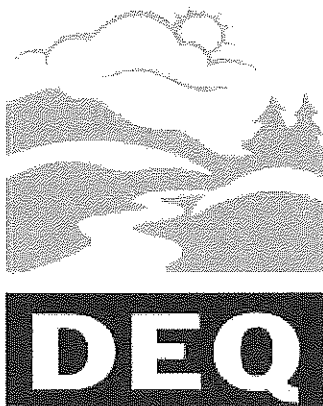


OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 04/14/1989



State of Oregon
**Department of
Environmental
Quality**

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OREGON ENVIRONMENTAL QUALITY COMMISSION

NOTE: There will be an all day field trip to the Gilliam County Landfill and to the Chem-Security Systems, Inc. Hazardous Waste Facility on Thursday, April 13. The Environmental Quality Commission will leave Portland at 7:30 a.m. and arrive back in Portland at 6:00 p.m.

REVISED AGENDA

April 14, 1989

NOTE: The Commission will breakfast at 7:30 a.m. in Conference Room 4, 811 S.W. Sixth Avenue, Portland, Oregon.

Fourth Floor Conference Room, Executive Building
811 S.W. Sixth Avenue
Portland, Oregon

Consent Items - 8:30 a.m.

These routine items are usually acted on without public discussion. If any item is of special interest to the Commission or sufficient need for public comment is indicated, the Chairman may hold any item over for discussion.

- A. Minutes of the March 3 and 4, 1989, EQC meeting
- B. Monthly Activity Reports for January and February 1989
- C. Civil Penalties Settlements
- D. Tax Credits for Approval
- E. Commission member reports:
 - Pacific Northwest Hazardous Waste Advisory Council (Hutchison)
 - Governor's Watershed Enhancement Board (Sage)
 - Strategic Planning (Wessinger)

Public Forum

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

Hearing Authorizations

Request for Authorization to Conduct Public Hearings on:

- F. Field Burning: Permanent Rules to Replace Temporary Rules Adopted During the Last Burning Season
- G. Leaking Underground Storage Tanks, Matrix for Evaluating Cleanup Levels in Soils
- H. TMDL's (Total Maximum Daily Loads) for Bear Creek

Rule Adoptions

Public hearings have already been held on the rules proposed for adoption. Testimony will not be taken on items. However, the Commission may choose to question interested parties present at the meeting.

Request for adoption of:

- I. Industrial PM₁₀ Rules for the Klamath Falls Urban Growth Area
- J. Out-of-State Hazardous Waste: Permanent Rule
- K. Waste Tire Economic Feasibility Rules
- L. Air Quality Plan Approval: Delegation of Authority to the Department

Other Items

- M. City of Corvallis: Approval of Plans, Specifications, and Implementation Schedule for Sewer Project to Serve the Philomath Boulevard Phase II Health Hazard Annexation Area
- ~~N. Stipulated Consent Agreement: Prineville~~
- O. Unified Sewerage Agency (USA)/Washington County: Program to Meet TMDL (Total Maximum Daily Loads)
- ~~P. Jeld-Wen, Inc; Klamath Falls: Increased Wastewater Discharge to Klamath Lake~~
- Q. City of Brookings: Request for Time Extension to Comply with Stipulated Consent Order
- R. Informational Report: Recycling Program Performance Standards
- S. Informational Report: Update on Yard Debris

EQC Agenda
Page 3
April 14, 1989

T. Future Commission Meetings: Establish Schedule

Because of the uncertain length of time needed, the Commission may deal with any item at any time in the meeting except those set for a specific time. Anyone wishing to be heard on any item not having set time should arrive at 8:30 a.m. to avoid missing any item of interest.

The next Commission meeting will be Friday, June 2, 1989. There will be a short work session prior to this meeting at 2:00 p.m., Thursday, June 1, 1989.

Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5301, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.

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April 14, 1989

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- ~~P.~~ ~~Jeld Wen, Inc; Klamath Falls: Increased Wastewater Discharge to Klamath Lake~~
- ~~Q.~~ City of Brookings: Request for Time Extension to Comply with Stipulated Consent Order
- ~~R.~~ Informational Report: Recycling Program Performance Standards
- ~~S.~~ Informational Report: Update on Yard Debris

*Continued
Wagstaff* Staff Report
Review
off agenda

~~F.~~ Future Commission Meetings: Establish Schedule

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Approved _____
Approved with Corrections _____ ✓
Corrections made _____ ✓

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the March 2, 1989, Work Session and
One Hundred Ninety-Fourth Meeting,
March 3, 1989

WORK SESSION

March 2, 1989

Department of Forestry
2600 State Street
Salem, Oregon
Protection Conference Room
Building 2

1. **Policy on Delegation of Programs:** The purpose of this work session item was to provide policy direction to the Department when requesting delegation of Federal environmental programs from the U. S. Environmental Protection Agency (EPA). Mike Downs, Administrator of the Environmental Cleanup Division, presented this item on behalf of the Department. The Department recommended the Commission adopt the policy statement in the staff report.

