, the precipitation with a rain gage, and daily evaporation with either an evaporation pan or commercially supplied data for Weston area. These simple steps would enable SFFI to determine whether there are any leaks to the brine or wastewater lagoons. Visual inspections would not address this. On the basis of information gathered from the simple observations proposed by UWPA, DEQ would be able to develop a higher-tech approach to studying possible problems. DEQ adopted none of UWPA's proposals.

In addition, DEQ's permit required SFFI to develop its own Operations, Monitoring, and Maintenance (OM&M) plan. DEQ refused to adopt any of UWPA's proposals because SFFI was supposed to adopt an OM&M plan which would sufficiently address UWPA's comments. When SFFI's OM&M plan was submitted, it did not sufficiently address UWPA's proposed monitoring plan. Many of the parameters UWPA proposed will not be monitored under SFFI's plan. This includes monitoring of groundwater for nitrate, ammonia, iron, calcium carbonate, and ortho-phosphate. Also, SFFI's plan does not monitor surface water for dissolved oxygen, sodium, chloride, total Kjeldahl nitrogen, ammonia, nitrate, or stream flow. Nor does it envision a biological assessment of stream diversity. Also, neither Schedule B of the permit nor the OM&M plan requires any monitoring of the brine and wastewater lagoons other than visual inspections and annual testing. Neither of these methods would detect leaks in the lagoons in a manner sufficient to quickly discover leaks and respond in a timely manner.

The SFFI permit renewal also violates the anti-degradation policy of the federal Clean

Water Act, especially in the DEQ's failure to competently identify the effects of the ongoing permitted activities on ground and surface waters as described above. There are also valid, serious concerns heretofore unaddressed or considered involving the chronic, ongoing problems of the leaching of process water from the older lagoon(s), and unabated seepage of chloride-contaminated waters into Pine Creek through the admittedly contaminated groundwaters. The permit renewal has not adequately addressed SFFI violations and DEQ's noncompliance with the Commission's groundwater quality protection rules at OAR Chapter 340, Division 40. See, for example but not limited to, OAR 340-41-020(3) ("All groundwaters of the state shall be protected from pollution that could impair existing or potential beneficial uses for which the natural water quality is adequate."); and OAR 340-41-060 ("Non-Permitted Activities").

The manner in which DEQ issued the permit to SFFI indicates that the process was politically driven. DEQ had eight years from the time the original permit had expired to renew the permit. In that time, it did not renew SFFI's permit. It was only after UWPA filed a suit alleging violations of the Clean Water Act that DEQ began to process the WPCF permit. This, in conjunction with the fact that the owner of the SFFI plant, Gordon Smith, is running for state-wide office, indicates that DEQ was under pressure to issue the permit quickly. Statements by Mr. Smith in the press and in campaign advertisements indicate that he is using the permit as a political tool to cover up his environmental record. He has stated publicly that the issuance of the permit shows that the plant has "a good environmental record." This permit shows no such thing, nor does it have any bearing on the citizen suit which UWPA has filed alleging discharges to Pine Creek.

Finally, Petitioners adopt and incorporate herein the comments heretofore made in

opposition prior to the permit renewal as issued (See, e.g., written comments of Oregon Environmental Council, in toto), as well as the judicial admissions of SFFI in the course of the litigation ongoing in UWPA v. SFFI, Civ. No. 96-657-AS (D.Or)("...there is probably some limited continued leaching from the soils beneath the old brine lagoon site to Pine Creek...." (Defendant's Memorandum in Support of Motion for Summary Judgment at p.5); and, "SFFI acknowledges that some constituents released from the old unlined lagoons in the past (i.e., before 1987 when the new lined lagoons were constructed) may still remain in groundwater or surface water in the vicinity of its facility." Id. at p.15). On the issue of seepage from the SFFI waste ponds and lagoons as point sources of water pollution, see U.S. v. Earth Sciences, Inc., 599 F.2d 368, 369 (10th Cir. 1979).

A petition for reconsideration or rehearing is the Petitioners' proper administrative remedy under the Oregon APA and should be granted.

### III. CONCLUSION

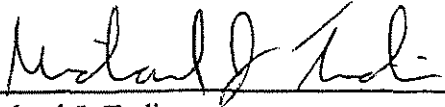
The Commission must recognize Petitioners' legitimate legal interests and unique public interest purposes, objectives and history in protecting water quality in the Columbia River Basin and issue an order requiring reconsideration and rehearing of this matter. Additionally, or in the alternative, the Commission must stay the DEQ's order without restriction, pending the outcome of subsequent agency reconsideration, Commission decision or judicial review, because otherwise Petitioners will suffer irreparable injury if the Order is not stayed, there is a colorable claim of error in the Order, and granting the stay will not result in substantial public harm.

### IV. RELIEF REQUESTED

The petitioners herein request the Commission to issue an order directing DEQ to rehear

and reconsider the SFFI permit renewal and stay the DEQ order of July 19, 1996 renewing the SFFI permit.

Signed and Submitted September 17, 1996

A handwritten signature in cursive script, appearing to read "Michael J. Tedin", written over a horizontal line.

Michael J. Tedin

Attorney for Petitioners OSB 95438

Memo To: Stephanie Hallock, Administrator, Eastern Region  
July 18, 1996  
Page 9

In structuring the proposed WPCF permit for SFFI, the Department's objective is to evaluate whether SFFI facility practices in any way adversely impact Pine Creek water quality above background levels; accordingly, our objective is not focused on determining whether SFFI impacts on Pine Creek water quality, if any, are within the Table 20 standards given that the water quality standard for WPCF facilities is background.

As noted in Subsection 4.1.1.2 of the Department's WPCF Permit Evaluation Report for the SFFI facility, the 1987 hydrogeologic characterization of the brine lagoon site identified that the formerly unlined brine lagoon had produced chloride and total dissolved solids impacts in Pine Creek. Identifying and factoring any residual subsurface contamination which may continue to influence groundwater and/or Pine Creek water quality is integral to the water quality-based objectives of the proposed WPCF permit for SFFI.

4. **UMATILLA WATERQUALITY PROTECTIVE ASSOCIATION (written comments)**

a. **COMMENT:**

Comment provided by Bill Kloos, Attorney for the UWPA.

Mr. Kloos explains that the UWPA has asked a hydrogeologist to suggest changes to Schedule B of the draft permit (next comment) -- changes which would allow more definitive information about SFFI impacts on the creek to begin to be collected now, rather than at some point next year.

• **RESPONSE:**

In supplement to the Department's response to Comment 4.b. (below) pertaining to the UWPA's proposal of an alternative Schedule B, the Department's response to Comment 3.b. (above) pertaining to the time lines for performance of evaluations and assessments under the proposed WPCF permit is largely applicable to this comment.

b. **COMMENT:**

The UWPA retained Mr. Kevin Brackney, M.S., a hydrogeologist, to propose an alternative permit Schedule B for the Department's consideration for inclusion in the proposed WPCF permit for SFFI. The UWPA's proposed Schedule B differs from that proposed by the Department as follows:

- A. **Process Wastewater:** The UWPA proposes process wastewater monitoring for fewer parameters than proposed by the Department but at an increased frequency than proposed by the Department.

Exhibit B p. 1-A3



Memo To: Stephanie Hallock, Administrator, Eastern Region

July 18, 1996

Page 10

- B. **Groundwater:** The UWPA proposes a routine groundwater monitoring program for SFFI including a weekly check of groundwater depth and monthly analysis of groundwater for a suite of parameters. The Department does not prescribe a groundwater monitoring program in the proposed WPCF permit for SFFI.
- C. **Pine Creek Surface Water Monitoring:** The UWPA proposes monitoring of Pine Creek water quality at the same locations as proposed by the Department but for more numerous parameters than proposed by the Department. The UWPA also proposes semi-quantitative assessment of biological diversity in Pine Creek which the Department has not included in the proposed WPCF permit for SFFI.
- D. **Brine and Wastewater Lagoon Monitoring:** The UWPA proposes a lagoon monitoring program which includes daily monitoring of inflow, outflow, storage volume, precipitation and evaporation. The Department proposes visual lagoon inspections (for integrity) every 24 hours when SFFI is operating and once per week when not operating.
- E. **Wastewater Conveyances:** The UWPA does not propose to monitor SFFI wastewater conveyances. The Department proposes wastewater conveyance system monitoring (for integrity) every 24 hours when SFFI is pumping to the Hansell Farms or Johnson Ranches and once per week when not pumping to those sites.
- F. The UWPA proposes monthly as well as annual reporting of data and data summaries. The Department has included a provision for annual reporting in the proposed WPCF permit for SFFI.

- **RESPONSE:**

Subsection 4.1.3 of the Department's WPCF Permit Evaluation Report for the SFFI facility entails a summary of groundwater and surface water quality issues at the SFFI facility. In this subsection, the Department identifies that nearly ten years have elapsed since the lagoon site investigation and retrofitting action. Therein, we also note that while it is appropriate to draw upon historical information about the SFFI facility to develop an approach for structuring the renewed WPCF permit, it is inappropriate to form any significant conclusions about existing groundwater or surface water quality issues at the SFFI facility, as it is premature to incorporate significant provisions into the renewed permit pertaining to these issues, based exclusively on this same information. Accordingly, we identify that the Department's approach in addressing these issues in the renewed WPCF permit must commence with an investigative process.

Memo To: Stephanie Hallock, Administrator, Eastern Region  
July 18, 1996  
Page 11

We have also identified that the proposed WPCF permit includes provisions for SFFI's performance of lagoon leak tests, characterization (investigation) of the lagoon and land application sites and assessment of existing Pine Creek water quality data. We have identified that any requirements for additional action pertaining to groundwater or surface water protection, investigative or remedial, must be founded only on well supported technical information developed as part of the initial investigative process. The Department has identified that we may reopen the WPCF permit or utilize other appropriate administrative authority to effect implementation of any such requirements.

Section 4.5 of the Department's WPCF Permit Evaluation Report for the SFFI facility pertains to facility monitoring. Therein, the Department acknowledges that the requirements for industrial wastewater and Pine Creek monitoring as included in the proposed WPCF permit are not suitably comprehensive to reflect the complexity of the SFFI facility over an extended time. We identify that Schedule C of the proposed WPCF permit requires SFFI to develop a wastewater disposal facility OM&M plan and that Condition 3 of Schedule B of the proposed permit provides that upon the Department's approval of the OM&M plan, facility monitoring and reporting will be in accordance with the approved OM&M plan and any amendments to the plan which have been approved in writing by the Department.

In Section 4.5 of the WPCF Permit Evaluation Report, we have identified that the Department's approach to facility monitoring in the proposed WPCF permit provides for the following advantages:

- In the short term, it enables SFFI to monitor the facility in the accustomed manner while proposing any immediate facility monitoring upgrades in the initial OM&M plan submittal as may be appropriate based on knowledge of current facility practices;
- In the long term, it enables SFFI to phase in facility monitoring upgrades in the form of revisions to the OM&M plan to reflect knowledge developed from ongoing facility characterization; and,
- Overall, it enables routine amendment of the facility monitoring program to be accomplished through revision of the OM&M plan which does not require formal modification of the WPCF permit.

The Department recognizes the validity of certain of the UWPA's comments on Schedule B of the proposed WPCF permit for SFFI. However, our approach in structuring the proposed permit is largely investigative. A technically well supported approach to facility monitoring, particularly groundwater monitoring, should be structured to reflect the information developed in the investigative (characterization) phase.

Exhibit B p. 3013

Memo To: Stephanie Hallock, Administrator, Eastern Region  
July 18, 1996  
Page 12

As more information about the SFFI facility is developed from the investigations, evaluations and assessments required under Schedule C of the proposed WPCF permit, the Department will reconsider the UWPA's approach to facility monitoring at a point in the process when it is most appropriate to do so.

---

**RECOMMENDATIONS:**

Based upon the information contained in the administrative record and after thorough consideration of the public comment received, I recommend reissuance of the WPCF permit to SFFI as proposed in the Public Notice draft of the permit.

Schedule B

Minimum monitoring and reporting requirements

1. a. Process Wastewater Monitoring

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Conductivity, pH	Weekly during processing season and segregated by crop. A minimum of 2 samples per crop	Water meter (with documented calibration before each use)
TKN, COD, Chloride, Sodium, Ca, Mg, K, PO4-P	Weekly during processing season and segregated by crop. A minimum of 2 samples per crop	Grab

1. b. Groundwater Monitoring

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Depth to groundwater (0.01 ft accuracy). Well elevations will be established by a licensed surveyor.	Weekly	Electronic water level meter
Conductivity, Temperature, pH, Reduction/Oxidation Potential (Redox, mV), Dissolved Oxygen	Monthly	Water meter (with documented calibration before each use)
Sodium, Chloride, COD, NH3-N, NO3-N, Ca, Mg, K, Fe, SO4, CaCO3, HCO3, Ortho-phosphate (field filtered), Total dissolved solids (Domenico and Schwartz, 1990, p. 410)	Monthly	Grab

Exhibit C, p. 1 of 3  
 Attach. to  
 Decl. of K.  
 Crackney -- 1

### 1. c. Pine Creek Surface Water Monitoring

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Conductivity, Temperature, pH, Reduction/Oxidation Potential (Redox, mV), Dissolved Oxygen <sup>1</sup>	Monthly or when a release occurs	Water meter
Sodium, Chloride, COD, TSS, TKN, NH <sub>3</sub> -N, NO <sub>3</sub> -N <sup>1</sup>	Monthly or when a release occurs	Grab
Stream Flow <sup>2</sup>	Monthly or when a release occurs	Stream cross-sectional area times stream velocity and staff gages.
Biological Assessment <sup>2</sup>	Quarterly	Semi-quantitative assessment of biological diversity by trained professional.

1. Parameters shall be measured at Pine Creek Sampling Point Nos. 1, 2, 3, 4, 5, and 6.
2. Parameters shall be measured at Pine Creek Sampling Point Nos. 1, 5, 6.

### 2. Brine and Wastewater Lagoon Monitoring

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Inflow	Daily	Water Meter
Outflow	Daily	Water Meter
Pond Storage Volume	Daily	Staff gage/stilling well with surveyed elevation.
Precipitation	Daily	Tipping Bucket Rain Gage
Evaporation	Daily during evaporation season.	Standard Evaporation Pan (may use commercially supplied data for Westin area, if available).

### 3. Reporting Requirements

Monitoring results shall be submitted monthly and within 10 days of the receipt of the chemical analysis. Copies of the analysis and quality assurance and quality control (QAQC) field data sheets and a review of data quality objectives and results shall be submitted with each report. Depth to groundwater shall be converted to elevation above mean sea level with reference points taken at the top of the monitor well casing. A water level contour map shall be constructed for each month. Monitor well hydrographs shall be prepared from the weekly measurements with each months report including the hydrographs from the previous months and continuing until the end of the year. Hydrographs shall also be prepared for the brine and waste water lagoons for the staff gages and corrected to elevation above mean sea level. A hydrologic water balance with a minimum of 90% confidence level shall be calculated each month.

An annual report summarizing the monitoring results, groundwater, and surface water hydrology shall be submitted by February 28th of the following year. Data for both monthly and annual monitoring well results shall be submitted both on paper copies and in digital format utilizing an electronic spread sheet (Lotus 1-2-3, Microsoft Excel, or equivalent). An analysis of water quality with a statistical comparison to upgradient stream water quality and upgradient groundwater quality shall be prepared.

#### References Cited

Domineco, Patrick, A., and Franklin W. Schwartz, Physical and Chemical Hydrology, John Wiley and Sons, 824 p.

**MILLER, NASH, WIENER,  
HAGER & CARLSEN LLP**

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September 23, 1996

ATTACHMENT 2

Mr. Larry Knudsen  
Assistant Attorney General  
Oregon Department of Justice  
1515 S.W. Fifth Avenue  
Portland, Oregon 97201

BY FACSIMILE

Subject: UWPA/CBI Petition for Reconsideration and  
Rehearing

Dear Larry:

I am writing in regard to the petition for reconsideration of the July 1996 WPCF permit issued to Smith Frozen Foods, Inc., which was filed on behalf of Columbia Basin Institute ("CBI") and Umatilla Waterquality Protective Association ("UWPA"). The petition purports to rely on ORS 183.484 (judicial review) and OAR 137-03-080 (reconsideration of orders in contested cases). Neither section provides support for a petition to the Environmental Quality Commission ("EQC") in an other than contested case matter. For that reason, it should be rejected.

Despite this clear failure of pleading, however, you indicated by telephone that DEQ might choose to treat the improperly filed petition as a petition to the Director under OAR 137-04-080.

OAR 137-04-080 provides in part that:

"A person entitled to judicial review under ORS 183.484 of a final order in other than a contested case may file a petition for reconsideration of a final order in other than a contested case with the agency within 60 days after the date of the order." (Emphasis added.)

Neither UWPA nor CBI are entitled to judicial review under ORS 183.484. See Local No. 290 v. Dept. of Environ. Quality, 323 Or 559, 919 P2d 1168 (1996). Thus, even ignoring the pleading deficiencies, neither UWPA nor CBI have standing to

MILLER, NASH, WIENER,  
HAGER & CARLSEN LLP

Mr. Larry Knudsen

- 2 -

September 23, 1996

petition the EQC or the Department of Environmental Quality for  
reconsideration of this permit under OAR 137-04-080.

Thank you for your consideration of this matter.

Sincerely,

  
Lynne A. Perry




State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 30, 1996

To: Environmental Quality Commission

From: Langdon Marsh, Director 

Subject: Agenda Item I, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996

**Statement of Purpose**

Under ORS 183.545 and 183.550, the Department is required to conduct a review of its administrative rules. The Department must accept public comments on all of its rules, including recently adopted rules and previously reviewed rules.

Based on comments received and the Department's independent review of its rules, the Department's rules can be continued without change or be amended or rescinded. This report contains the Department's recommended future actions based on this review.

**Background**

Each agency in the state of Oregon must review its rules, including those previously reviewed as well as rules recently adopted, at least once every three years. The review is based on six factors listed in ORS 183.550 and one additional factor listed in OAR 137-01-085. These factors are:

- a. The continued need for the rule;
- b. The complexity of the rule;
- c. The extent to which the rule duplicates, overlaps or conflicts with other state rules, federal regulations, and local government regulations;
- d. The degree to which technology, economic conditions, or other factors have changed in the subject area affected by the rule;
- e. The rule's potential for enhancement of job-producing enterprises;
- f. The legal basis for the rule; and
- g. Comments or complaints received regarding the rule.

The review has, in essence, two parts. First the Department must accept comments from the public and review specific rules based on the comments received. Secondly, the Department must conduct an independent review of its rules based on the factors listed above.

Attachment B contains the comments received and Attachment C is the Department's response to the comments. Attachment D entails the Department's independent review of its rules.

**Summary of Public Input Opportunity, Comments Received and the Department's Response**

Memo To: Environmental Quality Commission

**Agenda Item I**, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996 Page 2

In May 1996, notice of the rule review was sent to approximately 1800 persons listed on the agency's mailing lists. Prior to the close of the comment period, 14 comments were received. The comments received are included in Attachment B and the Department's response to the comments is included in Attachment C. Each of the documents is summarized below

Comments Received Regarding Air Quality Regulations

1. All the comments received regarding the Air Quality program related to seasonal backyard burning in the Hillsboro and Forest Grove area. Nine comments requested the Department to ban backyard burning where curbside pickup of yard debris is available. One comment was in favor of continued backyard burning in the areas.

Department's Response to Comments - Under ORS 468A.085, the Department is able to prohibit residential open burning if:

- (a) The prohibition is necessary to meet air quality standards in the area and
- (b) Alternative disposal methods are reasonably available.

While the Hillsboro area does have alternatives to backyard burning available, no violation of air quality standards has been documented in the area. However, local governments are not under similar constraints and are free to limit or ban backyard burning.

Comments Received Regarding Water Quality Regulations

1. Josephine County commented that complaints regarding sewage disposal systems are not investigated in a timely manner. To help resolve this problem, they suggested that the Department's rules be amended to require inspection within 10 days and that the Department receive citation authority.

Department's Response to Comment #1 - The on-site staff from the Grants Pass office met with staff from the Josephine County Planning Office. Staff stated that inadequate investigation of complaints stems from the lack of staff to conduct the investigations. Requiring inspections within a specified period of time would not resolve the problem of inadequate staffing. The Department tries, whenever possible, to achieve voluntary compliance with the on-site rules.

2. Chevron commented on several factors relating to local discharge standards.

Department's Response to Comment #2 - The Department does not determine specific municipality pretreatment standards, nor does it have rules directly related to pretreatment standards for indirect industrial dischargers. Under the Department's adoption of the federal pretreatment program, individual municipalities are required to develop discharge limits for industrial sources that discharge to their sewage collection and treatment plants. Pretreatment standards must prevent interference with the municipalities biological treatment processes and

Memo To: Environmental Quality Commission

**Agenda Item I**, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996 Page 3

maintain current or beneficial use of waste sludge. Pretreatment must also prevent potential worker health or safety problems or potential harm to the environment. The City of Portland has developed pretreatment standards (local limits) for industries such as Chevron and those limits have been approved by the Department. Since the city develops their specific pretreatment limits and regulates industries that discharge to their facilities, the comments would be better directed to the City of Portland.

Comments Received Regarding Solid and Hazardous Waste Regulations

1. One member of the electric utility community commented that the cleanup standard for PCB has caused unnecessary expense and difficulty. Furthermore, they would prefer that the Department establish standards that are consistent with EPA standards.

Department's Response to Comment #1 - The Department is currently working on several projects that should make PCB cleanups more efficient. First, a generic remedy cleanup standard is being developed. Secondly, a new cleanup law was passed by the 1995 Legislature that requires cleanups to be risk-based. The Department is currently in the process of developing rules to supplement the new law. Even with these changes, there will continue to be discrepancies between the state and federal policies. The protective level set by the cleanup law is 1 in 1 million excess cancer risk. The federal cleanup standard is not tied to any particular risk number.

2. One commenter recommended several changes to Division 12 (Enforcement Procedures and Civil Penalties) including creation of a new default Class III where the respondent proves the violation causes only minor harm or risk of minor harm in both solid waste and hazardous waste cases.

Department's Response to Comment #2 - This amendment has the potential to create new evidentiary burdens for the Department. Although it appears to place the burden of proof on the respondent, the Department would be required to submit evidence to overcome respondent's evidence. Furthermore, the default category for all other programs is Class II and this amendment would create inconsistencies between programs.

3. Commenter suggested that a violation for failure to satisfy manifest discrepancy be a Class I violation only if the failure is systematic since other violations are Class I violations only when they are systematic.

Department's Response to Comment #3 - The Department feels that the failure to satisfy manifest discrepancies in reporting requirements is different from other violations. The violation occurs after there has already been either mismanagement or mischaracterization of the waste. Serious consequences including potential hazards to public health and the environment can occur because of these discrepancies.

Memo To: Environmental Quality Commission

**Agenda Item I**, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996 Page 4

4. The commenter suggests amending the definition in OAR 340-12-030 by limiting its scope to violations that are not "the necessary and direct result of an earlier transgression."

Department's Response to Comment #4 - The Department believes that the suggested change would limit the Department's options in both formal and informal actions. The Department is looking at alternative ways that inspectors can cite violations without limiting the inspector's ability to inform of the consequences of earlier transgressions in informal actions. In formal actions, the Department generally only assesses one penalty for one transgression.

5. Under Division 93, certain transfer activities are exempt from obtaining a solid waste disposal permit. To be exempt, a container can not stay in one location longer than 72 hours. The commenter felt that the 72 hour time limit is impractical for certain low volume types of nonputrescible waste. Often it is economically impracticable to move the materials every 72 hours.

Department's Response to Comment #5 - The current rule allows the Department to extend the 72 hour time limit. If this provision does not adequately meet the needs of the industry, then rule revisions will be considered.

### **Proposed Future Actions and Department's Conclusions**

Based on the public comments received and the Department's own review of its rules, staff has recommended the future actions contained in Attachment D. Some of the more significant future actions are:

#### Water Quality

1. An advisory committee will be formed to review groundwater rules regarding complaints from businesses, municipalities and citizens. Of particular concern are the procedures for applying for and receiving concentrations limit variances and lack of consistency in application of regulations.
2. Division 44 (Construction and Use of Waste Disposal Wells or Other Underground Injection Activities) was last modified in 1983. Numerous changes have been made to other divisions that may affect construction of waste disposal wells including an adoption of a groundwater protection policy. An advisory committee will be convened in the 1997-99 biennium to address inconsistencies and concerns.
3. Regulations pertaining to NPDES and WPCF permits are currently being reviewed by an advisory committee. Some proposed changes include: clarifying when a federal agency must apply for a permit; clarifying rules regarding issuance of permits in emergency situations; updating

Memo To: Environmental Quality Commission

**Agenda Item I**, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996 Page 5

references to federal regulations; incorporating legislative adopted fees into fee schedules; clarifying procedures for application of hardship fee suspension and eliminating inconsistencies between Divisions 45 and 71 regarding WPCF permits.

4. Numerous fee provisions contained within the water quality rules, need to be reviewed. The fees charged for certification of wastewater system operator personnel do not appear to cover the costs of the program, even though the program uses only 2 FTE. No fees are currently assessed for Section 404 dredge and fill removal projects although considerable Departmental resources are expended on these permits. Also the recent federal court decision requiring 401 certifications for federal grazing permits, may make it necessary to develop a process and a fee structure for those certifications. The Department is planning to review the fee structure for the entire water quality program.

5. Current rules regarding the State Revolving Fund Program require all projects to be publicly owned and the borrowers must be municipal corporations. The Department is contemplating expanding the eligibility criteria to include nonpoint pollution control loans to private entities. This would allow the Department to be more effective in dealing with nonpoint source pollution problems

#### Air Quality

1. The Title V permitting program rules need to be updated to match EPA regulations regarding public participation. In making these changes, the Department will focus on making the permitting process as efficient as possible while still allowing public participation. EPA regulations are scheduled to be adopted in January 1997

2. Clarification regarding which emission increases are subject to New Source Review and Plant Site Emission Limits is needed. Also due to duplicate regulations, Hazardous Air Pollutants need to be exempted from New Source Review.

3. Emission trading is a voluntary emission reduction at one source which allows a corresponding increase to occur at another source. The existing rules allow trading under three circumstances. Some of the changes being considered to these rules are clarifying the basic requirements for creation and use of an emission reduction credit; increasing incentives by providing more certainty and flexibility for sources; and updating the rules to meet EPA guidelines.

#### Waste Management and Cleanup

Memo To: Environmental Quality Commission

**Agenda Item I**, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996 Page 6

1. A need for development of markets for recycled materials and more efforts for waste prevention has been identified. Changes to the existing solid waste grant program for local governments to allow grants to be used for recycling market development and waste prevention activities is being contemplated.
2. Persons who transport waste tires must have a Department permit and display a decal on each vehicle used to haul the tires. Companies are charged per decal. This requirement makes it difficult for large trucking companies to be able to haul tires. A proposed rule would create a new category of permit for large trucking companies which would require them to pay the permit fees for 15 trucks, regardless of the number of trucks actually used to haul tires.
3. The Hazardous Waste program is in need of several changes to bring the Department's rules into conformity with the federal rules. These include the state's ability to recognize interim status, public participation requirements, violation classifications and updating the list of chemicals under the toxic use reduction rules.
4. Numerous modifications are needed to the underground storage tank rules. These include making changes to the permit conditions that can be required, adjusting fees to fund the program, adopting financial responsibility requirements for all underground tank facilities so that the state can continue to implement the federal tank program, allowing compliance with new tank standards to be certified by third parties and adopting risk based corrective action as a tank cleanup option.
5. The majority of the rules related to hazardous waste cleanup are currently under revision with the public comment period closing on November 15, 1996. The changes are predicated by legislative changes contained in HB 3352. These changes include making environmental remedial actions risk-based, risk assessment will be based on likely exposures instead of maximum exposures, definition of "hot-spots" and cost reasonableness will be given greater weight.

#### General Regulations

Review of the general divisions of the Department (Divisions 11 and 14) revealed that several sections are inconsistent with the Administrative Procedures Act and the Attorney General's Model Rules. Some of the inconsistencies are highlighted below.

1. The APA authorizes only license suspensions and refusals to renew without a prior hearing. OAR 340-14-045(2) allows both suspensions or revocations without a prior hearing. This provision needs to be amended to bring the Department's rules in line with the APA.

Memo To: Environmental Quality Commission

**Agenda Item I**, Periodic Rule Review of Oregon Administrative Rules, Chapter 340, Divisions 11 through 180, EQC Meeting: November 14, 1996 Page 7

2. OAR 340-14-015(3) allows the Department to automatically terminate a permit if certain conditions are met. The rule does not allow for a contested case hearing or other appeal process on the termination.
3. An agency, under the APA and the Model Rules, may suspend a permit without notice if the agency finds that the danger to public health or safety is so imminent that notice cannot be provided. OAR 340-14-045(2) allows immediate suspension or revocation if there is a threat of serious harm to public health or safety, or irreparable damage to natural resources.
4. Under the APA an applicant who is denied a license or a permit must be given 60 days to request a hearing. OAR 340-14-025(4) only allows the applicant 20 days to request a hearing.
5. In OAR 340-11-005(7) the Department refers to the Attorney General's Model Rules which were in effect on April 29, 1988. This reference will be updated to incorporate the latest version of the Model Rules. Furthermore, the Department has not adopted Model Rules 137-04-000 *et seq.*, which relate to procedures for Orders in Other than Contested Cases.
6. Staff has complained that OAR 340-14-025(2) is unclear as to whom notice of a permit or license application must be sent. The current reference is to ORS Chapter 183 but not to any particular section. This rule will be amended to provide specifically who should receive notice. Similarly OAR 340-14-025(6) states that the hearing will be held "pursuant to OAR Chapter 340, Division 11." This reference will be clarified to state which hearing provisions will apply.

#### **Department Recommendation**

It is recommended that the Commission accept this report, discuss the matter, and provide advice and guidance to the Department as appropriate.

#### **Attachments**

- A. Notice of Periodic Rule Review
- B. Comments Received
- C. Summary of Comments Received and Department's Response to Comments
- D. Program's Detailed Review of Regulations

#### **Reference Documents (available upon request)**

ORS 183.545 and 183.550; Attorney General's Model Rule 137-01-085

Report Prepared By: Susan M. Greco  
Phone: (503) 229-5213  
Date Prepared: October 30, 1996

**State of Oregon**  
**Department of Environmental Quality**

**Memorandum**

**Date:** May 15, 1996  
**To:** Interested and Affected Public  
**Subject:** Notice of Periodic Rule Review of the Department of Environmental Quality's Administrative Rules and Solicitation of Public Comment

In accordance with ORS 183.545 and ORS 183.550, the Department of Environmental Quality will conduct a review of its administrative rules. The rules affect all of the Department's programs and administrative practices, and are contained in Oregon Administrative Rules, Chapter 340, Divisions 11 through 180.

The review will be based on the economic effect on businesses based on size and type of business and the criteria listed below. The Department, based on the comments received and its own review of its rules, will determine whether the Department's rules should be continued without change, or should be amended or rescinded.

**Public Comment Period**

If you would like to comment on any of the Department's rules, written comments will be accepted by the Department until 5:00 p.m., July 26, 1996. In accordance with ORS 183.335(13), no comments can be accepted after this date, by either the Environmental Quality Commission or the Department. Thus if you wish for your comments to be considered by the Department, your comments **must** be received prior to the close of the comment period. Interested parties are encouraged to present their comments as early as possible prior to the close of the comment period to ensure adequate review and evaluation of the comments presented. Please forward all comments to Department of Environmental Quality, Attn: Susan M. Greco, Rules Coordinator, 811 S.W. 6th Avenue, Portland, Oregon, 97204.

**What Happens After the Public Comment Period Closes**

The Department will review all of the public comments received and the rules in the context of the following criteria:

- (1) The continued need for the rule;
- (2) Any comments or complaints received concerning the rule;
- (3) The complexity of the rule;
- (4) The extent to which the rule overlaps, duplicates or conflicts with state, federal or local rules;
- (5) Technological or economic changes in the subject area affected by the rule;
- (6) The statutory or legal basis for the rule; and
- (7) The rule's potential for enhancement of job-producing enterprises.

After this review has been completed, the Department will prepare a report which summarizes

*Attachment A - 2 pages*



Memo To: Interested and Affected Public  
Periodic Rule Review  
Page 2

the comments received, the Department's analysis of the continued need for the rules, and any proposed changes to the Department's rules. This report will be presented to the Environmental Quality Commission prior to its November 1996 meeting. This date may be delayed if the Department needs further time to review its rules. Any rulemaking that occurs as a result of this review, will be conducted in accordance with the rulemaking requirements in ORS 183.325 through 183.410.

**Contact for more information**

If you would like more information regarding this process, please contact:

Susan M. Greco (503) 229-5213  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland OR 97204

The Department's administrative rules are available for review at the offices listed below during regular business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding holidays.

Headquarters

811 S.W. 6th Avenue  
Portland OR 97204

700 S.E. Emigrant, Suite 330  
Pendleton, OR 97801

Northwest Region

2020 S.W. 4th Avenue, 4th Floor  
Portland OR 97201

400 E. Scenic Drive, #307  
The Dalles, OR 97058

17 N. Highway 101  
Warrenton OR 97146

Western Region

340 N. Front Street  
Coos Bay, OR 97420

Eastern Region

2034 Auburn Avenue  
Baker City OR 97814

1102 Lincoln Street, Suite 210  
Eugene OR 97401

2146 N.E. 4th, #104  
Bend OR 97701

510 N.W. 4th, Room 76  
Grants Pass, OR 97526

256 East Hurlburt, Suite 117  
Hermiston OR 97838

201 W. Main St., Suite 2-D  
Medford, OR 97501

403 Pine Street  
Klamath Falls, OR 97601

725 S.E. Main  
Roseberg, OR 97470

750 Front Street N.E., Suite 120  
Salem, OR 97310

Susan Greco:

I was pleased to see some one else was bothered by the back yard burning we have neighbors that burn to where we can't see the house across the street at times so on a nice day you get inside what a shame. Not only have we seen people piling the damp debris on the pile but also plastic & trash with creosote on it so it really pollutes our air. I truly hope something can be do to eliminate back yard burning. Not only breathing the fumes you have to hang out laundry & guess what it goes thru the wash again & finally ends up in the dryer any way. Why do we have to take our cars thru DEQ it we have other fumes polluting our environment -

State of Oregon  
Department of Environmental Quality

RECEIVED

JUL 08 1996

OFFICE OF THE DEPUTY DIRECTOR

Mrs B. L. Wood  
867 NE Delsey  
Hillsboro, Or  
97124

Attachment B - 34 pages

RECEIVED

JUL 08 1996

OFFICE OF THE DEPUTY DIRECTOR

July 3, 1996

Department of Environmental Quality  
Rules Coordinator  
811 S.W. 6<sup>th</sup> Avenue  
Portland, Oregon 97204

Gentlemen and Ladies:

Earlier this week in the Hillsboro Argus, a local newspaper, a reader in the letter to editor section wrote of his objections to allowing backyard burning in Hillsboro. I wish to go on record to say that in my opinion his views do not represent those of most of the citizens of Hillsboro.

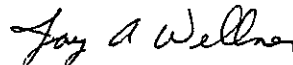
I have lived at my current address in Hillsboro for over thirty years and have enjoyed the use of backyard burning when allowed. Of all of my neighbors and friends around town, I am not aware of a single one that objects to backyard burning. In our neighborhood, we burn only on the days it is allowed and in most cases only when there is little wind so that smoke rises vertically without disturbing neighbors. Many of us are retired and rely on backyard burning because the volume of debris exceeds what we can place in the special yard debris collection containers and in the Metro sourced compost makers. It would be cost prohibitive to be forced to hire someone to come in and haul it away. Most of what I am forced to burn is in the form of tree branches, from the many fir and cedar trees in my yard.

During the two burning times of the year is when I can prune and trim trees and selectively burn the debris. Without allowable burning my yard would become more fire hazardous from the build up of dead and dry material. The allowable spring and fall times of the year for burning are reasonable as it permits a person to dispose of these materials when there is little danger of an uncontrolled fire because surrounding vegetation is green and damp.

Once again, most of us in Hillsboro welcome the use of backyard burning. If the writer to the Argus that is complaining about smoke from his neighbors would work things out with his neighbors, his objections would not affect the rest of us. Incidentally, I do not know the gentleman nor do I know where he lives in town.

Thank you for your time and I would appreciate your consideration in the continued use of backyard burning in this area.

Yours very truly,



Jay A. Wellner  
1322 S.E. 38<sup>th</sup> Ave.  
Hillsboro, Oregon 97123

JUL 24 1996

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Department of Environmental Quality  
State of Oregon

Susan Greco  
Rules Coordinator  
811 SW 6<sup>th</sup> Ave  
Portland OR 97204

Dear Susan,

We are a family who lives in the city of Hillsboro. We are very concerned about the burning of debris that is polluting our neighborhood air.

Please help to stop this antiquated practice. We have too many people living in close proximity to allow this to continue.

Thank you for your consideration.  
Paula Thatcher

Paula & Dave Thatcher  
490 SE 29<sup>th</sup> Ave  
Hillsboro OR 97123

Susan M. Greco  
Rules Coordinator  
Department of Environmental Quality  
811 SW 6th Avenue  
Portland, Oregon 97204

State of Oregon  
Department of Environmental Quality

RECEIVED

JUN 18 1996

Dear Susan

OFFICE OF THE DEPUTY DIRECTOR

I understand Oregon Administrative Rules, Chapter 340, Divisions 11 through 180 are open for public comment. Following are comments on Oregon Administrative rule Chapter 340, Division 23 -- "Rules for Backyard Burning."

I live within the Hillsboro city limits where backyard burning is still allowed 6 months out of the year (March 1-June 15 & October 1 to December 15 (OAR 340-23-075(5)(b))).

Hillsboro did not have curb side pickup of yard debris when the current rule was written, now that it does, it seems reasonable to prohibit backyard burning inside the city limits where this service is available, except for 'hardship cases' which DEQ can define and grant.

The current rule has a glaring conflict and can easily cause confrontations between neighbors. Section 340-23-075(5)(b) allows burning in the city limits of Hillsboro and section 340-23-042 (1) states "No person shall ... allow...any open burning which interferes unreasonably with enjoyment of life and property or creates any of the following: (a) a private nuisance... (b) a public nuisance...."

I maintain that in any city where homes are only yards apart it is impossible to have a backyard burn, where smoke is drifting into neighbors yards and homes, that does not cause a private or public nuisance! To enforce this part of the law, people are forced to call the Fire Marshal to complain about their neighbors smoke, which tends to escalate conflict rather than resolve it.

What I find extremely annoying is to have the first sunny weekends in the Spring tarnished by smoke drifting through neighborhoods, and even worse to have backyard burning smoke ruin holidays, such as Easter, Mothers Day, Memorial Day, and Thanksgiving Day gatherings by smoke 'whispering' by my nose setting off allergic reactions such as coughing, runny nose, and itchy eyes. The State of Washington does not allow forestry slash burning on Friday, Saturday, and Sunday from early Spring to late Fall to improve visibility in the Cascades for public enjoyment. If we must keep backyard burning inside the city, then let us at least change the law to allow DEQ the ability to protect the weekends and holidays when people are out trying to enjoy their backyards.

**Recommendations:**

Prohibit backyard burning inside Hillsboro city limits where curb side pickup of yard debris is available.

**Alternatives:**

Prohibit backyard burning on weekends and holidays during the Spring and Fall burning season (340-23-075(5)(b)) where curb side pickup of yard debris is available.

Ken and Candy Snell  
2064 E. Main, Hillsboro, OR 97123  
(503)-648-0289

cc:

Senator Jeannette Hamby  
P.O. Box 519  
Hillsboro, OR 97282

Representative John Meek  
P.O. Box 1327  
Hillsboro, OR 97123-1327  
(648-6664)

Representative Charles Starr  
8330 SW River RD  
Hillsboro, OR 97123

Greg Green  
Air Quality Division Administrator  
Department of Environmental Quality  
811 SW 6th Avenue  
Portland Oregon 97204

Letters to the Editor  
Hillsboro Argus  
P.O. Box 588  
Hillsboro, OR. 97123

Letters to the Editor  
The Oregonian  
1320 SW Broadway  
Portland, OR 97201  
(FAX) 294-4193

Letter to the editor

## Cough Cough

Yea its Spring! The sun is finally out, the temperature is finally warm, the flowers are finally starting to bloom; I go outside to enjoy the beautiful weather; I take a deep breath--And YUCK! Cough cough! Yes it is spring time 'backyard burning' season in the City of Hillsboro. Six months a year people are allowed to strike a match and lite up their soggy debris pile and smoke out their neighbors.

Oregon Department of Environmental Quality (DEQ) is asking for public comment on their Administrative Rules, Chapter 340, Divisions 11 through 180. One of the rules, OAR 340- 23, deals with backyard burning.

Hillsboro did not have curb side pickup of yard debris when the current rule was written, now that it does, it seems reasonable to prohibit backyard burning inside the city limits where this service is available, except for 'hardship cases' which DEQ can define and grant.

The current rule has a glaring conflict and can easily cause confrontations between neighbors. Section 340-23-075(5)(b) allows burning in the city limits of Hillsboro and section 340-23-042 (1) states "No person shall ... allow...any open burning which interferes unreasonably with enjoyment of life and property or creates any of the following: (a) a private nuisance... (b) a public nuisance...".

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If smoke bothers you, I hope you will send DEQ (Susan M. Greco, Rules Coordinator, Department of Environmental Quality, 811 SW 6th Avenue, Portland, Oregon 97204) a coughing, hacking, itchy eye, runny nose letter that encourages them to eliminate backyard burning in Hillsboro.

Ken Snell  
Hillsboro

Senator Jeannette Hamby  
P.O. Box 519  
Hillsboro, OR 97282

June 15, 1996

Dear Jeannette

Oregon Administrative Rules, Chapter 340, Divisions 11 through 180 are open for public comment. I encourage you to review Oregon Administrative rule Chapter 340, Division 23 -- "Rules for Backyard Burning". These rules effect the quality of life inside the city limits of Hillsboro.

I live within the Hillsboro city limits where backyard burning is still allowed 6 months out of the year (March 1-June 15 & October 1 to December 15 (OAR 340-23-075(5)(b)).

Hillsboro did not have curb side pickup of yard debris when the current rule was written, now that it does, it seems reasonable to prohibit backyard burning inside the city limits where this service is available, except for 'hardship cases' which DEQ can define and grant.

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**Recommendations:**

Prohibit backyard burning inside Hillsboro city limits where curb side pickup of yard debris is available.

**Alternatives:**

Prohibit backyard burning on weekends and holidays (340-23-075(5)(b)) where curb side pickup of yard debris is available.

Ken and Candy Snell  
2064 E. Main  
Hillsboro, OR 97123  
(503) 648-0289



Representative John Meek  
P.O. Box 1327  
Hillsboro, OR 97123-1327

June 15, 1996

Dear John

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Ken and Candy Snell  
2064 E. Main  
Hillsboro, OR 97123  
(503) 648-0289

Representative Charles Starr  
8330 SW River RD  
Hillsboro, OR 97123

June 15, 1996

Dear Charles

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Ken and Candy Snell  
2064 E. Main  
Hillsboro, OR 97123  
(503) 648-0289

State of Oregon  
Department of Environmental Quality

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JUL 08 1996

OFFICE OF THE DEPUTY DIRECTOR

The Oregon DEQ  
Susan M. Greco, Rules Coordinator  
811 S.W. 6th Ave.  
Portland, OR 97204

1 July 96

Dear Ms. Greco:

I wish to comment on the Oregon Administrative Rules, Chapter 340, Divisions 11 through 180; specifically, OAR 340-23.

I live in a pleasant Hillsboro neighborhood, where often, on a beautiful summer night, someone lights up a pile of wet leaves and grass, and smokes out the entire neighborhood to save the cost of a Hefty trash bag. Several homes nearby are in the \$200,000 range, yet their owners consistantly burn and stink out the block on a weekly basis, rather than use the FREE curbside yard debris recycling that comes to them!

Backyard burning made sense when the Portland area was much smaller and residents didn't spend thousands per year on pruning, fertilizing and mowing yards thus generating tons of RECYCLABLE, COMPOSTABLE yard debris. Citizens complained over the bottle bill, claiming it would ruin business and be impossible for consumers to manage, yet we all return bottles now and reap the rewards of a cleaner state. Backyard burning is a fossilized concept whose time has come and gone. Let's make better use of our wonderful curbside recycling system and clean up the air on weekends!

I work in the health field (I am a pharmacist), and it is dissapointing to me that a state full of kids with asthma and elderly people with pulmonary disease would continue to allow such gross, industrial age pollution to ruin otherwise clean-air areas. Pumping people full of asthma drugs, running air conditioning in bottled up houses and doing it all so the guy down the street can pinch a penny is ridiculous. This rule needs to change.

Sincerely,



Susan J. Bliss, R Ph

2112 SE Gerhard Drive  
Hillsboro, OR 97123

RECEIVED

JUL 11 1996

July 9, 1996

OFFICE OF THE DEPUTY DIRECTOR

Ms. Susan Greco, Rules Coordinator  
Oregon Dept. of Environmental Quality  
811 S.W. 6th Ave.  
Portland, OR 97204

Dear Ms. Greco:

I am responding to your requests for comments on backyard burning in Hillsboro.

From Aug. '79 through Nov. '83 I was a member of the Air Quality Advisory Committee chaired by Mrs. Jean Roy.

Our efforts were successful in establishing a ban on backyard burning through most of the populated areas of Multnomah and Washington Counties EXCEPT for Hillsboro!

Today I remain in strong support for a permanent ban on backyard burning in Hillsboro particularly because the City and Garbage Collection Company now provide bi-weekly pick-up of grass clippings, branches, etc., and there is a yearly curb-side leaf pick-up every Fall.

Moreover, the nuisance/health risk of backyard burning in our area has increased due to the population boom in Hillsboro fueled by the mushrooming micro chip industries in Hillsboro and vicinity.

In conclusion, thank you for giving me the opportunity to respond to your request for comments, and I will

enthusiastically applaud efforts you put forth to help put a permanent backyard burning ban into place for the city of Hillsboro.

Finally, I would welcome the opportunity, if need be, to again be involved in the cause. Please notify me if you need my help.

Sincerely,

A handwritten signature in cursive script that reads "Dock Shaw".

Dock Shaw

823 N.E. Baldwin Drive

Hillsboro, OR 97124

Phone: 640-5155

Robert E. Neely  
3450 S.E. Alder Street  
Hillsboro OR 97123-7447  
503/648-0901 Vox and Fax  
July 10, 1996

State of Oregon  
Department of Environmental Quality  
**RECEIVED**  
JUL 11 1996

Department of Environmental Quality  
Attn: Susan Greco, Rules Coordinator  
811 SW 6th Avenue  
Portland OR 97204

**OFFICE OF THE DEPUTY DIRECTOR**

It has come to my attention that the **BACK YARD BURNING Regulations** are now open for comment. I am particularly interested in the extension of present boundaries.

We have lived in Hillsboro for over 25 years. During this time our surroundings have evolved from strawberry and hay fields to solid housing. Some of our new neighbors lived in the area when back yard burning was the norm for debris disposal. In addition, many families have moved here from states such as Idaho, Wyoming, and Montana where burning continues to be a common means of disposal.

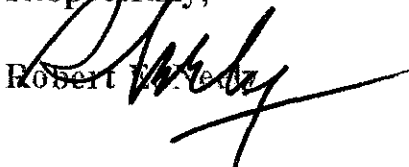
I recognize that the DEQ measures air pollution in gross terms, that is, sampling is done at specific sites and all results are integrated to determine an over-all value. While this method may satisfy statistical requirements, it does nothing to alleviate locally severe pollution.

All of Hillsboro has grown dramatically. Among other benefits of the growth is the regular curbside collection of yard and garden debris. Therefore, an effective alternative to burning is now available.

I believe that the city limit may reach all the way to SW 185th or very nearly so. I believe that Hillsboro should be included in the area in which back yard burning is prohibited because it is a vital part of the Metropolitan area and its citizens deserve the same protection provided by regulations that have been effective for several years in the areas east of SW 185th. Please extend the burning prohibition to include Hillsboro.

Respectfully,

Robert E. Neely



State of Oregon  
Department of Environmental Quality

RECEIVED

JUL 12 1996

July 8, 1996

OFFICE OF THE DEPUTY DIRECTOR

Susan M. Greco  
811 SW 6th Ave.  
Portland, OR 97204

Dear Ms. Greco:

I understand that you are reviewing the rules for backyard burning in the city of Hillsboro. I wish to add my opinion to the discussion.

Every spring and fall I have to deal with neighbors on three different sides of me burning yard debris. During the burning seasons, every time there is a nice day after several rainy days, at least one of these neighbors feels the need to burn spewing smoke about the neighborhood. If I'm really lucky, the wind will blow the smoke directly into my yard, which then inhibits me from doing my own yard work.

I remember calling DEQ a few years ago about the nuisance. At that time I also mentioned that my dog seemed to be affected and would sneeze during these burning periods. I would have to bring the dog inside to avoid the smoke. Since that time, my dog has died from sinus cancer. We now have a new puppy and I would like to spare him from the annoyance as well as any health effects the smoke might have on him, not to mention the children of the neighborhood.

I believe backyard burning should be banned year-round in residential neighborhoods. Thank you for considering my experiences on the subject.

Sincerely,

Cheryl Standeford  
936 NE Baldwin DR  
Hillsboro, OR 97124

RECEIVED

JUL 08 1996

7/1/96

DEQ

OFFICE OF THE DEPUTY DIRECTOR

Attn: Susan Greco  
Rules Coordinator  
811 SW 6th Ave  
Portland OR 97204

Re: Administrative Rules, OAR 340-23

I would encourage you to eliminate back  
yard burning in Hillsboro. We now have  
curbside pick-up of yard debris, a cleaner  
alternative.

Beverly Caldwell  
464 NE 17th Ave  
Hillsboro OR 97124



7/15/96

Susan Greco  
Rules Coordinator  
Department of Environmental Quality  
811 SW 6th Ave  
Portland OR 97204

State of Oregon  
Department of Environmental Quality

RECEIVED

JUL 17 1996

OFFICE OF THE DEPUTY DIRECTOR

Re: Rules for Open Burning

I understand that OAR Division 23 rules are open for public comment at this time. The following comments request a change in OAR 340-23-075, open burning restrictions for Washington County.

**Back yard burning results in significant localized air pollution impacts in Hillsboro, and easily available alternatives to burning exist.**

Currently, for significant periods of the year, open back yard burning is allowed in Hillsboro. This results in significant local air pollution impacts. Unlike many air pollution sources, back yard burning creates entirely local impacts that are rarely if ever measured by ambient air monitoring. For this reason, I believe that we do not know how serious exposure to back yard burning smoke might be. The fact that we don't know what levels of air pollution result locally from back yard burning does not lead to the conclusion that there is no threat to health.

I have lived through obnoxious back yard burn smoke exposures. This is the most significant air pollution exposure in my life. For the most part, those who back yard burn pay little attention to the amount of smoke they produce. Frequently, back yard burning occurs on days that are wet or directly after a wet period. This leads to smoky fires or just smoldering piles of wet material. One back yard burn can last for several hours and create smoky, smelly choking air in a one or two block area.

I own a large city lot in Hillsboro and have never back yard burned in the 9 years I have lived there. I make use of composting and yard debris pick up to deal with the significant amount of yard debris generated on my lot. Hillsboro residents have curbside yard debris pick up provided every other week, year round. This service can pick up all but large limbs over 4" in diameter, stumps and sod. In addition, there is at least one private company in Hillsboro that accepts yard debris at a nominal charge, which they grind and resell for mulch.

**Hillsboro is growing dramatically and the current back yard burning rules don't work well in the new Hillsboro**

When the back yard burning ban was implemented in the tri-county area back in the mid-1980's, Washington County, from Hillsboro west, was far less populated and far less densely populated than it is now. In addition, the amount of industrial development has skyrocketed in the past three years in the Hillsboro area. This has led to an increase

in automobile and industrial pollution. As Hillsboro grows and becomes more urbanized, it makes sense to re-examine issues like back yard burning.

New lot sizes are smaller, which means there is less yard debris per home site. In addition, smaller lot sizes and higher density means that back yard burns can impact more people. In addition, the reduction in undeveloped or agricultural space means that the smoke that is produced by back yard burns are less likely to be "soaked up" by the general environment. Smaller lot sizes mean that back yard burns are probably closer to structures, which makes the burning itself more of a fire hazard.

**The boundary for back yard burning in western Washington County should be changed**

Given the problems created by back yard burning in the Hillsboro area, the current burning boundary should be changed. OAR 340-23-115 figure 1A shows the current back yard burning boundaries in the Portland metropolitan area. I recommend that the boundary be changed so that back yard burning be banned in the entire area served by curbside yard debris pick up in Hillsboro.

I also recommend that DEQ consider extending the back yard burning ban to include the entire area within the urban growth boundary for Hillsboro, Cornelius and Forest Grove.

While changing the boundary will require that some people change their behavior with regard to back yard burning, this does not constitute a hardship. What will be required is that instead of raking up debris and lighting the stack and turning woody waste into air pollution, a person will rake up debris and put it into a yard debris container to be picked up and recycled.

Sincerely,



Joe Weller  
934 NE Arrington Rd  
Hillsboro OR 97124

The Office of  
**Josephine County Planning**

510 N.W. 4th Street ■ Grants Pass, Oregon 97526-2020  
Tel (503) 474-5421 ■ Fax (503) 474-5422 ■ TDD 1-800/735-2900



State of Oregon  
Department of Environmental Quality  
Wm. Bruce Bartow  
Planning Director

RECEIVED

JUN 2 1996

June 17, 1996

Susan M. Greco  
Dept. of Environmental Quality  
811 SW 6th Avenue  
Portland, OR 97204

OFFICE OF THE DEPUTY DIRECTOR

Re: Periodic Review of DEQ Rules

Dear Ms. Greco,

This office received your department's request for public comment regarding updating of its administrative rules.

This comment is limited to the single issue of rule enforcement. Josephine County employs a full-time employee to enforce ordinance requirements. In the course of conducting this business we receive numerous complaints about residences being developed without authorized sewage disposal systems. In many cases raw sewage disposal is documented on the ground or into water courses. When these complaints are forwarded to the local DEQ office, timely action rarely occurs.

We therefore suggest the rules be amended to require inspection and action within specified time limits. We suggest 10 days or sooner. Although unfamiliar with the enforcement aspects of the current rules, and therefore unsure about what enforcement powers are now authorized, we suggest citation authority be initiated if it does not exist. This allows violators to be compelled by a ticket to appear before a magistrate. We have information regarding citation mechanics.

Sincerely,

Michael Snider  
Assistant Planning Director



**Chevron**

State of Oregon  
Department of Environmental Quality

RECEIVED

JUL 08 1996

OFFICE OF THE DEPUTY DIRECTOR

**Chevron Products Company**

6001 Bollinger Canyon Road  
Building L  
San Ramon, CA 94583  
P.O. Box 5004  
San Ramon, CA 94583-0804

**Marketing - Northwest Region**

Phone 510 842 9500

July 5, 1996

Ms. Susan M. Greco  
Rules Coordinator  
Department Of Environmental Quality  
811 S.W. 6th Avenue  
Portland, OR, 97204

Dear Ms. Greco,

Please find enclosed Chevron's written comments for the Department's periodic rule review and update of local discharge standards. The Chevron Products Company - Willbridge Distribution Center is located at 5531 N.W. Doane Avenue, Portland, OR, 97210. Wastewater Discharge Permit # 400-014.