In response to questions, Mr. Downs noted that the proposed policy probably would not have resulted in different decisions on past delegations. This policy was drafted to reflect a more neutral position. With changing resource availability, the Department may be less likely to take some delegations.

Director Hansen noted there is a changing relationship between state and Federal programs resulting from reduced federal funding and the states taking a stronger lead in some areas.

Chairman Hutchison noted that DEQ should place more emphasis on influencing the Federal agenda early, rather than trying to conform later in implementation under a delegation approach. This could involve trying to force adequate funding to facilitate delegation.

Mr. Downs noted that delegation decisions involve negotiation with EPA. An advantage of having a neutral policy is that it strengthens the Department's negotiating position.

Commissioner Castle noted that the questions posed in the proposed policy are the correct questions; the issue is one of tone and stance as it relates to negotiations. He also recommended an aggressive position in an effort to influence the Federal agenda.

By consensus, the Commission agreed with Commissioner Castle's observations. Also, by consensus, the Commission agreed that the strategic plan should reflect an aggressive effort to influence Federal legislation and programs.

2. **Beneficial Uses of Water, General Discussion:** The purpose of this work session item was to provide an overview of the water quality program, to describe the river basin plans for Oregon, to discuss how the policies and standards within these plans protect beneficial uses and to review how point and nonpoint source discharges are currently regulated for all waters of the state. Dick Nichols, Administrator of the Water Quality Division, Neil Mullane, and Krystyna Wolniakowski of the Water Quality Division, presented the information and responded to questions.
3. **Container Nurseries, Water Pollution Control Strategy Discussion:** Department staff discussed with the Commission a strategy for regulating container nurseries. The strategy was developed in three segments:
 - a. The Oregon Department of Agriculture (ODA) and the Oregon Association of Nurserymen (OAN) are sponsoring a project to evaluate various practices at some of the container nurseries. This evaluation will be used to determine which practices contribute most to the discharge of pollutants. It is hoped that best management practices (BMPs) can be established as a result of this project. The study will be done by Oregon State University.
 - b. The non-point source committee of Washington County proposed a method of bracketing the various mini-basins and land use areas in the Tualatin Basin. This bracketing technique will be used to determine where standards violations are occurring and where improved management practices should be used. This would be part of the program plan to be finalized by the ODA by

March 1990, since they are the designated management agency to assure that the agriculture industry in the basin meets the waste load allocations designated for agriculture.

- c. The last segment of the strategy involves the development of a method of accountability by the ODA. The method of choice by the Department is the use of a permit to regulate each affected container nursery. The ODA will be exploring other similar methods of assuring accountability since the nursery industry is opposed to the use of permits. The Director and Commission were agreeable, provided the method of accountability selected was similar to the permit in establishing monitoring requirements, effluent limits and time schedules and was enforceable. The staff will recommend a method of accountability to the Commission in November.

4. **Tualatin Basin Interim Storm Water Rules, General Discussion:** Department staff discussed with the Commission draft rules for controlling storm water contaminants from new development in the Tualatin River and Oswego Lake subbasins. In addition to the Department's drafted rules, the municipal jurisdictions to be regulated in the subbasin proposed an alternate set of rules. The principle differences between the two sets of rules were discussed and staff indicated the sections of the alternate rules that could be substituted in the Department's draft rules. It was determined that the Commission would proceed toward hearing authorization at their March 3, 1989, meeting.

Field Trip, Marion County Garbage Burner, Brooks: The Commission traveled to Brooks for a tour of the Marion County Solid Waste Incinerator facility.

EQC Minutes
Page 4
January 19 and 20, 1989

FORMAL MEETING

March 3, 1989

**Mission Mill Dye House
1313 Mill Street S. E.
Salem, Oregon**

Commission Members Present:

Bill Hutchison, Chairman
Emery Castle, Vice Chairman
Wallace Brill
Genevieve Pisarski Sage
William Wessinger

Department of Environmental Quality Staff Present:

Fred Hansen, Director
Michael Huston, Assistant Attorney General
Program Staff Members

NOTE: Staff reports presented at this meeting, which contain the Director's Recommendations, are on file in the Office of the Director, Department of Environmental Quality, 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.