**1. Screening Levels For VOC's (specifically benzene, toluene, and ethylbenzene)**

Summary Chevron recommends that the Department take dilution in the sewer into account when setting screening levels for VOC's (specifically benzene, toluene, and ethylbenzene) at the headworks. Industrial dischargers account for only 10% of the flow to the headworks; sanitary sewage does not include detectable benzene, toluene, and ethylbenzene, so a screening level which is higher by a factor of ten remains protective.

Discussion Chevron Products Company Inc. is pleased to comment on City of Portland's proposed changes to the City's pretreatment program. We support the need to keep the City's POTWs in compliance with the Clean Water Act and comparable Oregon statutes and associated regulations, by limiting the discharges of contaminants which may interfere with or pass through the City's treatment system or cause hazards to the City's employees or the waters of Oregon.

We reviewed the City's Final Report, Update of Local Discharge Standards, dated April 1996. Screening levels for benzene were established to protect worker health at the headworks (as the limiting case). As discussed in Section 10.4.4, the City based the benzene pretreatment standard on a the time weighted average (TWA) threshold limit value (TLV) in the vapor space of the sewer, given for benzene as 32 mg/m<sup>3</sup> [Table 10-2]; and a Henry's Law Constant (HLC) of 225 (mg/m<sup>3</sup>)/(mg/L) [Table 10-3]. The City set the screening level of 0.14 mg/L based on:



$$\text{Limit in sewage} = \text{TWA/HLC} = 32/225 = 0.14 \text{ mg/L}$$

The City noted in Section 10.4.4 that "fume toxicity concentrations calculated from using Henry's Law are conservative for the determination of worker health and safety, since they are based on equilibrium conditions." We agree.

We believe that the City's approach is conservative for other reasons as well. Note that the City's highest observed benzene level at the headworks was reported to be 0.041 mg/L [Table 9-14] even absent any pretreatment requirements at all on benzene.

Chevron recommends that dilution in the sewer be factored into the screening level recommendations. Based on data in Section 8, industrial discharges (about 5.86 MGD) account for about 10% of the 57 MGD reaching the headworks. Furthermore, not all of the industrial dischargers will have benzene in them. Even if they did, not all of them would be at the maximum at the same time. We feel that a screening level of  $10 \times 0.14 = 1.4$  mg/L for benzene remains a conservative and protective level for benzene in the pretreatment requirements.

A parallel argument can be made for increasing the toluene and ethylbenzene screening levels by a factor of ten (to 14 and 16 mg/L). These compounds were detected at the headworks at a maximum of 0.043 and 0.007 mg/L respectively.

## 2. Oil and Grease Analysis Method

Summary Chevron recommends that dischargers are provided the flexibility of using either EPA method 413.1 or 1664, until EPA promulgates method 1664.

Discussion Chevron notes that the City has been using the new EPA 1664 method for oil and grease analysis. This new method, using n-hexane as the extraction solvent, will ultimately replace EPA methods based on freon extraction. Manufacture (but not the use) of freon has been banned under the Montreal Protocol to help protect the ozone layer.

Chevron supports the attempts of EPA and the City to find more environmentally friendly analytical methods and we applaud the City's forward look in gathering data with this new method. It is not clear to us whether the City is now using EPA 1664 to measure compliance with pretreatment standards, although by inference this is the case.

We would like to point out that EPA has not promulgated this method and it is not a 40 CFR, 136 method. We call your attention to the following regulation:

40 CFR 122.44(i)(1)(i):

- (1) To assure compliance with the permit, requirements to monitor:



**Chevron**

(iv) According to test procedures approved under 40 CFR 136 for the analysis of pollutants having approved methods under that part, and according to a method specified in the permit for pollutants with no approved methods.

This regulation seems to say that until EPA 1664 is promulgated, dischargers are required to use the only 40 CFR 136 method approved for oil and grease, namely, EPA 413.1. EPA 1664 is not a method approved under 40 CFR 136.

Our suggestion, however, is to provide dischargers the flexibility of using either method until EPA does promulgate 1664. We recognize that freon is becoming difficult and expensive to obtain.

We would also like to point out that users familiar with EPA 1664 have discovered anomalously high results. Such results raise a concern about false positives. Most users who have worked on this issue seem to feel that the method is flawed as written and that there are serious concerns about the ability to "dry" the residue unless the method is modified. Comments submitted addressed such concerns during EPA's comment period; these comments are part of the record. Also, EPA have reopened the comment period, and promulgation of the method is still likely to be months away. We do not know whether the method as proposed will be the method promulgated.

Chevron appreciates this opportunity to comment on the Department's proposed rule making. Should you have any questions on the comments detailed above, please do not hesitate to call me at (510) 842-1059.

Sincerely

A handwritten signature in black ink, appearing to read "Keith Richardson", written over a horizontal line.

Keith Richardson  
Terminal Compliance Specialist

RECEIVED

JUL 10 1996

OFFICE OF THE DEPUTY DIRECTOR



Portland General Electric Company

July 11, 1996

Department of Environmental Quality  
Attn: Susan M. Greco, Rules Coordination  
811 SW 6th Avenue  
Portland, OR 97204

Subject: Comment on DEQ Rule OAR 340-122-045 Table 1 and  
Appendix 1 Item 47 PCB

This cleanup standard has caused a tremendous amount of unnecessary expense to the electric utility community. This standard has been adopted by the DEQ staff at Headquarters and in the regions, numerous consultants and lenders (financial institutions) as the primary cleanup standard for cleaning up new and old spills that involve PCB.

Although PGE and other utilities are currently working with the DEQ on a generic remedy which will include a PCB standard which will be different from this standard, it is important to document the difficulty that this standard has created for many businesses, agencies and the public in the state of Oregon.

#### Background

In the course of their daily operations, PGE and the other utilities in Oregon have spills from electrical equipment. Most of the spills are transformer oil which is a highly refined mineral oil considered a non-hazardous substance in this application. The oil is used as an insulating and a cooling medium in electrical equipment.

Some of the oil contains low concentrations of PCB. The PCB was inadvertently mixed in the oil by the equipment manufacturer or the utilities. Most of the contamination is at concentrations below 500 ppm PCB. Approximately 99.5 % of PGE transformers contain less than 500 ppm PCB. Some utilities have transformers and capacitors in service that were manufactured with PCB as the primary liquid insulation/coolant. The capacitors are restricted to use in utility substations. The transformers are only allowed if installed according to EPA regulations.

#### Need for Change

The primary need for change is to establish consistency with the EPA cleanup policy. The electric utility industry cleans up new spills following the Toxic Substance Control Act (TSCA) policy

published May 4, 1987. This document states that 10 ppm PCB with a 10 inch cap of clean soil is an acceptable cleanup standard for unrestricted access areas. PGE and others have used 1 ppm PCB without a cap for unrestricted access areas. The DEQ standard is 0.08 ppm PCB.

As a result of this inconsistency, PGE and others have spent a significant amount of time discussing, negotiating, debating, explaining and arguing about what the cleanup standard should be for a specific site. At times, the utilities, for the sake of expediting a cleanup, have cleaned up to the DEQ standard. This lower standard causes more soil to be removed than is necessary to be protective of human health and the environment leading to far greater labor and disposal costs without generating equivalent environmental benefit. Although the costs associated with establishing an appropriate cleanup standard have not been tracked, it is safe to say that the costs have been in the tens of thousands for PGE.

Another problem this standard has caused is the delay in cleanup of some sites in Oregon. There are many sites in Oregon that have very low levels of PCB contamination in the soil. Cleaning these sites to the 0.08 ppm PCB standard is not economically feasible so these sites sit idle. Cleaning up to the 0.08 standard involves the removal and disposal of much more soil when compared to cleaning up to the 1 ppm standard.

The alternative solution to cleanup of these sites with low concentrations of PCB is to use DEQ's complex site process. This process is not cost effective for small sites.

I am believe that the generic remedy process will produce a cleanup standard that will lead to an eventual change in this rule. I ask that if there is anything in addition to that process that would speed up the change of this rule that it be initiated as soon as possible.

If you have any questions about this information, please call me at 464-8521.

Sincerely,



Rick Hess  
Environmental Specialist





**Chemical Waste Management of the Northwest, Inc.**

17629 Cedar Springs Lane  
Arlington, Oregon 97812  
503/454-2643

State of Oregon  
Department of Environmental Quality

**RECEIVED**

**JUL 26 1996**

**TO:** Oregon Department of Environmental Quality  
Attn: Susan M. Greco  
Rules Coordinator  
811 SW Sixth Avenue  
Portland, Oregon 97204

**OFFICE OF THE DEPUTY DIRECTOR**

**FROM:** Stephen H. Seed  
General Manager and Vice President  
of Landfill Operations  
Chemical Waste Management of the Northwest, Inc.  
Columbia Ridge Landfill and Recycling Center

**RE:** Notice of Periodic Rule Review of Department of Environmental Quality's  
Administrative Rules and Solicitation of Public Comment

**DATE:** July 26, 1996

---

Waste Management, Inc. on behalf of Chemical Waste Management of the Northwest, Inc. and Columbia Ridge Landfill and Recycling Center submits the following comments on certain rules of the Environmental Quality Commission being reviewed by the Department of Environmental Quality as part of the Department's triennial review of Commission rules in accordance with ORS 183.545 and ORS 183.550. These comments specifically concern rules regulating solid waste and hazardous waste.

These comments and requested revisions to the current rules are provided to modify or to delete certain unnecessary provisions of the current rules. Technology, economic conditions and other factors have changed rendering certain of the rules impractical or archaic. Suggested modifications are also provided for certain rules to minimize the economic effects on business while continuing to achieve the same environmental protection purposes. These requested revisions and the reasons supporting them fit within the purpose served by a statutory triennial review.

In the following comments, in Section A the parts of the current rule at issue are quoted in full, with astericks "\*" \* \*" showing where parts of the current rule (not at issue) have been omitted. A bullet "●" is shown next to the part of the current rule that should be revised. In Section B there is a discussion of the current rule and why it should be



revised. Finally, in Section C the current rule is set forth again in full with the requested revisions shown. Language requested to be deleted from the current rule is shown by strike throughs and language requested to be added is underlined.

1.

**A. CURRENT RULE 340-12-030**

"Unless otherwise required by context, as used in this Division:

\* \* \*

(6) 'Documented Violation' means any violation which the Department or other government agency records after observation, investigation or data collection.

\* \* \*

● (20) 'Violation' means a transgression of any statute, rule, order, license, permit, or any part thereof and includes both acts and omissions. Violations shall be categorized as Class One (or I), Class Two (or II) or Class Three (or III), with Class One designating the most serious class of violation."

**B. DISCUSSION**

The Department interprets the current rules in 340-12-030(6) [definition of Documented Violation], 340-12-030(20) [definition of Violation] and 340-12-041 [Enforcement Actions] to require that, in evaluating enforcement actions, the Department must consider every single violation that occurs as independent and subject to a potential enforcement action. There are certain multiple violations, however, where a person's single act or failure to act under the applicable regulatory requirement necessarily and directly results in the violation of several independent regulatory requirements without any further action by the person. That is, a single "mistake" has a ripple effect that triggers a series of violations. The situation is similar to a mathematics test where because a student calculates the wrong answer for the first part of a multiple part question (where each subsequent part of the question relies on the answer from the first part), the remaining parts of the question will be wrong as well even if the latter calculations are correctly performed. For these types of multiple violations, the Department should have the expressed discretion to forego pursuing the multiple violations and to pursue only the initial violation.

As an example, where a person generating hazardous waste exceeds the 90-day storage requirement, the person becomes automatically subject to the requirements in 40 CFR Part 264 applicable to a storage facility and violates these requirements simply because of the first regulatory violation. In such a case the Department should have the discretion to pursue only the violation of the 90-day storage requirement.



In many of these types of situations where multiple violations follow directly from a single initial transgression, independent enforcement actions for each of the multiple violations is not only unfair to the person involved but is also an unnecessary expenditure of Department enforcement resources. In some situations; however, the Department may still need to have discretion to bring an enforcement action for such multiple violations in order to ensure deterrence in the future.

The revised language to 340-12-030(20) suggested below would delete the current mandate that the Department always evaluate and take multiple enforcement actions in such multiple violation situations but would preserve discretion in the Department to take such multiple enforcement actions in those circumstances where the Department determines necessary.

**C. REQUESTED REVISION TO  
CURRENT RULE 340-12-030**

"Unless otherwise required by context, as used in this Division:

\* \* \*

(20) 'Violation' means a transgression of any statute, rule, order, license, permit, or any part thereof and includes both acts and omissions. Violations shall be categorized as Class One (or I), Class Two (or II) or Class Three (or III), with Class One designating the most serious class of violation. Unless otherwise required by the Department, Violations do not include a transgression of any statute, rule, order, license, permit or any part thereof that is a necessary and direct result of an earlier transgression for which the Department takes enforcement action."

2.

**A. CURRENT RULE 340-12-065**

"Violations pertaining to the management, recovery and disposal of solid waste shall be classified as follows:

\* \* \*

(2) Class Two:

\* \* \*

(k) Any violation related to solid waste, solid waste reduction, or any violation of a solid waste permit not otherwise classified in these rules.

(3) Class Three:

(a) Failure to post required signs;

(b) Failure to control litter."



## B. DISCUSSION

A general category should be established for the solid waste management list of violations in 340-12-065 that would allow a Respondent to demonstrate that a particular violation is minor and is a Class Three violation. Presently, there are only two Class Three violations listed: (1) failure to post required signs and (2) failure to control litter. Because of the detail of the solid waste laws and most solid waste permits, it would be impossible to provide a list of all the potentially truly minor violations that should be included in the Class Three category. Further, certain violations may pose a minor risk of harm under some circumstances yet may pose a greater risk of harm under other circumstances. Some provision should be made so that violations that pose a minor harm can be established as Class Three violations rather than automatically having such violations be Class Two violations under the catchall provision in 340-12-065(2)(k).

Provision (3)(c) below would allow a Respondent to show that an activity (not specifically included in 340-12-065 (1) as a Class One violation or in 340-12-065(2) as a Class Two violation) which caused minor harm or posed a minor risk of harm should be a Class Three violation. The burden to show that a violation is a Class Three under (3)(c) would be on the Respondent and would require a showing by a preponderance of the evidence. Proof by a preponderance of the evidence means that it must be established that the fact or conclusion to be proved is more probably true than false. See Riley Hill General Contractor v. Tandy Corp., 303 Or 390, 402, 737 P2d 595, 602 (1987). If the Respondent did not or could not make the required showing under (3)(c), the violation would be a Class Two under the catchall provision in 340-12-065(2)(k).

## C. REQUESTED REVISION TO CURRENT RULE 340-12-065

"Violations pertaining to the management, recovery and disposal of solid waste shall be classified as follows:

\* \* \*

(3) Class Three:

(a) Failure to post required signs;

(b) Failure to control litter-;

(c) Any violation pertaining to the management, recovery and disposal of solid waste not included in 340-12-065(1) and in 340-12-065(2)(a) through (j) which the Respondent demonstrates by a preponderance of the evidence causes minor harm or poses a minor risk of harm to public health or the environment is a Class Three violation."



### 3.

#### A. CURRENT RULE 340-12-068

"Violations pertaining to the management and disposal of hazardous waste shall be classified as follows:

(1) Class One:

\* \* \*

- (g) Failure to satisfy manifest discrepancy reporting requirements;  
\* \* \*
- (dd) Installation of inadequate groundwater monitoring wells such that detection of hazardous waste or hazardous constituents that migrate from the waste management area cannot immediately be detected;  
\* \* \*

(2) Any violation pertaining to the generation, management and disposal of hazardous waste which is not otherwise classified in these rules is a Class Two violation."

●

#### B. DISCUSSION

##### 1. Class One Violations

Two revisions should be made to the Class One violations in OAR 340-12-068. First, the violation established in 340-12-068(1)(g) for manifest discrepancy reporting requirements in certain cases can include isolated minor violations that create no serious threats or risks to human health or the environment. Such isolated minor violations should not automatically be Class One violations. The fact that similar isolated minor violations can occur and not constitute a Class One violation has already been recognized in other provisions in the rules in 340-12-068(f) [systematic failure of generator to comply with manifest system requirements], (s) [systematic failure to conduct inspections or to correct hazardous conditions discovered during inspections], (r) [systematic failure to follow container labeling requirements], (aa) [systematic failure to comply with generator annual reporting requirements] and (bb) [systematic failure to comply with TSD annual reporting requirements]. The revision included below to 340-12-068(1)(g) should be made to classify only "systematic" failures of the manifest discrepancy reporting requirements as Class One violations.

Second, 340-12-068(1)(dd) should be revised. For those facilities with Part B permits, the permits include Department-approved groundwater monitoring networks. Paragraph (dd) unnecessarily implies that even though a facility has a Department-approved and permitted groundwater monitoring network the facility would still be in violation of the law if that network failed to detect a release. Such an implication appears to contradict the provision in 40 CFR § 270.4(a) that is incorporated in Part B permits and provides that



enforcement actions will not be taken against a person holding a permit except for noncompliance with the conditions of the permit and except for self-implementing provisions of HSWA. The revision included below to 340-12-068(1)(dd) clarifies that the violation must be a violation of the facility permit.

## 2. Class Three Violations

The classification of violations for hazardous waste management and disposal should be revised to recognize Class Three violations. The majority of the other regulatory areas have Class Three violations such as, for example, 340-12-050(3)(air quality) and 340-12-055(3)(water quality).

The Oregon statutes impose no requirement that a hazardous waste activity violation be only a Class One or Class Two violation as the rules currently require. The statutes providing authority for civil penalties for hazardous waste violations state:

"(1) In addition to any other penalty provided by law, any person who violates ORS 466.005 to 466.385 and 466.890, a license condition or any commission rule or order pertaining to the generation, treatment, storage, disposal or transportation by air or water of hazardous waste, as defined by ORS 466.005, shall incur a civil penalty not to exceed \$10,000 for each day of the violation.

(2) The civil penalty authorized by subsection (1) of this section shall be imposed in the manner provided by ORS 468.135." ORS 466.880.

Nowhere in the statutes is there any indication that there should be no Class Three violations. In fact, the statute creating authority for hazardous waste violations refers to ORS 468.135, the provision in the general environmental laws (which include air and water quality), for the manner of imposition of civil penalties for hazardous waste violations.

These statutory provisions for hazardous waste also parallel, for example, the statutory authority provided in ORS 466.895 for civil penalties for underground storage tank violations. The rules in OAR 340-12-067(3)(a) through (e) for underground storage tank activities include five Class Three violations. As an additional example, see ORS 459.995(1)(a) and (2) [similar civil penalty authority for solid waste management] and OAR 340-12-065(3)(a) through (b) [creating two Class Three violations].

Several times in the past a request has been made to the Department to treat hazardous waste activities the same as other regulated areas by including Class Three violations in OAR 340-12-068. In response, in July 1992 the Department committed to consider Class Threes for hazardous waste in the "near future." In March 1994, the Department indicated that its reasons for not creating Class Three's for hazardous waste



were: (1) since the development of the classification scheme in 1989 there have been only Class One and Class Two's and the system "has worked well," and (2) because the Department is on a schedule to receive full delegation of the hazardous waste program from EPA, "continuing with the current classification scheme is necessary in this process so as not to give the impression that the Department is weakening hazardous waste enforcement through lowering a violation's class."

The first reason begs the question and provides no answer why hazardous waste violations should be treated differently than other violations. There is no analysis that the system would not "work well" with three classes of violations or in fact, any assessment of whether the system would work "better" if three classes of violations were provided for hazardous waste violations.

The second reason is now inapplicable with Oregon having been delegated full authority for its hazardous waste program by EPA. Further, EPA's RCRA Civil Penalty Policy (October 1990) recognizes the equivalent of Class Three violations by specifying that in calculating civil penalties certain violations of the hazardous waste laws can create a "minor" potential for harm and a "minor" extent of deviation from the applicable legal requirement.<sup>1</sup> EPA's RCRA Civil Penalty Policy provides the following example of a hazardous waste law violation that creates a minor potential for harm:

"Owners or operators of hazardous waste facilities must, under 40 CFR § 265.53, submit a copy of their contingency plans to all police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. If a facility has a complete contingency plan, including a description of arrangements agreed to by local entities to coordinate emergency services (§265.52), but had failed to submit copies of the plan to all of the necessary agencies, this would create a potential for harm. Enforcement personnel would need to examine the impact that failure to send the plan to the necessary agencies would have on these agencies' ability to respond in an emergency situation. If a complete plan existed and arrangements with all of the local entities had been agreed to, the likelihood of exposure and adverse effect on the implementation of RCRA may be relatively low. The minor potential

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<sup>1</sup>Other states follow this EPA policy for the assessment of civil penalties for the violation of hazardous waste laws and expressly recognize a minor category for violations. For example, the Missouri Department of Natural Resources has adopted the equivalent of the EPA policy by rule at 10 CSR 25-14.010(1)-(5) and the California Department of Toxic Substances Control has adopted the equivalent of the EPA policy as Official Policy and Procedure #EO-93-015-PP.



for harm category could be appropriate for such a situation." RCRA Civil Penalty Policy, p. 17. (Emphasis in original).

Recognition of a minor potential for harm and a minor extent of deviation means that under EPA's \$25,000 matrix a violation with those characteristics would start with a civil penalty ceiling of \$499. In contrast, Oregon's matrix in OAR 340-12-042(2) for hazardous waste law violations is a \$10,000 matrix with a floor of \$500 because there are no Class III violations for hazardous waste violations.

If Class Three violations are recognized in the rules for hazardous waste violations, some particular violations should be written into the rules in detail to ensure that certain violations that could pose a minor risk of harm are listed. Suggested Class Three violations have been included below in OAR 340-12-068, the rule establishing classification of violations for hazardous waste management and disposal. Violation (3)(a) included below parallels the Class Three violations in OAR 340-12-065 (3)(a) [solid waste management] and OAR 340-12-066(3)(c) [solid waste tire management]. Violation (3)(b) below parallels the Class Three violation in OAR 340-12-066(3)(e) [solid waste tire management].

Finally, (3)(c) below is a general category that would allow a Respondent to demonstrate that a particular violation fits as a Class Three. Because of the complexity of the hazardous waste laws and the voluminous detail of most hazardous waste permits, it would be impractical or impossible to list all truly minor violations that should be included in the Class Three category. Some provision must be made so that minor violations can be established as Class Three violations rather than automatically causing the violations to be Class Two violations under the catchall provision in 340-12-068(2).

Provision (3)(c) below would allow a Respondent to show that a transgression (not specifically enumerated in 340-12-068 (1) as a Class One violation) caused minor harm or posed a minor risk of harm and therefore should be a Class Three violation. The burden to show that a violation was a Class Three under (3)(c) would be on the Respondent and would require a showing by a preponderance of the evidence. Proof by a preponderance of the evidence means that it must be established that the fact or conclusion to be proved is more probably true than false. See Riley Hill General Contractor v. Tandy Corp., 303 Or 390, 402, 737 P2d 595, 602 (1987). If the Respondent did not or could not make the required showing under (3)(c), the violation would be a Class Two under the catchall provision in 340-12-068(2).

### **C. REQUESTED REVISIONS TO CURRENT RULE 340-12-068**

"Violations pertaining to the management and disposal of hazardous waste shall be classified as follows:

(1) Class One:

\* \* \*





(g) Systematic [F]failure to satisfy manifest discrepancy reporting requirements;

\* \* \*

(dd) Failure to properly [F]install[ation of inadequate] groundwater monitoring wells in accordance with the facility permit such that detection of hazardous waste or hazardous constituents that migrate from the waste management area cannot immediately be detected;

\* \* \*

(3) Class Three:

(a) Failure to post required signs;

(b) Failure to submit in a timely manner hazardous waste generator fees under OAR 340-102-065 or annual compliance determination fees under OAR 340-105-110;

(c) Any violation pertaining to the generation, management and disposal of hazardous waste not included in 340-12-068(1) which the Respondent demonstrates by a preponderance of the evidence causes minor harm or poses a minor risk of harm to public health or the environment is a Class Three violation."

#### 4.

##### A. CURRENT RULE 340-93-050

"(1) Except as provided by section (2) of this rule, no person shall establish, operate, maintain or substantially alter, expand, improve or close a disposal site, and no person shall change the method or type of disposal at a disposal site, until the person owning or controlling the disposal site obtains a permit therefor from the Department.

(2) Persons owning or controlling the following classes of disposal sites are specifically exempted from the above requirements to obtain a permit under OAR Chapter 340, Division 93 through 97, but shall comply with all other provision of OAR Chapter 340, Divisions 93 through 97 and other applicable laws, rules, and regulations regarding solid waste disposal:

\* \* \*

(f) A site used to transfer a container, including but not limited to a shipping container, or other vehicle holding solid waste from one mode of transportation to another (such as barge to truck), if:

(A) The container or vehicle is not available for direct use by the general public;

(B) The waste is not removed from the original container or vehicle;  
and

(C) The original container or vehicle does not stay in one location longer than 72 hours, unless otherwise authorized by the Department.



\* \* \*

(4) If it is determined by the Department that a proposed or existing disposal site is not likely to create a public nuisance, health hazard, air or water pollution or other environmental problem, the Department may waive any or all requirements of OAR 340-93-070, 340-93-130, 340-93-140, 390-93-150, 340-94-060(2) and 340-95-030(2) and issue a letter authorization in accordance with OAR 340-93-060.

\* \* \*"

## **B. DISCUSSION**

OAR 340-93-050(2)(f) specifies that certain transfer activities involving solid waste are exempt from the requirement to obtain a permit under OAR Chapter 340, Division 93 through 97 but nevertheless shall comply with all other provisions of OAR Chapter 340, Division 93 through 97. This provision is designed to allow solid waste to be collected and transported by a smaller vehicle to a certain location, off loaded there, and then loaded onto a larger transportation vehicle for transport to the ultimate disposal location. Even though a permit is not required for this "temporary" unloading and loading area, all of the other solid waste regulatory requirements apply to ensure that the activity is carried out in an environmental protective manner.

One of the requirements in OAR 340-93-050(2)(f) for qualifying for this exemption from the permitting requirement is that the container or vehicle not stay in one location "longer than 72 hours, unless otherwise authorized by the Department." The 72-hour limitation has proven to be impractical for certain special types of waste because they are often low volume type wastes. Many times special waste such as construction and demolition waste or industrial solid waste is produced in quantities that mean that only one or two containers of the waste will be picked up from a customer and taken to a site where the waste is held for pickup by a larger transportation unit for transport to the final disposal location. From an economic standpoint, there may not be sufficient containers for the larger transportation unit to make a trip to pick up the containers within 72 hours. Nevertheless, absent seeking specific waiver by the Department, the 72-hour limitation means that the containers must be picked up by the larger transportation unit.

The 72-hour limitation makes sense for certain types of wastes such as, for example, wastes containing putrescible material because those wastes potentially can decompose rapidly and may result in nuisance conditions. Other wastes such as industrial solid waste and construction and demolition waste do not undergo such rapid decomposition and are less likely to create a significant risk or potential harm if allowed to stand for a slightly longer period. To recognize the economic limitations inherent with certain low volume special type waste and to avoid the burden for the Department of having to pre-approve longer retention times, the 72-hour limitation should be increased to 30 days for



non-putrescible wastes. The limitation would remain at 72-hours for putrescible waste. A requested revision to the rule is included below.

**C. REQUESTED REVISION TO  
CURRENT RULE 340-93-050**

"(1) Except as provided by section (2) of this rule, no person shall establish, operate, maintain or substantially alter, expand, improve or close a disposal site, and no person shall change the method or type of disposal at a disposal site, until the person owning or controlling the disposal site obtains a permit therefor from the Department.

(2) Persons owning or controlling the following classes of disposal sites are specifically exempted from the above requirements to obtain a permit under OAR Chapter 340, Division 93 through 97, but shall comply with all other provision of OAR Chapter 340, Divisions 93 through 97 and other applicable laws, rules, and regulations regarding solid waste disposal:

\* \* \*

(f) A site used to transfer a container, including but not limited to a shipping container, or other vehicle holding solid waste from one mode of transportation to another (such as barge to truck), if:

(A) The container or vehicle is not available for direct use by the general public;

(B) The waste is not removed from the original container or vehicle;  
and

(C) The original container or vehicle does not stay in one location longer than 72 hours if it holds putrescible waste or 30 days if it holds non-putrescible waste, unless otherwise authorized by the Department.

\* \* \*"

## Air Quality Program Comments Received and Department's Response

Comments were received from:

1. Liz Hurley  
Forest Grove
2. Ken & Candy Snell  
Hillsboro
3. B.L. Wood  
Hillsboro
4. Jay A. Wellner  
Hillsboro
5. Beverly Aldrich  
Hillsboro
6. Susan J. Bliss  
Hillsboro
7. Robert E. Neely  
Hillsboro
8. Dock Shaw  
Hillsboro
9. Cheryl Standeford  
Hillsboro
10. Joe Weller  
Hillsboro
11. Paula and Dave Thatcher  
Hillsboro

*Attachment C - 9 pages*

## **Air Quality Program Comments Received and Department's Response**

**Comment:** (1,10)

The Department should ban backyard burning in the area within the urban growth boundary, including for Hillsboro, Cornelius, and Forest Grove.

**Comment:** (2,5,6,7,8,10)

The Department should ban backyard burning within the Hillsboro city limits, where curbside pickup of yard debris is available. Curbside pickup of yard debris is a free, easy alternative to backyard burning, that was not available when the original backyard burning rule was adopted.

**Comment:** (9,11)

Backyard burning should be banned year-round in residential neighborhoods.

**Comment:** (2)

Alternatively, the Department should ban backyard burning on weekends and holidays during the Spring and Fall burning seasons, where curbside pickup of yard debris is available.

**Comment:** (2)

The current rule causes confrontations between neighbors, because it allows any burning which does not cause public or private nuisance. When houses are only yards apart, it is impossible to have a backyard burn without causing a nuisance. To enforce the rule, people are forced to call the Fire Marshal, which tends to escalate, rather than resolve, conflict.

**Comment:** (2,3,6,9,10,11)

Backyard burning ruins many weekends and holidays, and prevents outdoor activities such as hanging laundry outside, doing yard work, etc... Smoke from backyard burning causes allergic reactions, and other health effects, and irritates adults, children, and pets.

**Comment:** (3,6,9,10)

Persons using backyard burning burn wet material, and sometimes include plastic and trash.

**Comment:** (4)

Most people welcome the use of backyard burning. Many users of backyard burning are retired and rely on backyard burning because the volume of debris exceeds what can be placed in yard debris collection containers and Metro sourced compost makers. It would be cost prohibitive to hire someone to haul it away.

**Comment:** (4)

Without allowable burning, yards would become more fire hazardous from the buildup of dead and dry material. The Spring and Fall burning times limit fire danger, because surrounding vegetation is green and damp.

**Comment:** (6)

Backyard burning contributes to the health problems of children with asthma, and elderly people with pulmonary diseases.

**Comment:** (7,10)

The Department's regulation of gross air pollution, based on sampling at

specific sites, does nothing to alleviate locally severe air pollution. Significant local air pollution impacts are rarely, if ever, measured by ambient air monitoring. Lack of knowledge about the local levels of air pollution caused by backyard burning does not mean that there is no threat to health.

**Comment:** (7,8,10)

The Hillsboro area has experienced dramatic growth in recent years. Pollution from industrial and automotive sources has increased. Backyard burning should be re-examined in that context.

**Comment:** (10,11)

Lot sizes in Hillsboro have decreased, which means less yard debris per home site. At the same time, the increased proximity of neighbors increases the number of people potentially affected by burns, and the likelihood that they will be affected. In addition, back yard fires are closer to structures, which increases the danger of fire.

Response: The Department's ability to regulate backyard burning is constrained by Oregon Revised Statutes 468A.085. The statute provides that:

- (2) After June 30, 1982, the [Environmental Quality Commission] may prohibit residential open burning in areas of the state if the commission finds:
  - (a) Such prohibition is necessary in the area affected to meet air quality standards; and
  - (b) Alternate disposal methods are reasonably available to a substantial majority of the population in the affected area.

The Hillsboro area meets only one of the two criteria set by the law: alternatives to backyard burning are available to many people. However, the Department's air quality monitors do not show violation of air quality standards at any of the sites in the Hillsboro area. The Department would have no basis for saying that a burn ban is necessary to meet the standards. The Department is therefore unable to prohibit backyard burning in the Hillsboro area.

The statute very clearly states that local governments are in no way prohibited from regulating backyard burning more strictly than the Department does. Hillsboro and Forest Grove are free to further limit or ban burning if they choose. If necessary, citizens can also bring nuisance actions in the courts to address individual complaints.

State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 18, 1996

**To:** Susan M. Greco  
**From:** Chuck Costanzo  
**Subject:** Letter from Josephine County

On August 7, Michael Snider and Barbara Sunday of Josephine County, and Chuck Costanzo and Greg Farrell of the Department, met to discuss the enforcement of on-site violations and structures in violation of planning regulations.

The discussion was precipitated by a letter written by Michael Snider, Asst. Planning Director for Josephine County to Susan Greco, DEQ, with concerns about on-site violations and the response to these violations by Department on-site staff. Mike was responding to the DEQ memo of May 15, 1996 requesting comments on any of the Departments rules (periodic rule review).

In his letter, Mike voiced concerns about the response time to cases where "raw sewage disposal is documented on the ground or into water courses." Mike's letter went on to suggest that the Department's rules be amended to require that investigation of complaints be commenced within ten days and that the state adopt citation authority. He further stated that when "these complaints are forwarded to the local DEQ office, timely action rarely occurs."

Mike and Barbara stated in the meeting that they felt we didn't have enough staff to adequately investigate complaints. Their impression was that the Grants Pass on-site staff was overwhelmed with permitting work load. They also felt that there were inadequate tools for enforcement within both the county and state, that the county had tried to get citation authority without success and that the state could pursue citation authority. Mike felt that his requested rule amendments could produce more staff and better tools for enforcement.

The Department responded as follows:

The on-site staff in Grants Pass has and will be available to work with the counties when a particular violation is a pollution or health hazard problem. The Department has in the past (and will continue) to offer to make field visits with county planners if that will aid in the resolution of the problem. A large number of the sewage complaints involve illegal buildings, including mobile or bus residences. It is DEQ policy to not investigate complaints that involve illegal buildings since zoning violations must be resolved first. Furthermore, it is often difficult, at best, to get the violators to pay for a permit and design a septic system for a dwelling that will, in all likelihood, be moved in the future.

The complaints received, many times, are not valid and have been generated by neighborhood squabbles. The Department attempts to respond to complaints that appear to be valid and there

are currently several ongoing investigations and efforts to get sewage violations resolved. These are very time consuming and require much effort to get resolved.

The Department feels that a time limit regarding investigation of complaints in the rules, would not resolve the problem. The Department still would not have the staff to do all of the work. Although the on-site staff in Grants Pass was recently increased by one FTE, that increase also included the increased workload of WPCF permitting. The on-site staff feels that their primary responsibility is to the permittees that pay fees and expect timely consideration of their permit applications.

The Department's directive is to be in partnership with permittees and achieve voluntary compliance. Civil penalties are the main enforcement tool to be used as a last resort but generally, they have not been very effective when used against individuals for sewage violations. The Department also has the authority for criminal action but with only one police officer statewide to investigate environmental crimes, resources are limited. Furthermore, the Department prefers not to use criminal actions on individual sewage violations. Criminal citation has been used for commercial facilities with failing septic systems.

The number of complaints has always been greater than the on-site staff could respond to even when the program was handled by the Josephine County Environmental Health staff. The Health Department still can investigate sewage complaints and if the complaint is valid, refer it to DEQ for enforcement proceedings.

In general, Mike and Barbara were comfortable with the work done by the Grants Pass on-site staff but felt that the problem of inadequate enforcement, probably statewide, should be dealt with by state administrators. Mike felt that on-site pollution complaints are not adequately investigated and enforced. His hopes were that his letter would generate some discussion that could lead to some resolution of the problem of inadequate enforcement of on-site problems.



## **Waste Management and Cleanup Program**

Listed below are summaries of comments on Oregon Administrative Rules pertaining to the waste management and cleanup program received during the periodic rule review public comment period. Also presented below is the Department's response to each comment.

### **Comments Related to Division 12**

The Department will consider these comments when it undertakes its next formal rulemaking effort to change the Division 12 rules. At that time, the Department plans to subject all the suggestions to both internal and external review.

#### **1. OAR 340-12-030**

**COMMENT:** Commentor suggests amending the definition of "violation" by limiting its scope to only those violations which are not "the necessary and direct result of an earlier transgression ...."

**RESPONSE:** The Department agrees that the commentor's basic idea may have merit, but believes that the suggested rule amendment would unreasonably limit the Department's options. The amendment as proposed could apply to all formal and informal actions. The Department believes there is no reason to prohibit a Department inspector from referring to a violation when there is no penalty assessed for that violation. For example, Notices of Noncompliance (NONs) are non-legal documents designed to inform the recipient about the law violated, the environmental consequences of it, what needs to be done to correct it, and the possible formal enforcement consequences. DEQ inspectors must be able to inform NON recipients about the consequences of earlier transgressions as well as those that may be duplicative or consequential. While the Department would be opposed to a rule change that restricts the tools an inspector could use in the NON, the Department will consider the concerns of the commentor and alternate ways in which inspectors can cite consequential violations when necessary. One way currently being considered is that the inspector could cite the initial transgression as a "violation" and specify that other subsequent transgressions resulted from that initial transgression.

To the extent that the suggested proposal applies to Notices of Civil Penalty Assessment, the Department believes the change is not necessary because the Department already operates under a policy that only one penalty be assessed for one "transgression." The Department believes that the system has worked well during the past seven years, and we have received few complaints about the process. However, because we believe we are already operating as the proposed rule would require, and because the Department is not otherwise restricted by double jeopardy or other limitation, the Department will consider the proposal when a Division 12 rulemaking effort is undertaken in the future.

## **2. OAR 340-12-065**

COMMENT: Commentor's proposal would create a new default Class III category in solid-waste cases where the respondent proves that the violation "causes minor harm or poses a minor risk of harm to public health or the environment."

RESPONSE: The amendment would unreasonably burden the Department. Although the proposal purports to give the respondent the burden of proof on the harm issue, in fact the Department would be compelled to submit evidence of harm to overcome respondent's showing. It would be very difficult and time consuming for the Department to collect the mass of evidence needed to show a statistically-significant harm that is more than "minor." As a result, almost all unclassified violations would become Class III. Because the default category was set at Class II for Solid Waste, as in all other program areas, the amendment would be inconsistent with other program areas. The Department believes that unclassified violations should always default to Class II. The Department would be opposed to a case-by-case determination of class as proposed, but will consider adding additional Class III violations to the rules when a Division 12 rulemaking effort is undertaken in the future.

## **3. OAR 340-12-068(1)(g)**

COMMENT: Commentor suggests that the violation of failure to satisfy manifest discrepancy be a Class I violation only if the failure is "systematic" because this would be consistent with other violations which are Class I violations only when committed systematically (*i.e.*, "systematic failure of generator to comply with manifest system requirements, systematic failure to conduct inspections or to correct hazardous conditions discovered during inspections, systematic failure to comply with container labeling requirements, systematic failure to comply with generator annual reporting requirements, and systematic failure to comply with TSD annual reporting requirements").

RESPONSE: The failure to satisfy manifest-discrepancy reporting requirements is fundamentally different than the other violations the commentor cites. A failure to satisfy a manifest discrepancy violation occurs after the person has identified that his hazardous waste has already been characterized or managed improperly. It is crucial, for reasons of public health and the environment, that the person responsible for tracking the waste help in correcting the improper management every time. By way of illustration, in a recent incident, an Oregon waste-management company failed to satisfy a manifest-discrepancy reporting requirement involving cyanide hazardous waste. The cyanide waste had been improperly manifested as hydrochloric-acid hazardous waste. Had the company consolidated the miss-identified cyanide waste with hydrochloric-acid waste, cyanide gas would have been released, and could have created a potential hazard to public health and the environment. Because of the serious consequences that can result from manifest discrepancies, the Department opposes reducing the classification for failure to resolve or report them.

## **4. OAR 340-12-068(1)(dd)**

COMMENT: Commentor suggests rewording OAR 340-12-068(1)(dd) for the purposes of clarification.

RESPONSE: The change is not needed because OAR 340-12-068(1)(dd) does not contradict other rules. OAR 340-12-068(1)(dd) does not create any violation, it merely classifies a violation of other rules. Nonetheless, the Department agrees that the commentor's suggestion might clarify the rule, and agrees to consider this change when a Division 12 rulemaking effort is undertaken in the future.

#### **5. OAR 340-12-068(3)**

COMMENT: Commentor's proposal would create a new default Class III category in hazardous-waste cases where the Respondent proves that the violation "causes minor harm or poses a minor risk of harm to public health or the environment."

RESPONSE: The amendment would unreasonably burden the Department. Although the proposal purports to give the respondent the burden of proof on the harm issue, in fact the Department would be compelled to submit evidence of harm to overcome respondent's showing. It would be very difficult and time consuming for the Department to collect the mass of evidence needed to show a statistically-significant harm that is more than "minor." As a result, almost all unclassified violations would become Class III. Because the default category was set at Class II for hazardous waste, as in all other program areas, the amendment would be inconsistent with other program areas. The Department believes that unclassified violations should always default to Class II. The Department would be opposed to a case-by-case determination of class as proposed, but would consider identifying some violations as Class III when a Division 12 rulemaking effort is undertaken in the future.

### **Comments Related to Division 93**

#### **1. OAR 340-93-050**

COMMENT: Certain transfer activities involving solid waste are exempt from the requirement to obtain a solid waste disposal permit. To be exempt, a container or vehicle cannot stay in one location longer than 72 hours, unless otherwise authorized by the Department. The 72 hour limit is impractical for certain types of low volume, nonputrescible waste that economically cannot be moved every 72 hours. The 72 hour limit should be increased to 30 days for nonputrescible waste.

RESPONSE: The exemption from permitting for containers that transfer waste and sit in storage for less than 72 hours was added to the rules at the request of the waste management industry and was intended to address the need to temporarily store waste during transfer. The current rule authorizes the Department to extend the 72 hour limit. To our knowledge, the Department has never been asked to extend the 72 hour limit.

The Department agrees that the 72 hour limit may be too strict for some situations. Rather than change the rule and pick another time limit, we would rather first try using our authority to extend the 72 limit. If we can't address legitimate need for more than 72 hour storage in this manner, we will take the issue to the Department's Solid Waste Advisory Committee for consideration of rule revisions.

### **Comments Related to Division 122**

#### **1. OAR 340-122-045**

COMMENT: The cleanup standard for PCB contained in Oregon Administrative Rule 340-122-045 Table 1 and Appendix 1, Item 47 has caused a tremendous amount of unnecessary expense to the electric utility community. This same standard has been adopted by numerous consultants and lenders as the primary PCB cleanup standard, but it is different than the standard used by the federal Environmental Protection Agency.

RESPONSE: The Department recognizes that the utility industry has been concerned about the PCB cleanup standard for some time. Two activities now coming to a close should act to make PCB cleanups quicker and cheaper.

First, the Department has been working with representatives from the utility industry to develop a generic remedy cleanup standard for PCB. The generic remedy will allow cleanup of PCB contamination to occur much quicker because site sampling and analysis is not as detailed as would be required under the site-specific risk assessment.

Meanwhile, the cleanup law passed by the 1995 Legislature and the proposed rules to implement that legislation makes the cleanup standards risk based. It is likely that new toxicological data and revised exposure assumptions will lead to higher residual concentrations being left behind under either the generic remedy or the site-specific risk assessment. The present PCB cleanup standard for simple soil cleanups is 0.08 parts per million (ppm).

While these two activities will speed and lessen the cost of cleanups, there will still be differences between state and federal cleanup policy. The protective level dictated by the revised Oregon cleanup law and the proposed cleanup rules remain at 1 in a million excess cancer risk. The new rules retain the OAR 340-122-045 Table 1 value for PCB, but the generic remedy and the proposed rule allow the level of protection to be achieved in ways other than by reducing concentration. Presently, the federal cleanup standard is not tied to any particular risk number, but relies on the concentration listed in the Toxic Substances Control Act.

## **WATER QUALITY PROGRAM RULE REVIEW**

The Water Quality program is governed by the rules contained in OAR Chapter 340, Divisions 40 to 81. Staff conducted a review of all of its rules based on the following factors:

1. The economic impact of the rule;
2. The continued need for the rule;
3. The complexity or redundancy of the rule;
4. The extent to which the rule duplicates or conflicts with other rules;
5. The degree to which technology has changed in the area affected by the rule;
6. The potential for enhancement of job opportunities; and
7. Any complaints received regarding the rule.

Based on this review, the program has determined that some rule changes or other future actions are needed. These changes or actions are summarized below.

### **DIVISION 40--GROUND WATER QUALITY PROTECTION**

These rules establish the minimum requirements for ground water quality protection in the State. Sections 340-40-001 to 340-40-080 primarily apply to point sources of pollution which require a permit. Sections 340-40-100 to 340-40-135 are applicable to area-wide sources of pollution. Sections 340-40-140 to 340-40-210 refer to Oregon's Wellhead Protection Program, adopted in 1996.

The rules have substantial positive and negative economic impacts on municipalities, private businesses and the general public. Implementing the rules can be expensive because municipalities and businesses discharging waste to the groundwater must construct and operate treatment facilities that reduce or eliminate the pollutants in wastewater discharged to the ground water. But high quality ground water is essential to farmers who use the water for irrigation, industries who use groundwater for processing, municipal and other public water suppliers, domestic well owners and the general public who must rely on this water for consumption. Because of this, protection of ground water quality is a high priority and has strong public support in spite of the negative impact of these rules.

In 1989 the Oregon Legislature passed the Groundwater Protection Act and the Department adopted new and revised rules in the same year. The rules were written using advisory committees to ensure better quality and to avoid overlapping, duplication or conflicts with other rules, particularly rules prepared by the Department of Water Resources and the State Health Division. Guidance documents have recently been updated. Although efforts have been made to improve clarity, the regulated community and general public believes the rules are very complex, difficult to comprehend, unduly restrictive, rigid and difficult to implement. The Department's Industrial Waste Permit Advisory Committee recently completed a review of the ground water program and rules. Concerns expressed by this committee pertaining to the rules are summarized, as follows:

- a) There is a lack of consistency in the application of regulatory requirements for ground water quality protection and in rule interpretation, both within the water quality program and between programs within DEQ. The inconsistency stems, in part, from the complexity and lack of clarity in the rules.
- b) The rules do not recognize differences in ground water characteristics, e.g., irrigation return water, natural high quality aquifers, and artificially created aquifers are all subject to the same requirements even though there may be variations in water uses, and in the type and degree of protection needed.
- c) The rules for concentration limit variances are rigid and are not applicable to some situations. Application of this section of the rules is not consistent.
- d) The rules appear to go beyond the intent of the statute adopted in 1989.
- e) Guidance is often treated as a requirement; guidance often goes beyond the intent of the rule.
- f) There is a fundamental difference in philosophy between industry and DEQ regarding the degree to which ground water should be protected. Industry believes that designated uses for ground water should be developed, as has been done for surface water. For example, some ground water should be available for industrial uses and not be subject to high quality requirements essential for drinking water. Examples include perched aquifers, agricultural and irrigation return waters, artificial aquifers, etc.

The Department needs to form an advisory committee to review the rules and to make recommendations for revision of the ground water protection rules. Formation of the committee and staff support is a high priority of the water quality program, but will have to be delayed until next biennium due to staff resource shortage.

**DIVISION 41--STATEWIDE WATER QUALITY MANAGEMENT PLAN:  
BENEFICIAL USES, POLICIES, STANDARDS, AND TREATMENT CRITERIA  
FOR OREGON**

These rules establish policies, standards and treatment criteria which have to be achieved by pollution sources. The rules ultimately require the development, design and construction of pollution control facilities. The pollution sources must make capital expenditures to construct wastewater treatment facilities necessary to treat the wastes, along with the expenditures made to consulting firms to develop plans and engineering designs, vendors that sell treatment equipment, plant operators, and construction firms which build the physical facilities. In addition, funds must be expended for ongoing operation and maintenance of the facilities. Although these rules have a significant economic impact on regulated sources, it is the policy of the State of Oregon to protect

water quality for identified beneficial uses of State waters.

The rules are reviewed on a three year cycle pursuant to federal requirements. During this review process efforts are made to reduce complexity whenever possible, along with a effort to reflect current scientific information. The Department recently completed a water quality standards review in early 1996 and presented recommendation to the Commission. Any recommendations developed for any subsequent changes to the rule will take place no sooner than the 1997-99 biennium.

#### **DIVISION 43--CHEMICAL MINING**

These rules require certain controls of cyanide and other chemicals used in mining and could prevent mining of some very low grade ores. The adoption of the rules is relatively recent (1991) and should be up to date with technology, economic conditions, or other factors.

Unfortunately, the rules are extremely complex because it regulates a complex industry. Redundancy with other state rules was avoided by the Department working closely with the Department of Geology and Mineral Industries.(DOGAMI) in development of the rules.

In 1995, a petition was presented to the Commission requesting rule amendments which would require permit applicants (mining discharges) to submit full disclosure of past practices and compliance at all mining sites. The applicant would also be required to list all affiliates, shareholders, stockholders, etc., down to 10% ownership. The rule would authorize the Department to deny a permit based on the information received. This amendment would be applicable to not only chemical mining but hard rock mining as well. The Department is currently evaluating the petition and will utilize an advisory committee in the 1997-99 biennium to consider options.

#### **DIVISION 44--CONSTRUCTION AND USE OF WASTE DISPOSAL WELLS OR OTHER UNDERGROUND INJECTION ACTIVITIES**

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 regulated by EPA. Also, for the protection of groundwater, this rule or an equivalent is essential.

The rule does prohibit certain underground injection activities in Oregon. For example, the rule prohibits deep well injection of hazardous wastes. This practice is allowed in many states.

Some overlapping with other state rules may occur since DOGAMI does have rules related to the underground injection of oil and gas field production water. But the

Department attempts to work closely with them and not duplicate their efforts. In addition, the Department of Water Resources does have rules pertaining to the injection of geothermal fluid. Again, the Department attempts to work closely with them and not duplicate their requirements.

Since the last rule amendments in 1983, there have been significant changes in technology and in economic conditions in Oregon. A thorough review and evaluation of this rule will be undertaken in the 1997-99 biennium. After the review, an advisory committee should be convened to evaluate possible amendments to the rule.

#### **DIVISION 45--REGULATIONS PERTAINING TO NPDES AND WPCF PERMITS**

NPDES and WPCF permits are the primary tools for regulating point source discharges of wastes in Oregon. There is no other mechanism for achieving waste treatment and for allowing specified effluent discharge to streams. The permitting process is also the primary tool for preventing discharges to ground water.

This rule has both negative and positive economic impacts on municipalities, private domestic treatment systems, industries, small businesses, government and the general public.

Negative impacts are associated with costs for collection, transport and treatment of wastes, and disposal of treated effluent and sludge. These costs are very substantial and include capital investment, operation and maintenance expenses, and fees. Domestic and industrial permit holders pay over four million dollars annually to the Department for staff compliance activities and permit processing. Since 1970 domestic and industrial sources have invested about three billion dollars in wastewater collection and treatment facilities. The cost for operation and maintenance of domestic and industrial treatment works is not known but is believed to be very substantial.

Positive impacts are associated with the pollution abatement activities performed by the domestic and industrial sources. Without the high degree of treatment provided by municipalities and industry, most rivers and many 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.

New technology occurs continually in the wastewater treatment field. Division 45 specifies permitting requirements but are not technology specific. 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 rule is sufficiently flexible, however, to allow permit writers to negotiate implementation schedules which do recognize economic conditions.



Division 45 has been amended many times since 1976. The rule has become complex, lacks clarity and appears to be inconsistent with some parts of Division 71. The division is now being reviewed by a Department advisory committee; proposed amendments will be presented to the Commission by July 1997. Some possible areas for proposed revisions include the following: a) Clarify requirements for federal agencies to apply for an NPDES or WPCF permit; b) Incorporate requirements for storm water permits; c) Improve rules related to development and issuance of general permits; d) Clarify provisions for issuance of NPDES permits in emergency situations; e) Update references to federal regulations; f) Amend the rule to better regulate public collector sewer system that discharge to another system for ultimate treatment and disposal; g) Incorporate legislative adopted industrial waste treatment permit fees into the fee schedule; h) Clarify procedures for applying for a hardship fee suspension; i) Prepare several housekeeping changes to the waste treatment permit fee schedule; and j) Eliminate inconsistencies between Divisions 45 and 71 regarding requirements and fees for WPCF permits.

#### **DIVISION 48--CERTIFICATION OF COMPLIANCE WITH WATER QUALITY REQUIREMENTS AND STANDARDS**

Applicants, under these rules must conduct activities that are in compliance with the State's water quality standards. An applicant must develop the information for the application and conduct the necessary work or activity required by the Department to protect the water quality. The rule helps to ensure that the regulated activities are performed in an environmentally sound manner.

This rule was intended to apply only to hydroelectric applications. There may be a need to revise the rule for applicability to section 404 dredge and fill removal projects. Also, with the recent federal court decision requiring 401 certifications for grazing permits it may be necessary to revise the rules to establish a process for reviewing these activities.

Furthermore, the fees charged to applicants need to be reviewed and modified if needed. This activity should take place when the Department reviews the fee structure for the entire water quality program.

#### **DIVISION 49--REGULATIONS PERTAINING TO CERTIFICATION OF WASTEWATER SYSTEM OPERATOR PERSONNEL**

The rule is needed pursuant to statutory requirements and to ensure proper operation of wastewater treatment systems.

Although the rules regulating operator certification are relatively complex in some areas, guidance documents have been developed and updated to assist system owners and operators regarding examinations, contract supervision, supervisor's availability, system classification, etc.

Although the Department endeavors to hold the fees as low as possible ( the entire program is administered by less then two FTE), fees charged to operators need to be reviewed and modified. Fees should be sufficient to cover the costs for administering the program and this does not appear to be the case. This activity will take place when the Department reviews the fee structure for the entire water quality program.

#### **DIVISION 50--LAND APPLICATION AND DISPOSAL OF SEWAGE TREATMENT PLANT BIOSOLIDS AND BIOSOLIDS DERIVED PRODUCTS INCLUDING SEPTAGE**

These rules require wastewater treatment facilities to process biosolids. The rule allows privatization of all phases of solids handling. In addition, the rule encourages the use of biosolids derived products. Also, the rule is sufficiently flexible to allow entrepreneurs to investigate new technology for solids stabilization and utilization.

These rules do have an impact associated with the costs for treatment and land application of biosolids. These costs include capital investment, operation and maintenance costs and payment of permit fees to the Department. However, most permitted sources select biosolids land application over incineration or landfilling because it is the most cost effective and environmentally sound solids handling method.

This rule was recently rewritten to reduce complexity and redundancy, improve clarity, and to comply with federal requirements. The revisions were recently adopted by Commission action. There is some overlap between this rule and regulations governing the solid waste program. Department staff are continuously working to end these overlaps and to improve consistency in the rules between the water quality program and the solid waste section of the waste management program.

While there are no immediate plans to revise these rules, the rules reference some federal rules, which have been changed. Additional federal rule changes are planned for early December of 1996 and late February 1997. References will need to be updated in the future. At that time, the need for several housekeeping changes, e.g., better referencing, typing errors, etc. will be addressed.

#### **DIVISION 52--REVIEW OF PLANS AND SPECIFICATIONS**

These rules requires that domestic and industrial sources submit for review most engineering plans and specifications pertaining to disposal systems, treatment works and sewerage systems. 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.

The rule is needed for the following reasons: a) an independent review provides a service to many municipalities who do not have sanitary engineers on staff; b) technical assistance is provided by experienced engineers; c) the water quality program gains valuable

technical knowledge and understanding of municipal and industrial treatment systems; d) federal money would be lost to the State from agencies relying on DEQ engineers to provide an independent review.