At 7:30 a.m., the Commission met with legislators for breakfast in Room 50, State Capitol.

Before the start of the regular meeting at the Mission Mill Dye House, **John Loewy**, the Department's Liaison to the Legislature, provided the Commission with a list of bills that the DEQ is tracking, and reported on the status of significant legislation.

Chairman Hutchison called the meeting to order at 9:00 a.m.

CONSENT ITEMS:

Agenda Item A: Minutes of the January 19 and 20, 1989, EQC Meeting.

ACTION: It was **MOVED** by Commissioner Castle, seconded by Commissioner Wessinger, and unanimously passed to approve the minutes of the January 19, 1989, work session and the January 20, 1989, regular meeting.

Agenda Item B: Monthly Activity Report for December 1988.

Action: It was **MOVED** by Commissioner Sage, seconded by Commissioner Castle and unanimously passed to approve the Activity Report for December 1988.

Agenda Item C: Civil Penalty Settlement Agreements.

The Commission considered two proposed settlement agreements:

1. AQ-FB-188-114, DEQ v. Joe Schumacher
2. OS-SWR-88-68, DEQ v. Claude St. Jean

Action: The Commission approved the settlements by consensus and signed the Stipulated and Final Orders.

Agenda Item D: Tax Credits for Approval

Action: It was **MOVED** by Commissioner Wessinger, seconded by Commissioner Brill and unanimously passed to approve the tax credits for the listed reports.

Agenda Item E: Commission member reports:

1. **Pacific Northwest Hazardous Waste Advisory Council:** Chairman Hutchison noted the Council would meet on Friday, April 11, and Saturday, April 12, in Seattle. Among the issues at that meeting will be a decision on the need for an incinerator in the region. Preliminary information indicates that one incinerator would meet the regional needs for treatment and disposal of hazardous waste. The next meeting will be in July in Alaska.
2. **Governor's Watershed Enhancement Board:** Commissioner Sage reported that the Board met on Friday, February 24. The current chairperson has resigned but will continue serving on the Board; a new chair remains to be named.

The Governor's office has stated that the Board is a hallmark program; aggressive action from the Board is expected; and the Board should address non-point source problem areas and provide a clear statement of direction.

The Watershed Enhancement Board will be meeting on March 30 and 31 to discuss strategy for accomplishing a pro-active approach and for accomplishing the educational mission of the Board.

A \$5,000 grant for DEQ to produce a pamphlet on management of watersheds in urban areas has been approved by the Board, and Commissioner Sage expressed thanks to Andy Schaedel of the DEQ for his excellent support to the Board.

3. **Strategic Planning:** Commissioner Wessinger reported that the third strategic planning session was held Tuesday, February 21. Two further sessions are scheduled.

PUBLIC FORUM

Jack Churchill, representing Northwest Environmental Defense Center, presented the Commission with an article from the Roseburg News Review outlining what Roseburg is doing about storm water and surface water management. He does not believe the Department is properly interpreting beneficial uses of water and the Department's role in determining water quality standards. He urged the Commission to require the Department to move promptly to establish concepts and legal definitions of standards in line with Federal requirements and other state statutes.

Chairman Hutchison announced that Agenda Items O, T and Q would be considered first and then the remainder of the agenda would be considered in the order listed.

Agenda Item O: Enforcement Policy and Penalty Matrix Rules.

Director Hansen introduced the agenda item by noting that persons inside and outside the Department have voiced concern over existing enforcement policies, saying revision is needed to provide predictability and certainty about Department actions and penalty amounts. The rules proposed for adoption contain a matrix for establishing penalty amounts based on type and seriousness of violation. The penalty would then be increased or decreased based on statutorily required considerations.

The rule contains a proposal that all violations be noted and that the violator receive a notice of non-compliance. This is a change from the requirement in the draft considered at the hearings. Finally, the rules provide clear direction to the Department about enforcement actions. The Department conducted a hearing on the draft rules and has evaluated testimony. Rules have been modified in response to comments; the Department has reviewed all comments but has not necessarily recommended change.

John Charles and Ann Wheeler, Oregon Environmental Council, had previously provided the Commission with a copy of their report,

"Enforcing Oregon's Environmental Statutes." Mr. Charles stated that a problem exists with the institutional culture within DEQ stemming from the statutes which have existed over time. He noted that the Commission has latitude to direct change within the framework of existing statutes.

Ms. Wheeler urged reinterpretation of the words conference, conciliation, and persuasion that appear in the statutes in order to define the basic direction and a reevaluation of the structure of the Department's enforcement activities with more resources for monitoring. She also urged exploration of a relationship with the State Police similar to that used by the Department of Fish and Wildlife. She asked that the Commission consider legislative changes to clarify the definition of the terms conference, conciliation, and persuasion in order to obtain authority for recovering administrative costs in penalties.

Ms. Wheeler commended the Department for moving forward in the rules proposed for adoption, but noted too much discretion in the rules existed. She said the notice of non-compliance is the only mandatory step outlined in the rule and is not a statutory requirement, merely an extra "free bite." Ms. Wheeler also recommended that the first step be a notice of violation. She added that there is no requirement that a penalty be levied; there should be written findings to support a decision not to levy a penalty for a violation. She also noted disagreement with the matrix rule which gives mitigation credit points for poor economic condition rather than simply remaining neutral.

Harry Demaray, a DEQ employee, noted that he was appearing at this meeting using a vacation day. Mr. Demaray expressed the opinion that the Department was not very receptive to his suggestions for changes to the rules. He said that penalties should be set so that the violator does not benefit from the violation and that the state should recover administrative costs for penalty assessment. Mr. Demaray also expressed the view that all documented violations should be presented to the Director for a decision since only the Director can assess a penalty. He questioned adding a new paragraph to a rule after the hearing had been held. Michael Huston, Assistant Attorney General, stated that new language can be added if the language pertains to the subject covered in the hearing notice.

Richard Bach, chair of the environmental law section of Stoel, Rives, Boley, Jones & Grey, expressed general support of the rules as drafted, but with some very grave reservations about the necessity and the efficacy of the rules in protecting and enhancing Oregon's environment. Mr. Bach recognized the existence of a mindset in certain circles that the best way to achieve

environmental quality is by strict enforcement with fines, threats and "bashing" of industry. The proposed rule would, to some extent, satisfy that philosophy. Mr. Bach took an opposing view saying there has been no showing that DEQ is not doing the job mandated by the Legislature and public and compliance with environmental laws and regulations has been just as effective through past policies of voluntary cooperation, conciliation and negotiation.

Mr. Bach noted that the penalty approach forces discussion between lawyers, not engineers, and that lawyers slow down environmental progress by assuring due process for their clients. He reminded the Commission of the statutory directive that DEQ negotiate, conciliate, and work with industry and suggested there should be no change in past practices unless the Legislature clearly indicates a desire for change by modifying the statutory directions. Mr. Bach stated he does not see a need for the proposed policy, but recognizes a demand exists. Finally, he applauded the decision not to incorporate this policy into the Federal Clean Air Act State Implementation Plan (SIP).

Chairman Hutchison asked how one can assure that there is equanimity in application of the rules. Mr. Bach responded that he supported strong enforcement against deliberate violators.

Tom Donaca, General Counsel for Associated Oregon Industries (AOI), supported the comments of Mr. Bach. He noted that only recently have lawyers been appearing before the Commission, particularly in the hazardous waste area. AOI believes the proposed policy will bring consistency into the enforcement program and is appropriate for the air, water and solid waste programs.

Mr. Donaca expressed concern with application of the rules to hazardous waste generators who are new to regulation by the agency. He urged discretion in applying the policy to this group as they learn about state and Federal regulations. He stated disagreement with the harshness of the Oregon Environmental Council allegations.

Tom Bispham, Administrator of the Regional Operations Division, introduced DEQ staff members Van Kollias and Yone McNally who had developed the enforcement rules for this agenda item. Mr. Bispham noted that the rules apply to individuals and industries. The rules remove a level of discretion from the DEQ field operations. He agreed with OEC that tracking enforcement activity has been deficient and noted that changes have been made to address this problem.

EQC Minutes

Page 9

January 19 and 20, 1989

Responding to a question from Commissioner Sage, Mr. Bispham noted the requirement to issue a notice of non-compliance is a significant change. This requirement will provide a basis for tracking violations and assuring that appropriate enforcement action is taken.