Currently, approximately eight cities with professional engineers are allowed to design collection systems without submitting the plans and specifications for Departmental approval prior to building the systems. Some municipalities would advocate broadening this discretion or limiting the Department's role in other ways.

### **DIVISION 53--MUNICIPAL WASTE WATER TREATMENT WORKS CONSTRUCTION GRANTS PROGRAM**

The EPA funded and Department funded construction grants program is no longer viable because the U.S. Congress does not provide funds for the program. The construction grants program has been replaced by the State Revolving Fund Program, Division 54. Currently about eight grants remain active. These rules need to be repealed once these grants have been completed. This is scheduled to occur during the 1997-99 biennium.

### **DIVISION 54--STATE REVOLVING FUND PROGRAM (SRF)**

These rules establish the procedures and selection criteria 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.

The SRF has been established as a permanent, significant source of financial assistance for local governments with municipal wastewater treatment needs. 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.

Current rules require all assisted projects to be publicly owned, and limit borrowers to municipal corporations. Federal rules allow nonpoint pollution control loans to be made to private entities for privately owned projects. Expansion of the eligibility criteria would support Departmental efforts to be more effective in dealing with nonpoint source water pollution problems.

### **DIVISIONS 71, 72, and 73.**

The rules within these divisions prescribe minimum standards for the construction, alternation, 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, licensees, 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 citizens of Oregon.

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 environment. Compliance with the rules can be expensive for on-site systems.

There are about 6,000 permits issued each year for construction of on-site systems or the pumping or cleaning of these systems. Each permit 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.

Many sections of these rules were recently rewritten to reduce complexity and redundancy and to improve clarity. The revisions were adopted by Commission action in the fall of 1995.

On-site technologies are evolving continually throughout the nation. The recent rule revisions ensure that technical advancements can be reviewed and incorporated into the program when feasible.

Many residents of the State do not believe on-site system activities should be regulated; many believe that the regulations are too stringent.

As noted above, many of the rules were substantially revised in the fall of 1995. There is a need to review these rules carefully for housekeeping changes, improved clarity, and to re-evaluate the fees. The rules will continue to be difficult implement unless the fees are increased. The Department is currently forming an advisory committee to address the need for fee increases, whether holding tank fees should be reduced, appropriate housekeeping changes, and a number of technical issues such as conditions associated with saturation, sand filters, and whether or not to include a "septic tank inspection at sale" as part of the compliance activities associated with the federal Coastal Zone Management Act.

## **DIVISION 81--STATE FINANCIAL ASSISTANCE TO PUBLIC AGENCIES FOR WATER POLLUTION CONTROL FACILITIES**

These rules establish and describe 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. 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 rules have beneficial economic effects on municipalities by reducing borrowing costs

for the acquisition of water pollution control facilities. Since general obligation bonds require 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. If necessary a state-wide ad valorem property tax could be levied to repay the bonds.

The rules are short and an attempt has been made to write them as simply as possible. However, the field of municipal finance is complicated, and the rules reflect this complexity. They were written to complement the rules of other financing programs with the Department, principally the State Revolving Fund program and programs of the Economic Development Department.

No need for rule changes have been identified. Although there have been no guidance documents prepared to explain the regulatory requirements, documents will be prepared should the need arise.

## Air Quality Programs

Air quality programs are governed by rules in OAR Chapter 340, Divisions 020 to 035.

In 1995, the Air Quality Division began a program of rule review and revision. A survey of staff generated a list of over sixty suggested rule revisions. Since then, additional suggestions by staff, the public, and the regulated community have brought the total well over one hundred.

Reasons for revision have included that the rule:

- is not needed
- is too complex
- conflicts with or duplicates other regulations
- could be revised to lessen economic impact or enhance job producing enterprises
- is obsolete or needs revision due to changes in economic or technological factors

Most suggestions have been for fairly minor revisions. Rules from the list have been gathered into packages containing three or four minor substantive issues, and a number of grammatical or other housekeeping changes. The packages have been put through the normal rulemaking process on an average of one package every month and a half. In addition, the Department has made some major revisions of the rules, which have gone or are going through rulemaking individually.

As of August, 1996, of one hundred twenty three suggested rule changes, forty five had been adopted, twenty two were in process, and twenty five had been considered, but rejected. Thirty one remain to be addressed.

Examples of the housekeeping revisions are: outdated cross references, rewording to create consistency between rules, and clarification of rule language. Examples of minor revisions are: replacement of obsolete test methods, changing compliance determination methods to lower costs, and revision of emission limits. Examples of major changes have been: fee increases, revision of public participation and major program rule changes.

### **Major air quality rule changes currently in process**

#### **New Source Review**

New Source Review (NSR) regulations are designed to review construction of new major sources and major modifications to address adequate control of emissions. Sources that have a Significant Emission Rate<sup>1</sup> increase of a criteria pollutant are subject to NSR. The requirements of NSR vary depending on the attainment status of an area, with the most stringent requirements for sources in Nonattainment areas.

Key changes being considered:

- Clarify which emission increases are subject to NSR.

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<sup>1</sup> The rate deemed significant varies by pollutant.

- Clarify the control technology requirements for past modifications that become subject to NSR.
- Exempt hazardous air pollutants from NSR because they are subject to other regulations adopted in 1993.

### **Plant Site Emission Limits**

Plant Site Emission Limits (PSELs) are emission limits established for total emissions from a facility as an airshed management tool, though they also provide sources with operational flexibility. Sources must comply with specific emission standards in addition to staying within the overall PSEL levels.

Key changes being considered:

- Clarify which emission increases are subject to PSEL rules and which are subject to NSR.
- Exempt individual pollutants with de minimis emission from the requirement for a PSEL.
- Clarify procedures to ensure that the PSEL is enforceable, including requirements for PSEL components and compliance determination methods.
- Retain the requirement for short term PSELs only where needed for air quality protection. Establish a new procedure for handling requests for short term PSEL increases

### **Emissions Trading**

Emissions trading occurs when voluntary emission reduction occurs at one source or emission unit, and a corresponding increase occurs at another source or emission unit. To be eligible for trading, reductions must be surplus, quantifiable, permanent, and enforceable. Existing Oregon rules allow trading under three circumstances. First, netting is a type of trading within a single source that allows a source to avoid NSR by keeping its net emission increase below a SER. Second, offsetting is a type of trading between sources that is required when a new major source or modification is constructed in areas with limited airshed capacity. Finally, bubbling is a type of trading that allows a source to exceed an emission standard at one emission unit by reducing emissions at another emission unit in the same facility. Bubbling between sources, sometimes called open market trading, is not allowed in Oregon. Emission reduction credits (ERCs) may be banked (designated for later use)

Key changes being considered:

- Clarify the basic requirements for creation of an emission reduction credit (ERC). The reduction must be: surplus, quantifiable, permanent, and enforceable.
- Increase incentives for voluntary early emission reductions by providing more certainty and flexibility for sources that generate ERCs.
- Clarify requirements for the use of ERCs generated by shutdowns.
- Update the bubble rules to meet EPA guidelines.

### **Permit modification improvements**

The Environmental Protection Agency has proposed changes to its Title V permit program regulations. The proposed changes include matching the level of public input to the

environmental significance of permit modifications. The final regulations are not expected to be promulgated until January of 1997.

The Department of Environmental Quality expects to revise its public process regulations based on the final EPA regulations. The Department is interested in improving its permit modification process, and has been exploring possibilities with the Air Quality Industrial Source Advisory Committee.

The Department's goals are to:

- Make permitting as efficient and expeditious as possible, while affording the most opportunity for public participation in actions with environmental impact.
- Within existing resources, shift effort away from numerous less environmentally significant actions toward an earlier, more extensive focus on the actions with the most potential to affect public health and the environment.
- Tailor the federal operating permit process to accommodate Oregon's distinct regulatory approaches.
- Improve the effectiveness of public participation for air permitting actions.



## **Waste Management and Cleanup Administrative Rule Review**

The Waste Management and Cleanup program regularly reviews its rules to delete or modify those determined to be not needed, or a duplicate of other state, local or federal regulations, or that should be modified because factors have changed since original adoption. Rule makings occur frequently allowing this regular rule review. Also, each of the program areas has had one or more citizen advisory committees that have reviewed all or parts of rules and have allowed the public to recommend rule changes.

The request for comments on, and the internal review of, existing rules governing the activities of the Waste Management and Cleanup program considered, where applicable, the following:

- the continued need for the rules;
- the complexity of the rules;
- the extent to which the rule duplicates, overlaps, or conflicts with other state rules, federal regulations, and local government regulations;
- the degree to which technology, economic conditions, or other factors have changed in the subject area affected by the rules;
- the rule's potential for enhancement of job-producing enterprises; and
- the legal basis for the rules.

Rule makings that have occurred in the Waste Management and Cleanup program in last three years are presented below.

### **Solid Waste Program**

#### Background:

The Solid Waste Management and Reduction program ensures the prevention, reduction and proper management of solid waste; implements Oregon's recycling act and Oregon's comprehensive plan for waste reduction; provides waste prevention, reduction and recycling technical assistance; coordinates household hazardous waste collection events statewide; inspects and regulates solid waste disposal sites; implements the requirements of the Federal Resource Conservation and Recovery Act, Subtitle D; responds to complaints; and issues enforcement actions for solid waste management violations.

#### Oregon Administrative Rules, Chapter 340, Governing the Solid Waste Program:

Division 64	Waste Tires
Division 90	Recycling and Waste Reduction
Division 91	Waste Reduction Program and Recycling Certification
Division 93	Solid Waste: General Provisions

Division 94	Solid Waste: Municipal Solid Waste Landfills
Division 95	Solid Waste: Other Land Disposal Sites
Division 96	Solid Waste: Special Rules for Selected Disposal Sites
Division 97	Solid Waste: Permit Fees

Rule Changes in Last Three Years:

Adopted March 11, 1994: A change to Division 93 establishing special waste management standards for treated wood waste and sandblast grit waste (state-only hazardous wastes). Allowed pesticide treated wood waste and sandblast grit to be managed as special waste in a Subtitle D solid waste landfill.

Adopted April 22, 1994: Modifications to Divisions 90, 91, 93, 94, 95, 96 and 97 which delayed date by when land disposal sites had to provide financial assurance to comply with Subtitle D regulations. Required self-reporting and quarterly payments of solid waste permit fees by larger permitted solid waste facilities. Established a \$500 renewal fee for solid waste Letter Authorizations, and a new \$500 permit exemption determination fee.

Adopted October 21, 1994: Regulations (in Divisions 12 and 90) to implement Oregon's rigid plastic container law. The rules established definitions and specified how product manufacturers and container manufacturers were to comply with the law. Compliance options included recycling, recycled content or reuse. Established recordkeeping and reporting requirements, and set penalties.

Adopted December 2, 1994: Implemented changes (in Divisions 93, 94 and 95) in provision of financial assurance for solid waste disposal sites and integrated these with federal regulations. Established procedures for landfill operators for provision of financial assurance for closure, post-closure care and corrective action.

Temporary rule, adopted November 17, 1995: Adopted in Division 94 Federal rule changes allowing certain very small landfills in arid regions two additional years to meet Federal Subtitle D landfill requirements.

Adopted May 17, 1996: Modifications to Divisions 11, 12, 23, 64, 90, 91, 93, 94, 96, 97, and 130. Fee decrease for solid waste used as alternative daily cover at landfills. Modified rigid plastic container rules to conform to legislative changes from the 1995 session. Changed procedure for approval of out-of-state recycling programs (for persons sending out-of-state waste into Oregon for disposal). Adopted as permanent rule the provisions for very small landfills previously adopted as temporary rule on 11/1/7/95.

Rule Changes Under Consideration:

1. Composting facilities. Major changes to existing rules governing the composting of

solid waste are scheduled to be considered by the Environmental Quality Commission at its January 1997 meeting. The number of commercial composting operations has been increasing in recent years in response to increasing availability of organic feedstocks and increasing demand for composted products. The number of complaints regarding environmental problems at these facilities has also increased. Existing solid waste rules cannot easily be applied to these new composting operations. The new rules are needed to encourage commercial composting and ensure it is done in an environmentally sound manner.

The proposed rules would establish three classes of regulation for composting facilities depending on the amount and type of materials composted, and would establish fees for each class of regulation based on the potential environmental risk and amount of DEQ staff oversight needed. The rules were developed to provide reasonable, consistent regulation to protect air and water quality and human health while promoting commercial composting.

2. New category of waste tire carrier permits. Persons transporting more than four waste tires must obtain a DEQ waste tire carrier permit and display a DEQ decal on each vehicle used to haul waste tires. This requirement does not work well for large trucking companies (common carriers) who have a large number of trucks and haul tires on an occasional basis.

The proposed rule would create a new category of waste tire carrier permit for common carriers to address the present difficulty of having to obtain a permit for each truck in a fleet. Among other provisions, the proposal would eliminate the DEQ decal requirement for common carriers. Anticipated adoption in February, 1997.

3. Solid Waste Grant Program. The Department has just completed a review of all existing recycling legislation and requirements. This process identified a need to enhance development of markets for recycled materials and to direct more efforts towards waste prevention rather than recycling and disposal. One tool to do this is the existing DEQ solid waste grant program for local governments. Considering future changes to solid waste rules governing the grant program to allow grants to be used for recycling market development and waste prevention activities by local governments.

## **Hazardous Waste Program**

### Background:

The Hazardous Waste Management and Reduction program promotes the minimization and proper management of hazardous waste; issues waste management facility permits; conducts inspections of hazardous waste handlers; oversees corrective actions (cleanups) under the Federal Resource Conservation and Recovery Act (RCRA), Subtitle C; provides hazardous waste regulatory compliance; reviews industry toxic use reduction plans and provides technical assistance to help implement these plans;

responds to complaints and issues enforcement actions for hazardous waste management violations.

Oregon Administrative Rules Governing the Hazardous Waste Program:

Chapter 340	
Division 100	Hazardous Waste Management System: General
Division 101	Identification and Listing of Hazardous Waste
Division 102	Standards Applicable to Generators
Division 103	Standards Applicable to Transporters
Division 104	Standards for Treatment, Storage and Disposal Facilities
Division 105	Management Facility permits
Division 106	Permitting Procedures
Division 109	Management of Pesticide Wastes
Division 110	Polychlorinated Biphenyl's (PCBs)
Division 111	Used Oil Management
Division 120	Facility Siting
Division 130	Environmental Hazard Notices
Division 135	Toxic Use and Hazardous Waste Reduction

Rule Changes in Last Three Years:

Adopted March 11, 1994: Modifications to Divisions 100, 101, 102 and 111. Conditionally allowed disposal in a solid waste landfill of state-only hazardous waste treated wood wastes and pesticide contaminated sandblast grit; eliminated from hazardous waste determination requirements under the state-only 3% and 10% rule wastes containing toxicity characteristic constituents; clarified EPA's intent in the federal used oil regulations by designating what is and is not "used oil", and set a 5,000 BTU per pound minimum limit to distinguish used oil that is burned for energy recovery.

Adopted May 18, 1995: Modifications to Divisions 100 and 101. Deleted exception reporting requirements for small quantity generators; clarified that the legally adopted federal mixture and derived-from rules remained in effect in Oregon even after the courts vacated the rules in 1991; and deleted certain references to the enforceability in the manual describing the Best Pollution Prevention Practices for the ship and boat repair industry.

Adopted July 12, 1996: Modifications to Divisions 100, 101, 102, 109, 113. Streamlined pesticide waste management and conditionally allowed disposal in a solid waste landfill; eliminated the 3% and 10% rule as a basis for regulating pesticide wastes; added mercury-containing lamps to the list of universal wastes; strengthened the off-site management requirements for universal wastes; added to the list of hazardous wastes blister agents and the treatment residues from treating both blister agents and nerve agents; and expanded the number of work days to equitably address a claimant's request for trade secret claim.

Rule Changes Under Consideration:

Changes to rules governing hazardous waste treatment, storage and disposal to conform with federal rules, including reconciling and streamlining the federal interim status standards and the state's ability to recognize interim status; reconciling the federal and state public participation requirements, and adjusting the violation classifications in light of new TSD requirements, including Land Disposal Restriction requirements.

Consider changing rules governing generation and management of hazardous waste by conditionally exempt generators to ensure waste is being managed in a protective manner; specifically, establish standards for recycling and disposal facilities accepting or consolidating CEG wastes; require registration in order to participate in state-sponsored CEG collection events; and codify prohibitions of CEG wastes in non-Subtitle D landfills.

Update the list of chemicals under the toxic use reduction rules, as required by law. EPA periodically expands the TRI Chemical list, and the Department matches these lists to make reduction planning requirements clear and reasonable.

Modification of hazardous waste facility and generator fees, following any action by the 1997 Oregon Legislature. In some instances, the fee structure does not allow the Department to be compensated for work, nor do they necessarily reflect the types of activities undertaken at these facilities.

**Spill Program**

Background:

The Spill Prevention and Management program develops the state's oil and hazardous material emergency response plans; oversees development of emergency response plans for private facilities and vessels; directs the cleanup of oil and hazardous material spills where there is no responsible party; oversees responsible party cleanup of oil and hazardous material spills; arranges for the cleanup of illegal drug labs at the request of law enforcement agencies.

Oregon Administrative Rules Governing the Spill Program:

Chapter 340	
Division 47	Regulations Pertaining to Oil Spills into Public Waters
Division 108	Oil and Hazardous Material Spills and Releases
Division 140	Illegal Drug Lab Cleanup Assistance

Rule Changes in Last Three Years:

Adopted October 11, 1996. Modified Division 47 to decrease the fees paid by a certain type of self-propelled tank vessel.

Rule Changes Under Consideration:

Division 47 - possible issues for rule modifications include:

- Equipment transfer - allows contingency plan holders to transfer oil spill response equipment out of state temporarily to respond to a major oil spill.
- Spill prevention - may need revisions to provide for appropriate spill prevention strategies.
- Definitions - review and revise definitions to be consistent with statute.
- Housekeeping changes - general changes to add clarity as needed.

Division 108 - possible issues for rule modifications include:

- Prevention and preparedness - adjust rules to reflect any changes made by 1997 legislature to require Department to develop inland hazardous material response plans or model industry specific spill response plans.
- Consistency - may need modifications to make language on cleanup requirements consistent with Division 122 (risk based) and generally to reflect any statutory requirements not currently addressed.

**Tanks Program**

Background:

The Underground Storage Tank Compliance and Cleanup program regulates tanks through permits and inspections; oversees the installation and decommissioning of underground storage tanks; implements the underground storage tank financial assistance program; certifies and licenses underground storage tank supervisors and contractors; directs the investigation and cleanup of state- or federally-funded above ground and underground storage tank sites, and oversees that work at responsible party-funded sites. Provides technical assistance to owners or operators of storage tanks.

Oregon Administrative Rules Governing the Tanks Program:

Chapter 340	
Division 150	Underground Storage Tanks
Division 160	Underground Storage Tank Service Providers
Division 162	Underground Storage Tank Soil Matrix Cleanup Providers and Supervisors
Division 163	Heating Oil Tank Soil Matrix Cleanup Providers and Supervisors
Division 170	Underground Storage Tank Reimbursement Grants
Division 172	Underground Storage Tank Financial Assistance
Division 174	Underground Storage Tank Insurance Copayment
Division 175	Underground Storage Tank Grants

Division 176	Underground Storage Tank Loan Guarantee
Division 178	Underground Storage Tank Reduced Rate Interest Loan
Division 180	Underground Storage Tank Subsidy Loan Guarantee and Interest Rate Subsidy

Rule Changes in Last Three Years:

1. Adopted March 22, 1994: Modified Division 150. Changed the annual underground storage tank compliance fee from \$25 maximum to \$35 maximum
2. Effective March 22, 1994: Modified Division 172. Exempted underground storage tank financial assistance program to December 31, 1996, limited financial assistance to essential service grants of 75% not to exceed \$75,000 and implemented other provisions of HB 2776, 1993.

Rule Changes Under Consideration:

Modify underground storage tank permit requirements and conditions.

The present rule does not describe specific permit conditions or easily allow termination of the permit for not complying with permit conditions. The proposed rule modifications will make the permit a permanent permit and change the permit so it is more like the traditional DEQ discharge permit.

Adjust the rule setting the underground storage tank permit fee so it conforms with the action taken by the 1997 Legislature.

DEQ will be asking 1977 legislature to increase the annual permit fee from the present \$35 maximum to a level yet to be determined.

Permitted tanks have reduced, primarily through permanently decommissioning, from 32,000 in 1998 to less than 10,000 today. Accordingly, the permit fee income has reduced each year since the start of the tank program in 1998.

Adopt financial responsibility requirements for all underground tank facilities.

Tank rules presently require only petroleum marketers with 100 or more tanks and persons (firms) with more than \$20,000,000 net worth to demonstrate financial responsibility for dealing with releases from tanks; pay for cleanup and third party damage. To be fully authorized to implement the federal tank program DEQ must adopt rules to requiring financial responsibility for all tank owners.

Allow third party compliance certification.

Each underground storage tank must meet new tank standards by December 22, 1998. Each tank should be certified as "in compliance" either by direct inspection by DEQ staff, owner self certification or direct inspection by a third party. Third party certification would stretch DEQ resources and provide compliance equivalent to inspection by DEQ staff. DEQ proposes to add an UST Compliance Certification category to the UST licensing rules.

Adopt Risk Based Corrective Action (RBCA) as a tank cleanup option.

RBCA may allow quicker and lower cost petroleum cleanups. While the tank program has RBCA guidance documents it may be appropriate to adopt rules.

Revise or delete the financial assistance rules.

The financial assistance statute terminates the program on December 31, 1996, except for ongoing expenditures. DEQ anticipates that the essential services grant portion of the program may be extended by the legislature. Rule modifications may be required depending upon the action taken by the 1997 Oregon legislature.

## **Cleanup Program**

### Background:

The Cleanup Program includes these activities:

Site Assessment - discovers and assesses sites where a release, or threat of release, of hazardous substances has occurred; conducts inspections of contaminated sites; produces a statewide inventory of facilities requiring cleanup of hazardous substances);

Site Response - directs the investigation and cleanup of high priority state-funded orphan sites where responsible parties are unknown, unwilling or unable to conduct the work; oversees those same activities at responsible party-funded enforcement sites; participates in, and in some cases assumes lead authority for, the cleanup of Federal National Priorities List (NPL) sites.

Voluntary Cleanup - oversees the investigation and cleanup of sites where the responsible party wishes to proceed, has requested Department oversight, and is willing to pay for oversight costs; provides technical assistance to property owners who wish to clean up contamination and receive state approval for the cleanup; and provides technical assistance to local governments who own contaminated land, so these sites may be returned to beneficial use.

### Oregon Administrative Rules Governing the Cleanup Program:



Rule Changes in Last Three Years:

None.

(The most recent changes were the Soil Cleanup (SOCLEAN) Rules (340-122-045 and 046) adopted in June, 1992, and the Lender Liability Exemption Rules (340-122-120, 130, and 140) adopted in December, 1992.)

Rule Changes Under Consideration

Most of Division 122 related to hazardous substance (not petroleum) cleanup is currently under revision. The public comment period for these revisions runs from October 1, 1996 until November 15, 1996. The EQC is scheduled to consider adopting the proposed rules in January, 1997.

While all rules from 340-122-010 through 110 and 425 through 470 contain some changes, the rules have the following common elements.

- Environmental remedial actions are risk-based rather than being based on background concentrations;
- Risk assessment is based on likely exposures rather than maximum exposures;
- Treatment is required for "hot spots" of contamination; risk management techniques receive equal consideration as risk reduction techniques at non-hot-spot area; and
- Cost reasonableness is given greater weight in the balancing factors when selecting remedies.

Other possible rule changes might include:

- changing the Soil Cleanup (SOCLEAN) Table to reflect updated risk factors;
- developing rules for certain classes of contaminants (e.g., drycleaners);
- using Risk Based Corrective Action (RBCA) for non-UST petroleum releases; and
- changing existing spill response rules to being risk-based.

The Soil Cleanup Table was not changed in the currently proposed rule changes because we anticipate changes to both toxicity values and exposure values. After the Department has gained experience with the proposed rules, we anticipate significant changes to the SOCLEAN table but to keep the tool available for the cleanup of simple, soil-only sites.

The Department is developing guidance for "generic remedies" for certain types of sites or certain contaminants. Should certain approaches be required for these sites, it would be appropriate for the generic remedies to be in rule rather than guidance.

As noted in the UST section, use of the Risk Based Corrective Action is being permitted for use at UST sites. Petroleum releases at non-USTs can fall under Division 122 cleanup rules, and use of RBCA needs to be consistent with the risk-based approach. This may require the adoption of RBCA rules within this division.

While the spill rules are outside Division 122, we have the potential conflict of the spill rules being at odds with the risk-based approach to remediation. It may require rule changes to either Division 108 or 122 to achieve a consistent approach to releases.

"J"  
11-14-96  
EQC MTJ.

**STATUS OF THE CITY OF PORTLAND'S  
COMBINED SEWER OVERFLOW PROGRAM**

Presented By:

Dean Marriott, Director  
City of Portland  
Bureau of Environmental Services

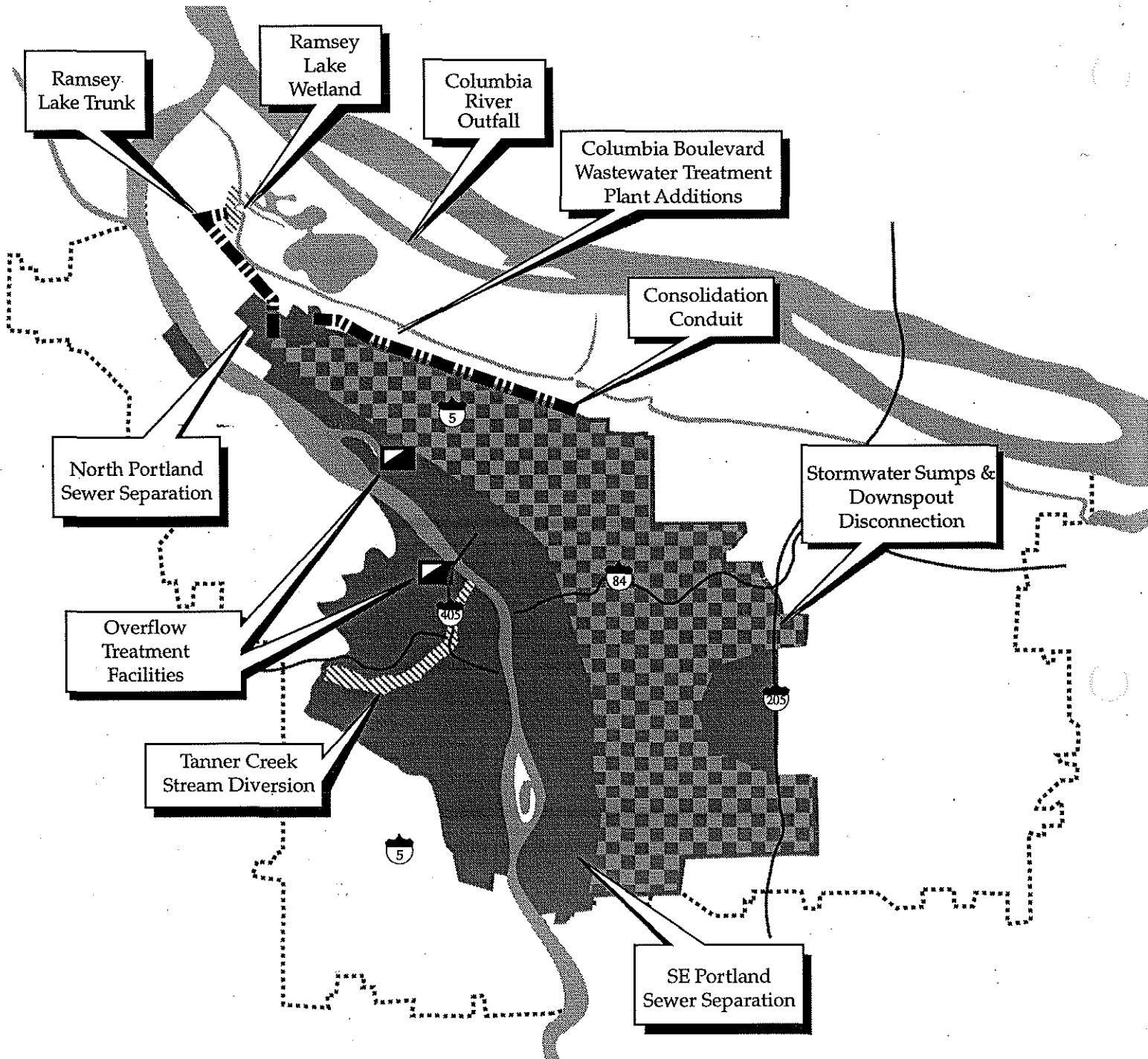
to:







State of Oregon Environmental Quality Commission  
November 14, 1996

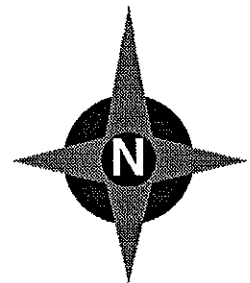
# **The CSO Program**

**A 20-year, \$700 million program to reduce CSOs with the results of:**

- Removing 6 billion gallons of raw sewage**
- End Bacteria and Aesthetic Violations**
- Enjoy Swimmable, Fishable Rivers**



-  Combined Sewer Area
-  Urban Services Boundary
-  Downspout Disconnection & Stormwater Sump Area
-  Alternative Overflow Treatment Sites
-  Major Trunk Sewer Construction
-  Stream Diversion, Constructed Wetland



# Combined Sewer Overflow Program Strategy

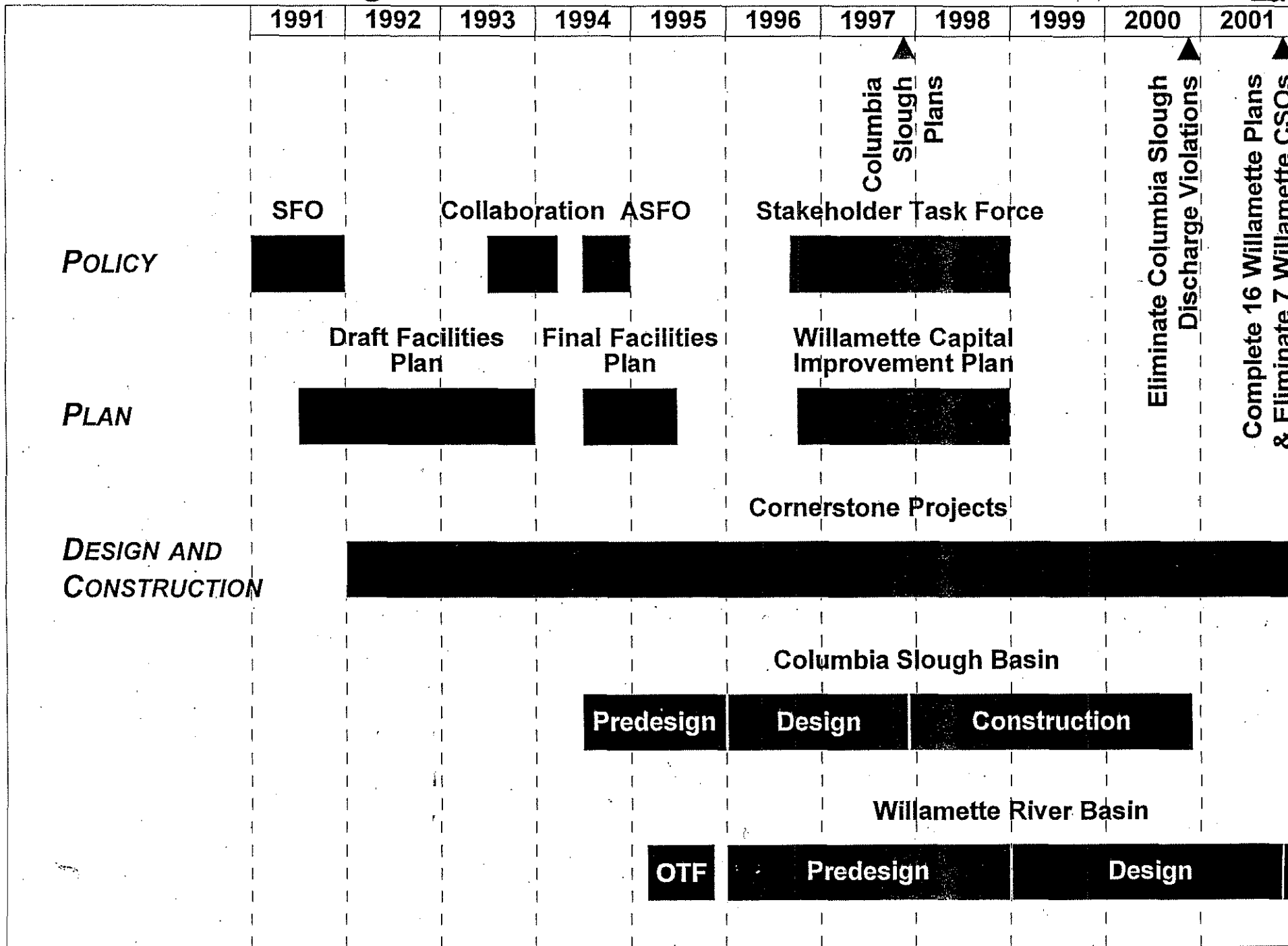


## Basins

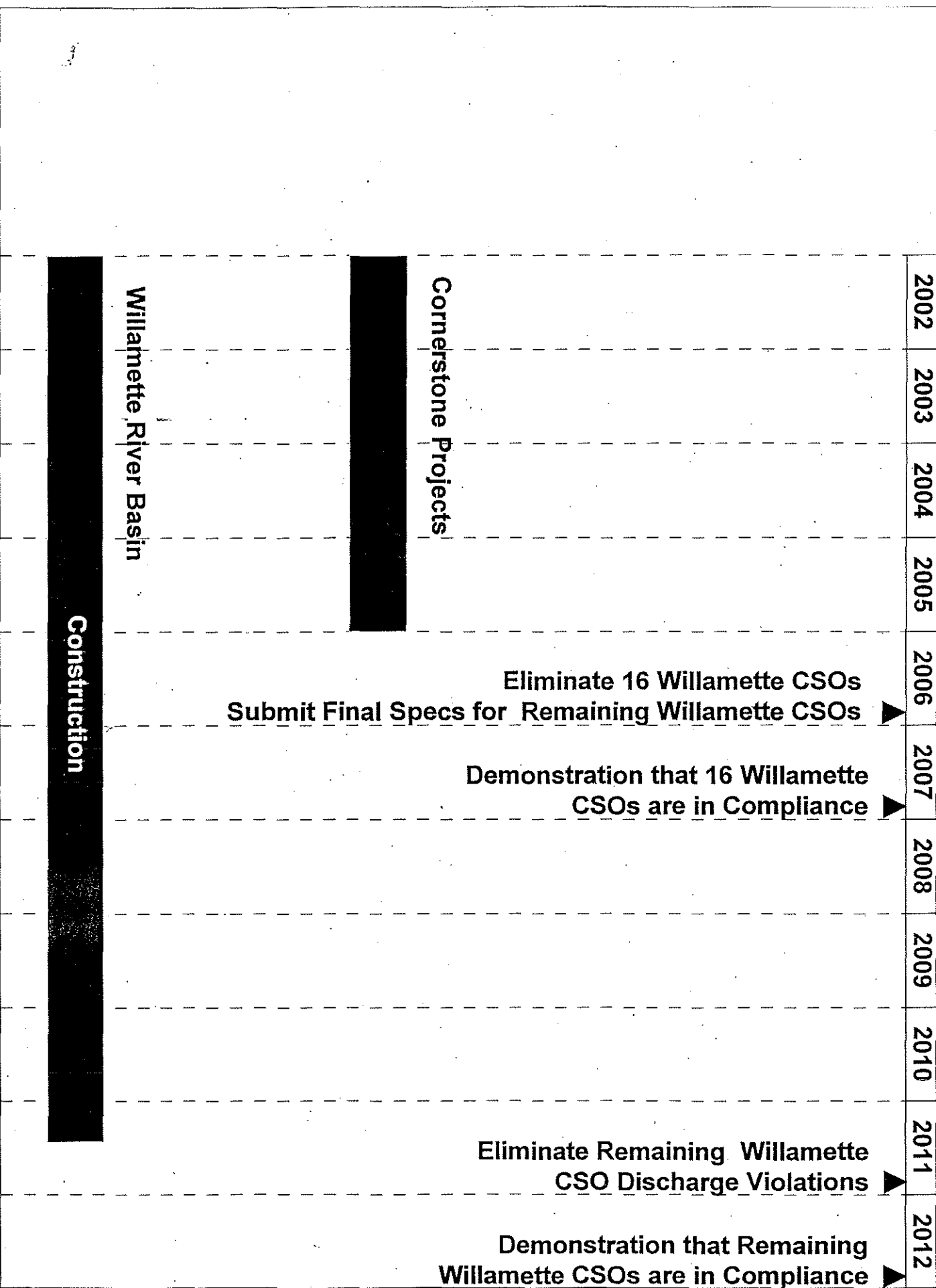
Strategies

	Columbia Slough	Willamette River
Remove Stormwater (Cornerstone Projects)	Sumps Downspouts Sewer Separation	Sumps Downspouts Sewer Separation Stream Diversion
Collect & Treat	Conduit Pump Station Treatment Facility Outfall	Conduit Pump Stations Treatment Facility(s) Outfall(s)

# Portland's CSO Program



# Portland's CSO Program



Cornerstone Projects

Willamette River Basin

Construction

Eliminate 16 Willamette CSOs  
Submit Final Specs for Remaining Willamette CSOs

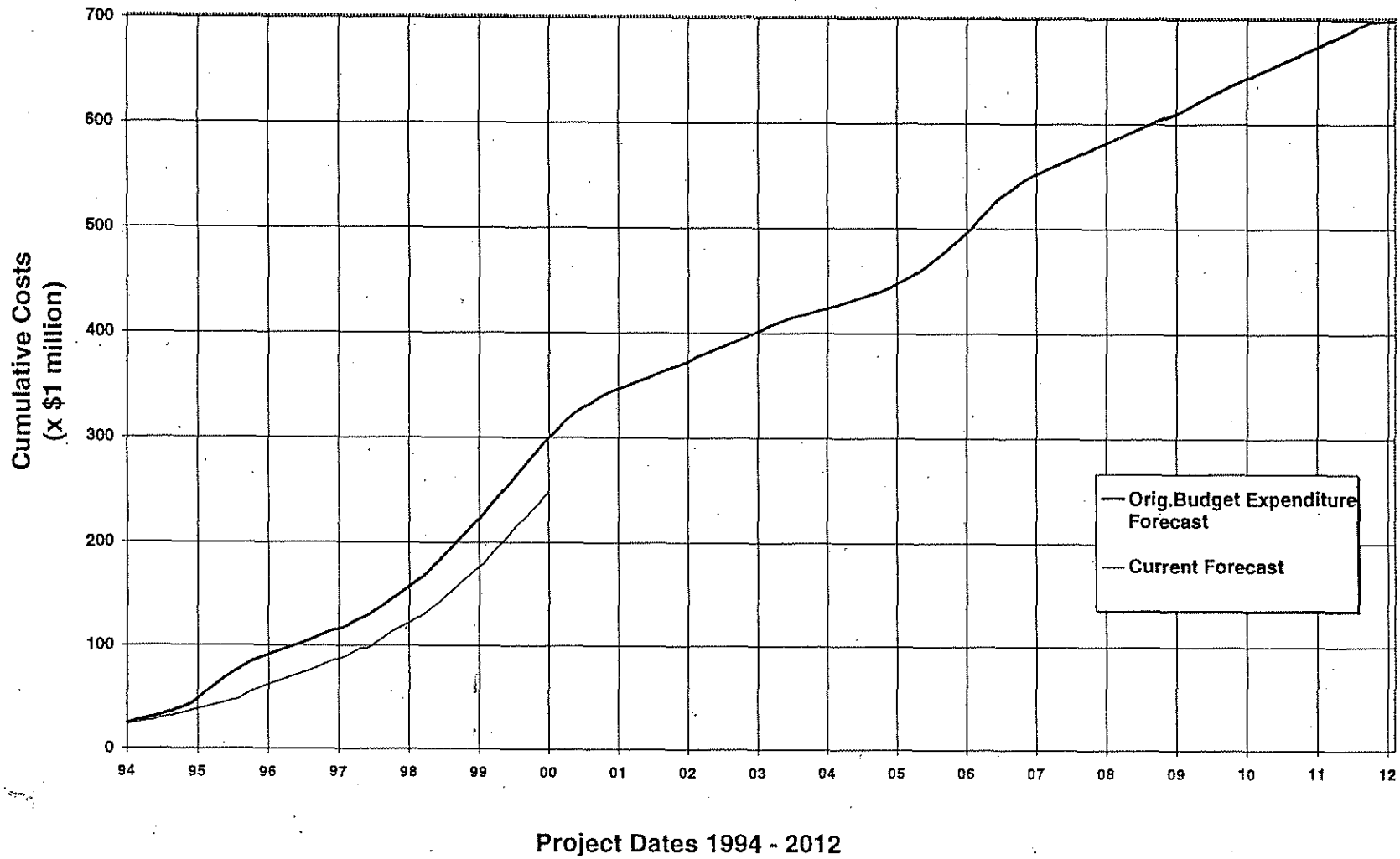
Demonstration that 16 Willamette CSOs are in Compliance

Eliminate Remaining Willamette CSO Discharge Violations

Demonstration that Remaining Willamette CSOs are in Compliance



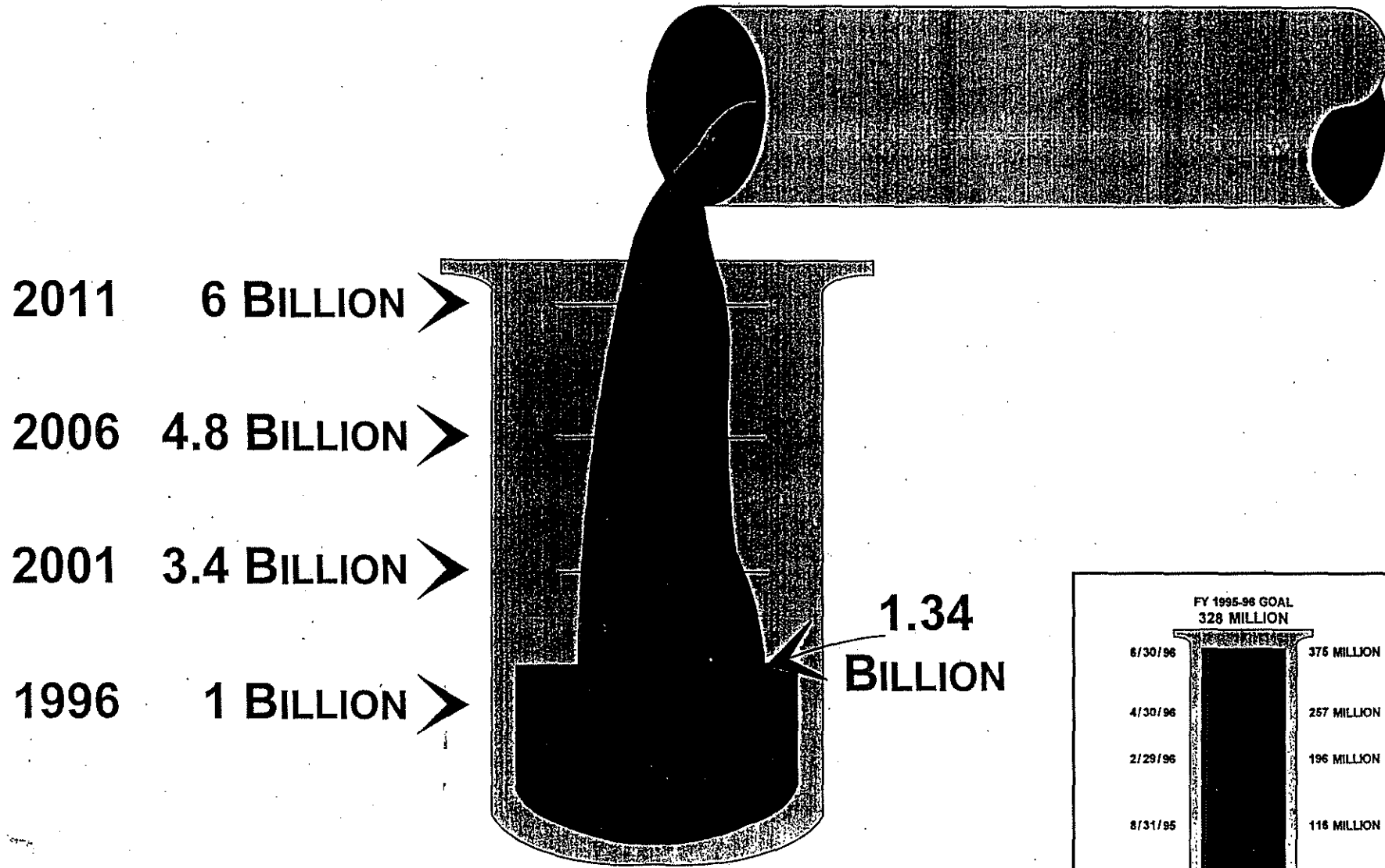
# CSO Budget and Forecast



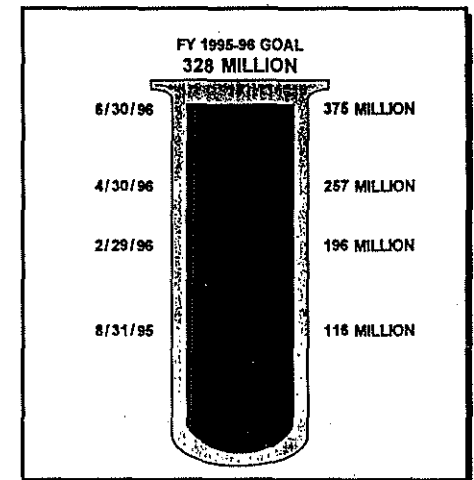
**Table of Projected Savings on the Following CSO Projects**  
 ( based on budgeted scope of work - excluding escalation and scope changes )

<b>Proj. Number</b>	<b>Project Name</b>	<b>Life Budget</b>	<b>Current Life Estimate</b>	<b>Over (under)</b>
5302	Columbia Slough Outfall	\$22,685,000	\$19,400,000	(\$3,285,000)
5332	Columbia Slough Consolidation Conduit	\$84,000,000	\$70,300,000	(\$13,700,000)
5480	Columbia Slough WWTF	\$41,801,000	\$35,000,000	(\$6,801,000)
5499	Columbia Slough Pump Station	\$15,500,000	\$9,100,000	(\$6,400,000)
5161	Downspout Disconnect	\$30,000,000	\$25,000,000	(\$5,000,000)
5083	Sumps	\$49,758,000	\$31,489,000	(\$18,269,000)
	<b>Total</b>	<b>\$243,744,000</b>	<b>\$190,289,000</b>	<b>(\$53,455,000)</b>

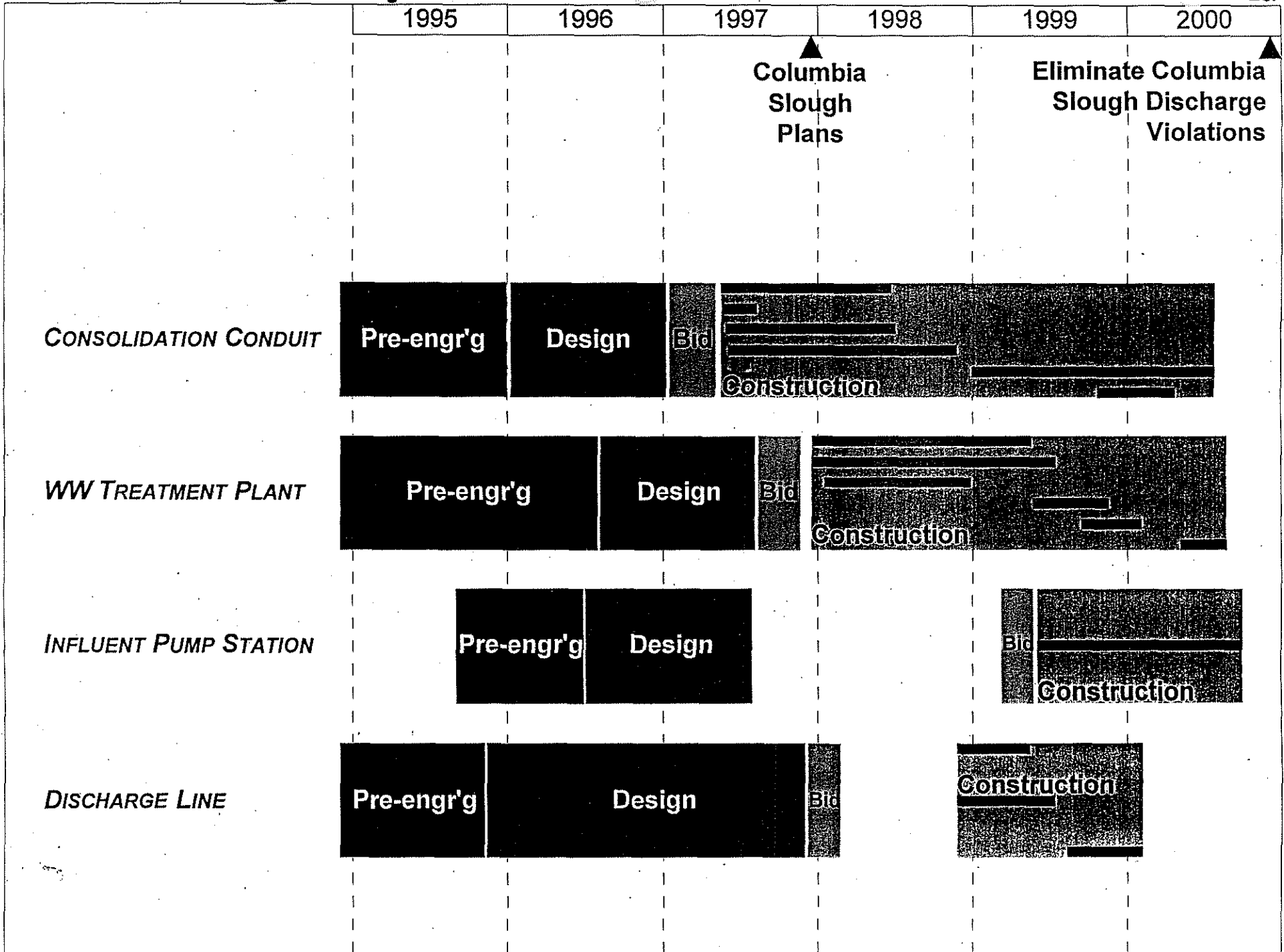
# GALLONS OF COMBINED SEWAGE REMOVED FROM RIVER & SLOUGH



CLEAN RIVER WORKS



# Columbia Slough Projects

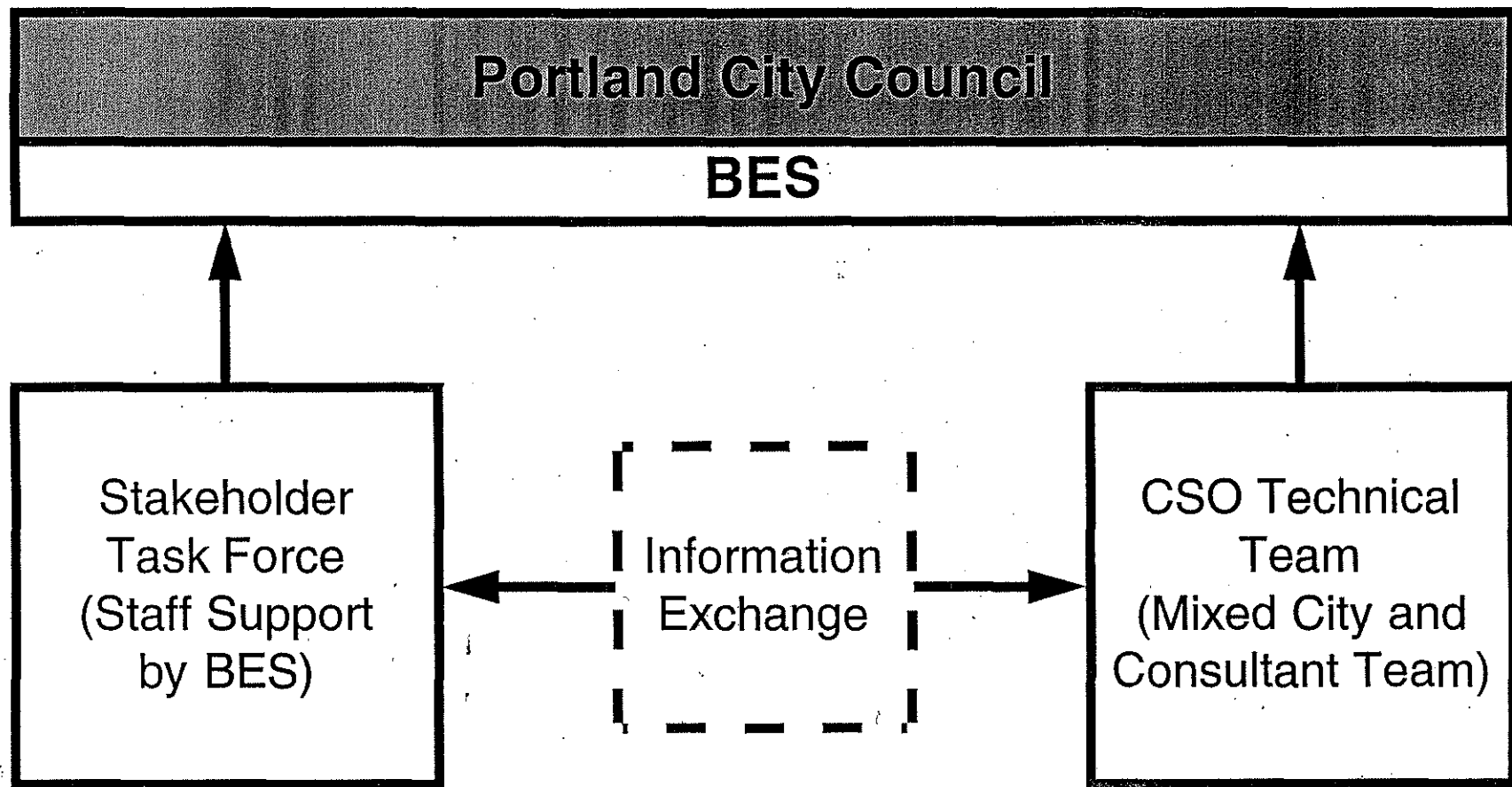


# **Willamette River Predesign**

**Develop an integrated control plan for reducing CSOs in the Willamette River which:**

- Improves water quality in the Willamette River**
- Develops cost effective solutions for controlling CSOs**
- Reflects community values in the Willamette River**

# Willamette River Predesign Stakeholder Process

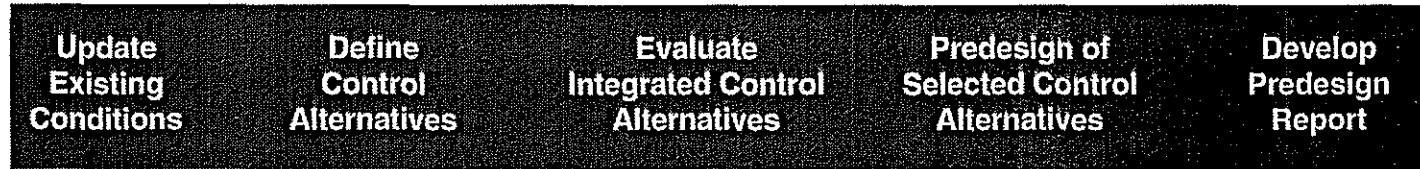


# Willamette River Pre-Design



1996	1997	1998
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## *Technical Tasks*



Willamette Predesign Report to Council

## *Stakeholder Tasks*



Stakeholder Report to Council

Stakeholder Report to Council

## *Other Public Involvement*



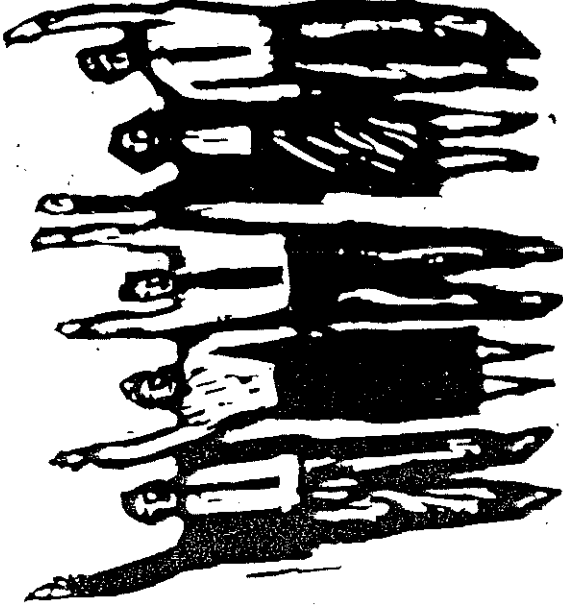
**Water  
Quality  
Protection**

**+**

**Cost-Effective  
Solutions**

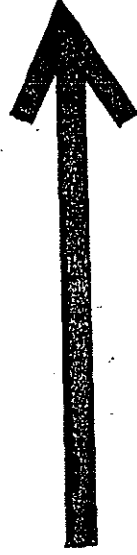
**+**

**Meaningful  
Public  
Involvement**



**Citizen**

**Support**





**LINES DRAWN IN THE SAND:  
A REVIEW OF CHALLENGES,  
OPPORTUNITIES, AND OPTIONS FOR  
CHEMICAL WEAPONS DISPOSAL**

Presented to the  
Oregon Environmental Quality Commission  
November 14, 1996 Portland, Oregon  
Donald Sampson, CTUIR Board of Trustees Chairman  
Armand Minthorn, CTUIR Board of Trustees  
J.R. Wilkinson, CTUIR/Department of Natural  
Resources -- Special Sciences and Resources

*Overview of Presentation*

**What you will see and hear today:**

- Background Information on the CTUIR
- Outline of CTUIR Issues
- Why "Lines Drawn in the Sand" as a Title
- Examples of Concerns about the Permits and Process
- Proposal to Step Beyond the Gridlock
- What the Proposal Is NOT
- Recognition of Key Assumptions
- Two Essential Elements of the Proposal
- Key Elements of Alternatives Assessment
- Increase Meaningful Public and Tribal Involvement
- What are the Conclusions of the CTUIR?

## *Background Information on the Confederated Tribes of the Umatilla Indian Reservation*

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### Three Northeast Oregon Tribes

- Cayuse, Walla Walla, and Umatilla

### Signed Treaty of 1855 with U.S. Government

- Established 6.4 million acres of ceded lands in Oregon and Washington state
- Tribes retain off-reservation rights in ceded lands including fishing, hunting, gathering of plants and pasturing livestock
- Established Umatilla Indian Reservation eight miles east of Pendleton
- On-reservation regulatory and management responsibilities implemented by the Tribe's Board of Trustees through an Administrative structure

## *Outline of Confederated Tribes of the Umatilla Indian Reservation Issues*

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- Conduct an alternative assessment of the risks, costs, and benefits of:
  - Continued storage, transportation, non-incineration technologies, and incineration
- Develop realistic emergency response capabilities and plans
- Implement an environmental and human health monitoring network prior to disposal
- Increase government-to-government consultation with the CTUIR
  - Consultation is not commenting on announced decisions

### *Why "Lines Drawn in the Sand" as a Title?*

The CTUIR recognize two sides of the debate: pro- and anti-incineration .

- The third side are the undecided and the fourth are the unaware (both equally as important as the first two)

The two sides of the debate are entrenched

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  - Other regional planning efforts supported by the CTUIR
  - Disposal must provide for least-harm and be cost effective and protective of human health and the environment
  - An accident can inflict tremendous losses to the Tribe's treaty-reserved natural, cultural, and economic resources

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DEQ staff working on permit for 10 years

- Comment period less than one year
- Questions remain regarding DEQ regulator role

Complexity of information is understood by an elite group of individuals; not general public

- State of Oregon support for incineration implied by permits
- Other tribes, state agencies, states, and local jurisdictions not involved
  - e.g., Yakama Indian Nation, OR Department of Health, Washington state, City of Kennewick
- Water consumption/discharge poorly understood

*Examples of Concerns  
about the Permits and the Process (2)*

If the process is flawed, does good information make good decisions?

State risk modeling cannot account for unique risks to Tribal communities from emissions

- Bioaccumulation, synergism, and cumulative not available
- Tribal exposure patterns not understood
- Lack of liability insurance and environmental monitoring network places regional economic interests at risk due to loss of customer base
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*A Proposal to Step Beyond the Gridlock  
over Chemical Weapons Disposal*

This proposal:

- Supports a least-harm and cost-effective disposal system that is protective of human health and the environment
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- Enhances economic opportunities in Oregon
- Reduces chance of lengthy litigation delaying disposal

### *What this Proposal Is NOT*

- It is not the "answer" to chemical weapons disposal
  - A technology is not recommended
- It is not a complete compendium of all options
  - There maybe other options not considered
- It is not a complete and thorough analysis of each link in the matrix
  - e.g., reverse assembly vs. shear vs. punch and drain
- It is not a substitute for effective Tribal and public awareness, education, and outreach efforts

### *Recognition of Several Key Assumptions*

- It's simply impossible to digest the enormous amount of available information on such a complex subject
- Are there "independent" experts?
- Different experts may know about different technologies and interpret data with their own personal bias (often unknown)
  - "Experts" may differ in the faithfulness with which they report what is happening in the world
- The "right" option is one that builds consensus and reduces conflict -- we all must live with the "answer"
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## The Two Essential Proposal Actions

### ■ Reduce immediate risks

- Ensure that storage bunkers are up to earthquake code
- Stabilize the M-55s using environmental controls
- Build a reconfiguration facility

### ■ Establish an Alternatives Assessment process to resolve remaining questions

- Develop an alternatives assessment to review the risks, costs, and benefits of continued storage, transportation, non-incineration technologies and incineration
- Establish a Governor's Task Force with political, financial, and technical support for a timely and thorough assessment
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- Outcome: permitted disposal option(s)

## Key Elements of Alternatives Assessment

### ■ Three broad technology "groups"

- Incineration
- Non-incineration technologies (AEA, M4, EcoLogic)
- Neutralization

### ■ Utilize approximately <sup>16</sup>13 "value" factors to evaluate the three broad technology groups

- For example: public acceptability, worker safety and health, emission types/quantities, accident potential, future risks,...
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### ■ Estimated timeline to conduct assessment

- 6 month start-up; 1 year program; 3 month closure to final report to Governor

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■ The ramifications of the Army's plans are extraordinary

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- The Oregon Experiment: A Grassroots Approach to Meaningful Public Participation (January 1996)
- Utilize the principles presented in the document

## *What are the Options being presented to the EQC by the CTUIR? (1)*

■ Reconfiguration facility

- Begin additional M-55 mitigation actions immediately

■ Request a Governor's Task Force on Chemical Weapons Disposal

- This is a statewide issue
- Ensure that political, financial, and technical support is provided to Task Force for completion of work
- The Task Force should increase public and Tribal awareness and provide for an ability to influence decisions
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Potential recommendation to Congressional delegation for Defense Authorization Act modifications supporting Oregon's actions

Establish an innovative demonstration zone

- Advance the options available to the nation
- Spin-off Industries for Hanford cleanup
- Support Local Reuse Authority options
- Create cooperative working relationships between the opposite sides of the Line in the Sand
  - Increase consensus and decrease conflict
  - Complete disposal expeditiously, safely, and economically



**LINES DRAWN IN THE SAND:  
A REVIEW OF CHALLENGES,  
OPPORTUNITIES, AND OPTIONS FOR  
CHEMICAL WEAPONS DISPOSAL**

Presented to the  
Oregon Environmental Quality Commission  
*November 14, 1996 Portland, Oregon*  
Donald Sampson, CTUIR Board of Trustees Chairman  
Armand Minthorn, CTUIR Board of Trustees  
J.R. Wilkinson, CTUIR/Department of Natural  
Resources -- Special Sciences and Resources

*Overview of Presentation*

**What you will see and hear today:**

- Background Information on the CTUIR
- Outline of CTUIR Issues
- Why "Lines Drawn in the Sand" as a Title
- Examples of Concerns about the Permits and Process
- Proposal to Step Beyond the Gridlock
- What the Proposal is NOT
- Recognition of Key Assumptions
- Two Essential Elements of the Proposal
- Key Elements of Alternatives Assessment
- Increase Meaningful Public and Tribal Involvement
- What are the Conclusions of the CTUIR?

## *Background Information on the Confederated Tribes of the Umatilla Indian Reservation*

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### ■ Three Northeast Oregon Tribes

- Cayuse, Walla Walla, and Umatilla

### Signed Treaty of 1855 with U.S. Government

- Established 6.4 million acres of ceded lands in Oregon and Washington state
- Tribes retain off-reservation rights in ceded lands including fishing, hunting, gathering of plants and pasturing livestock
- Established Umatilla Indian Reservation eight miles east of Pendleton
- On-reservation regulatory and management responsibilities implemented by the Tribe's Board of Trustees through an Administrative structure

## *Outline of Confederated Tribes of the Umatilla Indian Reservation Issues*

---

### ■ Conduct an alternative assessment of the risks, costs, and benefits of:

- Continued storage, transportation, non-incineration technologies, and incineration

### ■ Develop realistic emergency response capabilities and plans

### ■ Implement an environmental and human health monitoring network prior to disposal

### ■ Increase government-to-government consultation with the CTUIR

- Consultation is not commenting on announced decisions

### Why "Lines Drawn in the Sand" as a Title?

---

- The CTUIR recognize two sides of the debate: pro- and anti-incineration
  - The third side are the undecided and the fourth are the unaware (both equally as important as the first two)
- The two sides of the debate are entrenched
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- Establish an innovative demonstration zone
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State of Oregon  
Department of Environmental Quality

Memorandum

Date: November 14, 1996

To: Environmental Quality Commissioners  
From: Langdon Marsh *Lang Marsh*  
Subject: Director's Report

**Agency Budget Undergoes Governor Review**

Department of Administrative Services and the Governor's office have completed initial review and revision of the DEQ 1997-99 budget proposal. Our budget will be part of the overall package Governor Kitzhaber announces in early December.

At this point, the agency budget would maintain existing service level into the next biennium. The Governor also announced his intent to hold natural resource agencies harmless from cuts in existing General Fund spending levels, but the prospects are not good for new general fund dollars for expanded or new programs. We will be asking for selected fee increases during the legislative session. These revenue increases would offset rising costs that contributed to program deficits during this budget period and promise greater problems next biennium.

Measure 47 passage adds uncertainty to an already clouded vision of what will likely happen over the next several months. The Governor has said he will not dismantle state government to support local services. He will also form a group of county, city and special tax district representatives who collectively will propose legislation to implement the measure. Don Lindley, Association of Oregon Counties; and Larry Griffith, League of Oregon Cities will co-chair the group.

**NMFS Delays Coho Listing Decision**

NMFS announced two weeks ago that they would delay for six months a decision on whether to list Oregon coastal coho salmon as threatened or endangered species. This now gives the state until mid February to further refine the Governor's salmon restoration plan. DEQ has been an increasingly active player, and will be part of the Governor's Healthy Streams budget package to deal with coastal salmon as well as water quality issues statewide.

DEQ salmon restoration implementation teams began work in the Rogue, Umpqua and Tillamook basins in late October pursuing tasks ranging from coordination meetings with other agencies and stakeholders to water quality analysis projects. Highlights are listed below.

- DEQ staff are working with ODFW to integrate Umpqua Basin core areas into DEQ GIS files. This will allow matching of these areas with NPDES sources within the basin and

monitoring sites used in the 303d listing process. This information should be useful for sub-basin and watershed scale temperature and NPS management plans.

- The Environmental Protection Agency has loaned a staff person to assist DEQ in TMDL development for the lower South Fork Umpqua River.
- Two DEQ staff are now on special assignment to evaluate and prioritize municipal discharges in the Rogue, Umpqua and Tillamook basins. Initial work will be completed by November 30.

### **Healthy Streams Proposal Adds Resources**

Governor Kitzhaber's Healthy Streams budget would add 19 FTEs to DEQ, primarily for stream data gathering, monitoring and TMDL-related activities. This is part of his overall commitment to restore both salmon populations and statewide water quality. Prior to the elections, he and natural resource agency representatives had productive discussions with agricultural interests about how we can work together on water and salmon restoration needs.

We remain hopeful that people within the agricultural community, such as the Oregon Farm Bureau, will support the governor's budget proposal. At this point, the governor has not announced a specific funding mechanism to finance his Healthy Streams proposals.

### **MLK Boulevard Project A Continuing Success**

I mentioned several weeks ago about DEQ's involvement with the revitalization project along Martin Luther King Boulevard in Portland. Our work continues and grows even more productive. Last week Governor Kitzhaber visited the area to recognize efforts by agencies, organizations and community leaders. The most visible change is removal of a traffic island which will restore on-street parking and should increase customer traffic to local businesses. The area has many other needs as well.

DEQ staff from NW Region have put considerable effort into providing technical support as needed, and delivering specific workshops for local residents and businesses. Two weeks ago, region staff sponsored a workshop on how to recognize potential environmental hazards or contaminated sites. A followup workshop last night focused on how people can operate an environmental cleanup business.

I congratulate NW region staff for their work to rebuild a neighborhood, and to establish DEQ as a partner in the community.

### **Water Quality Division Changes Ahead**

Mike Downs, who has served as Division Administrator for the past few years, and I have agreed that he will take on a new assignment. He will have lead responsibility for several high priority projects and will provide input and advise on a number of key water quality issues. Mike and I

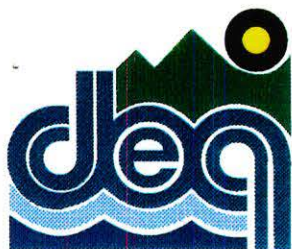
have agreed that a change in his responsibilities and in the Water Quality Division is the best match for his unique talents and the current needs of the agency.

First, I have asked Mike to head up the agency's response to the Governor's Coastal Salmon Restoration Initiative. Mike has been acting as DEQ's liaison to the coastal salmon initiative, and I now want him to be able to focus much more of his attention on this vital multi regional and divisional project. I have also asked Mike to take the lead on a new project to further DEQ's data management capability through a grant from EPA to develop a one-stop multi-program data center concept. Mike's unique set of abilities make him the perfect candidate to develop what I believe will be a nationally important data management tool.

In addition to these projects, Mike will continue to provide advice and keep involved in a number of key areas such as TMDLs and federal issues, including CWA Reauthorization, EPA's Stormwater Phase II FACA, and representing DEQ at ASIWPCA.

I want to thank Mike for the long and dedicated hours he has put in on the complex set of issues and problems facing the Water Quality Division. This has been a very difficult period with the numerous lawsuits and fiscal problems that have plagued the Division for the last several years. Mike has always worked hard for Oregon's environment and his new assignment will allow him to continue that dedicated service. I know Mike will continue to have a track record for outstanding work for the citizens of Oregon.

As Mike assumes these new duties, the Water Quality Division Administrator position will open up. I intend to conduct a national search to find a new Division Administrator. In the meantime, I have asked Stephanie Hallock to serve as interim Division Administrator effective December 1st.



**E.Q.C. WORK SESSION**  
**November 15, 1996**

*Finding of Best Available Technology*

Umatilla Chemical Depot

# REFERENCES

- ▶ **NRC'S Report**
- ▶ **AMSAA Report**
- ▶ **Army SME Report**
- ▶ **Army Report for Congress**
- ▶ **Quantitative Risk Assessment**
- ▶ **Pre-Trial Burn Risk Assessment**
- ▶ **Mitretek Risk Assessment of Alternative Technologies**
- ▶ **Oregon Environmental Council Report**
- ▶ **Information provided by vendors of alternative technologies**
- ▶ **Letter from CTUIR to EQC**
- ▶ **Others**

# Limitations of Available Information

*Incineration*





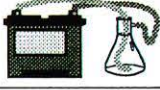


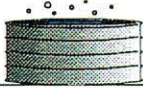

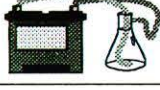




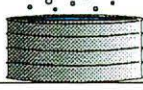

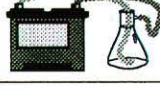




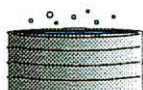




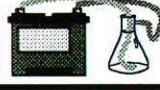

*Storage*

*Neutralization*

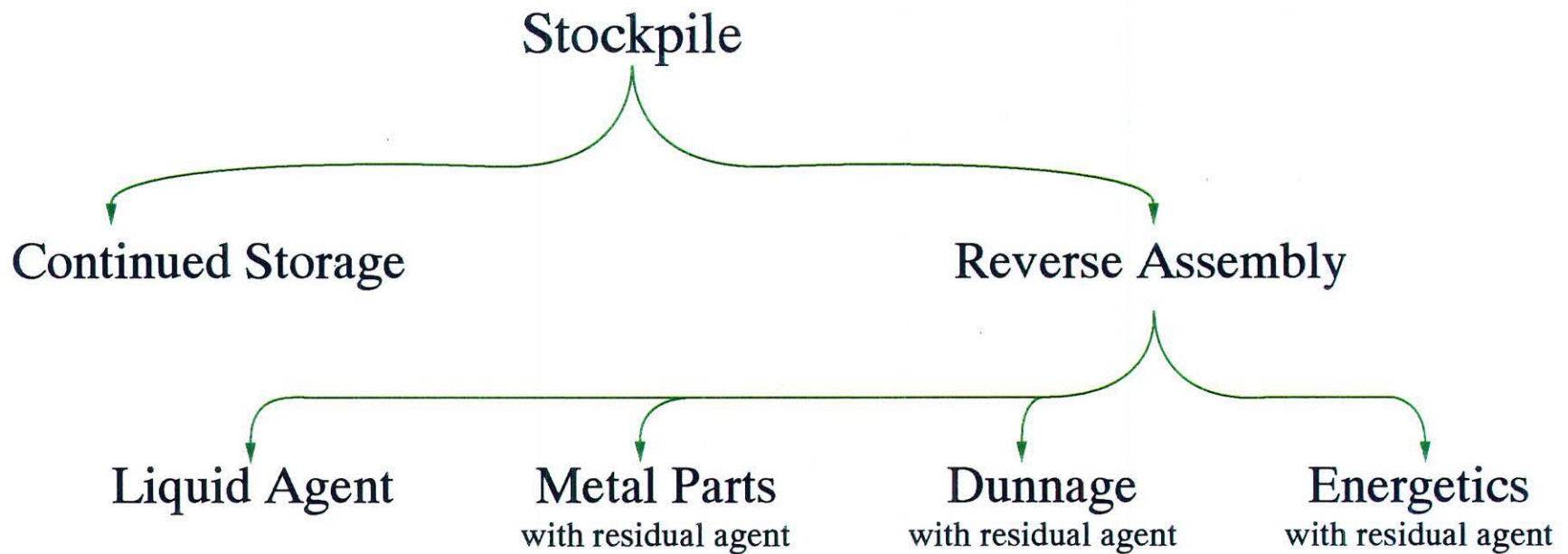
*Molten Metal  
Catalytic  
Extraction*

*Electrochemical  
Oxidation*

*Gas Phase  
Chemical  
Reduction*

Quantitative Risk Assessment						
Mitretek Report						
Pre-Trial Burn Risk Assessment						
National Research Council Report						
Environmental Impact Statement						
Subject Matter Expert Report						
Army Report To Congress						
AMSAA Report						
Alternative Technology Vendor Information						

# Stockpile Waste Streams



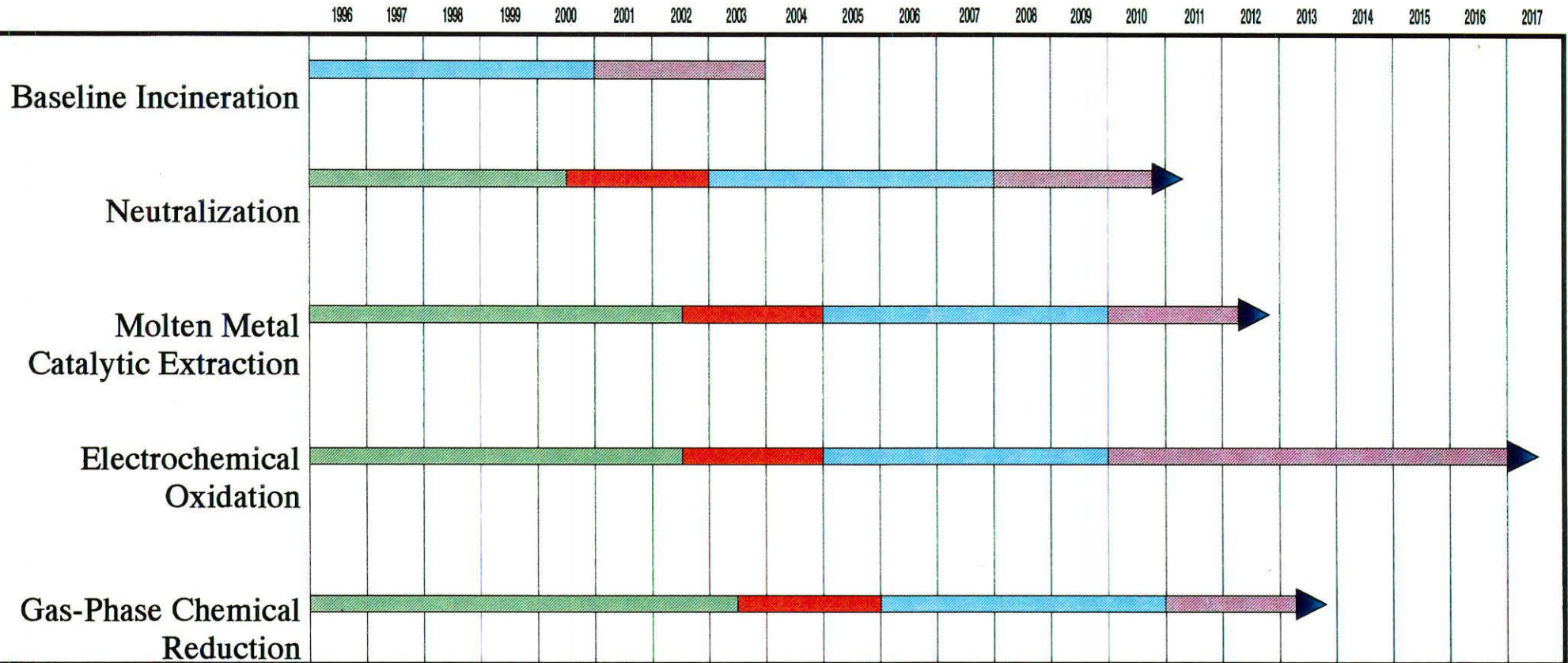


## **BEST AVAILABLE TECHNOLOGY: RISK**

- ▶ *QRA: Estimates fatalities for catastrophic releases.*
- ▶ *PreRA: Estimates likelihood of cancer and other adverse chronic health outcomes and ecological impacts.*
- ▶ *EIS: Long-term effects and fate and transport associated with releases of agent.*
- ▶ *Mitretek: Qualitative evaluation of hazards and uncertainties for alternative technologies.*



# TIME LINE



- Additional Development - Based on estimates presented in the matrix.
- Permitting - Assumed 2 1/2 years based on best professional judgment.
- Construction/Systemization - Assumed 5 years based on best professional judgment.
- Agent Processing - Based on estimates presented in the matrix (agent only except for incineration).

Oregon Department of Environmental Quality  
Eastern Region, Bend Office  
Brett McKnight, Manager  
2146 NE 4<sup>th</sup> Street  
Suite 104  
Bend, OR 97701

Corvallis, October 29, 1996



OREGON  
STATE  
UNIVERSITY

103 Gleeson Hall  
Corvallis, Oregon  
97331-2702

Enclosed is a report containing my answers to the questions on dioxin formation in the proposed Umatilla Chemical Demilitarization Facility. The questions were presented to me in letters from the Department of Environmental Quality dated August 8, 1996 and September 6, 1996. My findings can be summarized as:

- 1) Sulfur inhibits dioxin formation.
- 2) Other factors are more important in setting dioxin emissions than the chlorine content in the feed.
- 3) The dioxin emissions from the proposed facility will be less than 1 ng/m<sup>3</sup> during normal operation and not significantly different than emissions from similar plants burning natural gas only.
- 4) The design of the incinerator is not important as long as proper combustion conditions are maintained.
- 5) The most important features of a pollution abatement system for minimization of dioxin emissions are rapid cooling of the flue gases and removal of dioxin by e.g. carbon filters. Both of the methods are employed in the proposed facility.
- 6) No other method offers better dioxin removal than activated carbon filters.

If you have any questions regarding the report or wish further clarification of information, please, feel free to contact me. I apologize for being so slow in writing the report and wish that it can be of assistance to you.

Sincerely

A handwritten signature in black ink, appearing to read 'Kristiina Iisa'.

Kristiina Iisa  
Assistant professor

Telephone  
541-737-4791

Fax  
541-737-4600

STATE OF OREGON  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
RECEIVED

NOV -1 1996

EASTERN REGION  
BEND

**Answers to the four questions presented by the Department of Environmental Quality in their request dated August 8, 1996 and additionally to the fifth question presented in a separate letter dated September 6, 1996.**

**1. Sulfur and Dioxin Formation**

- a. The DEQ has received technical information indicating that sulfur is an inhibitor to the formation of dioxins. Does sulfur act as an inhibitor to the formation of dioxins and will the sulfur present in mustard (HD) act as an inhibitor for dioxin formation in the proposed incineration process for the UAD incinerators?**

Yes, the presence of sulfur in sufficient quantities in a fuel inhibits dioxin formation, and yes, sulfur in mustard is likely to act as an inhibitor for dioxin formation during its incineration in the proposed plant.

The inhibiting effect of sulfur on the formation of dioxins has been confirmed by several studies. /1-6/ Both laboratory and full scale plants experiments have shown that the addition of sulfur decreases the formation of dioxins. The presence of sulfur in coal is believed to be the reason for negligible dioxin emissions in coal combustion.

The form in which the sulfur has been added in the experiments has been sulfur dioxide or sulfur in coal that has been added to municipal solid waste incinerators. During combustion all sulfur regardless of source is oxidized to sulfur dioxide. Thus the sulfur in the mustard gas will behave in exactly the same manner as sulfur dioxide added to the incinerators in the tests or sulfur in coal and the results are applicable to combustion of mustard in the incinerators.

Reductions in the formation of dioxin by factors of up to thousand have been measured. With the addition of coal there seems to be a critical sulfur to chlorine molar ratio above which the reduction is considerable but below which there is little reduction. With the addition of sulfur dioxide, there seems to be reduction regardless of the sulfur to chlorine ratio though the extent varies with the amount of sulfur added. In the tests with natural gas combustion that seem most applicable to the incinerator proposed here, two levels of sulfur to chlorine ratios were used: 0.64 and 1.34. At these levels the dioxin emissions were less than one tenth of those that were obtained without any sulfur in the gases./4/ In coal combustion tests the addition of sulfur dioxide to increase the sulfur to chlorine ratio from 0.36 to 0.78 decreased the dioxin and furan yields by a factor of ten. In another study sulfur to chlorine ratios as low as 0.1 were sufficient to reduce dioxin concentrations by a factor of one hundred./5/

The molar ratio of sulfur to chlorine in mustard agent HD is 0.69. It seems safe to assume that the sulfur in mustard inhibits dioxin formation. Reductions in the amount of dioxins by at least a factor of ten could be expected.

## 2. Chlorine and Dioxin Formation

### a. Can dioxins be formed in a combustion process when chlorine is not an ingredient in the waste feed (i.e. chlorine in trace amounts as combustion air)?

Yes, any chlorine in the incinerator regardless of the source of the chlorine can contribute to dioxin formation. Even trace amounts of chlorine can lead to dioxin formation.

Laboratory and pilot scale studies done in well controlled conditions usually indicate that increasing the amount of chlorine by e.g. addition of hydrogen chloride increases the yield of dioxins/4,7-8/. Full scale studies on the other hand have failed to show any trends with the chlorine concentration./8-10/

The discrepancy between the two findings can be explained by the extreme complexity of the processes leading to dioxin formation. There are several routes for dioxin formation: *de novo* synthesis in which carbon in ash or soot reacts with chlorine to dioxin and formation via precursor mechanism in which chlorinated products of incomplete combustion are transformed to dioxins. Both may occur at short time scales in flight or over extended periods on deposits and other surfaces. Both are affected by the presence of several impurities.

Overall, factors other than the chlorine content are more important in setting the level of dioxin emissions during gas combustion in an incinerator./11-12/ The form at which chlorine is present in the flue gases is believed to influence dioxin formation more than the total amount of chlorine in the gas phase: elemental chlorine is more reactive than hydrogen chloride for dioxin formation./13/ During gas combustion factors such as sooting (formation of small particles consisting mainly of carbon) may have a greater impact on dioxin formation than the chlorine content./7,14/ Metals such as copper and iron catalyze dioxin formation, and the presence of them in the flue gases greatly increases dioxin formation. /15-17/

In general the existing data on the effect of chlorine concentration can be concluded to imply that at relatively high concentrations of chlorine in the feed, of the order of percents, the dioxin emissions are independent of the chlorine content of the feed. At low chlorine concentrations at otherwise identical conditions an increase in the chlorine content may increase dioxin emissions. Factors other than the chlorine content have a greater impact on the formation of dioxins and it is impossible to predict dioxin concentrations solely based on the chlorine content of the feed.

It is important to bear in mind that the dioxin concentrations are so low that even minute amounts of chlorine may lead to substantial dioxin formation if the conditions are right. With a chlorine content of 1 ppb (0.0000001 volume %) in the flue gases and a conversion of one percent of the chlorine to dioxins we could produce more than 5 ng/m<sup>3</sup> of dioxin.

- b. **Because the UAD incinerators are natural gas fired, would one expect other natural gas fired combustion facilities such as the Co-Gen facilities in the area, to form dioxin if chlorine was not a key component? If so at what mass emission rate would dioxin be produced?**

Yes, there may be formation of dioxins from the Co-Gen facilities due to trace impurities of chlorine in the combustion air or the natural gas. However, without measurements it is impossible to quantify the dioxin emissions. Generally, natural gas fired combustion facilities are deemed not to produce significant amounts of dioxins. Significant dioxin emissions could be defined for example as emissions above  $1 \text{ ng/m}^3$ . Measurements in the literature have indicated, however, dioxin concentration well above  $30 \text{ ng/m}^3$  during gas combustion without other chlorine sources except impurities in the fuel and combustion air. These measurements come from small scale experimental facilities and they are probably not applicable to large scale applications such as the Co-Gen facility.

- c. **How would the dioxin mass emission rate for the UAD incinerators while operating on natural gas compare to when mustard (HD) is introduced into the incinerators versus not introduced into the incinerators? What is the dioxin reduction for the UAD incinerators if HD is not burned? In calculating the dioxin emissions, the calculations should include: start up, shut down, normal operations, and upset conditions.**

Some increase in the dioxin emissions may occur when mustard is introduced in the incinerator compared to the incineration of the nerve agent VX. However, the emissions from the proposed system both with and without mustard addition are expected to be below  $1 \text{ ng/m}^3$  and thus it is impossible to give an estimate for the increase. The emissions during start up or shut down or upset conditions are not either expected to exceed  $30 \text{ ng/m}^3$ .

Mustard contains 41 % chlorine by weight which makes it seem like a strong candidate for dioxin formation. However, as stated in the answer for the first question it contains sulfur at a sulfur to chlorine molar ratio of 0.46, and sulfur inhibits dioxin formation. Based on studies in full scale plants there is no direct proportionality of dioxin formation with the input chlorine concentration, at least at high concentrations. Further, dioxin formation is normally greatly increased by the presence of certain metals, notably copper and iron. The concentrations of these metals are relatively low in mustard. This would make the dioxin emissions low when compared to e.g. incineration of municipal solid waste at similar chlorine concentrations. Overall the expectation is that despite the high chlorine content of mustard the dioxin emissions will be low.

The nerve agent GB contains 0.1 weight % hydrogen chloride as impurity. This makes the amount of chlorine in GB about one four hundredth of that in mustard. However, GB does not contain any significant amounts of sulfur. One way of comparing the emissions during combustion of mustard or GB is to assume that the dioxin emissions are directly proportional to the chlorine concentration until up to 1 weight % and that above this

concentration the dioxin emissions are independent of the input concentration. This seems a reasonable assumption based on the data available. Further, based on the data presented in the answer to the first question it is safe to assume that the sulfur in mustard decreases the dioxin emissions by at least a factor of ten. This would make the dioxin emissions during combustion of mustard the same as during destruction of GB.

The nerve agent VX does not contain any significant chlorine impurities. The chlorine source during VX incineration is then any trace impurity in the agent, natural gas or combustion air. In addition VX contains sulfur, at about half the concentration of that in mustard. These two factors make it likely that the dioxin emissions during destruction of VX in the incinerator are lower than during destruction of mustard.

The dioxin emissions from the proposed plant could be best estimated based on the trial burns at Johnston Atoll. Table 1 shows the reported dioxin and furan emissions during different sets of trial burns. Included in the table are only values that were actually detected. The results of the five sets with three to four experiments in each are shown. The values for each run in the sets as well as the average for each set is given.

Table 1. Sum of the detected concentrations of dioxins (PCDD) and furans (PCDF) in  $\text{ng}/\text{m}^3$  during the experiments at Johnston Atoll. LIC refers to liquid incinerator, DFS to deactivation furnace system, MPF to metal parts furnace, and DUN to dunnage furnace. Source: Appendix G (JADACS Emission Test Summaries and ANCDF Emission Estimates) of the Final SRA, RCRA Part B, RA No. 39-26-1399-95, Revision No. 1, 14 July 1995.

agent	run 1	run 2	run 3	run 4	average
HD, LIC	0.1	0.04	0.09	0.33	0.14
VX, LIC	0.06	0	0	0	0.01
GB, LIC	0.13	.02	0.18	-	0.13
VX, DFS	0.64	0.31	0.1	0	0.26
HD, MPF	0.18	0.04	1.21	0.21	0.41
GB, DUN	7.25	6.97	4.02	7.66	6.47

The average emissions vary from  $0.01 \text{ ng}/\text{m}^3$  for the liquid incinerator tests with VX to  $6.5 \text{ ng}/\text{m}^3$  for the dunnage furnace tests with GB. The liquid incinerator test runs show the expected trends: higher and approximately equal emissions for mustard and GB and lower emissions for VX. The comparatively high emissions from the deactivation furnace with VX and the dunnage furnace with GB may seem surprising at first.

The source of chlorine in the VX experiments could be trace impurities in the combustion air or natural gas or the feed (energetics and small metals parts). Johnston Atoll is situated in the Pacific Ocean at a relatively warm climate. This makes the air contain considerable quantities of chlorine. This could raise the chlorine concentration to a level high enough to explain the dioxin formation. The feed to the deactivation furnace contains metals, and the flue gases contained higher concentrations of metals than those from the liquid

furnace. The presence of metals in the flue gases enhances dioxin formation. This may easily explain the relatively high emissions from the deactivation furnace.

Another interesting feature in the data for VX destruction in the deactivation furnace is the decrease in dioxin concentration from experiment to experiment. It has been demonstrated that contamination of incinerators by soot or metals affects dioxin emissions and that the dioxin emissions may be slow to respond to changes in the feed conditions, e.g. changes in sulfur concentration./7,18/ Response times of several days have been reported. It is possible that there may have been some incident that had rendered the furnace highly active for dioxin formation and that the activity was slowly decreasing.

The GB that was added in the dunnage incineration test contains some chlorine. Thus the chlorine sources are GB and impurities in air and natural gases plus possibly in the waste. One difference between the dunnage furnace and the other incinerators is that the pollution abatement system contains no quench tower for quickly cooling the flue gases. Dioxin formation occurs at high rates only at temperatures in a relatively narrow range of 250-400°C. The longer residence times at these critical temperatures increases the formation of dioxin. The flue gases contained higher concentrations of metals than those in the liquid incinerator tests. In particular copper concentrations seem to have been high. As stated for the emissions from VX destruction in the metals parts furnace, metals, in particular copper, enhance the formation of dioxins. A further factor may be that the material burned in the dunnage incinerator includes wooden pallets and packing materials. They form ash, and ash also promotes the formation of dioxins. The concentrations of volatile products of incomplete combustion were also somewhat higher than those in the tests in the liquid incinerator. The combustion may not have been as complete as in the liquid incinerator. GB does not contain sulfur that would have inhibited dioxin formation. All of these factors contributed to the higher dioxin emissions even though the chlorine content of GB is low compared to mustard and the amount of the agent is smaller in the incinerator is smaller than in the liquid incinerator.

The data from the deactivation and dunnage furnaces clearly demonstrate that other factors are more important for dioxin formation than the concentration of chlorine in the feed.

The dioxin and furan emissions taking into account the detected amounts and undetected ones at the detection limit were all below 7 ng/m<sup>3</sup>, and with the exception of the dunnage furnace below 1.5 ng/m<sup>3</sup>. With the addition of carbon filters the emissions from the proposed Umatilla incinerator will be considerably lower than this. With the carbon filters it is possible to decrease the dioxin emissions by several orders of magnitude. Thus an estimate of actual emissions below 0.1 ng/m<sup>3</sup> is reasonable and below 1 ng/m<sup>3</sup> conservative.

The above applies to operation at normal considerations. The emissions during start-up, shut-down or upset conditions could be higher. However, with the safety procedures proposed for the plant I do not expect them to be exceed 30 ng/m<sup>3</sup>.

Some conditions that would increase the dioxin emissions include:

- Improper combustion conditions in the incinerator. This would result in increased formation of products of incomplete combustion. In extreme cases dioxins could be formed in the incinerator. However, a more likely and greater effect of improper combustion is increased soot formation and the formation of precursors for dioxin formation. The presence of excess amounts of soot greatly increases the formation of dioxin. The proposed plant contains primary and secondary chambers or primary burners and afterburners for all incinerators to ensure proper combustion.

A good indicator for improper combustion conditions is the carbon monoxide level in the incinerator. If the carbon monoxide concentration exceeds 100 ppm in the incinerators the agent feeds to the furnaces will be cut off. The agent feed will also be cut off if the oxygen concentration becomes lower than 3 %, or if the temperature becomes lower than set values. Also if the combustion air pressure decreases below a set limit, the incinerators will be shut down. All of these precautions should ensure that proper combustion conditions are maintained and that there will not be increased dioxin emissions. Even if there were improper combustion conditions, the carbon filters still provide a buffer against increased concentrations of dioxin, and the dioxin emissions are not expected to exceed 30 ng/m<sup>3</sup>.

- Lack of cooling in the quench tower. If the cooling liquid flow to the quench towers decreases or ceases, the temperature of the flue gases may remain high. This would lead to increased exposure of the gases to temperatures in the window 250-400°C (480-750°F) that is critical for dioxin formation and thus increase dioxin emissions. All feed will stopped if the temperature of the gases leaving the quench tower exceed 250°F. This seems adequate for ensuring that no sustained temperatures above 480°F will be encountered. The carbon filters still provide extra security, and the emissions are not expected to exceed 30 ng/m<sup>3</sup>.
- Unavailability of a carbon filter. If the carbon filters were not operational the dioxin emissions would increase. In this case, the dioxin emissions are expected to be comparable to those measured at Johnston Atoll and they would still be below the limit 30 ng/m<sup>3</sup>. There are two spare carbon filters that are common to all of the incineration units. This should be adequate for ensuring that the gases can be switched over to one of them in case of an unavailability of a filter.
- Formation of hot spots in the filter. The formation of hot spots may cause fires and release of adsorbed dioxins from the filter. The carbon monoxide concentrations before and after the carbon filters are measured and used as an indication of possible hot spots in the filters. The carbon filters are also taken off line if the temperature of the inlet gas exceeds 130°F.



All of the precautions seem adequate to ensure that the dioxin emissions during upset conditions do not exceed  $30 \text{ ng/m}^3$ .

### **3. Combustion technology and dioxin.**

#### **a. What is considered state of the art design technology for preventing dioxin formation in a combustion process?**

Most of the dioxin formation occurs at the low temperatures downstream of the combustion chambers at temperatures 250-400°C. Hence the incineration technology is not nearly as crucial as the design of the pollution abatement system for formation of dioxin. As long as conditions are maintained for destruction of the agents at the desired level the design of the incinerator is not crucial.

For proper combustion a sufficient residence time at high temperatures with good mixing is required. Non-proper conditions increase the formation of products of incomplete combustion. This includes formation of precursors for dioxin formation or dioxin itself though the latter is usually not of great importance. Further, improper combustion produces soot. The formation of dioxins increases considerably when the combustion produces higher amounts of soot.

### **4. Pollution Control Technology and Dioxin**

#### **a. What are the essential design elements of a pollution abatement system for controlling dioxin emissions from a combustion process?**

The essential elements of a pollution abatement system for controlling dioxin emissions from combustion processes are: a) rapid cooling of the gases in a quench system to prevent dioxin formation and b) adsorption of dioxin once it has been formed. Both of these processes are employed here, the former as quench towers for the liquid incinerators, deactivations furnaces and metal parts furnaces and the latter as the carbon filters for all of the systems. Due to the low concentration of the agents in the dunnage furnace the dioxin emissions are expected to be lower than from the other furnaces, and no quench cooling is provided for this stream.

In principle there are two different ways of addressing the minimization of dioxin emissions. The first is to prevent the formation of dioxin and the second is destruction or removal of dioxin once it has been formed.

The formation of dioxin occurs in a relatively narrow temperature window of 250-400°C. Above 400°C and below 250°C the net rates of dioxin formation are negligible. The minimization of the exposure to these temperatures is one of the most efficient methods of preventing dioxin formation. By this method the formation of dioxins is easily

decreased by factors of ten to hundred./19/ Other suggested methods for the prevention of dioxin formation include the removal of precursors of dioxin formation. An example is the removal of hydrogen chloride by use of limestone./20/

The addition of compounds containing sulfur to inhibit dioxin formation has been suggested and demonstrated as well. Good results have been obtained with the addition of high sulfur coal or lignite to municipal solid waste incinerators./3/ Mustard and the agent VX have high sulfur contents and sulfur is naturally present in the incinerators in these cases.

Several methods have been developed for removal of dioxin. Activated carbon is the most common candidate for adsorption of dioxin. The injection of activated carbon as a final step to remove dioxin emissions after scrubbers is used extensively in Europe. In this method activated carbon or a mixture of carbon with limestone is injected into flue gases after scrubbers or other flue gas cleaning equipment. The carbon is then captured in fabric filters. Some of the removal of the dioxin occurs in flight on the activated carbon particles, the rest on the activated carbon collected on the filters. Removal efficiencies of more than 95 % and emissions below 5 ng/m<sup>3</sup> are easily achieved.

Another way of using activated carbon for the capture of dioxin are static or dynamic carbon filter beds. The flue gases are led through beds of activated carbon and dioxin and other impurities are adsorbed onto the carbon granules. This is the method chosen for the Umatilla facility. The efficiency of the carbon filters depends on the quality of the activated carbon. With a proper selection of this very high reduction efficiencies can be obtained. The efficiency of activated carbon filters is unsurpassed by other methods. An activated carbon filter used in the incineration of solid radioactive waste in Germany was reported to decrease the dioxin emissions by factors ranging from 250 to 5700 with an average reduction by a factor of 1700 in nine tests/23/. These correspond to reduction efficiencies of 99.6 to 99.98 %.

The activated carbon filters have two distinct advantages. The use of activated carbon in method gives the ability to simultaneously reduce the concentrations of other pollutants as well. Thus they offer added security against accidental releases of the agents or other products of incomplete combustion. Another benefit of using carbon filters is that they contain large quantities of the filter bed material. This offers buffering capacity in cases of accidental high concentrations of pollutants, whether they are dioxins or agents. This feature is unique to the carbon beds.

The use of activated carbon together with limestone in the equipment for sulfur dioxide removal has been proposed. The ability of dry, semi-dry and wet processes to reduce the toxic equivalent to values of less than 0.1 ng/m<sup>3</sup> has been demonstrated in Europe./21/ A disadvantage of these methods is that the wastes are mixtures of the carbon that has been contaminated by dioxins and other pollutants together with the limestone and possibly ash from the combustion process. The disposal of the waste mixture creates a problem.

Mixtures of sodium bicarbonate and carbon have been used as well in the dry method with good success./22/

Several other methods for the reduction of dioxin emissions are being developed./24/An example is the application of selective catalytic reduction for oxidation of dioxin. The selective catalytic reduction is used for nitrogen oxides removal. High destruction efficiencies can be obtained if the temperature in the catalyst is high enough. /21,25/ Other catalysts for dioxin oxidation are being developed as well.

In many cases the methods of reducing the amount of dioxin formation may be sufficient for achieving low dioxin concentrations. With high dioxin emissions, removal or destruction of dioxin is needed as well.

**5. Design of the carbon filters and best available control technology. My opinion on the pollution abatement system (PAS) carbon filter design and comment as to the carbon filter system applicability as being the best available technology for incineration design was asked.**

As expressed in the answer to the fourth question, activated carbon filters together with rapid quenching of the flue gases is the most efficient methods of reducing dioxin emissions. No other method seems to be able to offer higher reduction efficiencies. The carbon filters have the advantage of being able to reduce concentrations of other pollutants as well and of offering added security against accidental high releases during upset conditions.

The use of carbon filters contains some risks. There is a possibility for the formation of local hot spots that could lead to fires and release of the adsorbed compounds from the carbon. Also, condensation of water in the filters might render the filters unusable. The preventive actions proposed for the carbon filters at the Umatilla facility seem adequate for reducing the risks associated with the use of the carbon filters.

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**Draft**  
**Best Available Technology**  
**Findings Report**  
**Umatilla Chemical Depot**  
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**Prepared for:**

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## Table of Contents

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<u>Section</u>	<u>Page</u>
1 Introduction .....	1
2 Summary of Available Risk Information .....	4
3 Umatilla Stockpile Components .....	12
4 Matrix for Comparison of Technologies .....	16
5 Baseline Incineration .....	20
6 Neutralization .....	25
7 Molten Metal Catalytic Extraction .....	35
8 Electrochemical Oxidation .....	40
9 Gas-Phase Chemical Reduction .....	44
References .....	50

Attachment A - Tables for Comparison of Alternative Technologies

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conditions along the western slope of the Blue Mountains, this area should be assessed with air monitoring. The air modeling and site selection shows the stronger frequency of southwesterly winds will push pollutants to the northeast. These sites could be pinpointed further through additional air dispersion modeling by using refined analysis and a focus on higher elevated topographic features. This type of analysis could be used to identify monitoring sites with a much greater level of accuracy than currently identified by UMDA.

The following three air monitoring sites were identified as the potential ambient monitoring locations:

- Site 1 This is a UMDA boundary site approximately 4.9 km northeast of the facility. This site corresponds to modeling receptor location BD\_80 along the hypothetical 56.25 degree radial. The general area for selection of this site is shaded on Figure 1 in the Attachments. It represents the off-site MEI; the expected ambient air concentrations are presented in Table 1. These modeled ambient air concentrations were calculated using the proposed emission rates from the four stacks (explained in the Task 8.1 report) with the use of multipliers (normalized air concentrations from modeling). This site should represent the highest air concentration just outside the UMDA boundary. Ambient monitoring at this location may help to verify the air dispersion model.
- Site 2 This is the maximum expected air impact location. This site is located 50 km from the UMCDF site, along the hypothetical 67.5 degree radial, to the northeast of the facility. The modeled location is identified as GP3\_48. Figure 1 shows the recommended region for monitoring. This site is important because it represents the maximum air impact expected at 50 km, which is the outer bounds of usefulness of the ISCST3 model. Ambient sampling at this location could be used to (1) verify the dispersion model and (2) verify low ambient concentrations of potential contaminants of concern. This site also represents a conservative measure of the concentration of contaminants at locations greater than 50 km from the UMCDF. Expected concentrations for this maximum are also shown in Table 1. *Error! Not true*
- Site 3 This site should be located on the western slope of the Blue Mountains, preferably northeast or east of UMCDF near traditional CTUIR agricultural areas. This site will be approximately 80 km from the UMCDF. Since (1) atmospheric inconsistencies described in Task 8.1 can exist in these areas (PRC 1996) and (2) this location is located beyond the recommended distance of the ISCST3 model, ambient monitoring can be conducted here to assess actual conditions.

## 7.2 MONITORING LOCATIONS BASED ON DATA COLLECTED AT OTHER FACILITIES

PRC found one study regarding monitoring locations selection. During the destruction of chemical agents at a facility in Canada, an instrumented air quality monitoring trailer was established downwind

## ACRONYMS

AMSAA	United States Army Materiel Systems Analysis Activity
Army	United States Army
BAT	Best available technology
BDAT	Best demonstrated available technology
Btu/h	British thermal units per hour
CHB	Container handling building
Chem Waste	Chemical Waste Management, Inc.
CSR	Catalytic steam reformer
DEQ	Department of Environmental Quality
DRE	Destruction removal efficiency
E&E	Ecology and Environment, Inc.
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
EQC	Environmental Quality Commission
FPEIS	Final Programmatic Environmental Impact Statement
gal	Gallon
GB	Nerve agent (sarin)
HD	Distilled mustard
HVAC	Heating, ventilation, and air conditioning
JACADS	Johnston Atoll Chemical Agent Disposal System
kJ	Kilojoule
km	Kilometer
kW	Kilowatt
lb	Pound
LDR	Land disposal restriction
LD50	Lethal dose for 50% of the population
MPF	Metal parts furnace
MW	Megawatt
NO <sub>x</sub>	Oxides of nitrogen
NRC	National Research Council
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
OVT	Operational verification testing
PAS	Pollution abatement system
PCB	Polychlorinated biphenyl
PreRA	Pre-trial burn risk assessment
QRA	Quantitative risk assessment
RCRA	Resource Conservation and Recovery Act
SAIC	Science Applications International Corporation
SBV	Sequencing batch vaporizer
TSDF	Treatment, storage, and disposal facility
UMAD	Umatilla Army Depot
UMCD	Umatilla Chemical Depot
UMDA	Umatilla Depot Activity



UMCDF	Umatilla Chemical Disposal Facility
UPA	Unpack area
VOC	Volatile organic compound
VX	Nerve agent

## 1. INTRODUCTION

Ecology and Environment, Inc. (E&E) was tasked to provide technical assistance to the Department of Environmental Quality (DEQ) relating to the use of disposal technologies to destroy the chemical munitions stockpile at the Umatilla Chemical Depot (UMCD). The purpose of this review is to prepare background for review by the Environmental Quality Commission (EQC) to facilitate their findings about best available technology (BAT) in accordance with ORS 466.055(3) for destruction of the stockpile of chemical weapons stored at Umatilla.

As part of this analysis, E&E has performed a comparative analysis of several disposal technologies, including:

- Baseline incineration (current proposed disposal technology)
- Neutralization
- Neutralization followed by biodegradation
- Molten metal catalytic extraction
- Silver II electrochemical oxidation
- Gas-phase chemical reduction

These technologies were evaluated by utilizing criteria identified by the EQC and DEQ as outlined below.

1. Types/quantities/toxicity of discharges to the environment by operation of the proposed facility or any alternative technology
2. Risks of discharge from a catastrophic event or breakdown in operation of the proposed facility or any alternative technology.
3. Safety of the operation of the proposed facility or any alternative technology.
4. The rapidity with which the technology can destroy the stockpile.
5. Impacts of the proposed technology on consumption of natural resources.
6. Period of time to test out the technology and have it fully operational and how that impacts the overall risk of the stockpile program.

7. Cost.

These criteria were addressed based on information contained in the following documents and also based on E & E's institutional knowledge of the proposed baseline incineration facility.

- *Review and Evaluation of Alternative Chemical Disposal Technologies* (NRC 1996);
- *Army Material Systems Analysis Activity Summary Report, Special Publication No. 75, Technical and Economic Analysis comparing Alternative Chemical Demilitarization Technologies to the Baseline, vol. I* (AMSAA 1996);
- *U.S. Army Demilitarization Technology Report for Congress* (Army 1994b);
- *Umatilla Chemical Agent Disposal Facility Phase I Quantitative Risk Assessment* (SAIC 1996);
- *Draft Pre-Trial Burn Risk Assessment, Proposed Umatilla Chemical Demilitarization Facility* (E&E 1996);
- *Preliminary Risk Assessment of Alternative Technologies for Chemical Demilitarization* (Mitretek 1996);
- *The Promise of Alternative Technologies* (Brown 1996);
- Information provided by vendors of alternative technologies (i.e., AEA Technology - Silver II electrochemical oxidation, M4 Environmental L.P. - molten metals catalytic extraction, Eco Logic - gas-phase chemical reduction);
- Letter to Members of the Oregon Environmental Quality Commission (Wilkinson, 1996); and
- Others as noted.

The results of this evaluation are summarized in a matrix (See Table 4-1). Detailed information supporting the matrix is included in Sections 5 through 9.

An August 8, 1996 memorandum prepared by Langdon Marsh, Director of the DEQ, to the EQC describes the statutes by which the EQC is bound to make its findings on the proposed technology for the Umatilla facility. These statutes address the use of best available technology (ORS 455.055(3)) and the human health and environmental risks posed by the proposed facility (ORS 455.055(5)).

The best available technology determination requires that a minimum technology standard is applied; however, the EQC can make the standard more stringent. Under different environmental regulations, various applications of BAT are applied which account for cost, technical feasibility, maximum reduction of pollutant levels, energy and environmental impacts. The Resource Conservation

and Recovery Act (RCRA), which provides the regulatory framework for the hazardous waste permit, best demonstrated available technology (BDAT) definition states that "determinations should not be based on emerging and innovative technologies."

One of the specific concerns for the BAT determination at Umatilla is the availability of newly emerging technologies. RCRA BDAT defines "available" three ways: (1) the technology does not present a greater total risk than land disposal; (2) if the technology is a proprietary or patented process, it can be purchased from the proprietor; and (3) the technology provides substantial treatment. This last criterion can be further defined as substantially diminishing the toxicity or substantially reducing the likelihood of migration of hazardous constituents. Definitions of BAT under the Clean Water Act (CWA) and the Clean Air Act (CAA) are not as restrictive as RCRA BDAT in defining availability. The EQC is not limited by the RCRA BDAT definition of "available."

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## 2. SUMMARY OF AVAILABLE RISK INFORMATION

This section provides an overview of the various risks associated with the stockpile of munitions at UMCD. Section 2.1 summarizes the risks associated with storage of the munitions compared to disposal processing, and Section 2.2 compares risks associated with the alternate technologies. Conclusions from these sections are presented in Section 2.3.