Commissioner Castle asked for clarification of how economic conditions are considered in assessing a penalty. Mr. Kollias noted that the Department does not know the economic condition of a source when a penalty is levied. Arguments that economic condition should be a basis for mitigation of a penalty are usually introduced in the appeal process and are considered in settlement, not in establishing the initial penalty. The Department studies economic gain as a result of non-compliance when a penalty is assessed. The Department proposed a rule amendment (page A-17; add a new 3.) to distinguish and separate those two areas of economic conditions and to allow the penalty to be increased in cases where evidence of economic gain from non-compliance has been shown.

Chairman Hutchison asked if the Commission would be helped in interpreting economic condition in settlement actions with addition of rule guidelines. Commissioner Wessinger stated there was no need for additional criteria in this area.

Responding to questions from Chairman Hutchison, Department staff expressed support for the current statutory direction of achieving compliance by conference and conciliation. It was noted that much has been accomplished under that policy. Due process considerations would require an appeal right if a notice of non-compliance is considered to be a prior violation for purposes of the rules. In addition, it was speculated that the proposed rules would result in more and higher penalties.

The Commission deferred action on this item until later in the meeting and instructed the Department to confer with those who had testified and to develop wording to modify rules in the following areas: allow added penalty due to economic gain; clarify that the respondent has the responsibility for supporting any claim of economic hardship; provide that a credit of up to four (4) could be given if the Department determines that an economic hardship exists.

Agenda Item T: METRO Solid Waste Reduction Program, Approval of Stipulated Order.

Chairman Hutchison introduced this item by stating this matter had been before the Commission for the third or fourth time. It was

intended that the Commission would approve a negotiated stipulated order at this meeting. However, because the METRO Council had not approved the stipulated order, that action again had to be postponed.

Bob Martin, Director of Solid Waste for METRO, briefed the Commission on the events that had taken place since the last EQC meeting.

1. The METRO Council Finance Committee has amended their solid waste budget to add 8.5 new positions for waste reduction.
2. The METRO Council Solid Waste Committee has drafted and moved to introduce an ordinance updating their waste reduction plan. This ordinance takes all items being discussed as part of the stipulated order and incorporates them as plan revisions to the 1986 waste reduction plan, which avoids having a plan and an order which are different.
3. Ongoing implementation has been underway in waste reduction. This includes adoption of an institutional paper purchasing policy, initiation of a waste characterization study, startup of a curbside collection demonstration project, completion of systems measurement work to identify the most effective programs in waste reduction in terms of percent removal of waste, and initiation of recruiting to fill the 8.5 new positions. These actions will proceed regardless of the stipulated order.

A proposed stipulated order was presented to the METRO Council with a strong recommendation for adoption. The concerns of the Council are that discretionary authority to direct how the plans are accomplished would be limited, and that the definition of concurrence and procedures are involved.

Commissioner Wessinger asked for a recommendation from staff regarding the next step.

Director Hansen recommended the Commission set a date that a unilateral order would be entered requiring implementation of the 1986 plan. He further recommended that the date for entering the order be set later in March following the METRO meeting, and that the unilateral order would not be entered if a stipulated order was obtained that would be acceptable to both sides prior to that date. He noted that March 23 is the date for the next METRO Council meeting, therefore, March 24 could be the date for a telephone conference call for purposes of entering the unilateral order.

Chairman Hutchison noted that staff has also drafted a unilateral order that could be entered today and expressed a preference for entering an order immediately; the unilateral order would be revoked if a stipulated order is entered within 30 days. Commissioner Wessinger agreed with Chairman Hutchison. Mr. Huston advised that the Commission could adopt a unilateral order, effective on a particular date, if a stipulated order is not entered prior to that time. Such a requirement would not have to be a clause of the order.

Bob Martin asked that the METRO Council be given time to address their concerns about the wording of the order.

Chairman Hutchison noted that the Commission is being criticized for implementing a backyard burning ban before there was a means of disposing of yard debris and not taking action on this issue in a timely manner. In some respects, this has been government at its best in terms of the effort staff has put into generating this order, and government at its worst in that it was almost May 1, the first performance date in this order, and that time was closing in quickly on other deadlines.

Chairman Hutchison added that the Department has spent many hours on this issue. He stated this was a procedural question that took away implementation of the substantive program. Chairman Hutchison noted the minutes of the Council meetings and the endorsement of the stipulated order process. He expressed concern over the fact that it has been so difficult to elicit action from the Council in bringing this matter to a close.