### 2.1 Quantitative Risk Assessment Findings

Science Applications International Corporation (SAIC), under contract with the Army, completed a quantitative risk assessment (QRA) for the Umatilla Chemical Agent Disposal Facility (UMCDF), the baseline incineration process. The purpose of the QRA is to support a risk management program designed to ensure safe disposal of the chemical weapons stockpile while minimizing risks to the public, site workers, and the environment. The QRA consists of two phases. The first phase has been completed and estimated public health risk based on: (1) current chemical agent disposal facility design and planned operations; (2) relevant data collected since the final programmatic environmental impact statement (FPEIS) study was performed; (3) improvements in QRA methodology; and (4) declassification of the U.S. chemical weapons stockpile. The second phase of the QRA will incorporate site-specific design information and include a comprehensive assessment of risks, including worker risks associated with agent operations and explicit evaluation of uncertainty. The Phase 2 QRA is expected to be completed after construction of the facility is complete.

A summary of results presented in the QRA are shown in Table 2-1.

Table 2-1  
COMPARISON OF RISKS AT UMCD  
BASED ON INFORMATION PRESENTED IN THE QUANTITATIVE RISK ASSESSMENT

Stockpile Scenario	Expected Fatalities	Chance of at least one Public Fatality
Disposal Processing (assumes baseline incineration - 3.3 Years)	0.00002	1 in 300,000
Stockpile Storage During Disposal Processing (assumes baseline incineration - 3.3 Years)	0.04	1 in 6,000
20 Years of Continued Storage	0.6	1 in 400

Source: SAIC 1996.

Expected fatalities account for both the chance of an accident occurring and the consequences of these accidents in the local population. For example, 0.5 expected fatalities could mean a 50% chance of one death or a 5% chance of ten deaths in the local population (and not that half of one person would die). The expected fatalities presented in the QRA consider a variety of possible events and the results of each.

The chance of at least one public fatality measures the chance of a catastrophic accident, but does not account for the magnitude of these accidents. In other words, this statistic does not differentiate between potential events that cause one death and potential events that cause thousands of deaths.

For both statistics presented in Table 2-1 the risk associated with 20 years of continued storage are greater than storage during disposal processing (3.3 years) which, in turn, are greater than the risks associated with disposal processing.

### 2.1.1 Munitions Processing

As shown in Table 2-1, the estimated fatalities associated with accidents during disposal processing is 0.00002 (page ii, SAIC 1996). This risk is dominated by the following potential events (page 13-7, SAIC 1996):

- Collapse of the container handling building (CHB) during a seismic event - 71% of total risk
- Rocketing fire due to handling accident - 14% of total risk
- Aircraft crash into facility - 13% of total risk

Although the QRA was written to assess the risks associated with the proposed baseline incineration facility, the significant disposal risks are associated with external events which may occur during handling of munitions or during reverse assembly. This means that all alternative technologies would, at a minimum, have the same disposal risks as the baseline system. Furthermore, risks associated with reverse assembly and storage of the stockpile would also be at least as high, since the same risks would be incurred through the reverse assembly process.

The risk percentages associated with each of the chemical agents stored at UMCD are as follows:

- GB - 84% of total risk
- VX - 11% of total risk
- HD - 5% of total risk

The increased risk associated with GB processing is due primarily to the fact that GB is more volatile than the other agents; consequently, following a release, it can be dispersed over a much larger area and thereby impact more people (page 13-20, SAIC 1996). This is true despite the fact a greater volume of HD than GB is stored at Umatilla. Risk of fatality is more dependent on the chemical properties of GB and munition configuration (i.e., M55 rockets pose a greater risk than bulk agent due to the potential for explosion) than on the quantity of agent stored on site.

### 2.1.2 Stockpile Storage

The estimated fatalities associated with stockpile storage during the disposal period (i.e., 3.3 years) is 0.04 (page ii, SAIC 1996). The estimated fatalities for 20 years of continued storage is 0.6.

Factors contributing to the risk associated with storage include the following:

- Seismic risk (such as ignition of M55 rockets following falls in storage igloos) - 97% of total risk
- Lightning triggering ignition of M55 rockets - 2% of total risk
- Aircraft crashes into mustard storage shed - less than 1% of total risk
- Handling accident - less than 1% of total risk

The igloos in which the munitions are stored are robust to seismic events; however, munition stacks within them may fall and leak during an earthquake (page 15-10, SAIC 1996). Similar to the processing risk, release of GB contributes a greater percentage to the total risk estimate because of its higher volatility as compared with VX and HD.

The QRA does not specifically address two scenarios which are potentially relevant to UMCD. These are destruction of all munitions except for the HD ton containers and reverse assembly and long-term storage of the munitions. Risks associated with these two scenarios may still be assessed qualitatively through further examination of the details in the results of the QRA. These risks and the rationales for each are presented in the following sections.

#### 2.1.2.1 Storage of HD ton containers

The HD ton containers have a much smaller storage risk than munitions containing energetics. The most significant causes of storage risk (seismic risks and lightning) do not apply to ton containers, which would not explode after falls in igloos or after lightning strikes. The only remaining significant event is a potential airplane crash into a mustard storage shed; however, the storage risk for the ton

containers still exceeds the risk associated with disposal processing of the HD. A summary of these risks is presented in Table 2-2.

**Table 2-2**

**COMPARISON OF RISKS FOR HD TON CONTAINERS AT UMCDF  
BASED ON INFORMATION PRESENTED IN THE QUANTITATIVE RISK ASSESSMENT**

Stockpile Scenario	Expected Fatalities
Disposal Processing (assumes baseline incineration - approximately 0.5 years)	0.000001
Stockpile Storage During Disposal Processing (assumes baseline incineration - approximately 0.5 years)	0.000023
Risk Per Year of Continued Storage	0.000034

Source: SAIC 1996.

This table shows that the expected fatalities during processing of HD ton containers is still over twenty times higher for storage than for disposal. The total risk would increase as the length of storage increases; and unless some new technology is developed that eliminates handling risks, the processing risks would still be incurred when the HD is eventually destroyed. If the ton containers are stored for five additional years, which is approximately the development time of some alternative technologies, the storage risk would be about 170 times higher than the disposal risk.

It also should be noted that while the fatality risk associated with HD ton containers is relatively low compared to the remainder of the stockpile, this is due in large part to the low chance of an aircraft crash occurring compared to the chance of a catastrophic seismic event. The consequences of an aircraft crash, however, are extremely severe and would have significant effects beyond risk of fatalities. The Environmental Impact Statement (EIS) (Army 1996b) describes some of these potential effects:

"During continued storage, an aircraft crash into the mustard storage warehouse at UMDA would create an accident with the potential for significant impacts on surface water quality in the vicinity of UMDA (U.S. Army 1988a, Vol. 3, Appendix N). If a fire did not follow the aircrash, this accident could spill as much as 154,000 kg (340,000 lb) [or 130,500 L (34,500 gal)] of liquid mustard agent if all containers stored within the warehouse were involved. The amount of agent spilled during this accident would substantially exceed quantities associated with corresponding accidents under on-site disposal."

(page 4-54, Army 1996b)



The EIS also describes the potential fate of such a spill. These effects include seepage of mustard into the water table, persistence of mustard for years in water, and the preclusion of the use of the Columbia River for drinking water or for agricultural purposes (page 4-55, Army 1996b).

#### 2.1.2.2 Reverse assembly and storage

Reverse assembly of the stockpile could potentially reduce risks associated with storage. However, these risks would still exceed risks associated with disposal processing, and could cause other potential problems as well. As noted above, the disposal processing risks are dominated by external events, such as the collapse of the container handling building during an earthquake or an ignitoo fire during a handling accident. All of these risks would still be incurred during the reverse assembly process. In addition, extra handling risk would be added as the disassembled munitions are returned to their storage locations. Furthermore, there would still be significant storage risks associated with the disassembled munitions; the consequences of an airplane crash into a storage shed with bulk GB potentially could be greater than the consequences of a similar accident with HD due to the greater volatility of GB. Also, the reverse assembly process is not perfect; a small amount of agent typically remains on/in munitions following draining, and in cases where the agent has crystallized or gelled, significant amounts of agent may remain. This agent could still cause fatalities in the event of an accident involving the dismantled munitions. Finally, the reverse assembly process can generate significant amounts of materials which are potentially contaminated with agent, such as spent decontamination solution (SDS). These materials would presumably have to be stored along with the munitions, greatly increasing the volume of agent-related matter stored at UMCD.

#### 2.2 Comparison of Risks for Alternative Technologies

Mitretek performed a comparison of risks associated with several alternative technologies for the bulk agent sites at Newport, Indiana and Aberdeen, Maryland. Three tables from the Mitretek report are included in Attachment A. Other Mitretek tables are referenced but not included. At Newport and Aberdeen, incineration was not considered to be an option due to public opposition; therefore, incineration was not considered in the Mitretek report (1996). Based on the assumptions that all of the alternative technologies can be operated safely, the risk results presented in the Mitretek report (page 10-1, Mitretek 1996) are based on inherent factors (i.e., relating to chemicals used in processes and operating parameters [temperature, pressure, flow rate, equipment complexity, etc.]). Unlike the pre-trial

burn risk assessment (prepared by E & E for the hazardous waste permit) and the QRA, risks presented in the Mitretek report are not quantitative results; actual values were not calculated. Rather, the risks are qualitative based on the best available information. Also, because the alternative technologies are in various stages of development, risks described in the Mitretek report are impacted by the completeness of design for each respective alternative technology (page 9-1, Mitretek 1996).

Inherent processing risks associated with the various alternative technologies were evaluated. Operating temperatures are significantly higher for gas-phase chemical reduction and molten metal catalytic extraction (Tables 10-1 and 10-2, Mitretek 1996). Gas pressure is significantly higher for molten metal catalytic extraction (Table 10-2, Mitretek 1996). Process volume is large for both types of neutralization, and medium for Silver II electrochemical oxidation (Table 10-2, Mitretek 1996).

For external events, unique areas of concern were identified for electrochemical oxidation and molten metal catalytic extraction. For electrochemical oxidation, unique concerns are associated with the capacity to hold large quantities of agent within the agent batch feed tanks and also with the lack of design documentation for the use of stricter seismic standards. Stricter seismic standards are needed to achieve parity with the baseline system. For molten metals, unique concerns are associated with having large quantities of agent in the plant at any one time and also with the lack of design documentation for the use of stricter seismic standards. This issue has been addressed by the respective vendors by limiting the amount of agent in the facility to 500 gallons. This type of control is not as "safe" as limiting the amount of agent in the system through design constraints (pages 10-15 and 10-16, Mitretek).

Tables 10-6, 10-7 and 10-8 from the Mitretek report (1996) are included here as Attachment A. These tables clearly summarize the major findings of this report. The following paragraphs provide additional details regarding the information presented in the tables.

Table 10-6 (Attachment A) is a summary of the hazardous chemicals associated with each of the alternative technologies. Given the lack of operational experience of the alternative technologies, it is neither possible nor appropriate to conduct a quantitative health or environmental risk assessment at this time (page 10-18, Mitretek 1996). With neutralization, the post-treatment design must ensure containment or destruction of carcinogenic compounds in the hydrolysate. Electrochemical oxidation requires the use of silver and nitrates, which may pose potential chronic noncarcinogenic risks. Gas-phase chemical reduction and molten metal catalytic extraction likely would not present chronic health effects, but the potential for acute effects from hydrogen sulfide, hydrogen cyanide, or carbon monoxide gas are possible. Molten metal catalytic extraction also uses nickel, a carcinogen and reproductive toxicant.

Table 10-7 (Attachment A) presents highlights of the alternative technologies by major risk evaluation parameters. For example, inherent risks associated with gas-phase chemical reduction and molten metal catalytic extraction are high operating temperatures and generation of large quantities of several flammable gases. Major failure modes associated with these two technologies are the potential for fire and explosion if hot process gases are released in the chemical demilitarization building (CDB). External risks for each of the alternative technologies at Aberdeen and Newport are relatively similar for each technology. Health risks associated with the alternative technologies vary considerably depending on the compounds generated/used in processes. Carcinogenic compounds are present in the hydrolysate generated by neutralization. Chronic health effects may be associated with the silver and nitrate compounds used in the electrochemical oxidation process. Finally acute effects may be associated with the process gases generated by gas-phase chemical reduction and molten metal catalytic extraction. Table 10-7 also summarizes the major uncertainties for each of the alternative technologies.

Table 10-8 (Attachment A) provides a qualitative evaluation of several parameters associated with each of the alternative technologies. The values presented were arrived at subjectively by Mitretek based on available information. These parameters relate to the completeness of information provided, the quality of the engineering design and process information presented, the support systems, level of automation, system redundancy, level of experience for agent processing, and the level of commercial experience. Two additional issues are presented including degree of recycling and commercial viability of waste streams. These two issues have no impact on the BAT finding, but rather are additional considerations for a few alternative technologies and were only evaluated after it was determined that the technology met all other criteria for disposing of the stockpile safely.

### 2.3 Risk Evaluation Conclusions

The greatest risk associated with the scenarios evaluated is presented by continued storage of chemical weapons (see Table 2-1). Expected fatalities are about 1,500 times higher per year of storage than for disposal processing; storage for twenty years would result in expected fatalities 300,000 times higher than for disposal processing. Consequently, rapid destruction of these munitions provides the greatest overall reduction in risk, and meets the goal of stockpile destruction. As concluded by SAIC, continued storage is the riskiest option; consequently, it is not considered to be a viable long-term option for the purposes of the BAT analysis. Furthermore, storage of HD ton containers or reverse assembly of the stockpile with continued storage of the dismantled munitions would still have higher risks than disposal processing; therefore, neither of these options are considered viable technologies.

The highest risks associated with disposal processing are related to accidents during handling and the reverse assembly process. These risks would be expected regardless of the technology used to dispose of the munitions. No specific comparison of risks associated with the technologies is possible because facility designs for the alternate technologies have not been completed. A number of potential issues have been identified for each alternate technology that would need to be resolved before these technologies could be used to destroy agent on a full-scale basis.

ORNL

### 3. UMATILLA STOCKPILE COMPONENTS

Table 3-1 presents a list of the specific munitions stored at UMCD. For all scenarios considered in this BAT evaluation, except long-term storage, the munitions must be separated into components (i.e., reverse assembly) prior to further processing. This is reflected in Figure 3-1. The four waste streams resulting from separation are agent (HD, VX, and GB), energetics (bursting, fuzes, and propellant), metal parts, and dunnage (i.e., general miscellaneous handling wastes). The non-agent waste streams would contain residual agent due to cross contamination and, in the case of metal parts, not all of the agent would be expected to readily drain from the munitions. For this reason, these waste streams also will need to be processed to ensure that residual agent is destroyed.

Some of the alternative technology vendors indicate that their technologies are capable of destroying the non-agent components of the stockpile; however, little or no data exist to support use of these technologies for energetics, metal parts, and dunnage. Consequently, each technology's potential ability to handle the non-agent waste streams was evaluated based on limited information. Figure 3-1 illustrates which technologies can be evaluated for which parts of the stockpile, based on vendor information and other reports. Proper disposal of non-agent waste streams requires monitoring to ensure that agent is not released during the processing. This factor prevents use of more conventional methods of disposal, such as open burning/open detonation for energetics.

Table 3-2 summarizes information available regarding the ability of each alternative technology to handle each waste stream. "Yes" indicates that available data support use of this technology for a particular waste stream. "No" indicates that available data do not support use of a technology for a particular waste stream or that the technology is fundamentally not appropriate for that waste stream. "Maybe" indicates that no data were available to support a vendor's claim that the waste stream could be handled by a particular alternative technology. "Incomplete Information" is used to indicate that the alternative technology could possibly handle the waste stream; however, no information was available.

Table 3-1  
**QUANTITIES AND TYPES OF MUNITIONS STORED AT  
 UMATILLA CHEMICAL DEPOT  
 UMATILLA, OREGON**

Agent	Munition	Number	Pounds/Agent/Munition	Total pounds	Percent of Stockpile
GB	115mm Rocket, M55	91,442	10.7	978,433	13.2%
GB	155mm Projectile, M121/A1	47,406	6.5	308,139	4.1%
GB	8-inch Projectile, M426	14,246	14.5	206,567	2.8%
GB	500-pound Bomb, MK-94	27	108	2,916	0.04%
GB	750-pound Bomb, MC-1	2,418	220	531,960	7.2%
<b>Total</b>				<b>2,028,015</b>	<b>27.3%</b>
VX	155mm Rocket, M55	14,519	10	145,190	2.0%
VX	Mine, M23	11,685	10.5	122,693	1.7%
VX	155mm Projectile, M121/A1	32,313	6	193,878	2.6%
VX	8-inch Projectile, M426	3,752	14.5	54,404	0.7%
VX	Spray Tank, TMU-28B	156	1356	211,536	2.8%
<b>Total</b>				<b>727,701</b>	<b>9.8%</b>
HD	Ton Containers	2,635	1775	4,677,125	62.9%
<b>Total</b>				<b>4,677,125</b>	<b>62.9%</b>
<b>Total All Agent</b>				<b>7,432,841</b>	<b>100.0%</b>

Source: SAIC 1996.

Table 3-2

**DESTRUCTION OF STOCKPILE WASTE STREAMS  
UMATILLA CHEMICAL DEPOT  
UMATILLA, OREGON**

Waste Stream	Baseline Incineration	Neutralization (HD)	Neutralization (VX, GB)	Molten Metal Catalytic Extraction	Silver II Electrochemical Oxidation	Gas-Phase Chemical Reduction
Agent	Yes	Yes	Yes	Yes	Yes	Yes
Energetics with Residual Agent	Yes	No	No	Maybe	Incomplete Information	Incomplete Information
Metal Parts with Residual Agent	Yes, 5X <sup>a</sup>	No, 3X <sup>b</sup>	No, 3X <sup>b</sup>	Yes, 5X <sup>a</sup>	No, 3X <sup>b</sup>	Yes, 5X <sup>a</sup>
Dunnage with Residual Agent	Yes	No	No	Yes	No	Incomplete Information

<sup>a</sup> Decontamination to "5X" indicates that the material is sufficiently free from agent to be released to the public.

<sup>b</sup> Decontamination to "3X" indicates that no agent is detectable by air monitoring above the material. Material decontaminated to 3X may not be released to the public and likely would be transported to Rock Island Arsenal, Illinois, for further treatment

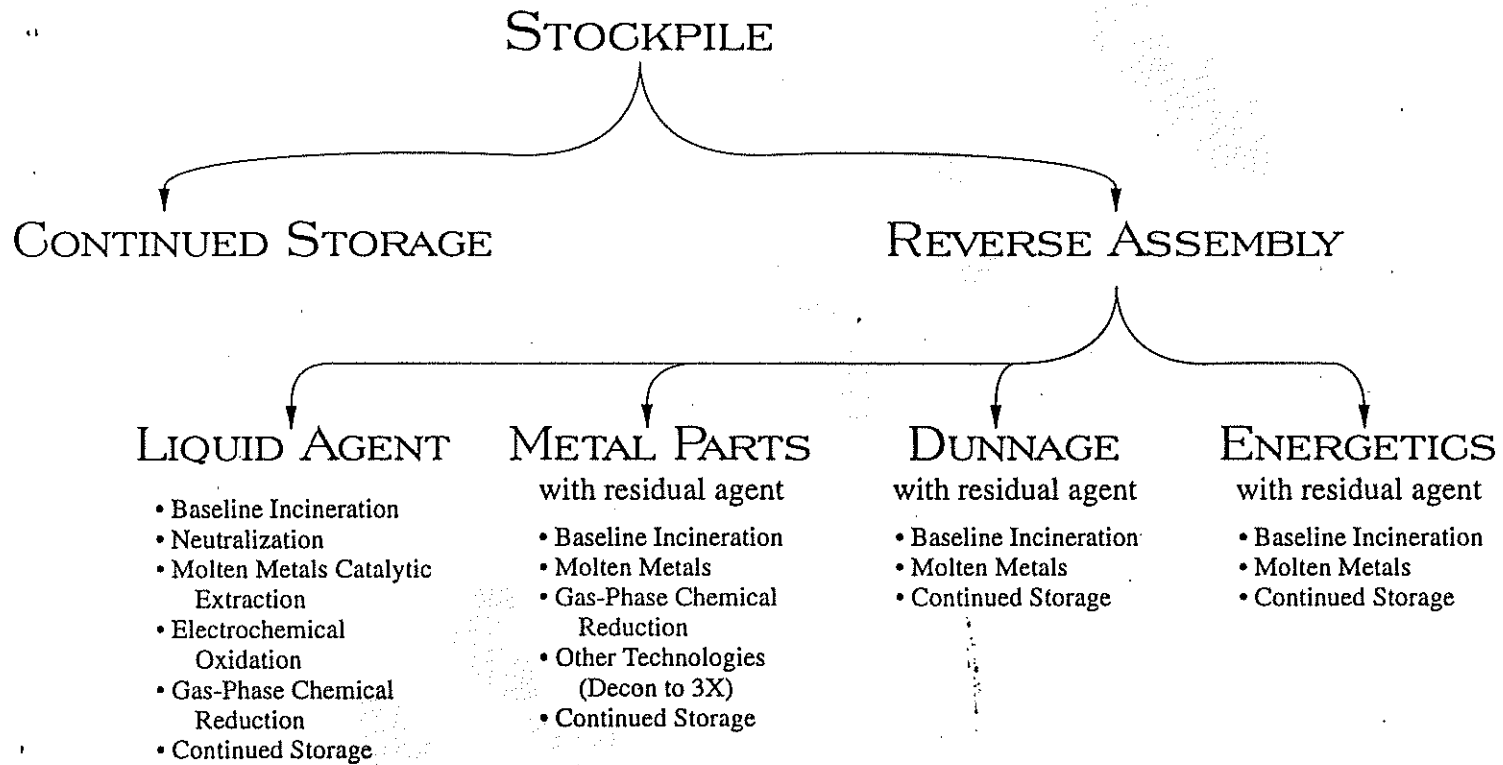


FIGURE 3-1



#### 4. MATRIX FOR COMPARISON OF TECHNOLOGIES

The seven BAT criteria discussed in the Introduction were developed by DEQ staff and approved by the EQC to evaluate the available information on disposal technologies. These criteria are presented in the left column of Table 4-1. A summary of the available information with respect to each criterion for each technology is presented in Table 4-1. The supporting information, including references to available reports is provided in Sections 5 through 9.

In general, there is a lack of data for several of the alternative technologies, especially with respect to the nerve agent GB. Based primarily on data presented for HD and VX (from Aberdeen and Newport, respectively), the criteria were addressed for each alternative technology. In cases where data were unavailable for GB, best professional judgment was used to determine if the technology could meet the criteria. Limited data are available for neutralization of GB from the Rocky Mountain Arsenal.

Because different technologies are able to treat different portions of the waste streams created by reverse assembly of the munitions, no complete comparison of the technologies is possible for processing of energetics, metal parts, or dunnage. As a result, the comparisons presented in these sections are for treatment of liquid agent, the only waste stream for which research has been performed for all of the technologies. For the baseline incineration process, this essentially means that the comparison evaluates only the Liquid Incinerators, and excludes the other three furnace types for the proposed facility. This limitation on the scope of the comparisons does limit the overall usefulness of the comparison; however, there are simply no data available to make any more comprehensive quantitative comparisons of the technologies.

The estimates of resources, wastes, time, and costs presented in Table 4-1 and in Sections 5 through 9 are intended to be used as rough estimates only. The data used to compile these estimates were taken from several reports which frequently presented information in different ways and, for a variety of reasons, were sometimes contradictory. As a result, the exact figures should be viewed with some skepticism and be used only to make qualitative judgements about the relative ranking of the technologies.

Table 4-1

## SUMMARY OF DISPOSAL METHODS

Issue	Baseline Incineration (LIC Only)	HD Neutralization	GB/VX Neutralization	Catalytic Extraction Process	Electrochemical Oxidation	Gas-Phase Chemical Reduction
1. Types/quantities/toxicity of discharges to the environment	<ul style="list-style-type: none"> <li>Provides a DRE of at least six nines*</li> <li>Air emissions without significant toxicity; all constituent concentrations below regulatory benchmarks</li> <li>No liquid process wastes</li> <li>Negligible solid wastes from incinerator; brine salts and activated carbon filters with low toxicity shipped to off-site waste disposal facility</li> </ul>	<ul style="list-style-type: none"> <li>Should provide a DRE of at least six nines; currently only reaches five nines because of detection limits*</li> <li>Offgas emissions from bioreactor (<math>3.3 \times 10^8</math> lbs) with little to no toxicity</li> <li>Biotreated hydrolysate discharge to Umatilla or Columbia river (<math>4.9 \times 10^7</math> gal) with "low toxicity" primarily from salts; assumes destruction of toxic contaminants including carcinogenic chemicals mixed with agent</li> <li>Solid wastes consisting of biomass filter cake (<math>4.7 \times 10^6</math> lbs) and activated carbon (28,000 lbs) with low toxicity</li> </ul>	<ul style="list-style-type: none"> <li>Should provide a DRE of at least six nines*</li> <li>Some venting of reactors during agent hydrolysis</li> <li>Liquid hydrolysate requires additional treatment to destroy neutralization products at offsite treatment facility - none have been identified for the Umatilla site; risk of release during transport</li> <li>An estimated 660,000 gal of hydrolysate would be produced treating VX</li> <li>No specific liquid generation rates were presented for GB treatment</li> <li>No solid wastes would be generated from agent treatment</li> </ul>	<ul style="list-style-type: none"> <li>Provides a DRE of at least six nines in laboratory-scale tests*</li> <li>Air emissions considered controllable and can be tested prior to release, but potentially contain iron and nickel fumes; hydrogen cyanide, hydrogen sulfide, carbon monoxide, or other gases</li> <li>No wastewater discharges</li> <li>Slag must be handled/ disposed as hazardous waste</li> </ul>	<ul style="list-style-type: none"> <li>Uncertain whether it could provide a DRE of six nines*</li> <li>Generates fewer air emissions than baseline incineration; emissions would be controllable and moderate</li> <li>No major toxic discharges are expected; mostly salt solutions</li> <li><math>7.5 \times 10^6</math> gallons wastewater discharged to Umatilla or Columbia river</li> <li>Very little solid waste likely to be generated</li> </ul>	<ul style="list-style-type: none"> <li>Should provide a DRE of at least six nines*</li> <li>Quantities predicted only for HD, not nerve agents</li> <li>For HD treatment, no total water or air discharge rates provided; only total amounts of certain constituents within these waste streams</li> <li>HD treatment releases: <ul style="list-style-type: none"> <li><math>4.6 \times 10^6</math> lb CO<sub>2</sub> (gas)</li> <li>146,000 lb soot (solid)</li> <li>960,000 lb sulfur (solid)</li> <li><math>2.2 \times 10^6</math> lb HCl (dissolved in wastewater)</li> </ul> </li> </ul>
2. Risks of discharge from a catastrophic event	<ul style="list-style-type: none"> <li>Extensive tests of baseline system at JACADS demonstrated insignificant risks related to catastrophic failure</li> <li>Extremely low quantities of agent present in incinerators at any time</li> <li>Automatic waste feed cutoff prevents large releases of agent</li> </ul>	<ul style="list-style-type: none"> <li>Components reliable and extensively used</li> <li>Cooling system failure would not cause catastrophic failure</li> <li>Little agent present in reactor at any time, so consequences of release are low</li> </ul>	<ul style="list-style-type: none"> <li>Components reliable and extensively used</li> <li>Cooling system failure would not cause catastrophic failure</li> <li>Larger amounts of agent present in reactor than for HD treatment, so higher consequences of release</li> </ul>	<ul style="list-style-type: none"> <li>Small amount of agent processed at one time, but larger quantities in plant</li> <li>Additional research needed to evaluate several potential failure modes</li> <li>Stricter seismic standards needed</li> <li>Potential for release of toxic process gasses</li> </ul>	<ul style="list-style-type: none"> <li>Rather severe hazard due to concentrated nitric acid used throughout the process</li> <li>Stricter seismic standards needed</li> <li>Potential for release of silver or nitrates</li> </ul>	<ul style="list-style-type: none"> <li>No failure scenario identified that would lead to off-site release of agent</li> <li>Secondary containment systems must be designed to avoid hydrogen buildup that would cause combustible situations; a large detonation or fire may result in release of agent</li> <li>Potential releases of hydrogen sulfide, hydrogen cyanide, or carbon monoxide</li> </ul>

\*DRE = Destruction removal efficiency. The "nines" indicates the number of nines in the percentage of agent destroyed; i.e., six nines equals at least 99.9999% destruction.

Table 4-1

## SUMMARY OF DISPOSAL METHODS

Issue	Baseline Incineration (LIC Only)	HD Neutralization	GB/VX Neutralization	Catalytic Extraction Process	Electrochemical Oxidation	Gas-Phase Chemical Reduction
3. Safety of operation	<ul style="list-style-type: none"> <li>Incineration process essentially completely automated; negligible opportunity for human contact</li> <li>Extensive JACADS experience demonstrates process safety</li> <li>Automatic waste feed cutoff prevents large releases of agent</li> </ul>	<ul style="list-style-type: none"> <li>Extensive industrial experience with all components of the treatment system</li> <li>Safety issues have been adequately addressed</li> </ul>	<ul style="list-style-type: none"> <li>Extensive industrial experience with all components of the treatment system</li> <li>Safety issues have been adequately addressed</li> </ul>	<ul style="list-style-type: none"> <li>Extreme hazards from high temperature, explosion or fires, and toxic chemicals used or produced</li> <li>Other hazards from leaks, corrosion, and material compatibility</li> <li>Relatively high gas pressure</li> <li>Limited commercial experience with other wastes, no commercial experience with agent</li> </ul>	<ul style="list-style-type: none"> <li>Low temperature, low pressure process</li> <li>Chemicals used such as sodium hydroxide create worker hazard</li> <li>Because of strong electric currents, possibility of short circuit generates fire/explosion hazard</li> <li>Limited commercial experience with other wastes, no commercial experience with agent</li> </ul>	<ul style="list-style-type: none"> <li>System operates at low pressure.</li> <li>Loss of key utilities would not result in hazardous operating conditions.</li> <li>Process uses high temperature H<sub>2</sub>, steam/hot water/ and corrosives (in scrubber water).</li> <li>Potential concerns with maintenance and control of gas flow through the system</li> <li>Limited commercial experience with other wastes, no commercial experience with agent</li> </ul>
4. Rapidity of destruction	<ul style="list-style-type: none"> <li>Agent completely destroyed almost immediately upon introduction into incinerator</li> <li>Baseline process designed to meet 2004 destruction deadline</li> <li>Stockpile could theoretically be destroyed in about 10 months of full-time processing; actual operations would last about 3.3 years</li> </ul>	<ul style="list-style-type: none"> <li>To estimate rapidity, used the unit rate of destruction given for the proposed Aberdeen facility; presumably, greater rates could be achieved with further parallel systems</li> <li>At 7000 lbs of HD: destruction per day, 670 days of treatment would be required</li> </ul>	<ul style="list-style-type: none"> <li>To estimate rapidity, used the unit rate of destruction given for the VX destruction at the proposed Newport facility. This rate is assumed for both GB and VX, which have similar residence time requirements</li> <li>At 7300 lbs of nerve agent destruction per day, 100 days of treatment would be required to treat VX and 280 days to treat GB</li> </ul>	<ul style="list-style-type: none"> <li>Very complex treatment process, leading to potential difficulty in control and operations</li> <li>Significantly longer startup/shutdown times than other technologies, leading to greater downtime and longer time to treat stockpile</li> <li>Because of high degree of process control needed, possibly more maintenance time required</li> <li>742 days of agent processing required to destroy entire stockpile</li> </ul>	<ul style="list-style-type: none"> <li>Process difficult to monitor and control</li> <li>7 years of agent processing required to destroy entire stockpile</li> </ul>	<ul style="list-style-type: none"> <li>At 5.5 tons of agent destruction per day and 20% downtime (based on vendor estimate), 811 days of treatment would be required</li> </ul>

Table 4-1

## SUMMARY OF DISPOSAL METHODS

Issue	Baseline Incineration (LIC Only)	HD Neutralization	GB/VX Neutralization	Catalytic Extraction Process	Electrochemical Oxidation	Gas-Phase Chemical Reduction
5. Impacts on consumption of natural resources	<ul style="list-style-type: none"> <li>Process requires moderate amounts of water, natural gas, fuel oil, and electricity; all resource demands identified and accounted for in EIS (Army 1996b)</li> </ul>	Water: $51 \times 10^6$ gal Electricity: $5 \times 10^7$ kW-hr	<ul style="list-style-type: none"> <li>Data for VX: Water: 700,000 gal Electricity: <math>3.9 \times 10^6</math> kW-hr</li> <li>Data not available for GB. specific consumption may be similar to VX. Ratio of masses of GB to VX is <math>-2.8</math></li> </ul>	<ul style="list-style-type: none"> <li>Relatively inefficient electric heating process (<math>2.7 \times 10^7</math> kW-hr)</li> <li>Very low water usage (<math>1.1 \times 10^7</math> gal)</li> <li>Requires constant feed of iron</li> </ul>	<ul style="list-style-type: none"> <li>An energy intensive process: Water: <math>3.8 \times 10^7</math> gal Electricity: <math>3.2 \times 10^8</math> kW-hr</li> </ul>	<ul style="list-style-type: none"> <li>Vendor did not provide a complete energy balance</li> <li>Resource usage (all agents): Water: <math>9.7 \times 10^7</math> gal Electricity: <math>1.7 \times 10^7</math> kW-hr</li> </ul>
6. Time before technology is operational and impacts to overall risks	<ul style="list-style-type: none"> <li>Immediate; no further time required for permitting, design, research, or impact studies</li> </ul>	<ul style="list-style-type: none"> <li>At least an additional 4-5 years to develop prior to permitting</li> </ul>	<ul style="list-style-type: none"> <li>At least an additional 4-5 years to develop prior to permitting</li> </ul>	<ul style="list-style-type: none"> <li>At least an additional 6-7 years to develop prior to permitting</li> <li>Performance has not been demonstrated at full scale</li> </ul>	<ul style="list-style-type: none"> <li>At least an additional 6-7 years to develop prior to permitting</li> <li>Only limited laboratory/pilot testing has been performed</li> <li>Full performance hasn't been demonstrated</li> </ul>	<ul style="list-style-type: none"> <li>At least an additional 7-8 years to develop prior to permitting</li> <li>The Army predicts this process would take the longest time to complete at both Aberdeen and Newport</li> </ul>
7. Cost	<ul style="list-style-type: none"> <li>Moderate process costs</li> <li>Maturity of technology reduces uncertainty in costs and minimizes cost of further design and research</li> </ul>	<ul style="list-style-type: none"> <li>Costs will increase over the baseline system if a neutralization system is constructed for HD while another technology is constructed for the other agents; compared to using a single technology to treat all agent</li> </ul>	<ul style="list-style-type: none"> <li>Cost data not available in reviewed documents</li> </ul>	<ul style="list-style-type: none"> <li>Lowest life cost among all alternatives</li> <li>Produces salable byproducts: iron, elemental sulfur, hydrochloric acid</li> <li>Uses offgas to generate power for inplant uses</li> </ul>	<ul style="list-style-type: none"> <li>The second most expensive technology among all five technologies</li> </ul>	<ul style="list-style-type: none"> <li>Potentially the most expensive technology among all five technologies</li> </ul>

## 5. BASELINE INCINERATION

### 5.1 Types/quantities/toxicity of discharges to the environment by operation of the proposed baseline incineration facility

**Treatment efficiency.** The baseline incineration process has been demonstrated to destroy agent beyond the required destruction removal efficiency (DRE) in full-scale operations at Johnston Atoll Chemical Agent Disposal System (JACADS). Agent in all forms (i.e., liquid, solidified, crystallized) has been successfully treated, as well as all agent-contaminated energetics, metal parts, and dunnage. There is no evidence that agent will reform following treatment. The proposed facility would decontaminate metal parts to "5X," the Army's classification for material which has been decontaminated to a level that allows release to the public.

**Air Emissions.** Low levels of a number of different pollutants may be discharged from the facility stacks. These include sulfur dioxide, nitrogen oxides, particulates, and a variety of products of incomplete combustion, potentially including dioxins and furans. A study of the air quality impacts is presented in Section 4.1.2.2 of the Environmental Impact Statement (EIS) (Army 1996b), which concludes that all constituents of concern are expected to be present at concentrations well below their applicable standards. These results are summarized in Table 4-5 of the EIS (page 4-18, Army 1996b). The Pre-Trial Burn Risk Assessment (PreRA) assessed potential adverse effects to human health and the environment, based on expected emissions from the proposed facility and from results of JACADS Operational Verification Testing (OVT). All risks presented in this report indicate that emissions from the proposed facility are at acceptable levels as defined by the DEQ and by the EPA.

**Wastewater Discharges.** "No process liquid wastes, hazardous or otherwise, would be released by the incineration process or incinerator support facilities. There would be no impact to surface water or groundwater quality during routine, incident-free operation" (page 4-21, Army 1996b).

**Solid Wastes.** Based on Oregon regulations, all solid wastes (except for metals) generated from demilitarization, treatment and testing of blister (F998) or nerve agents (F999) are considered listed hazardous wastes. A large amount of the solid wastes would consist of nonhazardous (i.e., decontaminated to 5X) scrap metal from munitions and bulk containers. Ash residue from the furnaces and dried salts would be considered hazardous wastes and shipped to a permitted waste disposal facility, as would the activated carbon filters. These materials would be expected to have very low toxicity, and would not be expected to cause significant environmental damage in the case of an accidental spill.

Section 2.2.2.3 of the EIS (Army 1996b) provides details on the solid wastes that are expected to be generated. A summary of these wastes is provided in the following table.

Source	Type	Generation rate kg/hr (lb/hr)
Metal parts furnace	Metal scrap	4,580 (10,100)
Deactivation furnace	Scrap/ash	630 (1,400)
Dunnage incinerator	Scrap/ash	80 (180)
Brine reduction	Brine salts	2,860 (6,300)
Liquid incinerator	Solids	Negligible

### 5.2 Risks of discharge from a catastrophic event or breakdown in operation of the baseline incineration facility

Evaluations of emergency situations have been performed during JACADS systemization. These tests indicated that the baseline incineration system reliably prevents the release of agent within the facility in the event of an emergency. Furthermore, changes for facilities proposed in the continental United States have been made based on JACADS experience to eliminate or mitigate accidents (page 4-47, Army 1996a).

While a variety of situations have been evaluated in the QRA (SAIC 1996) and the EIS (Army 1996b) related to emergencies at the facility, it is important to note that the most significant emergencies (such as earthquakes collapsing the unpack area or airplane crashes into the facility) are related to the reverse assembly process or temporary storage of agent prior to processing. These risks would be incurred by any technology and are not specific to the baseline incineration system.

### 5.3 Safety of the operation of the baseline incineration facility

The actual operation of the incinerators (as opposed to handling of munitions and the reverse assembly process) involves minimal human contact. Facility operations are not abnormally complex; all personnel working at the proposed facility would undergo training at the Chemical Demilitarization Training Facility at Aberdeen Proving Ground prior to facility operations (pages 4-60 - 4-67, Army 1996b). Chemical agent is segregated from facility workers at all times. Monitoring systems in the

facility would detect any chemical agent in the event of a release to the facility (pages 4-67 to 4-70, Army 1996b). The incinerators are "designed to be easily controlled and to fail in a safe condition" (page 4-47, Army 1996a), and the process "employs few industrial chemicals and gases" (page 4-47, Army 1996a). Furthermore, the Army notes that "at least some hazards associated with a complex system will only be discovered by operating that system. The incineration technology has accumulated 6 years of chemical demilitarization experience and the lessons learned during that time have led to design improvements that enhance the safety of the incineration facilities" (page 4-46, Army 1996a).

#### **5.4 The rapidity with which the baseline incineration facility can destroy the stockpile**

The baseline incineration facility is designed to destroy the entire stockpile (including metal parts, energetics, and dunnage) before the 2004 deadline. The actual rates of agent destruction would be limited in the hazardous waste permit. The liquid incinerators would be limited to processing an average of 680 lb/hr VX, 1,030 lb/hr GB, and 1,305 lb/hr HD each, plus associated decontamination solution and other liquid wastes. The processing rates allowed in the permit would allow the entire stockpile to theoretically be destroyed in approximately ten months of constant operations, but the actual campaign schedules are much longer and there are significant changeover periods between campaigns. For example, the campaign duration for destruction of HD in ton containers is expected to be 26 weeks preceded by a changeover period of 6 weeks (page 3-29, SAIC 1996), but the LICs could theoretically destroy the HD in just over 10 weeks of continuous operation.

#### **5.5 Impacts of the baseline incineration facility on consumption of natural resources**

The proposed facility will require the use of a variety of resources, including water (for the incineration process, for personnel needs, and for fire prevention), fuels (including natural gas, diesel fuel, and fuel oils), and electrical power. These requirements are identified in the EIS, along with plans for obtaining these resources. These requirements are summarized in the following table. Note that these requirements are presented for the entire proposed facility, including all incinerators, reverse assembly systems, and support facilities, and do not represent the requirements of the liquid incinerators alone; therefore, these figures are not directly comparable to the requirements presented for the other technologies, which only consider actual agent processing resources.

Table 5-2

SUMMARY OF UTILITY DEMANDS FOR THE PROPOSED DISPOSAL FACILITY

Source: Table 2.4, pages 2-14 to 2-22, 4-21 to 4-22, Army 1996b

Utility	Usage	Source of Utility
Process water Average Peak	984 m <sup>3</sup> /day (260,000 gal/day) 1.8 m <sup>3</sup> /min (470 gal/min)	Current UMCD wells 3, 6, and 7 would be upgraded by installing new, deeper pumps.
Potable water Average Peak	104 m <sup>3</sup> /day (27,500 gal/day) 1.1 m <sup>3</sup> /min (285 gal/min)	Current UMCD wells 3, 6, and 7 would be upgraded by installing new, deeper pumps; truck deliveries possible if contamination detected in wells.
Fire water Peak	11.4 m <sup>3</sup> /min (3,000 gal/min)	Current UMCD wells 3, 6, and 7 would be upgraded by installing new, deeper pumps.
Sanitary sewer Average Peak	119 m <sup>3</sup> /day (31,500 gal/day) 1.1 m <sup>3</sup> /min (285 gal/min)	Current UMCD wells 3, 6, and 7 would be upgraded by installing new, deeper pumps.
Natural gas Average Peak	4950 m <sup>3</sup> /hr (175,000 scfh) 6120 m <sup>3</sup> /hr (216,000 scfh)	New pipeline to the facility would be built from existing main near Columbia River.
Fuel oil	14.4 m <sup>3</sup> /day (3,800 gal/day)	Delivered by tank truck.
Electricity	5,500 kVA projected demand 8,050 kVA available	Two new service connections would be made to existing power lines; new electrical substation would be constructed to service facility.

The EIS concludes that all resource requirements may be met without significant difficulty.

**5.6 Period of time to test out the baseline incineration technology and have it fully operational and how that impacts the overall risk to the stockpile**

The baseline incineration system is designed and tested in full-scale operations at JACADS. The proposed facility could begin construction immediately following issuance of the permit. Risks associated with storage of the stockpile would be minimized through the selection of the baseline technology because it is ready to go on-line relatively quickly.

**5.7 Cost**

Operations of the baseline incineration facility would not be expected to be significantly more or less expensive than the other technologies. The Army concluded that the baseline process would be the second lowest cost overall (page 4-100, Army 1996a). However, due to the maturity of the baseline technology, selection of this system would minimize design and permitting costs associated with



Umatilla as well as research costs for the chemical demilitarization program as a whole. The cost associated with using the proposed facility to treat the entire stockpile would be lower than use of this facility for part of the stockpile, plus an alternate technology for another portion of the stockpile.

**ORCA**

## 6. NEUTRALIZATION

There are several different ways to configure neutralization treatment trains for chemical weapons agents. It is first important to note that a separate technology configuration would be required for each type of agent (HD, VX, and GB). Not only would the configuration of the technology vary depending on the agent treated, but the effectiveness and impacts of the technology, as measured by the seven criteria, would vary from agent to agent. Thus, each agent is addressed separately in the following sections. Secondly, for each agent, the technology could be further configured along several optional lines. These options are presented below, and the configuration serving as the basis of evaluation is described.

### *HD*

HD would be first hydrolyzed with hot water, then the hydrolysate biodegraded. NRC (1996) describes four potential arrangements for this technology train. Essentially, the factors differentiating the possible approaches were:

- Whether or not water was recycled within the process;
- Whether or not VOCs in reactor offgas were treated onsite or not; and
- Whether or not the biodegradation step was performed onsite.

The 1996 NRC report assumes a treatment train configuration that treats volatile organic compounds (VOCs) onsite and biodegrades the hydrolysate onsite, but does not recycle water. This is the configuration recommended by the Army for the Aberdeen site. This configuration is appropriate for evaluation for the Umatilla site. Although it does not include the water recycling component, it is believed that the sequencing batch reactor (the bioreactor) would be capable of treating the aqueous effluent to levels required for surface water discharge to the Umatilla or Columbia rivers.

Based on an inventory of 2,635 ton containers, each containing 1,775 pounds of HD, approximately 4.7 million pounds of HD would be treated.

### *VX*

The neutralization process for VX is different than for HD. VX is more difficult to chemically degrade and thus the process is not as well developed as it is for HD or GB. Furthermore, the hydrolysate produced, while biodegradable, is not capable of being biodegraded without considerable additional carbon substrate. Thus, unlike the HD system, the hydrolysate could not be treated in a standalone biological

treatment unit, but rather would require off-site treatment in a separate wastewater treatment system, degrading other carbon substrates. The technology configuration for VX hydrolysis would thus consist of hydrolysis by aqueous sodium hydroxide. The hydrolysate is then shipped offsite for biological treatment. None of the reports reviewed provided any information regarding potential offsite treatment plants that would be capable of accepting and treating the hydrolysate. Hypochlorite may be added prior to shipment to reduce potential odor problems with the hydrolysate, although recent findings indicate that this may lead to some VX reformation. Alternatively, isopropanol may be added to homogenize the hydrolysate (which otherwise would be present as a two-phase system) and act as a carbon substrate supplement in the eventual biotreatment process. Whether either of these options is employed has little influence on the evaluations presented below.

Based on an inventory of 14,519 M55 rockets, 32,313 M121/A1 Projectiles, 3,752 M426 Projectiles, 156 Spray Tanks, and 11,685 landmines, approximately 730,000 pounds of VX would be treated.

#### *GB*

Like VX, GB would be hydrolyzed with an alkaline solution. This process has been carried out on a large scale by the Army to destroy GB at the Rocky Mountain Arsenal between 1973 and 1976. Problems with analytical techniques available at the time led to the incorrect conclusion that adequate treatment was difficult to achieve, and thus this program was discontinued. No further discussion of this process is presented in the 1996 NRC report, the 1996 AMSAA report (AMSAA 1996), or the Army's Alternative Technology Program Evaluation Report (Army 1996a), as these reports focus on the Aberdeen and Newport stockpiles which do not contain GB. The Army's Alternative Technologies Report (Army 1994) discusses this technology briefly, providing very few facts. For the purposes of this evaluation, it is assumed that the GB neutralization would proceed like VX, where the agent would be hydrolyzed under alkaline conditions, then shipped offsite for biological degradation. As for VX treatment, none of the reports reviewed provided any information regarding potential offsite treatment plants that would be capable of accepting and treating the hydrolysate.

Based on an inventory of 91,442 M55 rockets, 47,406 M121/A1 projectiles, 14,246 M426 projectiles, 2,418 MC-1 bombs, and 27 MK-94 bombs, an estimated 2.03 million pounds of GB would be treated.

## 6.1 Types/quantities/toxicity of discharges to the environment by operation of the neutralization facility

6.1.1 **HD** (Absolute quantities presented are based on the mass of agent present at Umatilla, using the unit generation rates [mass of product per mass of agent] presented for operation at Aberdeen.)

**Discharge to atmosphere:**  $3.3 \times 10^8$  lbs. This would consist entirely of air discharges from the aerobic bioreactor degrading the hydrolysate (page 7-30, NRC 1996). All agent would be destroyed (at least five 9's destruction, page 7-4, NRC 1996) prior to entering the bioreactor. This offgas would be passed through activated carbon to remove organic compounds. Thus, this offgas would be essentially air, with little to no toxicity (page 7-30, NRC 1996).

**Discharge to surface water:**  $4.9 \times 10^7$  gals. This would consist of biotreated hydrolysate (page 7-30, NRC 1996). As stated above, all agent would be removed prior to biotreatment, so no agent toxicity would be present in any aqueous discharges. Effluent generated from bench scale testing was characterized as "low toxicity" (page 7-17, NRC 1996). This remaining low toxicity in the effluent would result primarily from salts in the water. It is unknown whether this toxicity would adversely impact ecological receptors, such as the Columbia or Umatilla rivers.

**Solid wastes:** Based on Oregon regulations, all solid wastes (except for metals) generated from demilitarization, treatment, and testing of blister (F998) or nerve agents (F999) are considered listed hazardous wastes. In this process,  $4.7 \times 10^9$  lbs of biomass filter cake and 28,000 lbs of activated carbon would be generated. No specific data on the toxicity of these wastes are presented in the reviewed reports. However, these wastes would be similar to wastes produced by other biological treatment processes, and would be of low toxicity. Typically toxicity from biomass sludge is from heavy metals. However, no significant quantities of metals other than the relatively low toxicity iron are reported to be present in the feed to this system. If these wastes are disposed to landfills as planned, little to no exposure would be expected, and thus any possible toxicity would not present a risk. Dunnage, energetics, and some metal parts would not be treated by this technology.

6.1.2 **VX** (Absolute quantities presented are based on the mass of agent present at Umatilla, using the unit generation rates [mass of product per mass of agent] presented for operation at Newport.)

**Discharge to atmosphere:** Some venting to the atmosphere would occur during treatment. No data are provided for this stream in Appendix H (VX treatment mass balance, NRC 1996).

**Liquid Effluents:** Unlike HD neutralization (which is followed by on-site biological treatment), VX neutralization produces a detoxified effluent that requires additional carbon substrate to be biologically

destroyed. To accomplish, this, it must be shipped off site to an existing treatment, storage and disposal (TSDF) facility treating other organic wastes. This neutralized product would act as a phosphorus source for biological activity in that facility. A total of 660,000 gallons (page H-4, NRC 1996) of hydrolysate (stabilized with hypochlorite, significantly less would be generated without hypochlorite stabilization) would be generated. Toxicity data are limited to LD<sub>50</sub> testing on mice. Such testing showed a 42,000-fold decrease in toxicity to an LD<sub>50</sub> value of 0.6 mL per kg of body weight (page 8-17, NRC 1996).

The reviewed reports do not address the availability of suitable TSDFs to accept this waste within a reasonable distance of the Umatilla facility. Based on their current RCRA permit conditions, the Chemical Waste Management, Inc. (Chem Waste) facility in Arlington, Oregon can accept this type of liquid waste stream. However, to meet the Land Disposal Restrictions (LDRs), Chem Waste would have to remove the liquid from the respective surface impoundment(s) at the end of each year or permanently close the surface impoundment(s) in which the liquid wastes were placed. To date, Chem Waste in Arlington has chosen not to accept this type of liquid waste stream.

**Solid Wastes:** None related to treatment of liquid agent; however, based on Oregon regulations, all solid wastes (except for metals) generated from demilitarization, treatment, and testing of blister (F998) or nerve agents (F999) are considered listed hazardous wastes. Dunnage, energetics, and some metal parts would not be treated by this technology.

6.1.3 GB (all data based on results published for VX by the NRC [1996]; however, the Army [1994] states that lower amounts of reagent would be needed to treat GB compared to VX)

**Discharge to atmosphere:** None.

**Liquid Effluents:** As with VX hydrolysis, the product from treatment would have to be shipped to an offsite facility for biological treatment. An estimated  $1.8 \times 10^6$  gallons of hydrolyzed product would have to be shipped offsite. The reviewed reports do not address the availability of suitable TSDF facilities to accept this waste within a reasonable distance of the Umatilla facility. No toxicity data are available in the reviewed documents for this hydrolysate. As with VX hydrolysate, Chem Waste in Arlington, Oregon may be able to accept this waste stream, however, there are similar concerns (see Section 6.1.2).

**Solid Wastes:** None related to treatment of liquid agent; however, based on Oregon regulations, all solid wastes (except for metals) generated from demilitarization, treatment, and testing of blister (F998) or nerve agents (F999) are considered listed hazardous wastes. Dunnage, energetics, and some metal parts would not be treated by this technology.

## 6.2 Risks of discharge from a catastrophic event or breakdown in operation of the neutralization facility

### 6.2.1 HD

- "The system will use standard industrial components that have been used extensively in conventional applications" (page 7-21, NRC 1996).
- Cooling system failure would cause temperatures to rise to about 108°C or 1.4 atm gauge, whereas the design pressure would be 6.8 atm gauge. "There should be no catastrophic thermal excursions" (page 7-21, NRC 1996).
- Excessive heat could also be generated by the inadvertent introduction of concentrated caustic solution. No maximum temperature or pressure from such an event were provided in the reports reviewed. However, the system meters in HD near its rate of treatment, so that at any time there would be little HD present in the reactor (page 7-21, NRC 1996).

### 6.2.2 VX

- "The system will use standard industrial components for which there is extensive good industrial experience." (page 8-13, NRC 1996)
- Cooling system failure would cause temperatures to rise to about 98°C or 1.1 atm gauge, whereas the design pressure would be 6.8 atm gauge. "Thus there should be no catastrophic thermal excursions" (page 8-13, NRC 1996)
- The NRC (1996) does not provide any comment on possible temperature excursions due to excessive caustic addition; however, comments made for HD would be expected to apply to this technology as well. However, unlike HD treatment, VX is not added at the rate of treatment, and thus non-negligible quantities of agent would be present during the treatment process.
- Gases are vented from the reactor during treatment. Condensible portions are condensed and returned to the reactor. The noncondensable gases pass through a dual scrubbing system (page 8-9, NRC 1996). No comments made in the reports reviewed about possible consequences of vent gas scrubber failures.

### 6.2.3 GB

No facts were provided in the reviewed reports concerning risks of discharge from a catastrophic event or breakdown in operation. However, as the treatment process for this agent would be similar to that for VX, the risks would be assumed to be similar.

## 6.3 Safety of the operation of the neutralization facility

Treatment systems for all three agents are presented together as they employ similar equipment. The exception is HD which also employs on-site biological treatment. However, this stage of treatment is after

the destruction of HD to below acceptable levels, and would thus not pose any safety problems from an agent-exposure perspective.

Safety aspects are adequately addressed in the previous section discussing discharge risks from catastrophic events. For routine industrial risks, it is again remarked that the treatment systems would use standard industrial components for which there is extensive good industrial experience. Such experience would allow adequate handling of all inherent industrial risks.

#### 6.4 The rapidity with which neutralization can destroy the stockpile

##### 6.4.1 HD

For application of this technology at Aberdeen, the Army proposed operating three neutralization process lines (each including two neutralization reactors designed to work in parallel). These lines would be operated 24 hours per day, 7 days per week, for a throughput of about 7,000 pounds of HD per day. At this rate, it would take approximately 670 days to treat the HD stockpile at Umatilla (page 7-22, NRC 1996). The configuration of the trains could be adjusted (i.e. addition of an additional treatment train) should additional capacity be required to accelerate the treatment process.

The biological treatment component of this technology would operate independently of the neutralization step. However, these steps would be closely coupled to ensure that hydrolyzed agent need not be stored for any appreciable length of time prior to biological treatment.

##### 6.4.2 VX

For application of this technology at Newport, the Army proposed operating two neutralization process lines (page 8-8, NRC 1996). These lines would be operated 24 hours per day, 7 days per week, for a throughput of about 7,300 pounds of VX per day. At this rate, it would take approximately 100 days to treat the VX stockpile at Umatilla (page 8-12, NRC 1996). The configuration could be adjusted should less or additional capacity be required.

##### 6.4.3 GB

No data is provided for GB treatment rates. However, it is assumed that treatment rates could be obtained for this agent as for VX. As there is more GB than VX present at Umatilla, a treatment train similar to that proposed for Newport's VX would take 280 days to treat all the GB. The configuration could be adjusted should less or additional capacity be required.

## 6.5 Impacts of neutralization on consumption of natural resources

6.5.1 HD (all data from the 1996 NRC report, pages 7-31 and G-12. Total usage quantities presented are based on the mass of agent present at Umatilla, using the unit usage rates [quantity of resource per mass of agent] presented for operation at Aberdeen.)

Resource	Unit Usage (per lb HD)	Total Usage
Water	10.8 gal	$51 \times 10^6$ gal
Steam	4.7 kW-hr	$2.2 \times 10^7$ kW-hr
Cooling	1.8 kW-hr	$8.4 \times 10^6$ kW-hr
Electricity	4.2 kW-hr	$2.0 \times 10^7$ kW-hr
Total Electricity		$5.0 \times 10^7$ kW-hr

6.5.2 VX (all data from the 1996 NRC report, page 8-7. Total usage quantities presented are based on the mass of agent present at Umatilla, using the unit usage rates [quantity of resource per mass of agent] presented for operation at Newport.)

Resource	Unit Usage (per lb VX)	Total Usage
Water	0.96 gal	700,000 gal
Steam	3.6 kW-hr	$2.6 \times 10^6$ kW-hr
Cooling	0.64 kW-hr	$4.7 \times 10^7$ kW-hr
Electricity	1.2 kW-hr	$8.6 \times 10^5$ kW-hr
Total Electricity		$3.9 \times 10^6$ kW-hr

### 6.5.3 GB

No resource consumption data are provided in the reviewed reports. Resource consumption estimates are made using the data provided in the 1996 NRC report for VX. The data are scaled for the estimated quantity of GB present at the Umatilla Stockpile.

Resource	Unit Usage (per lb VX)	Total Usage
Water	0.96 gal	$1.9 \times 10^6$ gal
Steam	3.6 kW-hr	$7.3 \times 10^6$ kW-hr
Cooling	0.64 kW-hr	$1.3 \times 10^6$ kW-hr
Electricity	1.2 kW-hr	$2.4 \times 10^6$ kW-hr
Total Electricity		$1.1 \times 10^7$ kW-hr



## 6.6 Period of time to test out neutralization technology and have it fully operational and how that impacts the overall risk of the stockpile

Schedule information presented below was taken from the reviewed reports, and address implementation at the Aberdeen or Newport facilities. No adjustments were made for different quantities at Umatilla, or for possible differences in the permitting procedures.

### 6.6.1 HD

The 1996 NRC report indicates that for treatment at Aberdeen, 90% design for this technology could be achieved presently. Subsequent scheduling was estimated as follows (page 7-27, NRC 1996):

Permit acquisition:	12 months from present
Contractor procurement:	20 months from present
Construction completion:	48 months from present
Systemization completed:	57 months from present
Pilot test completed:	64 months from present
Full scale completed:	79 months from present

The Army projects full scale completion at Aberdeen within 95 months, with a "risk adjusted" duration of 108 months (i.e., 9 years, page 4-85, Army 1996a).

The Army compares the schedules of the alternate technologies and incineration. The 95/108 month estimate presented above compares to an estimated schedule of incineration of 84/108 months (Army 1996a). Thus, under a non-risk-adjusted schedule, neutralization/biodegradation would extend the treatment schedule by about a year, thus extending the risks inherent from storage. All other alternative technologies would take even more time to be developed. The overall risk of the process is governed principally by the duration of storage prior to and during treatment.

AMSAA projects full scale completion within 86 months, with a "risk adjusted" duration of 132 months (page 31, AMSAA 1996).

AMSAA compares the schedules of the alternative technologies and incineration. The 86/132 month estimate presented above compares to an estimated schedule of incineration of 84/124 months. Thus, under a non-risk-adjusted schedule, neutralization/biodegradation would extend the treatment schedule from the baseline incineration system by about two months (and about eight months under the risk-corrected schedules), thus extending the risks inherent from storage.

### 6.6.2 VX

The NRC estimated the following schedule for implementation at Newport (page 8-16, NRC 1996):

Pilot plant design:	2 months from present
Permit acquisition:	30 months from present
Construction completed:	64 months from present
Systemization completed:	73 months from present
Pilot test completed:	80 months from present
Full scale operation start:	84 months from present
Full scale completed:	93 months from present

The Army projects full scale completion within 101 months, with a "risk-adjusted" duration of 105 months (i.e., about 9 years, page 4-85, Army 1996a).

The Army compares the schedules of the alternate technologies and incineration (Army 1996a). The 101/105 month estimate presented above compares to an estimated schedule of incineration of 84/108 months. Thus, under a non-risk-adjusted schedule, neutralization/biodegradation would extend the treatment schedule by about a year and a half, thus extending the risks inherent from storage. All other alternative technologies would take even more time to be developed. The overall risk of the process is governed principally by the duration of storage prior to and during treatment.

AMSAA projects full scale completion at Newport within 98 months, with a "risk adjusted" duration of 144 months (page 31, AMSAA 1996).

AMSAA compares the schedules of the alternate technologies and incineration (AMSAA 1996). The 98/144 month estimate presented above compares to an estimated schedule of incineration of 95/130 months. Thus, under a non-risk-adjusted schedule, neutralization/biodegradation would extend the treatment schedule by about 3 months (and about 14 months under the risk-corrected schedules), thus extending the risks inherent from storage. Overall risk of the process is governed principally by the duration of storage prior to and during treatment.

### 6.6.3 GB

The available information does not provide schedule information on GB neutralization. It is expected that the schedule would be longer than for the other agents because the specific treatment process for neutralization of GB has not been designed.

## 6.7 Cost

Cost data were not provided in the reviewed documents; however, some subjective comments can be made. Neutralization technology is developed to varying degrees depending on the type of agent to be treated. Furthermore, the end products of the processes vary tremendously, from relatively clean biotreated wastewater from the HD treatment process to wastewaters with concentrated hydrolysate requiring offsite treatment from the VX and GB treatment processes. Because of these differences, it may make sense to use neutralization for only one type of agent (*e.g.* HD) and another technology for other agents. However, the other alternative technologies considered are not agent specific like neutralization. Thus, any treatment system built to treat those agents could also be used to treat HD. The incremental additional treatment costs to treat HD in the systems used to treat the VX and the GB would most likely be less than the costs to develop and implement a completely separate technology to treat just the HD.

## 7. MOLTEN METAL CATALYTIC EXTRACTION PROCESS

### 7.1 Types /quantities/toxicity of discharges to the environment from molten metal catalytic extraction

**Treatment Efficiency.** This technology is capable of meeting the six nines destruction removal efficiency (DRE); based on bench-scale test results, up to eight nines DRE may be reached (page 4-11, NRC 1996). There is a low likelihood that HD or VX would reform (page 4-13, NRC 1996). Reformation of GB is also unlikely. However, there is no industry experience or proven record of performance in complete reaction of injected gases within a molten metal bath to the very low level of residuals required for agent destruction (page 4-5, NRC 1996).

**Air Emissions.** Because the process operates at low oxygen potential, and decomposes all feed molecules, no pathways would exist for the formation of oxides of nitrogen or sulfur; formation of dioxins or furans are also not likely (page 4-3, NRC 1996). If nitrogen was used for the inert gas there would be a potential for formation of hydrogen cyanide (page 4-7, NRC 1996). The potential for formation of this highly toxic gas would be unique to this technology. Air emissions should be controllable; however, they may contain iron and nickel fumes, hydrogen cyanide, hydrogen sulfide, carbon monoxide, and other gases (Table 10-6, Mitretek 1996).

The off gas could be held for testing and recycling back into the molten metal bath if needed, prior to discharge, resulting in a very low likelihood that off-specification gases are discharged (page 4-13, NRC 1996) or that permit violations would occur. Other technologies may not include, or easily accommodate, similar holding/testing of offgas prior to discharge.

**Wastewater Discharges.** All spent decontamination solutions, scrubbing and spent liquors, would go to into the molten metal bath (page 4-18, NRC 1996). This process produces no liquid wastestreams.

**Solid Wastes.** A ceramic slag, estimated to be in the range of 60 metric tons/yr for the Aberdeen/Newport projects, would be produced (page 4-17, NRC 1996). Although the slag would likely pass the toxicity characteristic leaching procedure (TCLP) test (i.e., one of the criteria for determining if a waste is hazardous), it would probably be classified a hazardous waste under RCRA because of the "derived from" rule (NRC pg 4-3). Therefore, this solid waste would require special handling and off site disposal as a hazardous waste. The metal melted in the process would not be a solid waste, but rather a re-useable (and salable) product.

## 7.2 Risks of discharge from a catastrophic event or breakdown in operation of molten metal catalytic extraction

There are no identified process mechanisms under normal operating conditions that could lead to a catastrophic failure of equipment; nevertheless, equipment or operator error could lead to an accident (page 4-24, NRC 1996). Some aspects of the design tend to mitigate the possibility for operating systems failure. For example, the metal mass in the reactor, having a high "thermal inertia," would prevent variations in temperature ("excursions" from design levels) even if the feed materials varied in temperature (page 4-24, NRC 1996). Similarly, the molten bath quickly dissipates the agent and reduces the potential for downstream contamination (page 4-32, NRC 1996). Also, the molten metal would solidify quickly and not travel far, reducing the possibility of the most severe type of accident, a reaction with coolant and resulting steam explosion (page 4-42, NRC 1996). The treatment system would also provide several levels of containment to limit the potential for offsite release: three containment shells within the reactor and two additional containment shells within the process building (page 4-32, NRC 1996). The seismic design standards need to be stricter to minimize damage in the event of an earthquake (page 10-16, Mitretek 1996).

There are, however, a number of failure modes that are of concern: coolant loss, solidifying in carryover gas, and corrosion in the offgas equipment (page 4-32, NRC 1996); possible dissociation of water and increase in oxygen content, resulting in and formation of flammable process gas within the reactor (page 8-16, Mitretek 1996). Because of the high temperature involved, a great deal of additional research and development is needed to evaluate key safety issues (page 4-41, NRC 1996). For example the integrity of the refractory liner and possible piping component failure due to thermal attack need to be studied (page 4-41, NRC 1996). Also, the possibility of buildup of combustible gases within one of the outer containment layers presents enough of a possible hazard to require additional research (page 4-41, NRC 1996).

## 7.3 Safety of the operation of the molten metal facility

There are a number of identified risks to worker health and safety. The molten metal baths would be maintained at very high temperatures (2600 to 3000 degrees F). Because the reactors cannot be easily or quickly cooled down, workers could be exposed to heat stress during routine instrument calibration and maintenance in the reactor rooms (page 8-25, Mitretek 1996). Flammable gases would be present within the reactors, including: hydrogen, carbon monoxide, and methane (Table 10-7, Mitretek 1996). These gases could accumulate within the processing building, presenting a hazard to workers (page 4-42,

NRC 1996). Any release of materials such as flammable gases (e.g., hydrogen or carbon monoxide) and vapors of partly oxidized agent would likely be ignited and result in fire or explosion. Thus, accidental release of reactor contents or exposure of personnel to the reactors could result in fire or explosion, serious burns, or inhalation hazards (page 8-25, Mitretek 1996).

Contact of water with molten metal could result in an explosion hazard as a result of explosive vaporization of the liquid and violent dispersion of the molten metal; there have been at least two such incidents in the past 21 years (page 8-25, Mitretek 1996). Exposure to iron and nickel fumes from the reactor could be toxic (page 8-22, Mitretek).

Use of the process for melting metal and containers would present additional hazards. Failure to purge combustible agent vapors from the pre-melter before opening the airlock door could produce an explosion. Failure to volatilize liquids from the ton containers before they entered the reactor could also produce an explosion (page 4-50, Army 1996a).

The front-end equipment is similar to incineration and is as reliable (page 8-14, Mitretek 1996). The compatibility of materials, specifically chlorine and HD, could pose a problem (page 4-20, Army 1996a). Calcium hypochlorite used in the scrubbers and hydrocarbon solvent could present chemical hazards to workers if used or stored improperly (page 8-21, Mitretek 1996).

From the standpoint of treatment process, there are no insurmountable risks from refractory containment, proximity of molten metal bath to the cooling system, monitoring of containment conditions, loss of power, or overpressure (page 4-41, NRC 1996). There are approaches identified to mitigate the hazards to worker safety, such as monitoring equipment for offgases (page 4-22, NRC 1996); remote operations of all process operations once ton containers are unpacked (page 4-5, Army 1996a); and low-maintenance equipment so that worker exposure during maintenance or replacement would be minimized (page 4-5, Army 1996a).

Despite these possible measures to reduce the risks, the key limitation of this technology, compared to the baseline, is that many safety issues still need to be researched, evaluated and tested, with workable and reliable safety features incorporated into the design, before the technology can be operated at commercial scale with minimal potential for risk to workers. Some of the most immediate issues needing to be addressed are high temperature hazards, corrosives in the scrubbers, and possible leaks from containment (page 4-42, NRC 1996).

#### 7.4 The rapidity with which the molten metal technology can destroy the stockpile

The estimated processing rate for Aberdeen/Newport would be about 200 kg/hr for HD and 170 kg/hr for VX (page 4-15, NRC 1996). GB is assumed to be processed at the same rate as VX. Based on the processing rates for Aberdeen and Newport and the quantities of agent stored at UMCD, it would take 433 days to process HD, 227 days to process GB, and 82 days to process VX. These numbers include agent processing time only and do not account for processing of other stockpile components (e.g., dunnage or energetics), normal operations and maintenance activities, other shutdowns, or any equipment changeout.

The molten metal process is quite complicated and may have potential problems (page 4-19, Army 1996a). A high degree of integrated process control and safety interlocking would be needed (page 10-7, NRC 1996). The control systems could be problematic (page 4-17, Army 1996a). Adjusting oxygen and carbon levels may not be adequate for process control (page 4-20, Army 1996a). Shutdown/startup would cause wear on the equipment (page 4-14, NRC 1996). Also, the treatment technology is designed, and operates best, by continuous operation. If the process has to be shut down, a long cooldown period and a long startup time would be needed (page 4-14, NRC 1996).

All of these factors could lead to greater downtime for inspection and repair, maintenance, or equipment changeout. Given the very complex operating system, and the fact that commercial scale units of this type have never been used for this application, there will likely be downtime needed for troubleshooting and system modifications. Greater downtime, especially with the long startup needed, could result in a significantly longer time to treat the stockpile, compared to the baseline or other technologies with less complex or better demonstrated processes.

#### 7.5 Impacts of the molten metal technology on consumption of natural resources

This technology uses relatively inefficient electric induction heating. The operating temperature must be high at all times, even if agent isn't being treated, to avoid long re-start times (NRC pg 4-14). The maximum load required for startup would be about 7,500 kW, with the net operating load in the range of about 1500 kW (page 4-36, NRC 1996). Total electricity requirements are estimated to be  $1.8 \times 10^7$  kW-hr. Water usage would be relatively low at about 10 gal/min (page 4-37, NRC 1996). Total water usage was estimated to be  $7.2 \times 10^6$  gallons. This technology depends on a constant feed of iron. If ton containers are not treated along with agent, iron would have to be added (page 4-8, NRC 1996). The technology would require a total of  $1.1 \times 10^7$  gallons of water and  $2.7 \times 10^7$  kW-hr to process the entire Umatilla stockpile.

## 7.6 Period of time to test out the molten metal technology and have it fully operational and how that impacts the overall risk of the stockpile

The vendor has the expertise to scale up and still get six nines DRE (page 4-37, NRC 1996). However, extensive research and development would be needed to bring this technology to commercial scale, especially in the following areas: piping, offgas, cooling system, integrity of refractory lining, and combustible gases (page 4-42, NRC 1996). The process is similar to induction furnaces used to melt metal, which have operated at commercial scale and have a proven record. However, there is no industry experience for an application similar to agent destruction. The operational experience for contaminant destruction is limited to pilot scale. The experience with chemical agents is limited to laboratory scale only. Performance has not been proven at full-scale. While there is experience with iron baths containing carbon, sulfur, and chlorine, there is no operational experience with phosphorus (page 4-58, NRC 1996).

Additional testing is needed for air monitoring, which would take at least 24 months to complete (page 4-89, Army 1996a). The time to develop, permit, construct, test, and demonstrate the technology at Aberdeen/Newport has been estimated to be over 4 years (page 4-54, NRC 1996). It would likely take at least as long, or longer, at Umatilla. This technology could not meet the PL 102-484 deadline of December 2004 for treatment of HD, VX, or GB (page 4-97, Army 1996a).

## 7.7 Cost

This technology has the lowest estimated life cycle cost for treatment of HD/VX among any of the five alternatives (page 4-99, Army 1996a). Treatment cost for GB is unknown. Costs would be offset in that salable metal ingots and elemental sulfur would be produced. Salable hydrochloric acid could also be recovered from the liquid wastestream for resale (page 4-18, NRC 1996). The offgas, containing methane and carbon monoxide, would be used to generate power for inplant uses in a turbine generator, which could offset the power demand.



## 8. Electrochemical Oxidation (Silver II)

### 8.1 Types/quantities/toxicity of discharges to the environment by operation of electrochemical oxidation

**Treatment Efficiency.** *In principle* electrochemical oxidation should meet six nines DRE, but this has not been demonstrated. Laboratory tests showed no residual but because of the detection limits and the small amounts tested, the computed DRE was only four nines (page 5-13, NRC 1996). Therefore, additional development and testing is needed to demonstrate the required six nines DRE (page 6-2, Mitretek 1996). Once the agent is destroyed it would not reform (page 5-13, NRC 1996). The technology could only achieve 3X decontamination of ton containers (page 4-19, Army 1996a).

**Air Emissions.** The offgas treatment (hydrogen peroxide and activated carbon) should remove any residual agent and volatiles; the gas would not be held prior to release (page 5-14, NRC 1996). The air emission levels would be moderate (page 4-4, Army 1996a). Discharges would include carbon dioxide, nitrogen, oxygen, with minor amounts of carbon monoxide, nitrogen dioxide, and  $\text{NO}_x$ ; no major toxic discharges are expected (page 6-11, Mitretek 1996). However, silver or nitrates may be released (Table 10-6, Mitretek 1996). Electrochemical oxidation would generate less gaseous waste than an incinerator (page 6-2, Mitretek 1996).

**Wastewater Discharges.** The liquid residuals would be relatively non-toxic and are not expected to be hazardous to human health or the environment (page 5-13, NRC 1996). The wastestreams generated include dilute nitric acid, neutral mixed salt solutions (mostly sodium salts), and a strong alkaline liquid. Assuming the wastewater discharge rates provided by the NRC (page 5-14, NRC 1996) and assuming the same rate for GB as for VX, then the total wastewater discharges associated with processing of all agents are expected to be  $7.5 \times 10^6$  gallons.

**Solid Wastes.** Based on Oregon regulations, all solid wastes (except for metals) generated from demilitarization, treatment and testing of blister (F998) or nerve agents (F999) are considered listed hazardous wastes. Very little solid waste likely would be generated, although little information is available. Salt solutions could be treated by evaporation/solidification and landfilled, instead of being discharged as a liquid.

### 8.2 Risks of discharge from a catastrophic event or breakdown in operation of the electrochemical oxidation technology

Leaks of hydrogen peroxide, in the presence of organic material, such as oil or grease, could produce enough heat to cause combustion and contribute to propagation of a fire (page 6-17, Mitretek

1996). Catastrophic failure from uncontrolled reactions is unlikely because of the slow feed rate of agent, constant low concentrations, and low amount of agent accumulation in any one location (pages 5-16 and 5-23, NRC 1996). Because it is a low temperature process, there is little or no threat from a catastrophic agent release (page 4-51, Army 1996a).

Nitric acid is stored and used throughout the process. Because it is a very strong oxidizing agent, if combined with organic material, such as oil or grease, a runaway oxidation reaction could occur, with pressure buildup and possible explosion. However, for a runaway condition to occur, three independent systems must fail simultaneously, which is unlikely. Therefore, a runaway reaction is not considered very likely (page 5-16, NRC 1996).

### 8.3 Safety of the operation of an electrochemical oxidation facility

The technology operates at low temperature (80-90 degrees C) and low pressure (1 atmosphere). The proposed design, along with trained personnel and proper protection gear and in-place procedures (such as plant shut downs) to deal with potential agent spills/leaks, could provide a safe operation and reduce the risk of worker injury (page 6-17, Mitretek 1996).

Nitric acid, used throughout the process, is a very strong oxidizing agent with risk to workers of serious skin burns and toxic vapors during maintenance (pages 6-18 and 6-25, Mitretek 1996). Failure of the oxides of nitrogen ( $\text{NO}_x$ ) reformer/condenser or the  $\text{NO}_x$  boiler could result in release of hot nitric acid fumes. Nitric acid is corrosive to metals and generates ignitable hydrogen; it reacts violently with sodium hydroxide and could develop sufficient pressure to rupture containers (page 6-25, Mitretek 1996).

Sodium hydroxide can react with water and generate pressure, or react with nitrogen compounds to form explosive mixtures (page 6-25, Mitretek 1996). Activated carbon waste could generate risk during changout but it would not be greater than baseline incineration (page 6-18, Mitretek 1996). The process uses very strong currents (2,000 amperes). A short circuit could cause fire or explosion. Strong electromagnetic forces could interfere with instrumentation (page 6-26, Mitretek 1996).

### 8.4 The rapidity with which electrochemical oxidation can destroy the stockpile

At full scale (24 hr/day) operation the technology would destroy about 140 metric ton HD or 75 metric ton VX in 245 days (i.e., 1,260 pounds/day HD and 675 pounds/day VX) per module (page 5-1, NRC 1996). For the Umatilla stockpile, it would require several modules. For example, with three

modules, it would take over 3 years for HD, one year for VX, and 3 years for GB to destroy the entire stockpile.

The process would be difficult to monitor and control because it contains a large number of parallel modules that must be monitored and controlled simultaneously (page 4-19, Army 1996a).

### **8.5 Impacts of electrochemical oxidation technology on consumption of natural resources**

This is an energy intensive process. It uses 72,000 kW/hr per metric ton HD destroyed and 134,000 kW/hr per metric ton VX destroyed (page 5-5, NRC 1996). Assuming the same rate of electricity use for GB as VX, the total electricity requirement for agent destruction based on stockpile quantities was estimated to be  $3.2 \times 10^8$  kW-hr. Total water use was estimated to be  $3.8 \times 10^7$  gallons based on rates provided by the NRC (page 5-26, NRC 1996).

### **8.6 Period of time to test out electrochemical oxidation and have it fully operational and how that impacts the overall risk of the stockpile**

Laboratory tests have been successful but only one pilot test at a small scale, has been completed; the technology has yet to be operated at a commercial scale (page 5-6, NRC 1996). Because the process generates large heat loads, temperature control in each of the modules, and in the system as a whole, must be tested and validated (page 5-6, NRC 1996). The process instrumentation and control system needs to be developed. No fully operational system or full scale design exists (page 5-15, NRC 1996). There is a concern that the technology hasn't been demonstrated to operate long-term with phosphates and sulfates without developing corrosion in key areas (page 4-36, Army 1996a).

A test program is needed to verify that the planned control systems are adequate to ensure stable operation over the full range of compositions expected (page 5-16, NRC 1996). It is uncertain whether the spent decontamination and other floor drain wastes can be successfully treated and additional research is needed. No information has yet been developed for mitigation of a potential accident regarding release of agent through the vessel jacket cooling system if there is a leak in the vessel (page 6-13, Mitretek 1996). Additional research is needed to evaluate key safety issues, including: stress cracking due to nitric acid; effects of phosphorus and variations in electrolyte composition; and construction materials' compatibility and durability (page 5-19, NRC 1996). Temperature control in each unit, and in the system as a whole, needs to be evaluated (page 10-10, NRC 1996). The effects of silver chloride loading, especially for HD processing, still has to be pilot tested at the conditions and

loadings expected at full scale; the HD treatment process under this technology is the least developed of any of the technologies (page 10-12, NRC 1996).

The technology would likely be viewed by regulators as novel; the lack of familiarity and operating experience with the technology for the treatment of agent might delay the regulatory permitting process significantly (page 10-13, NRC 1996).

Based on the estimates prepared for the Aberdeen/Newport project, it would take on the order of 4-5 years to design the system, construct and install it, and perform the testing needed to assure its safety and operability (page 5-23, NRC 1996). This technology could not meet the PL 102-484 deadline of December 2004 for treatment of HD or VX (page 4-97, Army 1996a), or for GB.

### 8.7 Cost

This technology was ranked second most expensive among all five technologies for treatment of HD and the most expensive for VX (page 4-99, Army 1996a).

## 9. GAS-PHASE CHEMICAL REDUCTION

The data presented for this technology in the NRC report (1996) were primarily based on experience with non-agent organic compounds (e.g., PCBs, DDT) and also HD. Data for VX were limited and no data for GB were presented. Assumptions used in this section for purposes of estimating quantities will be clearly identified.

### 9.1 Types/quantities/toxicity of discharges to the environment by operation of gas-phase chemical reduction

Predicting residuals from treatment of organosulfur compounds (i.e., HD) is more straightforward than for organophosphate compounds (i.e., VX). Only treatment of HD and VX were considered in the alternative evaluation. Therefore, no assumptions were made about treatment of GB.

Methane and hydrogen are burned in the steam boiler. Residuals from combustion exit as CO<sub>2</sub> and steam (page 6-9, NRC 1996). Only mass rates of individual chemical compounds were provided in the reports reviewed. Total waste stream masses/volumes were provided, including any associated water (for aqueous discharges) or nitrogen/oxygen (for air emissions).

#### 9.1.1 HD

**Air Emissions.** Carbon dioxide is given off from the monoethanolamine scrubber at a rate of 51.2 g-moles/min (page F-9, NRC 1996). Carbon dioxide also is released through the burner at a rate of 22.0 g-moles/min (page F-9, NRC 1996). These rates, derived for the Aberdeen stockpile of HD, combine to represent a total carbon dioxide release of 73.2 g-moles/min, or 426 pounds/hr. For a total mass of  $4.7 \times 10^6$  lbs of HD to be treated at UMCD, a total of  $4.6 \times 10^6$  pounds of carbon dioxide would be released. No data was provided for VX; consequently, emission rates for VX and GB were not estimated.

**Solid Wastes.** Carbon is present as soot in the water scrubber at a rate of 8.7 g-moles/min. (page 6-9, NRC 1996). This corresponds to 146,000 pounds of soot over the duration of the treatment of HD. Elemental sulfur is produced by the SulFerox process at a rate of 21.84 g-moles/min. This corresponds to 960,000 pounds sulfur over the duration of the treatment of HD. Based on Oregon regulations, all solid wastes (except for metals) generated from demilitarization, treatment, and testing of blister (F998) or nerve agents (E999) are considered listed hazardous wastes.

**Liquid Wastes.** Hydrochloric acid is produced in the water scrubber at the rate of 43.68 g-moles/min (page 6-9, NRC 1996). This corresponds to  $2.2 \times 10^6$  lbs hydrochloric acid over the duration of the treatment. Sodium salt solution is generated by the caustic scrubber (page 6-9, NRC 1996). Masses were not provided.

### 9.1.2 VX

For phosphorus containing materials, such as VX, products exiting the reactor are not well understood. Experimental work is needed to identify potential discharges to the environment (page 6-5, NRC 1996). If phosphine is produced, a proprietary technology developed by the vendor is proposed to scrub the phosphine (page 6-6, NRC 1996). The reaction chemistry for treatment of VX is still uncertain. Possible residuals include nitrogen, ammonia, nitrogen oxides, elemental phosphorus, hydrogen sulfide and possibly minor amounts of hydrogen cyanide (page 6-10, NRC 1996).

### 9.2 Risks of discharge from a catastrophic event or breakdown in operation of gas-phase chemical reduction

The NRC found no failure scenario involving loss of electrical power, loss of cooling, failure of pipes and valves, inadvertent overpressurization, or inadvertent temperature transients that would lead to off-site release of agent or toxic process products. (page 6-22, NRC 1996). The full operational manual, hazard and operability studies, and process and instrumentation diagrams have been developed for processing DDT-toluene mixtures and PCBs at commercial facilities located outdoors (page 6-7, NRC 1996).

The secondary containment system required for agent destruction facilities will need to be designed so that hydrogen will not stratify or build up locally to a combustible concentration (page 6-23, NRC 1996). A large detonation or burn of combustible gas near containers that store agent could damage containment structures and cause a release of agent. This risk must be considered when designing component locations and shielding (page 6-23, NRC 1996). The current systems design has features and controls in place to address the potential for combustible mixtures of air and hydrogen inside the circulating gas system as a result of air in-leakage (page 6-23, NRC 1996). The sequencing batch vaporizer (SBV) door seals must be designed to reliably seal against leakage of agent (page 6-23, NRC 1996). The design of the reactor vessel must consider thermal stresses, welding problems, crevices, and local design problems (page 6-23, NRC 1996).

### 9.3 Safety of the operation of gas-phase chemical reduction

The system operates at low pressure and it appears to be extremely difficult to overpressurize the system inadvertently (page 6-24, NRC 1996). The SBV chambers and reactor have pressure relief to the caustic scrubber (page 6-24, NRC 1996). Loss of electrical power, failure of cooling water to the heat exchanger, or failure of cooling water to the pumps will cause "graceful" shutdown of the system (page 6-

24, NRC 1996). The integrity of the system does not appear to be threatened in any realistic failure scenarios (page 6-24, NRC 1996).

Worker safety issues are associated with high temperature hydrogen, high temperature steam, hot water, and corrosives in scrubbers (page 6-24, NRC 1996). The vendor has assessed several failure modes and has developed control strategies for them. Process parameters have been identified that are critical for process control and safety (page 6-14, NRC 1996).

Mitretek has identified other safety concerns. The gas flow from the SBV to the reactor cannot be stopped quickly without adverse impact to the SBV. The gas flow could be contaminated with agent volatilized from heels remaining in ton containers after drainage. The design should address this (page 7-10, Mitretek 1996). Gas flow from the catalytic steam reformer (CSR) to the reactor cannot be stopped quickly without adverse impact to the CSR. The design should address this (page 7-10, Mitretek 1996). The primary mover for the process gas is a single positive displacement blower. Failure of the blower is not catastrophic to the process, but the possibility of unsafe conditions resulting from failure can be mitigated through the process design (page 7-10, Mitretek 1996). The nitrogen purge vent in the SBV and several purge vents located throughout the process discharge to the atmosphere through activated carbon beds. These vents provide a direct path for process gas to escape, particularly if the carbon is saturated (page 7-10, Mitretek 1996).

#### 9.4 The rapidity with which gas-phase chemical reduction can destroy the stockpile

The vendor's proposed destruction rate is 5 metric tons per day (5.5 English tons per day) for each agent and is assumed to operate on a continuous basis (pages F-5 and 6-19, NRC 1996). The vendor states that the time for facility construction is 6 months, assuming that the Army provides the secondary containment building and ancillary nonprocess facilities. Systemization requires 3 months (page 6-24, NRC 1996).

Using the UMCD stockpile quantities and assuming 20% downtime (page 6-19, NRC 1996), the estimated time to treat the agents is:

- GB 1,015 tons/(5.5 tons/day) × 1.2 = 221 days
- VX 365 tons/(5.5 tons/day) × 1.2 = 80 days
- HD 2,340 tons/(5.5 tons/day) × 1.2 = 510 days

These estimates total 811 days (27 months) including downtime or 676 days (about 22 months) excluding downtime for treatment of all three agents. These durations were used to estimate resource utilization and waste production. Information was not provided to indicate if additional downtime is required to modify the treatment system to allow switching from one type of agent to another type.

Other than increases in monitoring requirements, the design of the secondary containment, and the engineering necessary for managing the sulfur and phosphorus wastes, this technology is at a point where a unit like the existing commercial systems could serve as the pilot operation for agent destruction (page 6-24, NRC 1996). Schedule impacts for design of secondary containment and re-engineering to handle the various agents is unknown. The schedule for VX and GB is likely to be more greatly impacted than for HD (page 6-24, NRC 1996).

### 9.5 Impacts of gas-phase chemical reduction on the consumption of natural resources

The vendor did not provide a complete energy balance (page 6-8, NRC 1996). The reactor is expected to require 5,019 kW-h/day for processing agent (based on values provided for HD). Electrical power supply needed for pumps, heaters, and other equipment is 20,000 kW-h/day. The total average electrical power is 25,019 kW-h/day (pages 6-8 and 6-20, NRC 1996). Based on the operational durations in Section 9.4 (excluding downtime), and assuming the agents are treated sequentially, a total of  $1.69 \times 10^7$  kW-hr of electricity would be consumed.

The water requirement is 100 gallons per minute for steam feed and scrubbing, although the panel believes this may be on the high side for treating HD (page 6-20, NRC 1996). The total water requirement over the duration of treatment (based on the operational durations in Section 9.4 above [excluding downtime], and assuming the agents are treated sequentially) would be  $9.7 \times 10^7$  gallons of water. This does not include cooling water.

Propane use, assuming 5 metric ton/day processing rate, is 1,954 MJ/hr which converts to  $1.85 \times 10^6$  Btu/hr. This requires approximately 86 pounds of propane each hour, assuming 21,500 Btu/lb of propane (pages 6-20 and 6-26, NRC 1996). Based on the operational durations provided in Section 9.4 above (excluding downtime), and assuming the agents are treated sequentially, a total of  $1.4 \times 10^6$  lbs of propane would be required.



## 9.6 Period of time to test out gas-phase chemical reduction and have it fully operational, and how that impacts the overall risk of the stockpile program

The 1996 Army report estimated a treatment duration schedule of 132 months for HD and 134 months for VX for the base case. Risk-adjusted schedules of 150 and 154 months, respectively were also presented. These durations were for treatment of the Aberdeen and Newport stockpiles, respectively, and do not apply to Umatilla (page 4-85, Army 1996). The Army predicts that gas-phase electrochemical reduction would take the longest time among the candidate technologies to complete at both Aberdeen and Newport. Longer durations generally correlate to greater risks due to longer storage prior to treatment (page 4-85, Army 1996).

The 1996 AMSAA report, like the 1996 Army report, also provided "base" and "risk-adjusted" schedules for treatment of HD and VX at Aberdeen and Umatilla, respectively. Their (base/adjusted) estimates were 95/145 months for HD at Aberdeen and 91/128 months for VX at Newport (page 31, AMSAA 1996). AMSAA predicts that gas-phase chemical reduction could be completed at Aberdeen and Newport more quickly than all the technologies except molten metal for VX at Newport, but would be the second longest duration for treatment of HD at Aberdeen.

Due to the uncertainties presented below, no schedule was presented in the 1996 NRC report. The reactions of the heteroatoms, sulfur, nitrogen, and phosphorus, have not been investigated extensively, and the interplay of kinetics and thermodynamics is difficult to predict. Predictions are necessary both for developing appropriate scrubber systems, and for identifying and managing toxic residuals (page 6-4, NRC 1996).

The vendor has presented proprietary chemistry for scrubbing phosphine, but the technique may not be required if phosphine is in fact not produced (page 6-6, NRC 1996). Experimental work is needed to define the phosphorus end products in the reactor. These speciation issues are serious and will require substantial laboratory testing to resolve them prior to pilot scale work (page 6-5, NRC 1996). The vendor has developed a plan to determine speciation of phosphorus and design of a method of scrubbing the phosphorus containing residuals from the reactor effluent (page 6-5, NRC 1996). Although the panel received detailed modeling data from the vendor, it did not receive detailed laboratory data from the agent destruction tests. No bench scale tests have been reported to the panel (page 6-7, NRC 1996). The vendor has little experience with phosphorus containing materials, even at bench scale.

Although the vendor has developed a plan for addressing these issues, the timeline for doing so is unclear (page 6-7, NRC 1996). The vendor has stated, "the schedules for design, construction, testing and evaluation of a pilot scale system have been requested by the Army and will be provided according to their

requirements" (page 6-24, NRC 1996). Still to be assessed are the effects on the schedule of designing the secondary containment and any associated re-engineering. The effect on schedule is likely to be more severe for VX and GB than for HD because the need for identifying and managing phosphorus containing reaction products applies only to these agents (page 6-24, NRC 1996).

### 9.7 Cost

Development of gas-phase chemical reduction for treatment of HD was estimated to be the most expensive of the alternative technologies. Development of this technology for treatment of VX was considered to be the second most expensive alternative (page 4-99, Army, 1996a).

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Wilkinson, J.R., April 10, 1996, Letter to Members of the Oregon Environmental Quality Commission, from the Confederated Tribes of the Umatilla Indian Reservation, Pendleton, Oregon.

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**ATTACHMENT A**  
**TABLES FOR COMPARISON OF ALTERNATIVES**  
**TO THE BASELINE INCINERATION SYSTEM**  
**FROM THE MITRETEK REPORT**

Table 10-6. Potential Health and Environmental Risks Due to Chemicals

Potential Risks from Exposure to Chemicals	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed By Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
Cancer Risk	HD hydrolysates	HD hydrolysates	None	None	Nickel
Chronic Noncancer Health Hazard	None	None	<ul style="list-style-type: none"> <li>• Silver nitrate</li> <li>• Nitrite compounds</li> </ul>	<ul style="list-style-type: none"> <li>• Hydrochloric acid</li> </ul>	None
Acute Health Effects*	<ul style="list-style-type: none"> <li>• <i>Sodium hydroxide</i></li> <li>• <i>Sulfuric acid (VX only)</i></li> <li>• <i>Sodium hypochlorite</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Sodium hydroxide</i></li> <li>• <i>Sulfuric acid</i></li> <li>• <i>Phosphoric acid</i></li> <li>• <i>Ammonium hydroxide</i></li> <li>• <i>Hydrogen peroxide</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Nitric acid</i></li> <li>• <i>Sodium hydroxide</i></li> <li>• <i>Hydrogen peroxide</i></li> <li>• <i>Silver nitrate</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Hydrogen sulfide</i></li> <li>• <i>Carbon monoxide</i></li> <li>• <i>Phosphine</i></li> <li>• <i>Hydrochloric acid</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Methanol</i></li> <li>• <i>Carbon monoxide</i></li> <li>• <i>Hydrogen sulfide</i></li> <li>• <i>Hydrogen cyanide (for VX only)</i></li> <li>• <i>Sodium hydroxide</i></li> <li>• <i>Hydrochloric acid</i></li> <li>• <i>Sodium hypochlorite</i></li> </ul>
Ecological Hazards	<ul style="list-style-type: none"> <li>• HD or VX hydrolysates</li> <li>• Sodium hydroxide</li> <li>• Sulfuric acid</li> </ul>	<ul style="list-style-type: none"> <li>• HD hydrolysates †</li> <li>• Sodium hydroxide</li> <li>• Sulfuric acid</li> </ul>	<ul style="list-style-type: none"> <li>• Silver nitrate</li> <li>• Nitric acid</li> <li>• Sodium hydroxide</li> </ul>	<ul style="list-style-type: none"> <li>• Hydrochloric acid</li> </ul>	<ul style="list-style-type: none"> <li>• Methanol</li> <li>• Hydrogen cyanide</li> <li>• Hydrocarbon solvent</li> <li>• Nickel compound</li> </ul>

\* Acute effects from chemicals (listed in italicized font) would result primarily from potential accidents during transport to the facility of bulk quantities of chemicals used in the process.

† Toxicity of HD hydrolysates towards some aquatic organisms (e.g., brine shrimp) is reduced by biodegradation.

Table 10-7. Highlights of Alternative Technologies by Major Risk Evaluation Parameter Categories

Evaluation Parameter Subcategories	Alternative Technologies				
	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
<p>Inherent Risks (For details, see Tables 10-1, 2, and 3 for process hazards, &amp; the tables in Appendix H for chemical hazards.)</p> <p>"Toxic chemical" used in this row is defined to be a chemical having an IDLH limit.</p>	<ul style="list-style-type: none"> <li>• Low operating temperature &amp; pressure.</li> <li>• One toxic chemical in medium quantities used for VX only (sulfuric acid).</li> <li>• Negligible quantity of flammable gases generated.</li> </ul>	<ul style="list-style-type: none"> <li>• Low operating temperature &amp; pressure.</li> <li>• Three toxic chemicals in large quantities used (ammonium hydroxide, H<sub>2</sub>O<sub>2</sub>, &amp; phosphoric acid).</li> <li>• Negligible quantity of flammable gases generated.</li> </ul>	<ul style="list-style-type: none"> <li>• Low operating temperature &amp; pressure.</li> <li>• Three toxic chemicals in medium quantities (H<sub>2</sub>O<sub>2</sub>, Nitric Acid, &amp; NO<sub>x</sub>).</li> <li>• No flammable gases generated.</li> </ul>	<ul style="list-style-type: none"> <li>• High operating temperature, low pressure.</li> <li>• Three toxic chemicals in large quantities generated/used (CO, HCl, &amp; H<sub>2</sub>S).</li> <li>• Large quantities of several flammable gases generated.</li> </ul>	<ul style="list-style-type: none"> <li>• Very high operating temperature, low pressure.</li> <li>• Four toxic chemicals in large quantities (CO, HCl, H<sub>2</sub>S, &amp; solvent).</li> <li>• Large quantities of several flammable gases generated.</li> </ul>
<p>Major Failure Modes and Effects (For details, see Section 10.1.2 &amp; FEMA tables in Appendices C through G).</p>	<ul style="list-style-type: none"> <li>• Potential release of partially neutralized agent outside controlled areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential release of partially neutralized agent outside controlled areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential release of agent outside controlled areas.</li> <li>• Potential contamination of personnel because of improperly defined ventilation zones.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential release of agent during purging &amp; venting of the system.</li> <li>• Potential for fire &amp; explosion if hot process gases are released in CDB.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential for fire &amp; explosion if hot process gases are released in CDB.</li> </ul>
<p>External Events (For details, see Tables 10-4 &amp; 5)</p>	<ul style="list-style-type: none"> <li>• Worst/most likely off-site fatalities: 48/1 for NECA &amp; 0/0 for APG).</li> </ul>	<ul style="list-style-type: none"> <li>• Worst/most likely off-site fatalities: 48/1 for NECA &amp; 0/0 for APG).</li> </ul>	<ul style="list-style-type: none"> <li>• Worst/most likely off-site fatalities: 48/1 for NECA &amp; 0/0 for APG).</li> </ul>	<ul style="list-style-type: none"> <li>• Worst/most likely off-site fatalities: 48/1 for NECA &amp; 0/0 for APG).</li> </ul>	<ul style="list-style-type: none"> <li>• Worst/most likely off-site fatalities: 48/1 for NECA &amp; 0/0 for APG).</li> </ul>

10-31

Table 10-7. (Continued)

Evaluation Parameter Subcategories	Alternative Technologies				
	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
Health and Environment (See Table 10-6 for details).	<ul style="list-style-type: none"> <li>• Potential cancer risk from some HD or VX hydrolysates.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential cancer risk from some HD hydrolysates.</li> </ul>	<ul style="list-style-type: none"> <li>• Chronic health effects of silver &amp; nitrate compounds.</li> </ul>	<ul style="list-style-type: none"> <li>• Acute effects of generated process gases; no chronic effects.</li> </ul>	<ul style="list-style-type: none"> <li>• Acute effects of generated process gases; cancer risk for nickel fumes.</li> </ul>
Process and Essential Facility Systems Uncertainties (For details, see Table 10-8).	<ul style="list-style-type: none"> <li>• Design package at preliminary design phase; includes:                             <ul style="list-style-type: none"> <li>- P&amp;IDs &amp; logic diagrams for processing &amp; several major support systems, detailed layout drawings, &amp; design &amp; construction to be used in certain areas.</li> <li>- Undefined seismic design requirements for CDB, TOX, &amp; agent transfer system.</li> </ul> </li> <li>• Accounts for agent impurities.</li> </ul>	<ul style="list-style-type: none"> <li>• Design package at preliminary design phase; includes:                             <ul style="list-style-type: none"> <li>- P&amp;IDs &amp; logic diagrams for processing &amp; several major support systems, detailed layout drawings, &amp; design &amp; construction to be used in certain areas.</li> <li>- Undefined seismic design requirements for CDB, TOX, &amp; agent transfer system.</li> </ul> </li> <li>• Accounts for agent impurities.</li> </ul>	<ul style="list-style-type: none"> <li>• Design package at conceptual design phase; includes:                             <ul style="list-style-type: none"> <li>- Flow diagrams for the processing systems (none for support systems), &amp; general layout drawings.</li> <li>- Undefined seismic design requirements for CDB, TOX, &amp; agent</li> </ul> </li> <li>• Does not account for agent impurities; however, can destroy organic, (but may not remove inorganic) materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Design package at conceptual design phase; includes:                             <ul style="list-style-type: none"> <li>- Flow diagrams for processing systems (none for support systems), &amp; general layout drawings.</li> <li>- Undefined seismic design requirements for CDB, TOX, agent transfer system, &amp; certain process equipment.</li> </ul> </li> <li>• Does not account for agent impurities in its waste stream; but is capable of destroying any organics &amp; removing inorganics.</li> </ul>	<ul style="list-style-type: none"> <li>• Design package at advanced stage of conceptual design phase; includes:                             <ul style="list-style-type: none"> <li>- Flow diagrams for processing and support systems, &amp; general layout drawings.</li> <li>- Undefined seismic design requirements for CDB, TOX, agent transfer system, &amp; certain process equipment.</li> </ul> </li> <li>• Does not account for agent impurities in its waste stream; but is capable of destroying any organics &amp; removing inorganics.</li> </ul>



Table 10-7. (Concluded)

Evaluation Parameter Subcategories	Alternative Technologies				
	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
Scheduling and Continued Storage Uncertainties	<ul style="list-style-type: none"> <li>Provides 50% excess capacity &amp; redundancy in design of process &amp; support systems.</li> </ul>	<ul style="list-style-type: none"> <li>Provides 50% excess capacity &amp; redundancy in design of process &amp; support systems.</li> </ul>	<ul style="list-style-type: none"> <li>Modular design provides redundancy for processing agent; however, unknown redundancy in support systems.</li> </ul>	<ul style="list-style-type: none"> <li>Concern with possible processing at one site first, then the other site.</li> <li>No redundancies in design of processing or support systems.</li> <li>No schedule provided.</li> </ul>	<ul style="list-style-type: none"> <li>Concern with possible processing at one site first, then the other site.</li> <li>No redundancies in design of processing or support systems.</li> </ul>
Environmental Permitting Uncertainties	<ul style="list-style-type: none"> <li>Concern with suspended &amp; dissolved solids.</li> <li>No information on off-site treatment/disposal of HD/VX hydrolysate.</li> </ul>	<ul style="list-style-type: none"> <li>No information on management of solid waste if the recycle waste water system is removed.</li> </ul>	<ul style="list-style-type: none"> <li>No detailed information on permitting strategy.</li> <li>Concern about management of liquid waste from process.</li> </ul>	<ul style="list-style-type: none"> <li>Concern with management of liquid waste.</li> <li>Concern with acceptance of recycling of product gas.</li> </ul>	<ul style="list-style-type: none"> <li>No information on handling of waste water.</li> <li>Concern with acceptance of recycling philosophy (e.g., use of synthesis gas, as fuel recycling of hydrochloric acid &amp; sulfur).</li> <li>Concern with generation of hydrochloric acid &amp; sulfur.</li> </ul>

10-33

Table 10-8. Qualitative Conclusions of Alternative Technology Characteristics

Characteristic	Value Subjectively Concluded on a Relative Basis				
	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
Level of Detail Provided					
Overall Design Information	High	High	Low	Low	Medium
Hazards analyses, HAZOP, or FMEA	Medium	Medium	Low+	Low	High
Ton Container Processing					
Operational Details	High	High	Low	Low	Medium
Drawings	Medium	Medium	Low	Low	Medium
Redundancy/Availability	Low	Low	Low	Medium	Low
Material Balance	Medium	Medium	Low	Low	Medium
Mass Balance	Medium	Medium	Low	Low	Medium
Treatment					
Operational Details	High	High	Medium	High	High
Drawings	High	High	Medium	Low	Medium

10-34

Table 10-8. (Continued)

Characteristic	Value Subjectively Concluded on a Relative Basis				
	U.S. Army Neutralization Followed By Off-Site Post- Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
<b>Treatment (Continued)</b>					
Reaction Chemistry	High	High	Medium-	Medium	High
Material Balance	High	High	Medium	Medium	High
Mass Balance	Medium	Medium	Low	Medium	High
<b>Post-Treatment</b>					
Operational Details	None	High	Medium	High	High
Drawings	None	High	Medium	Low	High
Reaction Chemistry	Unknown	High	Low	Medium	High
Material Balance	Unknown	High	Medium	Medium	High
Mass Balance	Unknown	Medium	Low	Medium	High
Waste Steam Disposal	Low	Medium	Low	Low	Medium
Support Systems	High	High	Low	Low	High
Emergency Response Strategy	Low	Low	Medium	Medium	Medium

10-35

Table 10-8. (Continued)

Characteristic	Value Subjectively Concluded on a Relative Basis				
	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
Level of Automation/Remoteness of Operators for Process					
Ton Container Processing	Low	Low	Low	High	Medium
Treatment	High	High	High	High	High
Post-Treatment	Unknown	Low	High	High	Medium
System Redundancy/Excess Capacity	Medium	Medium	High	Low	Low
Confidence in Design					
Ton Container Processing	Medium	Medium	Medium	Low	Medium
Treatment Process	High	High	High	High	High
Post-Treatment	Low	High	Medium	Medium	Medium
Waste Stream Disposal	Medium	High	Low	Low	Low

10-36

Table 10-8. (Concluded)

Characteristic	Value Subjectively Concluded on a Relative Basis				
	U.S. Army Neutralization Followed By Off-Site Post-Treatment	U.S. Army Neutralization Followed by Biodegradation	AEA Silver II Electrochemical Oxidation	Eco Logic Gas-Phase Chemical Reduction	M4 Molten Metal Catalytic Extraction
Apparent understanding of the Army's CSDP Safety Design Requirements	High	High	Medium	Low	High
Level of agent processing experience with AT	Medium	Medium	Low	Low	Low
Level of commercial experience with AT	None	None	Medium	Low	Medium
Degree of Recycling	None	Low	High	Medium	Medium
Commercial viability of waste streams (resale instead of waste)	None	None	None	Medium	High

10-37

**ATTACHMENT A  
DEPARTMENT CONCLUSIONS ON  
ENVIRONMENTAL QUALITY COMMISSION FINDINGS**

**STAFF REPORT ON THE PROPOSED  
UMATILLA CHEMICAL DEMILITARIZATION FACILITY  
NOVEMBER, 1996 (\*\*\*\*DRAFT\*\*\*\*)**

	<b>PAGE</b>
Introduction.....	A-2
Before issuing a hazardous waste treatment permit the Commission must Find that:	
1. The intent of the statutory and regulatory provisions concerning community participation have been met. {ORS 466.050} .....	A-3
2. The proposed facility location is a) suitable for the type and amount of hazardous waste intended for treatment at the facility; b) provides the maximum protection possible to the public health and safety and to the environment; and c) is situated sufficient distance from urban growth boundaries, parks, wilderness, and recreation areas. {ORS 466.055(1)(a)-(c)}.....	A-7
3. The design of the proposed facility allows for treatment of the range of hazardous waste as required by the Commission. {ORS 466.055(2)(a)-(b)} .....	A-11
4. The proposed facility uses the best available technology. {ORS 466.055(3)}.....	A-13
5. The need for the facility has been demonstrated. {ORS 466.055(4)(a)-(c)} .....	A-14
6. The proposed facility will not have an adverse effect on either public health and safety or to the environment of adjacent lands. {ORS 466.055(5)(a)-(b)}.....	A-19
7. The owner and operator of the facility have demonstrated adequate financial and technical capability to properly construct and operate the facility. {ORS 466.060(1)(a)}.....	A-24
8. The owner and operator of the facility have demonstrated ability and willingness to operate the proposed facility in compliance with statutory and regulatory provisions. {ORS 466.060(1)(b)}.....	A-28

## INTRODUCTION

In 1985 the Oregon Legislature specifically gave the Environmental Quality Commission (Chapter 466 of the Oregon Revised Statutes) both the responsibility and the authority to act on applications for permits for disposal and treatment of hazardous waste and PCBs. Oregon Administrative Rules (specifically, Chapter 340, Division 120) were adopted by the Commission pursuant to Chapter 466 of the statute to more clearly define the siting criteria for both on-site and off-site hazardous waste facilities. The proposed Umatilla Chemical Demilitarization Facility is considered a new on-site hazardous waste treatment facility under state law.

The proposed Umatilla facility is subject to only those parts of Division 120 that apply to new on-site facilities. Not every Finding required by ORS 466 is specifically addressed by a corresponding rule. In one case (related to advisory commissions and community participation) there is a rule that specifically applies to new on-site facilities, but the corresponding statute does not strictly require a "Finding" by the Commission. Because the rule in Division 120 clearly applies to the Umatilla facility, the issue is included here as "Finding 1" on Page A-3.

This Attachment covers seven of the eight findings that the Commission must make before issuing a hazardous waste permit for the proposed Umatilla hazardous waste treatment facility. A report concerning finding #4 ("Best Available Technology") is being provided under separate cover, although the criteria being used to evaluate BAT are listed in this Attachment. The determination of which specific sections of applicable statutes and/or related rules require findings by the Commission were made in consultation with the Oregon Department of Justice. The complete text of the referenced Oregon Revised Statutes and Oregon Administrative Rules is contained in Attachments C and D, respectively.

**FINDING 1: Has the intent of the statutory and regulatory provisions concerning community participation been met?**

***Applicable Statute***

**ORS 466.050 Citizen advisory committees.**

Authorizes the Director to establish a citizens advisory committee to review applications and advise the Department and the Commission in the selection of a hazardous waste treatment or disposal facility or the site for such a facility. The establishment of a citizens advisory committee is left to the discretion of the Director.

Full text of ORS 466.050 is located on Page C-2.

***Related Rule***

**OAR 340-120-020 (1) –(6) Community participation.**

Describes the appointment procedure and specifies the composition of an advisory committee to review the siting, design, construction, and operation of a hazardous waste treatment or disposal facility. Gives suggestions of issues to be considered, such as emergency response capabilities, changes in property values, etc.. Grants the Commission authority to impose additional requirements to address community-related impact issues.

Full text of OAR 340-120-020(1)–(6) is located on Pages D-6–D-7.

{ Although ORS 466.050 was primarily intended to ensure community participation in the siting of an off-site hazardous waste facility, this part of the statute and related rule are included here because OAR 340-120-001(4) (see text on Page D-2) specifically states that on-site treatment facilities are subject to the requirements of Division 120 concerning community participation. }

In relation to Finding 1, the following **tend to support the conclusion** that the intent of the statutory and regulatory provisions concerning community participation for the proposed facility has been met:

1. The Chemical Demilitarization Citizens Advisory Commission (CDCAC) was appointed by Governor Barbara Roberts in 1993 (Executive Order EO-93-10, dated August 6, 1993).
2. The CDCAC held 21 meetings from January 18, 1994 through October 7, 1996.