Chairman Hutchison expressed support for entry of the unilateral order, at the same time voicing frustration that so much of the Department's time had been wasted. He also said he would enter it with the additional message to DEQ staff that they are not to negotiate any further with METRO. ~~Further, Chairman Hutchison said the Council may amend the order, however, the Department will continue implementing waste reduction and should not be distracted from moving forward in this program.~~

Action: Commissioner Castle **Moved** that the Commission enter the proposed Unilateral Order to be effective March 24, 1989, unless a stipulated order agreeable to both DEQ and METRO is entered before that date. The motion was seconded by Commissioner Wessinger, and passed unanimously.

Director Hansen noted on behalf of the Department that it has been a pleasure working with Bob Martin. Mr. Martin has been a strong advocate within METRO.

Agenda Item Q: Request by the City of Lowell for Approval to Discharge Treated Sewage Effluent into Dexter Reservoir near the Outlet.

The purpose of this agenda item was to request consideration of the City of Lowell, Oregon's, proposal to discharge treated and disinfected sewage treatment pollutant effluent into Dexter Reservoir near the reservoir outlet.

Rick Shoot, Mayor of Lowell, and John Erwin, City Engineer for Lowell, were available to answer questions from the Commission.

Recommendation: The Department recommended the Commission approve the request to allow the City of Lowell, Oregon, to discharge into Dexter Reservoir near the reservoir outlet.

Action: It was **MOVED** by Commissioner Wessinger, seconded by Commissioner Castle and unanimously passed that the Department's recommendation be approved.

HEARING AUTHORIZATIONS

Request for Authorization to Conduct Public Hearings on:

Agenda Item F: Proposed Rule to Limit Gasoline Volatility During the 1989 Summer Ozone Season.

The purpose of this agenda item was to provide the reduction of releases of volatile organic compounds (VOC) from gasoline. By establishing a maximum limit of gasoline volatility for the summer months, this limit will reduce the VOC emitted and will help meet the ozone standard for 1989 and future years. The gasoline sold in western Oregon will have a maximum Reid Vapor Pressure (RVP) of 105 (psi) from May 15 through September 15 of each year. The proposed rule also defines sampling methods and established civil penalties.

Recommendation: The Department recommended the Commission authorize public hearings to gather testimony on a proposed maximum RVP limit on gasoline to ensure compliance with the ozone standard.

Action: It was **MOVED** by Commissioner Castle, seconded by Commissioner Wessinger and unanimously passed that the Department's recommendation be approved.

Agenda Item G: Modifications to Air Quality Regulations for Kraft

Mills to Correct Deficiencies, Add Opacity Standard for Recovery Boilers, Clarify Monitoring Requirements.

The purpose of this agenda item was to revise the kraft pulp mill regulations which will comply with EPA requirements. These rules provide for the control of Total Reduced Sulfur (TRS), daily emission standards and correction of discrepancies, and adopt new Neutral Sulfite Mill Regulations specific to that process.

Recommendation: The Department recommended the Commission authorize public hearings to gather testimony on adoption of the revised Kraft Mill Regulations and the Neutral Sulfite Semi-Chemical Regulations. Adoption of the proposed regulations are considered necessary to conform with Section 110 and 111d of the Clean Air Act and allow EPA approval of kraft mill regulations and neutral sulfite mill regulations, as amendments to the State Implementation Plan (SIP).

Action: It was **MOVED** by Commissioner Brill, seconded by Commissioner Castle and unanimously passed that the Department's recommendation be approved.

Agenda Item H: Revisions to Hazardous Waste Rules including Adoption of New Federal Rules.

The purpose of this agenda item was to maintain authorization from EPA to implement the base Resource Conservation and Recovery Act (RCRA) program and to implement Hazardous and Solid Waste Amendments of 1984 (HSWA) regulations by updating EQC rules to be consistent with Federal rules.

Recommendation: The Department recommended that Alternative 1 be chosen (authorize hearing on proposed rules) in order to remain authorized for the base RCRA program and to seek authorization for the HSWA regulations.

Action: It was **MOVED** by Commissioner Castle, seconded by Commissioner Sage and unanimously passed that the Department's recommendation be approved.

Agenda Item I: The State/U. S. Environmental Protection Agency (EPA) Agreement (SEA).

The purpose of this agenda item was to update the agreement between DEQ and EPA. This agreement establishes mutual understanding of program priorities and expected accomplishments for the next fiscal year (July 1, 1989, through June 30, 1990) and becomes the basis for Federal funding assistance to DEQ.

Recommendation: The Department recommended approval of Alternative 1: Authorization for the Department to hold a public hearing on the State/EPA annual agreement.

Action: It was **MOVED** by Commissioner Sage, seconded by Commissioner Castle and unanimously passed that the Department's recommendation be approved.

Agenda Item J: Modifications to Construction Grant Rules to Implement Transition to the Revolving Loan Fund.

The purpose of this agenda item was to request authorization to hold a public hearing on rule modifications for the construction grants program (OAR 340-53). This item is a continuation of the January 19, 1989, work session item on the transition from a grant to loan program for funding of sewerage facilities and proposes amendments to the Construction grant regulations to implement the transition.

Recommendation: The Department recommended the Commission authorize the Department to hold a public hearing on the proposed rule modifications for the construction grants program contained in Attachment A of the staff report.

Action: It was **MOVED** by Commissioner Wessinger, seconded by Commissioner Brill and unanimously passed that the Department's recommendation be approved.

Agenda Item K: Proposed New Rules Related to Approval of Increased Wastewater Discharges.

The purpose of this agenda item was to propose new rules related to approval of increased wastewater discharges. The Water Quality Management Plan contains policy statements for waste discharges which apply generally in most, but not all, situations. In those cases where implementation of the policies are technically or economically infeasible, dischargers may request the Commission to grant an exception to a general policy. Those policy statements which provide authorization to the Commission for granting exceptions and approvals lack explicit criteria upon which the Department and Commission can apply to make an equitable evaluation of proposals for new or increased loadings.

Recommendation: The Department recommended the Commission adopt Alternative 2 which includes amendments to two policy statements as set forth in Attachments A and B and allows public hearings to proceed. This action will allow the Department to provide public review and receive testimony on the proposed rule amendments.

Action: It was **MOVED** by Commissioner Castle, seconded by Commissioner Brill and unanimously passed that the Department's recommendation be approved.

Agenda Item L: Proposed Total Maximum Daily Loads (TMDLs) for the Yamhill River.

The purpose of this agenda item was to provide the basis for establishing the total maximum daily load (TMDL), waste load allocations (WLA) and load allocations (LA) for phosphorus in the Yamhill Basin by defining the assimilative capacity of the Yamhill River for nutrient loads.

Recommendation: The Department recommended the Commission select Alternative 4 as set forth in Attachment A (which includes a total phosphorous criteria of 70 ug/l (micrograms per liter)) and allows public hearings to take place. The Department also recommended that the wording of Attachment A be changed to reflect a compliance date of June 30, 1994, and that other wording changes be made accordingly.

Action: It was **MOVED** by Commissioner Wessinger, seconded by Commissioner Sage and unanimously passed that the Department's recommendation including the amendments be approved.

Commissioner Wessinger asked the Department to develop a method to inform the Commissioners about the status of the TMDL projects.

Agenda Item M: Proposed Interim Storm Water Control Rules for the Tualatin River.

The purpose of this agenda item was to propose rules which ensure that new development in the Tualatin River Subbasin is provided with facilities to control and reduce the pollutants discharged until local jurisdictions develop and implement their own program plans for controlling pollutants in urban runoff.

The Department requested hearing authorization for draft rules for controlling storm water contaminants from new development in the Tualatin River and Oswego Lake subbasins. The Commission had before it the rules drafted by the staff and an alternate set of rules prepared by the municipal jurisdictions to be regulated in the subbasin.

Recommendation: The Department recommended the Commission authorize the Department to proceed with a hearing on the rules as proposed in Attachment A, based upon the following:

1. The proposed rules meet the requirements specified in the Tualatin TMDL rule (OAR 340-41-470(3)); and
2. The proposed rules will prove a practicable and effective approach to controlling storm water quality on new development in the Tualatin subbasin until the program plans are developed and implemented.

Action: It was **MOVED** by Commissioner Wessinger, seconded by Commissioner Castle and unanimously passed that the Department proceed to hearing on both sets of rules (those recommended by the Department in Attachment A and those presented by the municipal jurisdictions to be regulated in the basin) with the understanding that the final recommendation could be a combination of the two drafts.

RULE ADOPTIONS:

Request for adoption of:

Agenda Item N: Underground Storage Tanks (UST) Installer, Decommissioner, Tester and Inspector Certification Rules.

The purpose of this agenda item was to improve the quality of work on UST installations and thereby reduce releases and to prohibit placement of regulated substances into an unpermitted UST.

Recommendation: The Department recommended the Commission adopt Alternative 1: Adopt both rules as proposed in Attachments A and B. This alternative adopts a licensing program as intended by the legislature and improves the existing rules regulating the conditions under which regulated substances may be placed into underground storage tanks.