3. The Department of Environmental Quality ("Department") opened an office (dedicated solely to the Umatilla project) in Hermiston in April, 1994. The Hermiston office is staffed by the Department's Umatilla Permits Coordinator.
4. The Department developed a mailing list of persons interested in the Umatilla project that now contains approximately 600 entries.
5. The Department has distributed Umatilla-specific fact sheets and other information to persons on the mailing list and at public meetings and presentations.
6. The Department has given briefings to:
  - the City Councils of Boardman, Umatilla, Stanfield, Echo, Hermiston, and Pendleton, in addition to the City Councils of Kennewick, Pasco, and Richland in the state of Washington.
  - the County Commissioners of Umatilla and Morrow Counties in Oregon and Benton County in Washington.
  - local groups including the Chambers of Commerce of Hermiston, Boardman, and Irrigon, and the Hermiston Kiwanis Club.
7. The Department has held Open Houses and conducted presentations in the local area for members of the public.
8. The public comment period was held open for over seven months (April 5-November 15, 1996).
9. The Department held three public hearings in the local area (Pendleton, Kennewick, and Hermiston), and one public hearing in Portland.
10. The Environmental Quality Commission ("Commission") heard public testimony in Hermiston on August 22, 1996, and during their regular meetings in Portland on January 11, April 12, and September 27, 1996. Time for public testimony has also been scheduled for the EQC worksession to be held on November 15, 1996.
11. During 1996 the Commission held worksessions and/or heard informational presentations about the proposed facility on January 11, April 12, May 16 and 17, July 11, August 22 and 23, September 27, and October 11. A presentation to the EQC by the Confederated Tribes of the Umatilla Indian Reservation is scheduled for November 14, and a Umatilla worksession (with opportunity for public testimony) will be conducted on November 15, 1996.
12. The Department conducted a random telephone survey of 400 persons in the Hermiston area in 1994 that showed 87% of the respondents had seen or heard news or information about the proposed facility.<sup>(1)</sup>

13. The Department conducted a random telephone survey of 300 persons in the Hermiston area in 1996 that showed 90% of the respondents had seen or heard news or information about the proposed facility. <sup>(2)</sup>
  14. The Department conducted a random telephone survey of 100 persons each in Pendleton and the Tri-City (Washington) area in 1996 that showed 82% of respondents Pendleton, and 77% of respondents in the Tri-Cities, had seen or heard news or information about the proposed facility. <sup>(2)</sup>
  15. Media coverage in the local area has been extensive.
  16. The permit applicant maintains a public outreach office in Hermiston, has participated in DEQ-sponsored events, and conducted numerous presentations for community groups.
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In relation to Finding 1, the following **tend not to support the conclusion** that the intent of the statutory and regulatory provisions concerning community participation for the proposed facility has been met:

1. A Citizens Advisory Committee was not appointed to directly advise the Department.

{The Chemical Demilitarization Citizens Advisory Commission (CDCAC) appointed by Governor Roberts is charged with providing input to the Army, not to the Department. The CDCAC has, however, provided input directly to the Department, and Department staff has been present at all of the CDCAC meetings.}

2. An Army survey conducted in 1996<sup>(3)</sup> indicated that 51% of 1000 respondents in a random telephone survey of Umatilla, Morrow and Benton (Washington) Counties were unaware that a military base or installation was located in their county or a nearby county.
3. Of the 49% of the respondents in the Army survey<sup>(3)</sup> who indicated awareness of a nearby military installation only 55% of respondents in Umatilla County, 41% in Morrow County, and 16% in Benton County were aware of the chemical stockpile.

{The Department believes that the Army's survey methodology was flawed and that the community surveys conducted by the Department more accurately represent community awareness.}

4. Public comment was received stating that the public hearing process in the Portland area was inadequate.

{The Department acknowledges that the public hearing in Portland did not go smoothly; however, all those present who signed witness registration forms had the opportunity to testify and the transcript of the testimony was provided to the Commission. Additional public forums in Portland were provided at numerous Commission meetings during 1996 (see #'s "10" and "11" on Page A1-2).}

5. A report recently released by the National Research Council <sup>(4)</sup> is critical of the Army's public involvement efforts related to the Chemical Stockpile Disposal Program (CSDP) and concludes that "the Army's current public affairs program does not adequately involve citizens in the affected communities in the CSDP decision-making process or oversight of the program."

{The Department notes the NRC criticism of the Army's public involvement program and acknowledges that the Department has also received criticism of its public involvement efforts (although not from the NRC). The Department does not agree with at least one commenter's assertion that the Department has not established a "meaningful" public involvement process.}

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### **DEPARTMENT CONCLUSION ON FINDING 1:**

Notwithstanding the recent National Research Council report, which criticizes the Army's public involvement process, the Department believes that there is significant community awareness of the proposed facility and that there has been ample opportunity for public input to the state's permitting process, the health and ecological risk assessment, and the Commission findings. Oregon's unique statutory obligation for the Environmental Quality Commission to make a finding regarding best available technology has provided an opportunity for dialogue about alternative technologies which has not occurred in other states.

The Department concludes that the intent of ORS 466.050 and OAR 340-120-020 concerning community participation has been met for the proposed Umatilla facility.

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### **References, Finding 1:**

- (1) *Umatilla Army Depot Community Assessment Survey*, Intercept Research Corporation for Oregon Department of Environmental Quality, July, 1994.
- (2) *Umatilla Army Depot Community Assessment Tracking Survey*, Intercept Research Corporation for Oregon Department of Environmental Quality, July, 1996.
- (3) *Chemical Demilitarization Public Outreach: Umatilla Area Baseline Survey*, Innovative Emergency Management and Rowan & Blewitt Incorporated for U.S. Army Program Manager for Chemical Demilitarization Public Affairs Office, April, 1996.
- (4) *Public Involvement and the Army Chemical Stockpile Disposal Program*, Letter Report from the Committee on the Review and Evaluation of the Army Chemical Stockpile Disposal Program, Board on Army Science and Technology, Commission on Engineering and Technical Systems, National Research Council, October, 1996.

**FINDING 2:** The Commission must find that the proposed facility location:

- (a) is suitable for the type and amount of hazardous waste intended for treatment at the facility;
- (b) provides the maximum protection possible to the public health and safety and to the environment; and
- (c) is situated sufficient distance from urban growth boundaries, parks, wilderness, and recreation areas.

***Applicable Statute***

**466.055(1)(a)–(c) Criteria for new facility (as related to location)**

Requires the Commission to Find that the proposed location a) is suitable for the type and amount of hazardous waste intended for treatment; b) provides the maximum protection possible to the public health and safety and environment of Oregon from release of hazardous waste; and c) is situated sufficient distance from urban growth boundaries to protect the public health and safety and sufficient distance from recreation areas to prevent adverse impacts to public use of those areas.

Full text of ORS 466.055(1)(a)–(c) is located on Page C-2.

***Related Rule***

**OAR 340-120-010(2)(d) Location**

Gives specific siting criteria for off-site facilities. Requires the facility to be located a minimum of one mile from urban growth boundaries, wilderness, parks, recreation areas, residences, schools, churches, hospitals (and other similar community facilities). This paragraph does not actually apply to on-site facilities.

**OAR 340-120-010(2)(e) Property Line Setback**

Requires a 250 foot property line setback for on-site facilities.

Full text of OAR 340-120-010(2)(d)–(e) is located on Page D-5.

In relation to Finding 2, the following **tend to support the conclusion** that the proposed facility location is suitable for the type and amount of hazardous waste intended for treatment at the facility; provides the maximum protection possible to the public health and safety and to the environment; and is situated sufficient distance from urban growth boundaries, parks, wilderness, and recreation areas:

1. The proposed facility location is immediately adjacent to "K-Block," where the chemical weapon stockpile has been stored for over 30 years. The proposed location will minimize the distance the munitions must be transported.
  2. Although OAR 340-120-010(2)(d) was intended to apply only to off-site facilities, the proposed facility does meet the one-mile minimum distance specified for distance from urban growth boundaries, recreation areas, and community facilities and residences.
  3. The proposed facility meets the requirement of OAR 340-120-010(2)(e) for on-site facilities to maintain a minimum of a 250 foot setback from the property line (the proposed facility is two miles from the nearest Umatilla Depot boundary).
  4. In addition to being well within the fenced confines of a federal facility, the proposed facility will itself be secured by additional controlled access security measures.
  5. The Department's Draft Pre-Trial Burn Risk Assessment<sup>(1)</sup> concluded that except for a location well within the Depot fenceline, emissions from the proposed facility would not result in an unacceptable level of health risk (defined as a 1 in 100,000 chance of an excess cancer case, or a "hazard index" over 0.25 for non-cancer effects on an exposed individual).
  6. Except for a location well within the Depot fenceline (where mercury effects exceeded regulatory benchmarks), there is a low likelihood of potential ecological effects<sup>(1)</sup>.
  7. The permit applicant has met Department requirements that the permit application reasonably demonstrate the ability to meet federal and/or state emission standards for a hazardous waste treatment facility.
  8. Successful operation of the proposed facility will permanently remove the chemical stockpile hazard from the local area.
-

In relation to Finding 2, the following **tend not to support the conclusion** that the proposed facility location is suitable for the type and amount of hazardous waste intended for treatment at the facility; provides the maximum protection possible to the public health and safety and to the environment; and is situated sufficient distance from urban growth boundaries, parks, wilderness, and recreation areas:

1. Hazardous waste treatment facilities pose an inherent risk of handling and/or processing accidents that can result in uncontrolled releases that could pose a risk to the public.

{The Department believes that the proposed facility is designed with sufficient engineering controls as to minimize the risk of a release. Controls include, but are not limited to, transport of munitions in explosion-proof containers, robotic processing, cascaded ventilation (and carbon filter) systems in the container handling building, explosive containment rooms for critical process operations, automatic waste feed cut-offs, waste feed limitations, and state of the art pollution control systems, to include carbon filtration of stack emissions.}

2. There are approximately 53,000 people living within a 30-mile radius around the proposed facility, and a population of approximately 204,000 within a 36-mile radius<sup>(2)</sup>.
3. The Columbia River, Umatilla River, and the Irrigon Wildlife Refuge are located within five miles of the proposed facility. The Umatilla National Wildlife Refuge and the Cold Springs Reservoir National Wildlife Refuge are located within 10 miles of the proposed facility.

{The location of the proposed facility is as close as feasibly possible to the on-site waste it is intended to treat and is over two miles from the nearest property boundary. The Pre-Trial Burn Risk Assessment indicated that risks to the public and to the environment from facility emissions do not exceed regulatory benchmarks. Additional risk assessments will be completed after the facility completes its trial burn process. If necessary, operational parameters and/or permit conditions can be modified to reflect the new information.}

4. The effects of many chemicals, including products of incomplete combustion, on human health and the environment are unknown, or must be extrapolated from animal studies. The potential for synergistic effects of stack emissions, and the impacts of other emission sources in the area, are also unknown.

{Data and risk assessment methodologies are not available (and are unlikely to be available in the near future) to determine the synergistic effects of chemicals in stack emissions, or the potential impacts from multiple emission sources. The Department believes that the risk assessment process takes this into account by the use of conservative assumptions. See Finding 6 for further discussion of the assumptions used in the risk assessment.}

## DEPARTMENT CONCLUSION ON FINDING 2:

The proposed facility location meets all of the Oregon regulations concerning minimum distances from population centers, recreation areas, and property lines, and is as close as practicable to the on-site waste it is intended to treat. The results of the human health and ecological risk assessment indicate that the proposed facility location will not pose an unacceptable risk to public health or to the environment. The Department concludes that the facility location is suitable and provides the maximum protection possible to the public health and safety and to the environment.

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## References, Finding 2:

- (1) *Draft Pre-Trial Burn Risk Assessment-Proposed Umatilla Chemical Demilitarization Facility-Hermiston, Oregon*, Ecology and Environment for Oregon Department of Environmental Quality, Volumes 1 and 2, April, 1996.
- (2) *Umatilla Chemical Agent Disposal Facility-Phase 1 Quantitative Risk Assessment*, Science Applications International Corporation for U.S. Army Program Manager for Chemical Demilitarization, September, 1996.

**FINDING 3:** Does the design of the proposed facility allow for treatment of the range of hazardous waste as required by the Commission?

***Applicable Statute***      **ORS 466.055(2)(a)–(b) Criteria for new facility (as related to design)**

Requires the Commission to Find that the design of the proposed facility allows for treatment of the range of hazardous waste as required by the Commission. Requires that the facility significantly add to the range of waste handled, or the type of technology employed, at a facility previously permitted.

Full text of ORS 466.055(2)(a)–(b) is located on Page C-2.

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***Related Rule***                      (There is no section in the Oregon Administrative Rules that applies to this Statute.)

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In relation to Finding 3, the following **tend to support the conclusion** that Oregon Revised Statutes 466.055(2)(a) and (b) do not apply to the proposed Umatilla Facility:

1. ORS 466.055(2)(a) is applicable only to commercial facilities (off-site or on-site) that have applied for a hazardous waste facility permit in response to the Commission's determination that there is need for additional hazardous waste treatment or disposal capacity in Oregon.
  2. The Commission has not determined that there is a need for additional hazardous waste treatment or disposal capacity in Oregon. The proposed facility will treat only waste already stored at the Umatilla Chemical Depot, and will not be accepting any off-site waste.
  3. ORS 466.055(2)(b) applies only to previously permitted facilities that want to expand their capacity.
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In relation to Finding 3, the following **tend not to support the conclusion** that Oregon Revised Statutes 466.055(2)(a) and (b) do not apply to the proposed Umatilla Facility:

1. Because there is not currently a permitted hazardous waste facility in the state of Oregon suitable for the treatment and disposal of lethal chemical agents and munitions, the proposed facility could be considered an expansion of current capacity.

{Due to the specialized design of the proposed facility the "expansion" would apply only to Oregon's capacity to treat chemical warfare material.}

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**DEPARTMENT CONCLUSION ON FINDING 3:**

The Commission has not determined a need for additional treatment capacity, nor opened an "Application Period" as described in ORS 466.040. The proposed facility will treat only on-site waste and is not a commercial facility. The Department concludes that Oregon Revised Statutes 466.055(2)(a) and (b) do not apply to the proposed facility.

**FINDING 4: Does the proposed facility use the best available technology?**

***Applicable Statute*      ORS 466.055(3) Criteria for new facility (as related to technology)**

Requires the Commission to Find that the proposed facility uses the best available technology for treating hazardous waste as determined by the Department or the United States Environmental Protection Agency.

Full text of ORS 466.055(3) is located on Page C-3.

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***Related Rule*                      OAR 340-120-010(2)(c) Technology and Design**

Requires that the facility use the best available technology as determined by the Department for treatment of hazardous waste and to protect public health and safety and the environment.

Full text of OAR 340-120-010(2)(c) is located on Page D-4.

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The discussion of Best Available Technology is contained in Attachment B, provided under separate cover. The following criteria are being used to evaluate the proposed technology (incineration) and five alternative technologies being considered by the permit applicant for use at other chemical stockpile sites:

1. Types, quantities and toxicity of discharges to the environment by operation of the proposed facility compared to the alternative technologies.
2. Risks of discharge from a catastrophic event or mechanical breakdown in operation of the proposed facility compared to the alternative technologies.
3. Safety of the operations of the proposed facility compared to the alternative technologies.
4. The rapidity with which each of the technologies can destroy the stockpile.
5. Impacts that each of the technologies have on consumption of natural resources.
6. Time required to test the technology and have it fully operational; impacts of time on overall risk of stockpile storage.
7. Cost

**FINDING 5: Has the need for the facility been demonstrated?**

***Applicable Statute*      ORS 466.055(4)(a)–(c) Criteria for new facility (related to need for facility)**

Paragraph (4) requires the Commission to Find that the need for a new facility is demonstrated by (a) lack of treatment capacity in the Northwest; (b) the operation of the proposed facility would result in a higher level of protection of the public health and safety or environment; or (c) significantly lower treatment or disposal costs to Oregon companies.

Full text of ORS 466.055(4)(a)–(c) is located on Page C-3.

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***Related Rule*                      OAR 340-120-010(2)(a) Need**

Requires the applicant to demonstrate that the proposed facility is needed because of selected factors related to lack of treatment capacity for hazardous waste generated by Oregon companies; public health and safety; and cost reduction to Oregon companies.

Full text of OAR 340-120-010(2)(a) is located on Pages D-3–D-4.

**OAR 340-120-010(2)(b) Capacity**

Describes the required size of a facility based on the need for additional hazardous waste treatment capacity within the Northwest.

Full text of OAR 340-120-010(2)(b) is located on Page D4.

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In relation to Finding 5, the following **tend to support the conclusion** that ORS 466.055(4)(a) and (4)(c) do not apply to the proposed facility, and that the need for the facility has been demonstrated because the operation of the proposed facility would result in a higher level of protection for the public and the environment:

1. The construction of the proposed facility will not affect the hazardous waste treatment capacity in the Northwest, except for the capacity to treat chemical warfare munitions and agents.
2. The permitted hazardous waste disposal facility in Arlington, Oregon, is currently experiencing a decrease in the amount of hazardous waste it is receiving. Selection of the Arlington facility by the permit applicant for disposal of hazardous waste generated by the operation of the proposed facility is not expected to affect disposal costs for other hazardous waste generators.

3. The proposed facility will not lower treatment costs for Oregon companies because it is a non-commercial facility designed to treat only on-site wastes at the Umatilla Chemical Depot.
4. The Department of Justice<sup>(1)</sup> (See Attachment E), has determined that the requirements of 466.055(4)(a) are not applicable to a new on-site facility.
5. The Department of Justice<sup>(1)</sup> (See Attachment E), has determined that the requirements 466.055(4)(c) apply only to commercial facilities.
6. The Department has conducted a Human Health and Ecological Risk Assessment<sup>(2)</sup> and found that operation of the proposed facility will not pose unacceptable risks to either human health or the environment.
7. The Quantitative Risk Assessment conducted by the U.S. Army<sup>(3)</sup> concluded that the risk of fatalities from storage of the chemical weapons stockpile is far greater than the risk of fatalities from processing operations.
8. The National Research Council<sup>(4)</sup> concluded that the annual storage risk to the public is greater than the annual risk due to disposal and that total risk to the public will be reduced by prompt disposal of the stockpile.
9. The Department conducted a random telephone survey of 400 persons in the Hermiston area in 1994<sup>(5)</sup> that showed 87% of the respondents agreed with the statement "There is a need to build a facility of this type so that we may safely dispose of Umatilla Army Depot's aging stockpile of chemical weapons." When the Department repeated this survey (with 300 respondents) in 1996<sup>(6)</sup>, 84% of the respondents agreed with the statement.
10. The Department conducted a random telephone survey of 400 persons in the Hermiston area in 1994<sup>(5)</sup> that showed 78% of the respondents agreed with the statement "The process for destroying this chemical weapons stockpile should move ahead because leaving the weapons in place endangers the environment and public safety." When the Department repeated this survey (with 300 respondents) in 1996<sup>(6)</sup>, 80% of the respondents agreed with the statement.
11. Numerous public comments (provided directly to the Commission, or to the Commission through the Department) have been received urging the Department and the Commission to move ahead with granting a permit for the proposed facility.
12. Approximately 106,000 M-55 rockets are stored at the Umatilla Chemical Depot. Although there is less than one chance in a million that a rocket will "autoignite" before the year 2013 (some estimates range to the year 2064)<sup>(7)</sup>, studies have been limited to non-leaking munitions. The presence of

agent (especially GB) can accelerate the degradation of the propellant stabilizer<sup>(7)(8)</sup>. The leakage rate of GB-filled M-55 rockets has been increasing over the last four years<sup>(9)</sup>. The Umatilla stockpile includes 91,375 GB-filled rockets, including 54 identified as "leakers."<sup>(10)</sup>

13. Successful operation of the proposed facility will permanently remove the chemical stockpile hazard from the local area.

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In relation to Finding 5, the following **tend not to support the conclusion** that the need for the facility has been demonstrated because the operation of the proposed facility would result in a higher level of protection for the public and the environment:

1. The chemical weapons stockpile has been stored at the Umatilla Depot for over thirty years without serious incident. There is one chance in 300,000 (per year of storage) of a fatality among the population living one to three miles from the proposed facility. The greatest contributor (71%) to the risk of a fatality during storage is the unlikely occurrence of a major earthquake.<sup>(3)(11)</sup>

{In comparison, there is one chance in 27 million (per year of disposal processing) of a fatality among the population living one to three miles from the proposed facility. Thus the annual risk to individuals closest to the facility is about 90 times greater per year for continued storage versus disposal operations.<sup>(11)}</sup>}

2. Hazardous waste treatment facilities pose an inherent risk of handling and/or processing accidents. The nature of the chemical weapons stockpile (chemical agents that are lethal in minute quantities, in some cases stored in deteriorating, explosively configured munitions) is such that an accident occurring during the handling required for processing could result in an uncontrolled release.

{The Department believes that the proposed facility is designed with sufficient engineering controls as to minimize the risk of a release. Controls include the use of explosion-proof containers to transport munitions from the igloos to the container handling building, automated processing operations, cascaded ventilation (and carbon filter) systems in the processing building, explosive containment rooms for critical process operations, automatic waste feed cut-offs, waste feed limitations, and pollution control systems that include carbon filtration of stack emissions.}

3. Even with the basic uncertainties associated with estimates of M-55 rocket storage life, it is very unlikely that a non-leaking rocket will autoignite before the year 2013, and possibly not before the year 2064.<sup>(7)</sup> Insufficient studies have been conducted to determine the actual likelihood of autoignition of a "leaker" rocket.<sup>(7)(8)</sup>

{The Department believes that there are enough indications (albeit in some cases preliminary and/or confined to non-leaking rockets), of M-55 rocket instability that this should be a matter of serious concern in any decision that might further delay disposal of the chemical weapons stockpile at the Umatilla Chemical Depot.}

4. Numerous public comments (provided to the Commission) have been received indicating that there is no need for haste and urging the Department and the Commission to delay the granting of a permit for the proposed facility until further information is available concerning alternatives to the proposed incineration technology.
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#### **DEPARTMENT CONCLUSION ON FINDING 5:**

The proposed facility is a non-commercial, on-site treatment facility. The Department concludes that the requirements of Oregon Revised Statute 466.055(4)(a) and (4)(c) do not apply to the proposed facility.

The operation of the proposed facility will reduce, and eventually eliminate, the risk to surrounding communities from continued storage of the chemical agents and munitions. The Department concludes that the need for the facility has been demonstrated because operation of the proposed facility will result in a higher level of protection for public health and safety and for the environment (as compared to continued storage of the chemical weapons stockpile).

While it is possible that the Umatilla stockpile could be stored for many more years without incident, no one really knows when, or if, a catastrophic event will occur. Therefore, the Department recommends that the stockpile be destroyed as quickly as possible to remove the threat.

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#### **References, Finding 5:**

- (1) *Memorandum* (DOJ File No. 340-420-GNE0399-95) from Larry Edelman, Department of Justice, to Stephanie Hallock, Department of Environmental Quality, dated January 29, 1996 (See Attachment E of this report for a copy of the complete text).
- (2) *Draft Pre-Trial Burn Risk Assessment—Proposed Umatilla Chemical Demilitarization Facility—Hermiston, Oregon*, Ecology and Environment for Oregon Department of Environmental Quality, Volumes 1 and 2, April, 1996.
- (3) *Umatilla Chemical Agent Disposal Facility—Phase 1 Quantitative Risk Assessment*, Science Applications International Corporation for U.S. Army Program Manager for Chemical Demilitarization, September, 1996.
- (4) *Recommendations for the Disposal of Chemical Agents and Munitions*, National Research Council (Committee on Review and Evaluation of the Army Chemical Stockpile Disposal Program), 1994.
- (5) *Umatilla Army Depot Community Assessment Survey*, Intercept Research Corporation for Oregon Department of Environmental Quality, July, 1994.

- (6) *Umatilla Army Depot Community Assessment Tracking Survey*, Intercept Research Corporation for Oregon Department of Environmental Quality, July, 1996.
- (7) *M55 Rocket Storage Life Evaluation*, U.S. Army Chemical Demilitarization and Remediation Activity, December, 1994.
- (8) *Evaluation of Potential Hazards of Chemical Agent-Contaminated M55 Rocket Explosive Components*, U.S. Army Program Manager for Chemical Demilitarization, January, 1996.
- (9) *Department of Defense's Interim Status Assessment for the Chemical Demilitarization Program*, Department of Defense, April, 1996.
- (10) *Quarterly Leaker Report, Umatilla Chemical Activity*, Letter Report from Ronald Lamoreaux, Civilian Executive Assistant, Umatilla Chemical Depot, August 6, 1996.
- (11) *Perspectives on the Umatilla Quantitative Risk Assessment Results*, Science Applications International Corporation for U.S. Army Program Manager for Chemical Demilitarization, September, 1996.

**FINDING 6: Will the proposed facility have an adverse effect on either public health and safety or to the environment of adjacent lands?**

**Applicable Statute**      **ORS 466.055(5)(a)–(b) Criteria for new facility (related to adverse effects)**

Paragraph (5) requires the Commission to Find that the proposed hazardous waste treatment facility will have no major adverse effect on either (a) public health and safety or (b) to the environment of adjacent lands.

Full text of ORS 466.055(5)(a)–(b) is located on Page C-3.

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**Related Rule**                      (There is no section in the Oregon Administrative Rules that applies to this Statute.)

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In relation to Finding 6, the following **tend to support the conclusion** that the proposed facility will not have an adverse effect on public health and safety or the environment of adjacent lands:

1. The Department's Draft Pre-Trial Burn Risk Assessment<sup>(1)</sup> concluded that:
  - Except for a location well within the Depot fenceline, emissions from the proposed facility would not result in an unacceptable level of health risk, (defined as a 1 in 100,000 chance of an excess cancer case, or a "hazard index" over 0.25 for non-cancer effects on an exposed individual).
  - Emissions from the proposed facility will be within current state regulatory limits.
  - Except for a location well within the Depot fenceline (where mercury effects exceeded regulatory benchmarks), there is a low likelihood of potential ecological effects.
2. The Draft Pre-Trial Burn Risk Assessment<sup>(1)</sup> used a series of conservative assumptions, such as:
  - The proposed facility would produce stack emissions for 3.2 years, when in actuality the facility will be processing for only about one year of that time. The remainder of the time the facility is conducting maintenance and/or re-configuring for different munition types;



- A person would be exposed directly to stack emissions for 3.2 years (through inhalation, even though the facility would actually be processing less than 1/3 of that time), and then be exposed indirectly (through food or water intake) for a total of 30 years. For cancer-causing substances a person was expected to be exposed indirectly for an entire lifetime (70 years);
  - The proposed facility would always operate at the "high-end" of emission rates;
  - Concentrations of chemicals deposited in the soil are constant over time, when in actuality soil concentrations of most chemicals diminish over time;
  - There was no emission reduction "credit" given as a result of the carbon filtration system on the common stack;
  - Estimated emissions of organics were increased by 280%, and metals by 146%, to account for potential "upset" conditions; and
  - Emissions of chemicals not detected during JACADS trial burns were assumed to be emitted at one-half of the level of detection, and in some cases at the detection level.
3. Another risk assessment will be conducted after the facility has undergone its trial burn testing and site-specific emissions data are available.
  4. The proposed facility equipment and facility emissions will be thoroughly tested with surrogate chemicals before being allowed to conduct live agent tests.
  5. The proposed facility will be required to conduct extensive emissions testing during agent trial burns to ensure systems are performing as expected.
  6. The permit applicant has met Department requirements that the permit application demonstrate the ability to meet federal and/or state emission standards for a hazardous waste treatment facility.
  7. The Department has the authority to require the permit applicant to immediately cease operations if the Department finds that there is reasonable cause to believe that a clear and immediate danger to the public health and safety or to the environment exists from operations at the proposed facility.
  8. The Department will have full-time compliance staff to oversee construction and operation of the facility.
  9. Automatic Waste Feed Cut-Offs are an integral part of the facility design and will be triggered if process parameters exceed acceptable ranges, or if agent is detected at the allowable stack concentration in the common stack.
  10. Since 1990 the permit applicant has operated a prototype demilitarization facility in the South Pacific known as "JACADS." Although operations have not been entirely without incident (to include two releases of nerve agent outside engineering controls during maintenance procedures), as

of October 18, 1996, JACADS has processed 2.2 million pounds of agent from over 165,000 individual munitions or containers (including 72,300 M-55 rockets). There have been no adverse effects identified either to the workers living on the island, or to the environment of Johnston Atoll.

11. The permit applicant recently started operation of "TOCDF," a demilitarization facility located in Tooele, Utah, and very similar in design to the proposed Umatilla facility. TOCDF has successfully completed surrogate trial burns, and as of October 20, 1996 had processed 3,371 M-55 rockets (34,520 pounds of nerve agent GB) in preparation for live agent trial burns. No adverse effects on either human health or the environment have been identified.
12. The permit applicant is required to have all elements of the on-site facility Contingency Plan (as identified in the RCRA Part B Application) in place before start of operations.
13. Chemical agent monitoring equipment will be installed at the immediate boundary of the demilitarization facility for early detection of any uncontrolled release.
14. The Depot boundary will also be equipped with agent monitoring equipment for detection of agent at the Depot property line.

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In relation to Finding 6, the following **tend not to support the conclusion** that the proposed facility will not have an adverse effect on public health and safety or the environment of adjacent lands:

1. The effects of many chemicals, including products of incomplete combustion, on human health and the environment are unknown, or must be extrapolated from animal studies.
2. The synergistic effects of the chemicals from stack emissions are unknown.
3. Department assessments of emission impacts from the proposed facility do not take into account emissions from existing permitted facilities, or previous population exposures to radioactive emissions from the Hanford facility.

{In relation to 1, 2, and 3 (above), the Department believes that the conservative assumptions used in the human health risk assessment are sufficient to account for missing data and/or unknown effects.}

4. Exposure assessments for some segments of the population (i.e. Native Americans, breast-feeding infants) were not included in the Pre-Trial Burn Risk Assessment.

{The Department will be conducting another risk assessment after the proposed facility undergoes its trial burns. If new information becomes available it could be incorporated in the new risk assessment.}

5. The issue of dioxin exposure, and the effect of such exposure on the population (especially sensitive populations, such as breast-feeding infants) is currently undergoing a regulatory review by the U.S. Environmental Protection Agency.

{The Department acknowledges the controversy surrounding the issue of dioxin emissions from combustion sources, and will continue to monitor developments in the scientific and regulatory community concerning sources and control of dioxins and effects of human exposure. Testing during trial burns of the proposed facility will serve to confirm estimates of dioxin emissions that were used in the health risk assessment.}

{During normal operations of the proposed facility the monitoring of critical process parameters (such as combustion chamber temperatures and oxygen and carbon monoxide levels) will serve to maximize combustion efficiency and minimize dioxin formation. The presence of the carbon filters downstream from the standard pollution abatement systems has been shown in other cases to be highly effective in capturing any dioxin compounds that are formed during the combustion process. In the case of mustard agent (over 60% of the Umatilla chemical stockpile, by agent weight) the presence of sulfur in the waste stream is also an inhibitor to dioxin formation.<sup>(2)</sup>}

6. Emissions data from the Tooele Chemical Demilitarization Facility (most similar in design to the proposed Umatilla facility) were not available at the time of the Department's risk assessment.

{The Department used what data were available at the time. The risk assessment will be repeated when Umatilla-specific data are available (after the trial burn process).}

7. Hazardous waste treatment facilities pose an inherent risk of handling and/or processing accidents that can result in uncontrolled releases that could pose a risk to the public.

{The Department believes that the proposed facility is designed with sufficient engineering controls as to minimize the risk of a release. Controls include the use of explosion-proof containers to transport munitions from the igloos to the container handling building, automated processing operations, cascaded ventilation (and carbon filter) systems in the processing building, explosive containment rooms for critical process operations, automatic waste feed cut-offs, waste feed limitations, and pollution control systems that include carbon filtration of stack emissions.}

8. Surveys<sup>(3)(4)</sup> conducted by the Department showed that over half of the respondents in the local area were concerned about the potential for leaks or accidents related to the proposed facility.

{The same surveys showed that respondents in the local area were very concerned about the risk of continued storage, and about 80% of the respondents saw a need for the facility (See Finding 5 for statements concerning survey results).}

## DEPARTMENT CONCLUSION ON FINDING 6:

The human health and ecological risk assessment results did not show that the proposed facility will present an unacceptable risk to either human health or the environment. The proposed facility uses engineering process controls and state of the art pollution abatement systems which will undergo extensive testing before operations commence. The Department concludes that the proposed facility, if operated as designed and in accordance with the proposed permit, will not have any adverse effect on public health and safety, or to the environment of adjacent lands.

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### References, Finding 6:

- (1) *Draft Pre-Trial Burn Risk Assessment--Proposed Umatilla Chemical Demilitarization Facility--Hermiston, Oregon*, Ecology and Environment for Oregon Department of Environmental Quality, Volumes 1 and 2, April, 1996.
- (2) Memorandum of Response (to Department questions concerning dioxin issues), by Kristiina Iisa, Ph.D., Assistant Professor, Oregon State University, Chemical Engineering Department, October 29, 1996.
- (2) *Umatilla Army Depot Community Assessment Tracking Survey*, Intercept Research Corporation for Oregon Department of Environmental Quality, July, 1996.
- (3) *Umatilla Army Depot Community Assessment Survey*, Intercept Research Corporation for Oregon Department of Environmental Quality, July, 1994.

**FINDING 7: Have the owner and operator of the facility demonstrated adequate financial and technical capability to properly construct and operate the facility?**

***Applicable Statute***      **466.060(1)(a) Criteria to be met by owner and operator before issuance of permit (as related to financial and technical capability)**

Paragraph (1)(a) requires the Commission to Find that the owner and operator of the proposed facility have the financial and technical capability to properly construct and operate the facility.

Full text of ORS 466.060(1)(a) is located on Page C-3.

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***Related Rule***                      **OAR 340-120-010(2)(g) Owner and Operator Capability**

Paragraph (2)(g) defines the required information that must be submitted by the owner and operator of the proposed facility to demonstrate adequate financial capability to properly construct and operate the facility.

Full text of OAR 340-120-010(2)(g) is located on Pages D-5-D-6.

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{The permit applicant is a federal agency and as such is exempt from the requirement to demonstrate financial capability in accordance with CFR 264.140(c) (Adopted as Oregon Rule).}

In relation to Finding 7, the following **tend to support the conclusion** that the owner and operator of the proposed Umatilla facility have demonstrated the technical capability to properly construct and operate the facility:

1. The Department has reviewed the RCRA<sup>(1)</sup> and Air Contaminant Discharge<sup>(2)</sup> Permit applications for the proposed facility (and the applicant's response to the five Notices of Deficiency issued during the RCRA technical review process) and has found that the applicant has demonstrated the technical capability to construct and operate the facility.
2. In addition to the Department's review, the permit applications have also been reviewed by the technical staff of the U.S. Environmental Protection Agency. The Department also actively participates in a national working group composed of staff from EPA regional offices and state environmental staff (those states with chemical stockpiles) to exchange information and discuss technical matters related to chemical demilitarization facilities.

3. The Department believes that the proposed facility will be protective of human health and the environment if constructed and operated in accordance with the application, and the permit issued by the Commission. <sup>(3)</sup>
  4. The permit applicant operates a demilitarization facility in the south Pacific known as the Johnston Atoll Chemical Agent Disposal System (JACADS). As of October 18, 1996, JACADS has successfully processed 165,417 individual munitions and 134,961 pounds of VX nerve agent; 196,348 pounds of HD blister agent; and 1,860,895 pounds of GB nerve agent; for a total of 2,192,204 pounds of chemical agents. No measurable human health or environmental impacts have been observed. <sup>(4)</sup>
  5. The permit applicant operates a demilitarization facility in Tooele, Utah, known as the Tooele Chemical Disposal Facility (TOCDF). As of November 4, 1996, the TOCDF facility has successfully processed 4,253 M55 rockets (GB) through the deactivation furnace and 40,656 pounds of GB nerve agent and 196,564 pounds of spent decontamination solution through the liquid incinerator. No measurable human health or environmental impacts have been observed. <sup>(5)</sup>
  6. The permit applicant has utilized extensive outside engineering expertise in the design of the proposed facility, and maintains a "lessons learned" program to insure that design changes and/or revisions to operating practices are incorporated into other proposed facilities (including Umatilla) to reflect the experience gained at JACADS and TOCDF.
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In relation to Finding 7, the following **tend not to support the conclusion** that the owner and operator of the proposed Umatilla facility have demonstrated the technical capability to properly construct and operate the facility:

1. The JACADS facility has experienced numerous delays and operating problems since the beginning of demilitarization operations. Many of the delays have been related to inadequate design (i.e., an explosion in the deactivation furnace penetrated the kiln wall, conveyor systems were not adequate for the waste being processed requiring workers to manually clear conveyors, an important indicator gauge was located in an area inaccessible to workers in protective ensemble, excessive slag build-up in the liquid incinerators required manual removal), workers not following established maintenance procedures, or improper operating procedures.

{The JACADS facility was the permit applicant's prototype facility. The purpose of a prototype facility is to test equipment systems and operating practices. The permit applicant has made design changes to the proposed Umatilla facility as a result of operating experience at JACADS. For example, the thickness of the kiln walls in the deactivation furnace was increased from ½ inch to 2 inches to prevent penetration of the kiln wall in the event of another explosion. Conveyor belts have been re-designed with finer mesh to prevent jamming, instruments were re-located to insure accessibility, and slag removal systems have been incorporated into the liquid incinerator designs. The Department is satisfied that the permit applicant responds

with appropriate design improvements when necessary. None of the above noted incidents resulted in uncontrolled agent release or worker injury.

The Department acknowledges the ever-present possibility of equipment failure, human error, or failure of workers to follow established maintenance and operation procedures. The proposed facility incorporates numerous redundant safety systems and extensive requirements for operator training and certification.}

2. Before the Tooele facility even started operations a former safety manager of TOCDF made allegations of numerous safety violations and design flaws that he considered serious enough to pose a risk to the public.

{The Department reviewed the allegations of safety deficiencies at the Tooele facility, and the follow-up inspection reports, and was satisfied that most of the allegations were of a minor nature, and that the permit applicant was adequately addressing those that appeared to be more serious. Ultimately a lawsuit was filed in federal court to prevent operation of TOCDF. After several months of court proceedings the lawsuit was dismissed as unfounded by a federal judge.<sup>(6)</sup> An appeal to the decision has been filed.}

3. The JACADS facility has had three confirmed releases of nerve agent outside of engineering controls, and TOCDF has also detected a nerve agent vapor leak.

{The confirmed releases from the JACADS facility involved very minute amounts of nerve agent, but the fact that there were any releases at all is of course very serious. None of the three releases occurred during processing operations (two were related to maintenance operations and the third involved gasket leaks around a filter unit) and none resulted in any worker injury or harm to the environment. The Tooele vapor leak also involved a minor leak around a filter unit. The Department has reviewed the reports related to each of the releases, and is satisfied with the modifications to design and/or operating practices that were put into place to prevent recurrences.}

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#### **DEPARTMENT CONCLUSION ON FINDING 7:**

The permit applicant is successfully operating two facilities similar to the proposed Umatilla facility. Although operations at the other facilities have not been entirely without incident, the Department concludes that the permit applicant has adequately demonstrated the technical capability to properly construct and operate the facility.

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**References, Finding 7:**

- (1) *Resource Conservation and Recovery Act Hazardous Waste Permit Application for the Department of the Army Umatilla Depot Activity Chemical Stockpile Disposal Program*, Umatilla Depot Activity, submitted to the Oregon Department of Environmental Quality, February, 1996 (revised March 21, 1996).
- (2) *Air Permit Application for the Department of the Army Umatilla Chemical Agent Disposal Facility*, Umatilla Depot Activity, submitted to the Oregon Department of Environmental Quality, August, 1995 (revised March 21, 1996).
- (3) *Draft Pre-Trial Burn Risk Assessment—Proposed Umatilla Chemical Demilitarization Facility—Hermiston, Oregon*, Ecology and Environment for Oregon Department of Environmental Quality, Volumes 1 and 2, April, 1996.
- (4) Communication from the U.S. Army Program Manager for Chemical Demilitarization, October 25, 1996.
- (5) Communication from Carl Daly, U.S. Environmental Protection Agency, November 5, 1996.
- (6) *Memorandum Decision and Order, Civil No. 2:96-CV-425C*, Chemical Weapons Working Group, Inc., et al., Plaintiffs, vs. United States Department of the Army, et al., Defendants, Tena Campbell, United States District Judge, August 13, 1996.



**FINDING 8: Have the owner and operator of the facility demonstrated ability and willingness to operate the proposed facility in compliance with statutory and regulatory provisions?**

***Applicable Statute***      **ORS 466.060(1)(b) Criteria to be met by owner and operator before issuance of permit (as related to technical capability)**

Paragraph (1)(b) requires the Commission to make a Finding that the compliance history of the owner and operator with similar facilities indicates an ability and willingness to operate the proposed facility in compliance with the statutory provisions.

Full text of ORS 466.060(1)(b) is located on Page C-3.

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***Related Rule***      **OAR 340-120-010(2)(h) Compliance History**

Paragraph (2)(h) defines the required information (i.e. compliance history of similar facilities owned or operated by permittee) that must be submitted by the owner and operator of the proposed facility to demonstrate an ability and willingness to operate the proposed facility in compliance with statutory and regulatory provisions.

Full text of OAR 340-120-010(2)(h) is located on Page D-6.

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In relation to Finding 8, the following tend to support the conclusion that the owner and operator of the proposed Umatilla facility have demonstrated the ability and willingness to operate the proposed facility in compliance with statutory and regulatory provisions:

1. The permit applicant has submitted the information required by OAR 340-120-010 concerning compliance histories at similar facilities owned and operated by the applicant. The Department has reviewed the compliance histories of the Johnston Atoll Chemical Agent Disposal System (JACADS) and the Tooele Chemical Disposal Facility (TOCDF). The Department has reviewed the reports related to violations and is satisfied with the permittee's response to non-compliance issues.
2. The Utah Department of Environmental Quality has informed the Department that the TOCDF has successfully completed surrogate trial burns for the Deactivation Furnace, the Metal Parts Furnace, and a Liquid Incinerator, and is currently conducting "shakedown" operations for live agent trial burns for a Liquid Incinerator and the Deactivation Furnace. The Utah DEQ maintains compliance staff on-site at TOCDF and is satisfied that any identified compliance issues have been quickly addressed and that automatic waste feed cutoffs have been reliable.<sup>(1)</sup>

3. In addition to the regulatory oversight by outside agencies, the applicant maintains a vigorous internal self-audit program to review safety and environmental management issues, and has willingly provided the results of such audits to the regulatory agencies involved.
  4. The Department will maintain significant oversight authority during the construction, testing, and operation of the proposed facility, and will have compliance staff to ensure the permit applicant adheres to the requirements of the permit concerning construction certification, performance testing, operator training, monitoring and reporting, and management of all permitted hazardous waste management units.
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In relation to Finding 8, the following **tend not to support the conclusion** that the owner and operator of the proposed Umatilla facility have demonstrated the ability and willingness to operate the proposed facility in compliance with statutory and regulatory provisions:

1. Normal regulatory oversight by state and federal environmental agencies at similar facilities operated by the applicant have identified violations in the management and storage of hazardous waste resulting in Notices of Non-Compliance and on at least one occasion, monetary fines.
2. On April 15, 1996 the Utah Department of Environmental Quality issued a Notice of Violation (NOV) to TOCDF based on compliance inspections during surrogate trial burns and Toxic Substance and Control Act (TSCA) Research and Development tests conducted from June, 1995, through February, 1996. The NOV listed 11 violations, including record-keeping errors, delayed notification to the Utah DEQ of permit modifications, and handling of hazardous waste.<sup>(2)</sup>

{The TOCDF permit is voluminous and complex, and although non-compliance with hazardous waste permits is not to be taken lightly, most of the violations were of a relatively minor nature. It should also be noted that the permit applicant "self-reported" most of the violations and no monetary fines were issued by the Utah DEQ.}

3. The U.S. Environmental Protection Agency (EPA) issued a Determination of Violation (a civil administrative enforcement action) to the JACADS facility in March, 1995.<sup>(3)</sup> The Determination of Violation was based on a compliance inspection conducted in August, 1994, and on information supplied by the permittee (the U.S. Army). The Army was fined a total of \$122,300. Over half of the fine (\$68,300) resulted from waste storage in an unpermitted area. \$4,000 of the fine was imposed for failure to maintain adequate aisle space, and the remaining \$50,000 was for a failure to maintain the facility that resulted in a release of nerve agent.

{The violations noted in EPA enforcement action were serious, and in the case of the nerve agent release, posed a potentially serious threat of harm to human health and the environment. Of most concern to the Department is that the circumstances of the nerve agent release in March, 1994, were essentially identical to a release that took place in December, 1990. Although new equipment was installed and maintenance procedures revised after the 1990 incident, a second release occurred in 1994 (while conducting exactly the same

maintenance operation) when the new equipment failed to operate, and the operators failed to note there was a problem. The design of the ventilation system at the Umatilla facility is different than JACADS and the particular circumstances of the JACADS 1990 and 1994 releases could not occur at Umatilla.}

4. The JACADS 1995 Annual Report of RCRA Noncompliances was submitted by the U.S. Army to the EPA on March 15, 1996. <sup>(4)</sup> The Annual Report included numerous violations of the RCRA permit self-reported by the Army.

{The Department has reviewed the noncompliance report and found most of the reported violations to be minor in nature. Of those violations more serious in nature the Department is satisfied that the Army's corrective actions were appropriate and that the same corrective actions will be applied to the proposed Umatilla facility, where applicable.}

5. The Department maintains authority over the chemical storage areas at the Umatilla Chemical Depot (UCD) through interim status hazardous waste storage rules. An inspection of the facility was conducted by the Department in June, 1996. Although the inspection report has not yet been completed, a Notice of Non-Compliance is expected to be issued.

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#### **DEPARTMENT CONCLUSION ON FINDING 8:**

The regulations pertaining to the management of hazardous waste are voluminous and complex. Although this does not excuse non-compliance, it is not unusual for a hazardous waste facility undergoing a compliance inspection to have violations, especially in the area of record-keeping. The permit applicant has often self-reported permit violations. The Department concludes that the owner and operator of the proposed Umatilla facility have demonstrated an ability and willingness to operate the proposed facility in compliance with statutory and regulatory provisions.

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#### **References, Finding 8:**

- (1) *Letter* from Martin Gray, Section Manager, Utah Department of Environmental Quality, Division of Solid and Hazardous Waste, to Brett McKnight, Oregon DEQ, November 1, 1996.
- (2) *Notice of Violation No. 9601005*, issued by the Utah Department of Environmental Quality to the Tooele Chemical Disposal Facility, April 16, 1996.
- (3) *Determination of Violation/Compliance Order*, issued by the United States Environmental Protection Agency to the United States Army, U.S. EPA Docket No. RCRA 09-95-0001, March 13, 1995.
- (4) *The Johnston Atoll Chemical Agent Disposal System 1995 Annual Report of RCRA Noncompliances*, U.S. Army, March, 1996.

# Perspectives on the Umatilla Quantitative Risk Assessment Results

Prepared by  
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September 1996

## Introduction

A risk assessment has been completed for the Umatilla Chemical Agent Disposal Facility (UMCDF). A summary of the methods and results is provided in *Umatilla Chemical Agent Disposal Facility Phase 1 Quantitative Risk Assessment* (SAIC, 1996). The study provides estimates of the public risks of accidental agent release from the chemical stockpile and from proposed disposal facility operations.

The risk assessment document includes some comparisons of risks of storage and processing. The risk assessment is only an assessment of risks and does not include conclusions regarding acceptability of risk. Acceptability of risk is determined by society, generally through the elected or appointed officials.

In deliberating the permits for the disposal process, the State of Oregon Environmental Quality Commission and Department of Environmental Quality have expressed a desire to have additional explanation of risk through comparisons to other risks that society and individuals face in everyday life. Comparisons need to be carefully selected and considered by the decision makers. Society, individuals, and decision makers have perceptions of risk that are the controlling factor in risk decision making. To aid the State officials in their understanding of risks, some risk comparisons are provided in this paper. Again, conclusions regarding acceptability are not made.

Risk comparison is a difficult endeavor because of varying risk perceptions. Several different ways of viewing the risks are provided here. More detailed comparisons can be done, and there is substantial literature on risk comparison (e.g., Covello, 1990; Okrent, 1980; and Cohen, 1991). Additional information that could be used to compare risks is also provided in Section 2 of the QRA (SAIC, 1996).

## Societal Risk Results

Figure 1 is one summary of the findings of the study. It illustrates the risk of disposal processing at the UMCDF, the risk of munition storage at the Umatilla Chemical Depot (UMCD) during the approximate 3-year disposal period, and the risk of continued storage for 20 years (if no processing were undertaken). The storage risk during the disposal period accounts for the reduction in the inventory of munitions as they are processed at the facility. This is termed *societal risk* because it indicates the impact on the affected population (e.g., the society surrounding UMCD). Figure 1 illustrates, on the vertical scale, the probability of exceeding the number of fatalities shown on the horizontal scale. The scales on this graph are logarithmic, that is they are evenly divided in factors of 10, enabling the illustration of large changes on a single figure. The risk curves in the figure are specifically designed to provide the user with an understanding not only of the probability of accidents, but the probability of different size accidents. From Figure 1, it is seen that the probability of incurring one or more public fatalities is approximately:

- 1 in 300,000 for 3.3 years of disposal processing at UMCDF
- 1 in 6,000 for 3.3 years of stockpile storage at UMCD during processing
- 1 in 400 for continued stockpile storage at UMCD for 20 years with no processing.

The area under each of the curves in Figure 1 is the value most typically referred to as *the risk*. It represents the average risk (statistically expected fatalities) over all accidents and potential consequences. The results of the UMCDF QRA indicate that the fatality risk is approximately:

- 0.00002 for 3.3 years of disposal processing at UMCDF
- 0.04 for 3.3 years of stockpile storage at UMCD during processing
- 0.6 for continued stockpile storage at UMCD for 20 years with no processing.

The actual risk during the disposal process is the sum of the disposal processing risk and the risk of storage during the disposal process. During the 3.3 years of disposal processing, the risk is therefore the sum of the bottom two curves in Figure 1. From the values in the figure it is clear that the risk of the disposal process is a very small addition to the storage risk during disposal.

Figure 1 provides some other insights for decision makers. Typically decision makers consider not only the overall risk but also the risk of different size accidents, reflecting society's concern with large accidents. For example, in 1990 in the U. S. there were 46,814 deaths in motor vehicle accidents and 941 deaths due to air transport (National Safety Council, 1993). Airline crashes, however, gather the attention of media and society because they typically involve many deaths, whereas the automobile statistic, which equates to over

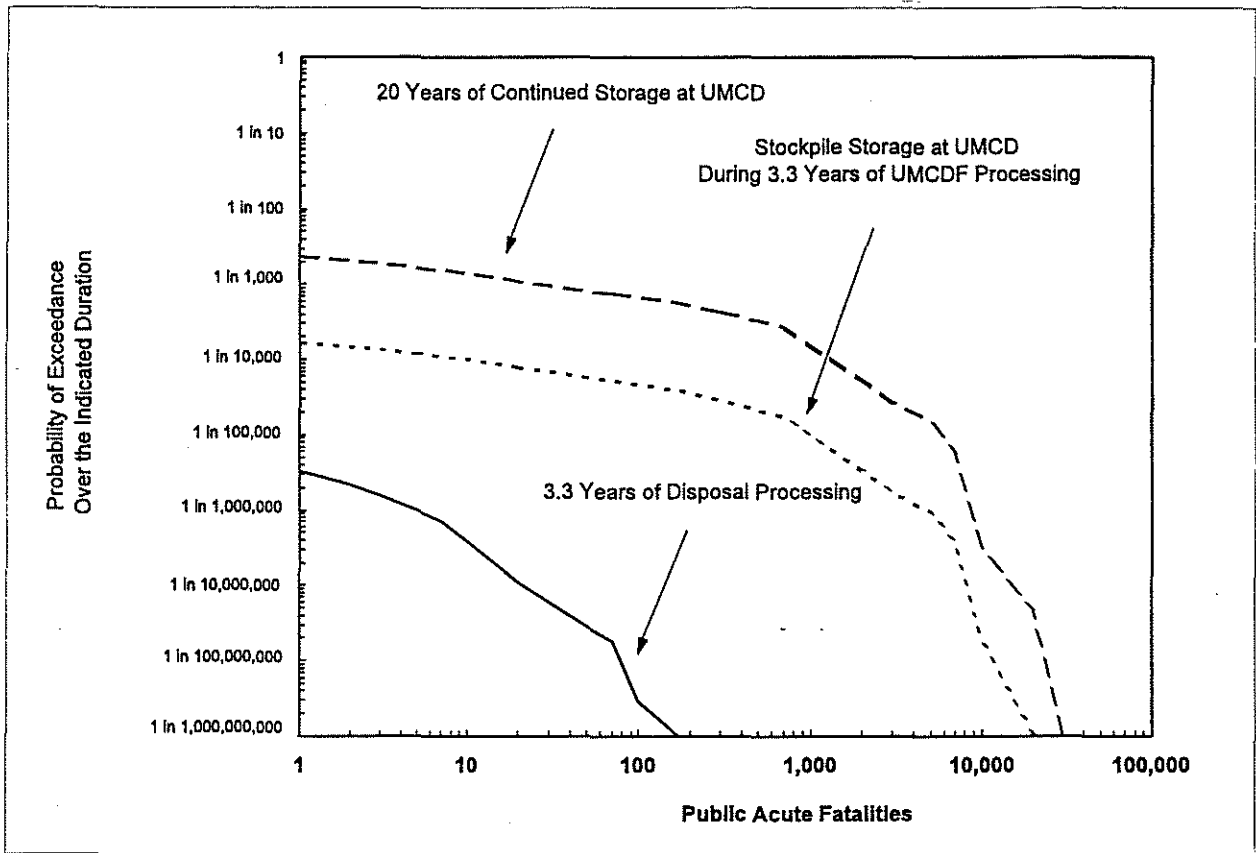


Figure 1. Summary of Umatilla Risk Results

100 people killed in motor vehicle accidents per day, appears to be more readily accepted by society because each accident typically involves a few deaths. It can be seen from Figure 1 that the risk of processing is less than storage but, perhaps more importantly, the risk of accidents with large numbers of deaths is much lower. There are an estimated 200 deaths at a 1-in-a-billion probability for the disposal processing, while at the same probability there is the potential for more than 10,000 deaths due to a storage accident.

In terms of the magnitude of the consequences, disposal processing accidents are estimated to have average consequences ranging up to 14 deaths, with an average across all accident sequences of approximately 1 death (SAIC, 1996, Table 13-1). On the other hand, accidents associated with continued storage are estimated to have average consequences up to 235 deaths with an average of 85 deaths across all scenarios (SAIC, 1996, Table 15-5).

## Perspective on Societal Risk

Comparison of societal risks is problematic for a single facility. The risks associated with UMCD are limited to a specific population, whereas societal risks generally result from all endeavors over a large population. A representative list of societal risks in terms of expected deaths per year is provided in Table 1. As indicated, the accidents associated with UMCD are estimated to be very small compared to other societal risks in Oregon. This comparison may be of limited value since it does not indicate the impact on people closest to UMCD, which is captured in the estimate of the individual risks discussed in the next section.

Table 1. Some Societal Risks in Oregon (Expected Deaths per Year)

No. of Deaths in Oregon Per Year	Cause <sup>a</sup>
<u>1,293</u>	<u>All accidental deaths</u>
678	Motor vehicle
56	Drownings
33	Machinery (including farm equip.)
25	Fires
6	Railway
4	Electric current
0.03	Stockpile storage <sup>b</sup>
0.000006	Disposal processing <sup>c</sup>

- a All except the last two entries based on actuarial data from 1989 from the National Safety Council, 1993. The last two entries from the Phase 1 QRA for Umatilla (SAIC, 1996).
- b. In other words, one death every 33 years.
- c. In other words, one death every 160,000 years.

## Individual Risk Results

Risks have also been calculated on a per-person basis. This is typically referred to as individual risk, although it is calculated for groups of people living various distances from UMCD, not for specific individuals. Individual risk is an estimate of the probability of death for potentially exposed persons. For the most exposed people, living between 1 to 3 miles from

the facility, the individual fatality risk is

1 in 27 million per year of disposal operation

1 in 300,000 per year of continued storage.

Thus the annual risk to the individuals closest to the facility is about 90 times greater per year for continued storage versus disposal operations. These risks have also been calculated for the entire disposal process compared to 20 years of continued storage.

1 in 8 million for the total 3.3 years of disposal operations

1 in 15,000 for 20 years of continued storage.

If these are compared as options, then the individual risk associated with continued storage is over 500 times greater than disposal processing.

## **P**erspective on Individual Risk

Although the relative difference in risk is important, it is useful for decision makers to compare the risks to other individual risks. A sampling of comparisons is provided here to illustrate this process. As noted in the introduction, decision makers and stakeholders will develop their own comparisons and conclusions based on their values and risk perceptions.

The annual chance of accidental death due to all causes (car accidents, drowning, falls, poisoning, etc.) for an average individual in the State of Oregon is approximately 4 in 10,000 (or 400 in a million). Table 2 lists the individual risks on the same basis.

Table 2. Estimated Chemical Weapons Disposal and Storage Individual Risks Compared to Individual Risk of Accidental Death in Oregon

Risk Result	% of Oregon Total Accidental Death Rate	Description
400 in a million	100%	Individual chance of accidental death per year in Oregon, all causes
3 in a million	~1%	Individual chance of death per year due to continued storage for individuals living closest to the facility
0.04 in a million	0.01%	Individual chance of death per year due to disposal operations for individuals living closest to the facility



Table 3 provides some additional comparisons of the estimated values from the QRA to other individual risks. (Oregon-specific results were not readily available, so U.S. averages are listed.) The results enable consideration of the estimated risks compared to other risks an individual might be exposed to. Society's perception of the need to be protected from various risks can then be factored into decision making.

Table 3. Average Individual Risks in the United States

Risk of Death to an Average Person in the U. S.	Percent of Total Accidental Death Risk	Description
<u>370 in a million</u>	<u>100%</u>	<u>All accidental causes</u>
200 in a million	54%	All motor vehicle accidents
32 in a million	9%	Pedestrian death due to motor vehicle
20 in a million	5%	Accidental poisoning
5 in a million	1%	Choking on food
<b>3 in a million</b>	<b>~1%</b>	<b>Continued storage at UMCD for individuals living closest (1-3 miles) to the facility</b>
0.4 in a million	0.1%	Lightning
0.1 in a million	0.03%	Dog bites
<b>0.04 in a million</b>	<b>0.01%</b>	<b>Disposal operations at UMCDF for individuals living closest (1-3 miles) to the facility</b>
0.04 in a million	0.01%	Venomous snakes, lizards, and spiders
0.02 in a million	0.005%	Fireworks accidents

## Cancer Risk

The QRA included an estimate of risk of cancer due to accidental release of mustard agents (only mustard is a carcinogen). The cancer risk due to accidental release was estimated to be very small. Table 4 lists the individual risk of induced cancer compared to other individual risks of death. This comparison includes several limitations. First, the estimated values in the QRA are for cancer induced over a lifetime, not necessarily death due to cancer; the other entries are for death. Second, the death rate information is based on the U.S. population as a

Table 4. Individual Risk of Death (Average of U. S. Population)  
Compared to QRA Estimates of Cancer Incidence.

Annual Individual Risk of Death <sup>a</sup>	% of Total	Cause
<u>8,630 in a million</u>	100%	<u>All causes of death</u>
2,895 in a million	34%	Heart disease
2,030 in a million	24%	Cancer
570 in a million	7%	Stroke
370 in a million	4%	Accidents
120 in a million	1%	Suicide
2,645 in a million	30%	All other causes
10 in a million	—	USEPA upper bound screening for lifetime cancer incidence due to facility emissions <sup>b</sup>
0.00001 in a million	10 <sup>-7</sup> % <sup>c</sup>	Cancer incidence risk for accidental releases during 20 years of storage for people closest to UMCD <sup>b</sup>
0.000002 in a million	10 <sup>-10</sup> % <sup>c</sup>	Cancer incidence risk for accidental releases during 3.3 years of disposal processing for people closest to UMCD <sup>b</sup>

- a. Death rates are values for an average individual in the population as a whole. There are substantial differences in death rates and causes among different age groups.
- b. These items are listed for convenience, but they represent cancer incidence in a lifetime, not annual risk of death, as the other items in the table.
- c. 10<sup>-7</sup> = 0.0000001, 10<sup>-10</sup> = 0.0000000001

whole. There are substantial differences among age groups as to death rates and causes. However, the table is useful for indicating the small values calculated in the QRA.

There is one other consideration regarding cancer risk. A human health risk assessment is also being completed for UMCD to meet the requirements of the Resource Conservation and Recovery Act (RCRA) Part B permit. As part of that process, the screening risk assessment involves evaluating the cancer risk to individuals from incinerator emissions using a screening method. That is, a conservative assessment of the cancer risk is estimated and the result is compared to a threshold predetermined to be below regulatory concern (1 in 100,000 chance of lifetime induced cancer). The screening risk assessment is therefore not intended to provide a best estimate, only to show attainment of a goal that is judged to protect the public

from any undue cancer risk. The cancer risk due to emissions is therefore part of the decision makers input. However, the methodology is established so that if the individual risk to the most exposed individuals are below the threshold of regulatory concern, no additional analysis is performed. The threshold is provided in Table 4 as a point of reference.

## Other Perspectives on Risk

Risk values are sometimes difficult to comprehend because they are a combination of how often something happens and how many people are affected. Another consideration useful for understanding risks is how often the accidents that could lead to public health effect could be expected to occur. In the risk assessment thousands of potential accidents were analyzed, ranging from those that might be expected to occur during the facility lifetime to accidents that are extremely rare. Tables 13-1 and 15-1 in the Phase 1 QRA (SAIC, 1996) list the accidents that contribute most to risk. Table 5 repeats some of that information and lists some other events for perspective.

Table 5. Comparison of Accident Frequencies

Recurrence Intervals	Description of Event	% Contr. to Risk
<u>Disposal Processing</u>		
30,000-500,000 yrs	Earthquake causes large release at UMCDF	71%
5,000 yrs	Handling accident causes igloo fire	14%
<u>Storage</u>		
1,500 yrs	Richter 5.5 earthquake causes large release	14%
3,800 yrs	Richter 6.5 earthquake causes large release	27%
11,000 yrs	Richter 6.8 earthquake causes large release	22%
32,000- 500,000 yrs	Richter 6.8 - 7.5 earthquake causes large release	35%
2,500,000 yrs	Aircraft crash into mustard storage	<1%
<u>Other Rare Events</u>		
164 yrs	Lightning strike to an acre of land near Umatilla	—
55,000 yrs	Greater than 1 pound meteorite strike per square mile	—
800,000 yrs	Lightning strike to a square yard of land near Umatilla	—
35,000,000 yrs	Greater than 1 pound meteorite strike per acre	—

For example, for disposal processing, the most frequent accident that contributes significantly has an average recurrence interval of about 5,000 years. (This is a handling accident that leads to an igloo fire.) Essentially, this can be taken as meaning that if that plant were to operate for 5,000 years, this accident would likely occur. It is difficult to gain perspective on these types of events because the time frames are outside the human range of experience. Lightning is one familiar phenomenon. For the area of Oregon around Umatilla, the lightning strike recurrence interval for an acre of land is about 164 years (based on area alone, does not account for conductors, lightning protection, or other phenomena that make some areas more likely to be struck than others.) However, to a single square yard of land, the lightning recurrence interval is 800,000 years. Meteorites striking the earth is another infrequent phenomena; for example, the recurrence interval for a 1 pound meteorite per acre is 35 million years.

Considering the fact that earthquakes are an important part of the risk, another viewpoint is gained by examining the historical record. Table 5-2 of the QRA (SAIC, 1996) lists two earthquakes that have occurred within 50 miles of the site.

Date	Approximate Richter Magnitude	Distance from UMCD
July 6, 1936	6 - 7.5	48 mi
March 7, 1893	6 - 7.5	7 mi

In earthquakes of this size, masonry is damaged, chimneys fall, etc. Thus, although not frequent, significant earthquakes do occur in this area. Generally, earthquakes that could result in releases from the facility or stockpile would be of Richter 5.5 or greater.

Finally, there has been some concern about the risk due to airplane crashes. As indicated, the recurrence interval for a crash (medium to large airplane) into the mustard storage area is about 2,500,000 years, a very rare event. Also shown in table 15-5 of the QRA (SAIC, 1996) is the average agent-related deaths associated with the crash—60 deaths. The mustard storage area covers about an acre. The air traffic over the depot is not heavy and is not higher than others areas such as Hermiston or Pasco. The average school, office building, or hospital is roughly the size of the mustard storage area. An airplane crash into any of those facilities might very well cause 60 or more deaths. Attempts to reduce the risk of airline crash to citizens in the area would require examining a broader scope than just the chemical storage area.

## References

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Okrent, D. "Comment on Societal Risk," *Science*, Vol. 208, 25 April 1980.

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11-15-96



# News Release

## Confederated Tribes of the Umatilla Indian Reservation

PO Box 638, Pendleton, Oregon, 97801  
Phone: 541-276-3165, FAX: 541-276-3095  
<http://www.ucinet.com/~umatribel/>

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Contact: Debra Croswell 541-278-5255  
JR Wilkinson, 541-278-5203

For Immediate Release: November 14, 1996

### Tribe Submits Recommendations for Chemical Weapons Disposal

Today the Confederated Tribes of the Umatilla Indian Reservation presented recommendations to the Oregon State Environmental Quality Commission on the destruction of chemical weapons stored at the Umatilla Chemical Depot.

According to CTUIR Board of Trustees Chairman Don Sampson, "Our foremost objective is to get rid of the chemical weapons stored at the Umatilla Chemical Depot in the safest manner possible, therefore, our proposal has two main action items that we are asking the EQC to consider. Our first recommendation is to eliminate the immediate threat of the M-55 rockets through the process of reconfiguration. Second, we are recommending a Governor's Task Force on chemical weapons disposal."

Reconfiguration of the M-55s was first discussed in the Army's Chemical Weapons Stockpile Safety Contingency Plan that was developed as a result of Congressional directives. The reconfiguration process involves separating the propellant and explosives of the M-55 rockets from the deadly chemicals, thereby eliminating the chance of an explosion.

"By reconfiguring the weapons, the Army would be reducing the immediate, hazardous threats that our communities have been concerned with for a long time," said Chairman Sampson.

The CTUIR is also recommending that a Governor's Task Force on Chemical Weapons Disposal be established with the full financial, technical, and political authority to conduct a thorough assessment of the available destruction options. The Task Force would have specific objectives and an 18-month timeframe to complete its deliberations and submit a final recommendation to the Governor.

- MORE -

*CTUIR Recommendations, page 2/2*

"The group would be charged with some very specific tasks that include taking a more thorough look at the disposal options that are usable in this situation," said Chairman Sampson. "We want to ensure that the public is aware there are other technologies available that may be safer for everyone and easier on the land. We also remain concerned about the lack of proper emergency response plans for all the surrounding communities."

Tribal staff have been reviewing reports, seeking expert testimony, and analyzing mountains of information regarding final disposal actions and have concluded that reconfiguration is possible and that more information is needed regarding final disposal methods. The CTUIR continues to look at all the options available for destroying the chemical weapons, including the safety and viability of incineration, as well as stressing the need for better emergency response plans.

The Army has permit requests before the EQC, which is expected to make a decision on the permits on November 22 in Pendleton. The public comment period on the requested permits ends November 15.

Earlier this year the CTUIR announced it had several concerns with the chemical weapons disposal at Umatilla Chemical Depot, including:

- 1) The need for an analysis of the comparative risks, costs and benefits of continued storage, transportation, alternative disposal methods and incineration of the chemical weapons.
- 2) The need for effective, realistic plans for responding to chemical agent releases from the Depot.
- 3) The need for an adequate human and environmental monitoring network that measures contaminant levels before, during, and after the disposal of the chemical weapons.
- 4) The need for proper government-to-government consultation and tribal involvement in the issue.

###

*The report outlining the CTUIR's recommendations will be available Friday, November 15.*

*Please contact the CTUIR Public Affairs Office at 541-278-5255 to request a FAX copy.*

**LINES DRAWN IN THE SAND:  
A REVIEW OF CHALLENGES,  
OPPORTUNITIES, AND OPTIONS FOR  
CHEMICAL WEAPONS DISPOSAL**

Presented to the  
Oregon Environmental Quality Commission  
*November 14, 1996 Portland, Oregon*  
Donald Sampson, CTUIR Board of Trustees Chairman  
Armand Minthorn, CTUIR Board of Trustees  
J.R. Wilkinson, CTUIR/Department of Natural  
Resources -- Special Sciences and Resources

*Overview of Presentation*

**What you will see and hear today:**

- Background Information on the CTUIR
- Outline of CTUIR Issues
- Why "Lines Drawn in the Sand" as a Title
- Examples of Concerns about the Permits and Process
- Proposal to Step Beyond the Gridlock
- What the Proposal is NOT
- Recognition of Key Assumptions
- Two Essential Elements of the Proposal
- Key Elements of Alternatives Assessment
- Increase Meaningful Public and Tribal Involvement
- What are the Conclusions of the CTUIR?



## *Background Information on the Confederated Tribes of the Umatilla Indian Reservation*

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- Three Northeast Oregon Tribes
  - Cayuse, Walla Walla, and Umatilla
- Signed Treaty of 1855 with U.S. Government
  - Established 6.4 million acres of ceded lands in Oregon and Washington state
  - Tribes retain off-reservation rights in ceded lands including fishing, hunting, gathering of plants and pasturing livestock
  - Established Umatilla Indian Reservation eight miles east of Pendleton
  - On-reservation regulatory and management responsibilities implemented by the Tribe's Board of Trustees through an Administrative structure

## *Outline of Confederated Tribes of the Umatilla Indian Reservation Issues*

---

- Conduct an alternative assessment of the risks, costs, and benefits of:
  - Continued storage, transportation, non-incineration technologies, and incineration
- Develop realistic emergency response capabilities and plans
- Implement an environmental and human health monitoring network prior to disposal
- Increase government-to-government consultation with the CTUIR
  - Consultation is not commenting on announced decisions

### *Why "Lines Drawn in the Sand" as a Title?*

---

- The CTUIR recognize two sides of the debate: pro- and anti-incineration
  - The third side are the undecided and the fourth are the unaware (both equally as important as the first two)
- The two sides of the debate are entrenched
- Building consensus on difficult issues is a trademark of the CTUIR
  - Other regional planning efforts supported by the CTUIR
  - Disposal must provide for least-harm and be cost effective and protective of human health and the environment
  - An accident can inflict tremendous losses to the Tribe's treaty-reserved natural, cultural, and economic resources

### *Examples of Concerns about the Permits and the Process (1)*

---

- DEQ staff working on permit for 10 years
  - Comment period less than one year
  - Questions remain regarding DEQ regulator role
- Complexity of information is understood by an elite group of individuals; not general public
- State of Oregon support for incineration implied by permits
- Other tribes, state agencies, states, and local jurisdictions not involved
  - e.g., Yakama Indian Nation, OR Department of Health, Washington state, City of Kennewick
- Water consumption/discharge poorly understood

*Examples of Concerns  
about the Permits and the Process (2)*

---

- If the process is flawed, does good information make good decisions?
  - State risk modeling cannot account for unique risks to Tribal communities from emissions
    - Bioaccumulation, synergism, and cumulative not available
    - Tribal exposure patterns not understood
- Lack of liability insurance and environmental monitoring network places regional economic interests at risk due to loss of customer base
- Long-term, small dose exposure not understood
- Lack of a range of disposal options considered

*A Proposal to Step Beyond the Gridlock  
over Chemical Weapons Disposal*

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- This proposal:
  - Supports a least-harm and cost-effective disposal system that is protective of human health and the environment
  - Identifies mitigation of immediate risks
  - Improves the development of consensus regarding disposal options
  - Enhances economic opportunities in Oregon
  - Reduces chance of lengthy litigation delaying disposal

## What this Proposal Is NOT

- It is not the “answer” to chemical weapons disposal
  - A technology is not recommended
- It is not a complete compendium of all options
  - There maybe other options not considered
- It is not a complete and thorough analysis of each link in the matrix
  - e.g., reverse assembly vs. shear vs. punch and drain
- It is not a substitute for effective Tribal and public awareness, education, and outreach efforts

## Recognition of Several Key Assumptions

- It's simply impossible to digest the enormous amount of available information on such a complex subject
- Are there “independent” experts?
  - Different experts may know about different technologies and interpret data with their own personal bias (often unknown)
  - “Experts” may differ in the faithfulness with which they report what is happening in the world
- The “right” option is one that builds consensus and reduces conflict -- we all must live with the “answer”
  - Chemical weapons communities are unique and conflicts exist at each site

## The Two Essential Proposal Actions

### ■ Reduce immediate risks

- Ensure that storage bunkers are up to earthquake code
- Stabilize the M-55s using environmental controls
- Build a reconfiguration facility

### ■ Establish an Alternatives Assessment process to resolve remaining questions

- Develop an alternatives assessment to review the risks, costs, and benefits of continued storage, transportation, non-incineration technologies and incineration
- Establish a Governor's Task Force with political, financial, and technical support for a timely and thorough assessment
- Review known processes (e.g., NEPA, CTUIR/Scoping Report, Oregon Department of Energy report)
- Outcome: permitted disposal option(s)

## Key Elements of Alternatives Assessment

### ■ Three broad technology "groups"

- Incineration
- Non-incineration technologies (AEA, M4, EcoLogic)
- Neutralization

### ■ Utilize approximately <sup>16</sup>13 "value" factors to evaluate the three broad technology groups

- For example: public acceptability, worker safety and health, emission types/quantities, accident potential, future risks,...
- Use these community based values to assess alternatives for chemical weapons disposal

### ■ Estimated timeline to conduct assessment

- 6 month start-up; 1 year program; 3 month closure to final report to Governor

## *Increase Meaningful Public and Tribal Involvement*

- The ramifications of the Army's plans are extraordinary
- This disposal program affects ALL Oregonians
  - Lack of statewide political and public understanding and debate points to failure of education efforts
- Current challenge: 51% of local residents are not aware of the Depot (East Oregonian, 7/30/96)
  - Can they then be aware of the available range of options?
  - Tribal community affected through its use of resources
- Review Oregon Department of Energy report
  - The Oregon Experiment: A Grassroots Approach to Meaningful Public Participation (January 1996)
  - Utilize the principles presented in the document

## *What are the Options being presented to the EQC by the CTUIR? (1)*

- Reconfiguration facility
  - Begin additional M-55 mitigation actions immediately
- Request a Governor's Task Force on Chemical Weapons Disposal
  - This is a statewide issue
  - Ensure that political, financial, and technical support is provided to Task Force for completion of work
  - The Task Force should increase public and Tribal awareness and provide for an ability to influence decisions
  - Group should "tap" potential vendors, scientists, and citizens
  - Establish CTUIR/Oregon approach as a national model in chemical weapons disposal deliberations

*What are the Options  
being presented to the EQC by the CTUIR? (2)*

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- Potential recommendation to Congressional delegation for Defense Authorization Act modifications supporting Oregon's actions
- Establish an innovative demonstration zone
  - Advance the options available to the nation
  - Spin-off industries for Hanford cleanup
  - Support Local Reuse Authority options
- Create cooperative working relationships between the opposite sides of the Line in the Sand
  - Increase consensus and decrease conflict
  - Complete disposal expeditiously, safely, and economically

# GREENPEACE



State of Oregon  
Department of Environmental Quality

November 12, 1996

**Received**  
NOV 13 1996

Governor John Kitzhaber  
254 State Capitol  
Salem Or, 97310

OFFICE OF THE DIRECTOR

Governor Kitzhaber:

I would like to take this opportunity to thank you for your involvement thus far in the issue of the safe disposal of the chemical weapons stockpile at the Umatilla Army Depot. Your decision to extend the public comment period until November 15, 1996 provided Oregonians with valuable time to adequately research this complex issue. The purpose of this letter is to recommend you consider the following actions to insure the best decision is made for Oregon. We recommend that you urge the Army to reconfigure the stockpile, restart the entire permit process, and work with the legislature to strengthen current chemical weapons disposal permit requirements to ensure adequate protection of the environment and public health.

As the public comment period draws to a close, we still lack two critical pieces of information necessary to make an educated and informed decision. First, the much anticipated study on the safe storage life of the chemical weapons is still not complete despite repeated promises by the United State Army that this information would be available to the public by August 1996. On September 22, 1996 the Army announced at the Environmental Quality Commission (EQC) meeting that the report will not be available until the second quarter of 1997, well after the scheduled November 22, 1996 permit application decision by the Environmental Quality Commission. This information is critical to this issue and without it the EQC and the people of Oregon will be forced to make an uninformed and ill-advised decision

Second, on August 23, 1996 we were informed that the trial burn data from the Toole, Utah incinerator facility will not be completed for public evaluation until 720 test burn hours have been concluded. Once again this time frame will put us well beyond the November 22, 1996 decision. As of today the Toole facility has available to the public only surrogate burn data, which offers little insight into their ability to successfully destroy live chemical agent. The Toole and JACADS facilities are the model for the proposed incinerators at Umatilla. Toole was forced to shut down due to nerve gas releases after operating only 72 hours (8/24/96), was shut down again due to structural problems within the facility (9/18/96), and malfunctions within the liquid incinerator (9/18/96). The prototype facility (CAMAS) after which the Tool facility is modeled, was also forced to stop activities due to an explosion in the metal parts furnace (10/24/96). In addition the incinerator in the pacific (JACADS) was closed down just six days before Toole began operations (8/16/96) when a planned exercise of the back-up power system resulted in agent migration to areas within the plant where protected workers and/or civilians would, under normal conditions, be present. The JACADS prototype had 32 RCRA non-

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compliance violations in 1995, and as the scientific evaluations by Greenpeace Senior Scientist Pat Costner submitted to your office earlier this year prove, it presents a case study in unsafe technology. This unreliability is an issue of deep concern to all Oregonians. Prudence dictates that these issues be factored into the decision making process.

Your letter to Secretary of Defense Perry ( 10/14/96) brought out several important points that need to be addressed here in Oregon, especially with regard to the Executive Order of President Clinton that directed the Secretary of Defense to ensure that the alternatives to incineration " receive the highest priority in the Chemical Demilitarization Program" and the Congressional appropriation of \$ 40 million for alternatives development. The October 1996 release of Public Involvement and The Army Chemical Weapon Stockpile Disposal Program by the National Research Council documents deficiencies with the Army's public involvement process. For example, in Oregon, even a cursory glance at the public's lack of knowledge and understanding of the CSEPPS program shows that full disclosure and transparency have been missing from this program and the entire process.

Furthermore, the National Academy of Sciences report entitled Review and evaluation of Alternative Chemical Disposal Technologies states that " there has been sufficient development to warrant re-evaluation of alternative technologies for chemical agent destruction". As you know the alternative technologies were not given proper consideration for the disposal of the Umatilla stockpile. Not only do the alternatives provide the community with a safer, cheaper, and more timely solution, they also insure that Oregon will not be saddled with a permanent hazardous waste incinerator facility once the project is complete.

The debate over this issue is healthy and necessary. Oregon needs the opportunity to look at the history of chemical weapons incineration, review newer technologies, and hold the government and its contractors accountable for full disclosure. Only then will Oregon be able to choose the best method for destroying the stockpile at Umatilla.

Greenpeace recommends that you consider the following recommendations for the safe disposal of the chemical weapons stored at the Umatilla Army Depot.

1. Urge the army to reconfigure the stockpile at Umatilla which will eliminate the question of safe storage life of the chemical weapons and allow ample time for Oregon to make the best decision for disposal. The Army has the knowledge and capability to accomplish this aspect of disposal quickly, as reflected in the 1985 A.D. Little " M55 Separation Study" and as testified to in Senate hearings in 1994.

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2. Urge the Oregon Department of Environmental Quality to listen to the public and restart the entire permit process with independent citizen selected review of each individual permit. Alternative technologies should be given equal consideration and evaluation. Public opinion and involvement should be an integral component throughout.

3 We urge you to work with the legislature to strengthen current chemical weapons permit requirements for Oregon. A copy of the legislation drafted by the State of Kentucky that strengthens the permitting process to ensure adequate environmental and public protection is included. Oregon's legislation would be following the precedent of other storage states including Colorado, Maryland, and Indiana that refused to allow military and corporate agendas to take priority over human health and ecosystem integrity.

Please accept the enclosed postcards from your constituency as reminder that the people of Oregon are deeply concerned about this issue. There are also several hand written letters from school children that are relying on your leadership to ensure their healthy future. We have also enclosed a copy of Public Involvement and the Army Chemical Stockpile Program from the National Research Council. We look forward to hearing your views in this matter. Please let us know if there is a convenient time when we can meet with you to discuss this matter in more detail. Thank you for your time and consideration in this matter.

Sincerely,

Mark A. Brown  
Public Outreach Coordinator  
Greenpeace Portland

C.C. Mr. Henry Lorenzen  
Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon

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# Fax Transmission

No. of pages incl. this one: **10**

To: Recipient Name: Director, Langdon Marsh, & Henry Lorenzen,  
Chair of Environmental Quality.

Fax number: Fax: 503-229-5850 Voice: Voice

cc: Carbon Copy: Jerry Watson & Dick Smith of Teledyne Brown.

From: RUSSEL W. KENNEL

Date: Thursday, November 14, 1996

If you do not receive all pages, please contact:

Jerry Watson and Dick Smith of  
Teledyne Brown:

800-933-2091: They have  
developed a plant design for this  
process.

RUSSEL W. KENNEL  
819 NEW TERRACE CT NE  
SALEM, OREGON 97303  
503-390-1809/503-585-2211 PHONE  
503-399-4658-FAX.

Subject: Public Comment on Incinerating  
Chemical Weapons material.

**Special Instructions:**

*I heard on the news last night that there was no  
alternate technology for incineration. Please do not  
allow this plant to be authorized until the Teledyne  
Brown Non-thermal destruction program can be fully  
tested and implemented!*

*All tests so far show the these chemicals can be safely  
neutralized without incineration, and at a far lower cost.*

*I am attaching copies of public information relating to  
the new technology which I hope will replace this  
outdated method that you are considering.*

*Please advise if there is anything further that can be  
done to stop this incinerator and replace it with the new  
technology.*

Sincerely,

*Russ Kennel, Private Citizen, Insurance Agent.*

# Ray Dirks Research

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October 17, 1996

Ray Dirks  
Tel. (Direct): (212) 832-0455  
Bob Brisotti  
Tel. (Direct): (212) 832-2793

## **PURCHASE RECOMMENDATION**

### **COMMODORE APPLIED TECHNOLOGIES, INC.**

(AMEX: CXI)

#### **SELECTED FINANCIAL DATA**

Current Price:	Common - 5 1/2	Range since 6/28/96: 12 - 5 1/2
	Warrants - 1 1/2	5 - 1 3/8
Shares Outstanding:	Common - 21,650,000	<u>Earnings/share</u> <u>P/E Ratio</u>
	Warrants - 5,750,000	1996E Loss -----
Market Capitalization:	\$120 million	1997E \$0.50 11X
		1998E 1.50 3.7
Shareholder's Equity:	\$17 million	1999E 3.00 2
		2000E 6.00 1

#### **Summary and Recommendation:**

We strongly recommend the purchase of the common stock and warrants of Commodore Applied Technologies, Inc. National Securities managed the initial public offering which became effective on June 28, 1996, raising gross proceeds of \$35 million.

#### **An Acquisition and A Joint Venture: Early Success in the Commercialization Strategy**

**Advanced Sciences, Inc. Acquisition:** On September 30 the Company completed its acquisition of Advanced Sciences, Inc. (ASI) for 900,000 shares of its common stock. It was a major initiative for Commodore; an engineering services and environmental marketing company like ASI provides Commodore with an immediate market for its proprietary technologies. ASI has been generating revenues of about \$25 million annually. We believe the introduction of Commodore's SET process will lead to additional revenues for ASI, probably in the \$10 million to \$15 million range for 1997. The Company continues to pursue acquisitions of profitable companies with meaningful revenue bases.

**The Teledyne-Commodore Joint Venture:** Commodore Applied Technologies, Inc. blossomed into a fully operational company on August 9 when it formed a 50-50 joint venture with Teledyne Industries, Inc.—now Allegheny Teledyne—to pursue chemical demilitarization (*chem demil*) on a worldwide basis. Teledyne already possessed the first and only Defense Department contract to manage the destruction of domestic non-stockpile chemical warfare

*The information and statistical data herein have been obtained from the company covered in this report and from other sources believed to be reliable but in no way are guaranteed by us as to accuracy or completeness. National Securities Corp. (or one of its affiliates) or their officers, directors, analysts or employees may have positions in these securities.*

agents—the U.S. market is projected to be \$17 billion over the next decade. What Teledyne desired was a universal technology capable of destroying all chemical warfare agents.

The Teledyne-Commodore *chem demil* program is also needed urgently elsewhere in the world. Congress and the Defense Department both recognize the enormity of the danger. For example, an August 11, 1996 The New York Times article first detailed the severe illnesses plaguing large numbers of U.S. Army troops who were exposed to chemical warfare agents during Desert Storm. This exposure apparently came from the U.S. destruction of an Iraqi bunker, not willful deployment by the Iraqis. With more than 100,000 tons of different chemical warfare agents—nerve and blister gases—in various places around the world, the prospect of leakage or terrorist access is frightening. This explains Congress' decision to help pay for the destruction of the Russian stockpile. It is also a major reason why the Senate is now expected to ratify the Chemical Weapons Convention (CWC) treaty. Once effective, probably in early 1997, the CWC treaty calls for the destruction of all chemical weapons within ten years and six months, or by 2007.

To date, Commodore's SET process is the only mobile, non-thermal technology proven effective for neutralizing what are estimated to be about \$60 billion of chemical warfare agents worldwide. In the U.S., Teledyne-Commodore expects that success in the non-stockpile destruction program will lead to Defense contracts to destroy some portion of the "stockpiles," the eight Army depots where about 40,000 tons of chemical warfare agents are stored. This stockpile destruction program alone is estimated to cost about \$13 billion over the next 10 or more years. Teledyne-Commodore is targeting 15 to 20 % of the U.S. chemical weapons demilitarization market. In addition, Teledyne-Commodore anticipates several substantial international contracts.

What this all means to Commodore is that it should share equally in the profits of what should be a billion-dollar-a-year business. We anticipate revenues from the Teledyne-Commodore joint venture to approximate \$10 million in 1997, then ramping up sharply in successive years.

### The Company—An Overview: Management

The Company's recent appointment of Thomas E. Noel as President and Chief Executive Officer is significant. Mr. Noel brings experience and talent rarely enjoyed by such a young company. We view his decision to join Commodore as a major endorsement of the SET process. We believe that his experience at companies like WMX Technologies where he was responsible for operations producing \$1.5 billion in annual revenues, and previously as Assistant Secretary of the Department of Energy, will enable him to help the Company achieve its goals. Commodore now has a management team in place fully capable of managing the projected growth.

### Commercial Opportunities

Commodore's patented solvated electron technology (SET) process represents the safest and most cost-effective means of neutralizing hazardous substances, including polychlorinated biphenyl's (PCB's), pesticides and dioxins, ozone depleting chlorofluorocarbons (CFC's), and most chemical warfare agents (including mustard and "blister" gases). The process is applicable for contaminated soils, sediments, oils and surfaces. Other processes, most of which involve

thermal treatment, are more dangerous because of emission and handling problems. Also, these other processes are infinitely more expensive relative to energy usage, transportation expense and capital requirements. As a result, Commodore's operations could create a billion-dollar business by the year 2000.

#### Recent Milestone Achievements:

- March 15, 1996: The U.S. Environmental Protection Agency granted its first-ever nationwide permit to Commodore's SET process for disposal of PCB's from soils and metallic surfaces. The SET process is the only technology that has been issued a portable, non-thermal, nationwide permit for PCB destruction by the EPA.
- April 30, 1996: At a special White House technology conference, the Clinton Administration announced that Commodore's SET process would be one of nine environmental technologies in its Rapid Commercialization Initiative (RCI). The program is designed to streamline the process of moving U.S. based environmental services and technologies to national and international markets by abolishing government red tape. This will enable agencies like the Departments of Energy and Defense to realize cost-effective efficiencies and step up the implementation of state of the art technologies. On September 30 Commodore completed its RCI demonstration for the Defense Department at the Navy's Port Hueneme, California facility. The Defense Department is expected to forward successful findings to RCI officials in mid November.
- May, 1996: In tests conducted by Geomet Laboratories in Maryland and Calspan Laboratories in Buffalo, NY (Federally licensed independent laboratories), Commodore's SET process successfully destroyed most chemical warfare agents, including mustard and blister gases. In one of the independent laboratories, more than pound quantities (a commercial benchmark) were destroyed.
- June, 1996: In tests on PCB contaminated soil at the Super Fund site in New Bedford harbor, where Ebasco Services (a Foster Wheeler subsidiary) is the general contractor to the EPA, Commodore's technology demonstrated that the SET process can effectively and economically eliminate PCB's. Commodore's technology is one of the three options being considered for a follow-on contract which can develop into a billion dollar business at New Bedford and many other harbor sites in the U.S. and abroad.
- June 28, 1996: Commodore Applied Technologies completed its initial public offering of common stock at a price of \$6.00 and of 5-year redeemable warrants at a price of ten cents, raising \$35 million. National Securities Corp. managed the underwriting.
- July 2, 1996: At a NATO workshop in Prague, an independent U.S. testing laboratory presented results of Commodore's SET process. These results demonstrated that the SET process could effectively destroy chemical warfare agents including Lewisite, the principal chemical warfare agent of the former Soviet Union.
- July 15, 1996: Tom J. Fatjo, Jr., founder of both Browning-Ferris Industries, Inc. and Republic Waste Industries, Inc. and C. Thomas McMillen, Co-Chair of the President's Council on Physical Fitness and Sports and a former three-term Congressman from

Maryland, were named to Commodore's Board of Directors. As a member of Congress, Mr. McMillen sponsored the 1992 bill that created the alternative (to incineration) technologies program for chemical demilitarization.

- August 9, 1996: A Teledyne subsidiary formed a 50-50 joint venture with Commodore under which Commodore's technology will be used to destroy chemical warfare agents on a worldwide basis.
- September 30, 1996: Commodore completed its acquisition of Advanced Sciences, Inc. for 900,000 common shares.
- October 1, 1996: Thomas E. Noel became Commodore's President and Chief Executive Officer. Paul E. Hannesson assumed the position of Chairman of the Board, replacing Bentley J. Blum who remains on the board.
- October 8, 1996: The Commodore RCI demonstration unit visits a special U.S. EPA-RCI conference at McClellan Air Force Base, Sacramento, California. Significantly, the RCI official announced that the purpose was to demonstrate a successful RCI technology.

Our confidence in the SET process is enhanced by independent verification of its effectiveness by U.S. government licensed laboratories. Additionally, successful participation in the White House sponsored Rapid Commercialization Initiative (RCI) program will accelerate the introduction and development of SET process applications.

Since huge quantities of contaminants are in our environment and containment sites, commercial hazardous waste destruction will take place on an industrial scale and could result in a number of billion dollar businesses that utilize the SET process. Commodore's business strategy involves establishing several business entities to handle specific areas of contaminant destruction. Among these businesses are partnerships and joint ventures with certain industrial leaders to take advantage of the partner's established business relationships and access to capital. Described below in greater detail are the business partnerships for clean-up of PCB contaminated harbor sludge, destruction of chemical warfare agents, clean-up and decontamination of PCB fire retarding paint found in naval vessels, remediation of dioxin contaminated soils and electric utility PCB contamination from transformer oils.

### **The Technology:**

The SET process is based upon solvated electron chemistry, which has been known for over a century. The process involves dissolving certain alkali or alkaline-earth metals (such as lithium, sodium, potassium, magnesium or calcium) in anhydrous liquid ammonia. Under these conditions, powerful reducing agents are formed that can break up the halogenated molecules that form a wide variety of environmental pollutants rendering them environmentally safe. The process has extensive patent protection, although the knowledge in making the process work on a commercial scale lies with the scientists at Commodore who have engineered the process reaction vessels and operating parameters that make the process work efficiently.

In commercial applications, the SET process involves placing liquefied ammonia into a pressurized reaction chamber, adding the appropriate metal to create the solvated electron

### AGENT 313

AGENT 313 technology mixes anhydrous liquid ammonia and/or other solvents with reactive metals and contaminated elements to effect the selective destruction or neutralization of halogenated organic compounds (such as PCBs, pesticides and dioxins). The Company has demonstrated that AGENT 313 can achieve consistently high levels of contaminant destruction when working with PCBs, dioxins and pesticides. AGENT 313 has treated soils containing up to 10,000 parts-per-million (ppm) of contaminants, and oils containing up to 250,000 ppm, leaving residual soils and oils with contamination levels of less than 1 ppm. In addition, AGENT 313 has been successfully applied to other PCB-contaminated surfaces such as concrete. No hazardous or toxic residues have resulted from the use of AGENT 313, nor have there been any toxic emissions into the air, water, soils or other surfaces to date. By example, most contaminated soils treated with AGENT 313 can be used subsequently for planting or for any other use for which non-contaminated soils are appropriate.

The AGENT 313 process consists of tanks, pumps and piping to handle anhydrous ammonia and other solvents in liquid and vapor forms, and reactor vessels for holding contaminated materials and for the introduction of solvating solutions. The system can be transported to field sites and configured in numerous sizes.

The AGENT 313 process requires placing the contaminated materials into a reactor where they are mixed with a solvent and charged with a base metal. The chemical reaction produces metal salts such as calcium chloride, calcium hydroxide, and non-halogenated inert organics. The ammonia within the reactor is then removed to a discharge tank. The materials are removed, sampled for residual traces of PCB or other halogenated organic compounds, and placed in storage for disposal. In many cases, the decontaminated soil and metals can be replaced in their original location, recycled or reused. The solvents do not enter the chemical reaction, but merely serve as the solute for the solvated electron solution.

### EPA Nationwide Permit and Testing Results

In order to treat PCBs within the United States on all non-Superfund sites, the treating entity must obtain a permit from the EPA. Most EPA permits granted to date for PCB destruction are solely for single-site incineration treatment centers. In August 1995, the Company demonstrated AGENT 313 to the EPA in order to obtain the Nationwide Permit. In March 1996, the EPA issued the Nationwide Permit to the Company. The Nationwide Permit allows the Company to use AGENT 313 on-site to treat PCB-contaminated soil at any location in the United States. In addition to soil treatment, the Nationwide Permit allows the Company to treat PCB-contaminated metallic surfaces. The Nationwide Permit only covers the destruction of PCBs in soils and on metallic surfaces.

Based on currently published lists of EPA national operating permits, the Company believes that it possesses the only non-thermal PCB treatment technology for multiple applications permitted under the EPA's Alternate Destruction Technology Program. EPA regulations governing permitting have been in effect for more than 15 years, and according to the latest EPA published list of non-thermal destructive processes, only seven companies have met EPA's stringent requirements for commercial operation. Of these, only the Company is permitted to remediate PCB-contaminated soils and metallic surfaces. The EPA's Alternative Destruction Technology Program is designed to encourage remediation technologies as an alternative to incineration.

The Nationwide Permit states that, among other matters, AGENT 313 treats soils and metallic surfaces highly contaminated with PCBs to levels which render the PCBs to an unregulated status of less than 2 ppm under the Toxic Substances Control Act ("TSCA"), and treats various metallic materials whose surfaces are highly contaminated with PCBs to TSCA unregulated status (less than 10 micrograms per 100 square centimeters).

The Nationwide Permit became effective on March 15, 1996, expires on March 15, 2001, and may be renewed subject to providing any requested additional information to the EPA at the time of renewal. The Nationwide Permit imposes certain continuing obligations on the Company, including notification of all job sites, periodic reporting to the EPA as to activities at the job sites, prior notification to and approval by the EPA with respect to any single-site centralized remediation facility that the Company may seek to establish, and certain restrictions on the disposal of AGENT 313 by-products. The Nationwide Permit further specifies that the Company must continue to comply with all otherwise applicable federal, state and local laws regarding the handling and disposition of hazardous substances.



In order to obtain the Nationwide Permit, the Company demonstrated AGENT 313 to the EPA. In these tests, AGENT 313 successfully treated PCB-contaminated soil and metallic surfaces to levels substantially below those required by current regulations (generally phrased in terms of parts per million (ppm) or micrograms ( $\mu\text{g}$ ) per 100 square centimeters ( $\text{cm}^2$ )).

The results of the August 1995 test are summarized below:

<u>Material</u>	<u>PCB Level</u>	
	<u>Before Treatment</u>	<u>After Treatment</u>
Soils	1,200 ppm	less than 1 ppm
	900 ppm	less than 1 ppm
	1,050 ppm	less than 1 ppm
Metal Surfaces	24,000 $\mu\text{g}/100 \text{ cm}^2$	4.1 $\mu\text{g}/100 \text{ cm}^2$
	26,000 $\mu\text{g}/100 \text{ cm}^2$	1.1 $\mu\text{g}/100 \text{ cm}^2$
	22,000 $\mu\text{g}/100 \text{ cm}^2$	3.8 $\mu\text{g}/100 \text{ cm}^2$

In September 1995, the Company received a national research and development permit from the EPA for experimentation with PCBs. In more than 1,000 tests using AGENT 313, levels of PCB contamination exceeding 6,000 ppm were reduced to levels approaching non-detectable, with the destruction process occurring in a matter of minutes. The following table is a summary of the results of those tests.

<u>Soil Type/Material</u>	<u>PCB Level</u>	
	<u>Before Treatment</u>	<u>After Treatment</u>
	<u>High PCBs</u>	
Clay	290 ppm	less than 1 ppm
Organic	660 ppm	less than 1 ppm
Sandy	6,200 ppm	less than 1 ppm
Oil	250,000 ppm	less than 1 ppm
	<u>Low PCBs</u>	
Clay	29 ppm	less than 1 ppm
Organic	83 ppm	less than 1 ppm
Sandy	130 ppm	less than 1 ppm

These tests were conducted on limited quantities of contaminated material, and there can be no assurance that AGENT 313 will be able to replicate any of these test results on a large-scale commercial basis or on any specific project. See "Risk Factors — Limited Operating History; Net Losses; Future Losses; Initial Commercialization Stage; Going Concern Disclosure in Independent Auditors' Report."

In September 1995 and December 1995, the Company retained Geomet Technologies, Inc. ("Geomet"), an independent surety laboratory licensed by the United States government to conduct tests on live chemical warfare agents. Geomet conducted two series of laboratory tests on AGENT 313's ability to neutralize chemical weapons materials and warfare agents. Such tests, conducted on a small scale, demonstrated destruction efficiencies of more than 99.99999% on nerve agents and chemical mustards. Such tests are not necessarily indicative of results that would be obtained from testing on a larger scale. The Company is continuing to test AGENT 313 on chemical weapons by-products, as well as on larger quantities of these chemical weapons materials.

### Competitive and Operational Aspects of AGENT 313

Substantially all existing systems in use for the destruction of PCBs and other halogenated compounds involve incineration or other thermal approaches, and either require the permanent installation of highly complex and expensive incinerators and waste disposal equipment at the affected site, or the removal of contaminated materials to off-site facilities. The Company believes that AGENT 313 represents an approach to resolving serious environmental remediation issues, without the safety risks of air pollution and transportation of hazardous materials. The Company believes that AGENT 313 is more effective than incineration and other destruction methods for toxic substances in that:

- AGENT 313 does not emit toxic fumes into the atmosphere, as is sometimes the case with thermal or incineration methods;
- AGENT 313 is portable and can be moved directly to the contaminated site, thereby reducing the risk of off-site contamination.
- AGENT 313 equipment can be customized and configured to address various treatment applications;
- AGENT 313 has been shown to neutralize or destroy all chemical weapons material and warfare agents in the United States stockpile, and Lewisite (the primary chemical weapons material and warfare agent of the former Soviet Union), in tests conducted by an independent surety laboratory;
- AGENT 313's reaction time is substantially less than that of alternative processes, such as thermal desorption and chemical treatment.
- AGENT 313 equipment may be able to be installed and operated inside industrial plant facilities to treat hazardous wastes on line as a continuation of the manufacturing process; and
- AGENT 313 when used to treat soils, yields nitrogen-enriched soils that can be reused on-site, avoiding replacement and the post-treatment costs of off-site disposal.

The Company believes that AGENT 313 is the only technology currently available which possesses all of these features and is capable of treating a wide variety of contaminants.

However, the Company also believes that AGENT 313 may have the following disadvantages:

- like incineration and other destruction methods, AGENT 313 destroys the organic content of soil, creating a need to reblend the soil with organic matter to restore its ability to support vegetative growth;
- the handling of ammonia and active metals such as calcium and sodium, in connection with the operation of AGENT 313, requires special training in materials handling and safety procedures which may be unfamiliar to some personnel;
- the requirement of AGENT 313 to operate within a vessel at an average pressure of 150 pounds per square inch adds to the processing time of contaminated materials and to the engineering complexity of the system; and
- the Company will be required to overcome the widespread use of incineration and other destruction methods for treating PCBs and related contaminants in its marketing of AGENT 313.

### Commercialization and Marketing Strategy

The Company's strategy is to use AGENT 313 on a select number of industrial, municipal and governmental clean-up and related projects through one or more collaborative working arrangements with well-recognized participants in the industry. Subject to domestic acceptance of AGENT 313, the Company will seek, through similar joint working arrangements, to penetrate international markets.

The Company's proposed joint ventures or joint working and marketing arrangements will be designed either for specified individual projects, or specific industries or market segments.

The Company will seek to enter into joint ventures or working arrangements which obligate the Company's collaborative partner to (i) purchase the capital equipment (which the Company currently estimates will represent approximately 10% of the cost of each project), (ii) be responsible for handling transportation of the equipment to and from the site, (iii) be responsible for removal of the treated soil or other material, and (iv) be responsible for labor and project supervision. The Company will be primarily responsible for (i) technical and marketing support and personnel, (ii) creating and monitoring the formulations and specifications of AGENT 313, including the mixture of liquid ammonia and other fluids with sodium, calcium or other reactive metals, and (iii) designing and monitoring the performance of the operating equipment.

solution (the reducing agent), followed by addition of the pollutant (e.g., PCB's). In the case of soil remediation, the soil is placed in the chamber prior to the addition of liquefied ammonia. The neutralization reaction, which is monitored by colorimetric sensors, will result in virtually total reduction of the pollutant to a safe material. Heat generated during the reaction is used to drive off the ammonia which is recycled for future use. The reaction chambers and supporting equipment can be made in various sizes from table top models to mobile units the size of a cement mixer. The chemicals used in the reaction, ammonia and alkaline and alkaline-earth metals are readily available. Therefore, the costs to set up a SET processing unit are much lower than establishing incineration plants or molten metal facilities, possibly as little as one-third. Since the reaction chambers are mobile, they can be moved from one site to another, reducing the risk of further environmental contamination that is the risk of transporting pollutants to treatment sites.

Commodore's SET process is applicable to the destruction of a variety of contaminants including destroying PCB's, pesticides, dioxins, ozone depleters (CFC's), and chemical warfare agents. The process can be used for contaminated soils, sediments, oils and surfaces.

### **Business Opportunities:**

Commodore is actively pursuing opportunities, nationally and internationally, notably:

**New Bedford harbor:** New Bedford, MA, harbor and waterfront is heavily contaminated by PCB's and in 1982 was placed on EPA's Superfund national priorities list. Ebasco Services, Inc., a subsidiary of Foster Wheeler Corp., is managing the project, and selected the SET process as a possible non-thermal method for PCB destruction.

**Advanced Sciences, Inc. acquisition:** This acquisition of an engineering services company greatly accelerated the Company's ability to produce significant revenues.

**Teledyne-Commodore Joint Venture:** The Company has formed a 50-50 joint venture relationship with Teledyne Brown to market the SET process to military establishments worldwide for the destruction of chemical warfare agents.

**Sverdrup Joint Venture:** The Company has a non-binding memorandum of understanding to establish one or more joint ventures or related arrangements to utilize the SET process as the enabling technology in decontamination of PCB's and other toxic substances. One prime target is the Navy Department for base clean-up and decontamination of submarines. PCB's were extensively used in submarines as a fire retardant in paint and insulation.

**Sharp & Associates:** The Company has a non-binding memorandum of understanding to explore the application of the SET process for remediation of dioxin contaminated soils.

**ESEERCO Project:** This project involves a demonstration of the SET process's effectiveness in treating PCB contamination at electric utility sites in New York State. The proposal was submitted by the Company and Groundwater Technology (a subsidiary of Fluor Daniel) to the Empire State Electric Energy Research Corporation.

**Others:** The Company has several other opportunities, including a program to degrade Freon gas refrigerants and plastic expansion agents that are believed to contribute to ozone depletion. These gases are chlorofluorocarbons and therefore can be decomposed by solvated electron technology. Additionally, the SET process is being considered as an effective means to eliminate the large quantities of waste uranium hexafluoride that is created to separate fissionable uranium isotopes from the more abundant non-fissionable ones.

### Management and Board of Directors

**Paul E. Hannesson, Chairman of the Board of Directors.** Prior to the IPO, Mr. Hannesson had been President, Chief Executive Officer, and a Director of Commodore Environmental Services, Inc. since 1993.

**Thomas E. Noel, President, Chief Executive Officer and Director.** Mr. Noel concluded his 14-year Army career as an aide to General Creighton Abrams, Army Chief of Staff. Mr. Noel then became the first director of the Federal Petroleum Reserve before being appointed an Assistant Secretary of Energy. He later was Senior Vice President, Operations, at WMX Technologies.

**Bentley J. Blum, Director.** Mr. Blum has been actively engaged in real estate acquisitions and currently is the sole stockholder and director of a number of corporations which hold real estate interests, oil drilling interests, and other corporate interests. He is the controlling stockholder of Commodore.

**Kenneth L. Adelman, Ph.D. Director.** Dr. Adelman served in the Reagan Administration with responsibility for arms control. From 1983 to 1987 he was Director of the United States Arms Control and Disarmament Agency and negotiated with Soviet diplomats on nuclear and chemical weapons control issues. He has been an independent consultant on international issues to various corporations, including Lockheed Martin Marietta Corporation and Loral Corporation.

**Herbert A. Cohen, Director.** Mr. Cohen has been a practicing negotiator acting in an advisory capacity in hostage negotiations and crisis management and was an advisor to Presidents Carter and Reagan in the Iranian hostage crisis, the government's response to the skyjacking of TWA Flight 847 and the seizure of the Achille Lauro.

**David L. Mitchell, Director.** He is president and Co-founder of Mitchell & Associates and formerly was a Managing Director of Shearson/American Express Inc., a Managing Director of First Boston Corporation and a Managing Director of the investment banking firm of S.G. Warburg & Company.

**Tom J. Fatjo, Jr., Director.** He was founder of both Browning-Ferris Industries, Inc. and Republic Waste Industries, Inc. He currently serves as Chairman of TransAmerican Waste Industries, Inc., a Houston based solid waste management company which he founded in 1991.

**C. Thomas McMillen, Director.** Co-Chair of the President's Council on Physical Fitness and Sports and a former three-term Congressman from Maryland. While in Congress, Mr. McMillen served on both the Energy and Commerce Committee and the Science, Space and Technology Committee. He is currently Chairman and CEO of Complete Wellness Centers, Inc.

**TELEDYNE BROWN ENGINEERING**  
*Common sense . . . uncommon innovation*

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Total pages <u>3</u> (including lead page)	
Message _____	Date <u>14 Nov 96</u>
TO: <u>Director Larry Don Marsh / Mr Henry Lopez</u>	
COMPANY NAME: _____	
TELEPHONE NO.: _____	
TELECOPIER NO.: <u>FAX 503 229 5850</u>	
FROM: _____	
COMPANY NAME: <u>Teledyne-Commodore LLC</u>	
TELEPHONE NO.: <u>205 726 2608</u>	
TELECOPIER NO.: <u>205 726 3330</u>	
<p>COMMENTS:</p> <p><i>Re: Call From Mr Russel Kennel</i></p> <p><i>(1) DOD and Oregon Congressional staff officers (Drd. Spooner in Wes Cooley's office and J. Shankman in Ron Wyden's office) have been briefed.</i></p> <p><i>(2) Teledyne-Commodore will compete for the Alternate Technologies studies authorized by the 1997 Congressional Approp. to be conducted at chemical ammunition sites.</i></p> <p style="text-align: right;"><i>Dick Smith</i></p>	
TELECOPIER NO.:	<u>205-726-2159 3330</u>
VERIFY:	<u>205-726-1889 or 6105 1483 or 3377</u>

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Huntsville, AL, October XX, 1996 - Teledyne-Commodore LLC, an equally-owned venture of Allegheny Teledyne (NYSE:AL) and Commodore Applied Technologies, Inc. (AMEX: CXI) formed to pursue the demilitarization of chemical weapons on a worldwide basis, announced today that Major (General (Ret.) Gerald G. Watson has been named President and Chief Executive Officer.

General Watson had been the Army's Chief Chemical Officer and, in his last posting before retiring in 1992, director of the Defense Nuclear Agency. Previously, he had directed the construction and operation of the first large chemical weapons destruction plant at Rocky Mountain Arsenal, Colorado, in which 7,000 tons of chemical agents were successfully destroyed.

Most recently, General Watson was General Manager of E G & G Alabama, Inc., where he was responsible for marketing of engineering and management services to the U.S. Space and Missile Defense programs and, significantly, for the development of chemical agent destruction strategies. Previously, his first job in industry following his 34-year military career was as Project Manager for Brown & Root, Inc., developing strategies for both the Anniston, AL chemical weapons destruction facility and the Russian Federation CW weapons destruction program.

"General Watson's experience at the highest levels of government and industry uniquely qualify him to manage the commercialization of Commodore's proprietary solvated electron technology (SET) process," said Thomas F. Noel, Commodore's President and Chief Executive Officer and a member of the Teledyne-Commodore Board of Managers. "Chemical weapons demilitarization is an emerging market of international scope and opportunity, and our SET process will help the U.S. achieve its objective of eliminating the entire class of chemical weapons systems worldwide."

Charles Fox, Jr., President and Chief Executive Officer, Teledyne Environmental, said, "SET is the only known technology that can effectively and efficiently neutralize all U.S. stockpile chemical agents. Because of General Watson's experience, vision and leadership, Teledyne-Commodore will be able to more effectively exploit defined opportunities within the U.S. stockpile and non-stockpile chemical weapons demilitarization programs."

Teledyne-Commodore also announced the members of its Board of Managers. They are General Watson, Mr. Noel, Dr. Fox, Paul F. Hamnesson, Commodore's Chairman of the Board, and Robert Reith, director, Allegheny Teledyne, Inc.

The joint venture was formed Aug. 9, 1996, to utilize Teledyne's management and engineering capabilities in implementing Commodore's SET process. In tests conducted at federally licensed, independent surety laboratories, the SET process destroyed more than pound quantities (a commercial benchmark) of all U.S. stockpile chemical warfare agents, including mustard (HD), Lewisite, and nerve gases (VX and GB). In other independent laboratory tests, SET has destroyed solid residues (hexes) of chemical warfare agents, as well as decontaminating both metal and plastic surfaces. In addition, SET is the only technology that has successfully decontaminated charcoal filters after they have been exposed to agents.

SET uses readily available materials to neutralize the agent, producing non-hazardous waste products that are post-treated for normal disposal. No detectable offgas is produced by the below-room-temperature process, and the overall "dry" waste stream is the least of any chemical agent neutralization process.