Action: It was **MOVED** by Commissioner Castle, seconded by Commissioner Sage and unanimously passed that the Department's recommendation be approved.

Agenda Item P: State Revolving Loan Fund Rules.

The purpose of this agenda item was to adopt proposed rules to provide loans for construction of water pollution control facilities. The proposed loan program is an alternative to the historic federal sewerage works construction grants program which is being phased out by Congress. A task force assisted the Department in drafting the proposed rules which have been considered at public hearings.

Commissioner Castle asked about the effect of 0 and 3 percent interest loans on the long term value of the state revolving loan fund. Maggie Conley, Water Quality Division, and Director Hansen explained that by rule, the EQC must reconsider the interest rates in two (2) years. At that time, other options will be considered such as basing loan interest rates on affordability to the local community or tying the interest rates to the rate of inflation.

Recommendation: The Department recommended the Commission adopt Alternative 1 (the rules as proposed in Attachment A) and the findings of Attachment N. The proposed rules in this alternative require a dedicated source of revenue for loan repayment including either general obligation bonds, revenue bonds or user fees. It also establishes interest rates at 0 percent for loans of five (5) years or less and 3 percent for loans of 5 to 20 years. Under these proposed rules, the Commission would review the interest rates in two (2) years and adjust the rates if necessary. This alternative was supported by the Task Force.

Action: It was **MOVED** by Commissioner Castle, seconded by Commissioner Wessinger and unanimously passed that the Department's recommendation be approved.

OTHER ITEMS:

Agenda Item R: Informational Report, Update of Definition of Recyclable Materials and Principal Recyclable Materials.

The purpose of this agenda item was to review the lists of materials which could be considered recyclable at each wasteshed and to determine if the lists should be modified. The lists are the basis for determining what is to be recycled at each city and disposal site in the wasteshed where the opportunity given to recycle is required.

The Department report recommended the Commission make no changes at this time.

The EQC discussed the issue and expressed the following concerns/questions:

1. Should the Department consider adding building materials to the list of principle recyclable materials in the METRO area and Lane wastesheds?

Staff response: No, SB 405 is intended to deal with

residential waste, not waste which would be primarily generated by commercial sources.

2. Should the Department be leading the way in adding plastics to the list of Principal Recyclable Material (PRM)? Are plastics not being recycled because they are not on the list?

Staff response: Plastics could be placed on the list of PRM but that would not guarantee that they would be recycled. Currently plastics do not meet the economic test which would make them recyclable materials.

3. Why isn't scrap paper on the list of PRM?

Staff response: The market for scrap paper is highly volatile. Unless a new domestic market is found that could stabilize price for the material, scrap paper will not be added.

The Commission asked the staff to continue examining the list of principle recyclable materials, to include additional materials whenever it is considered appropriate and continue to look at plastics on an ongoing basis.

The Commission accepted the report.

There was no Agenda Item S.

Agenda Item O: (Continued) Enforcement Policy and Penalty Matrix Rules.

Director Hansen presented to the Commission the specific language of proposed amendments to the wording of the proposed rules in Attachment A.

- Page A-15; -- near the top; (C)(i); add 0 to -4
-- at the end of the sentence; add subject to subsection (4) of this section;
- Page A-17; -- add a new subsection 3; add a new section on economic gain due to non-compliance.
-- add a new subsection 4; add a new section on economic hardship.

Action: It was **MOVED** by Commissioner Wessinger, seconded by Commissioner Brill and passed unanimously that the rules in Attachment A and as amended be adopted.

EQC Minutes
Page 19
January 19 and 20, 1989

Chairman Hutchison thanked the Oregon Environmental Council for their critique and participation. He viewed the enforcement program as a dynamic program; practice may dictate that these rules be amended in the future.

There was no further business and the meeting was adjourned.

The next Commission meeting will be Friday, April 14, 1989, in Portland, Oregon. On Thursday, April 13, the Commission will tour the Oregon Waste System's Regional Landfill and the Chem-Security Systems, Inc. hazardous waste facility in Arlington, Oregon.

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: B
Division: Management Services
Section: Administration

SUBJECT:

January and February 1989 Activity Reports

PURPOSE:

1. Obtain Commission approval of plans and specifications for construction for air contaminant sources.
2. Provide general information to the Commission on the activities of the Department.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment ___
 - Rulemaking Statements Attachment ___
 - Fiscal and Economic Impact Statement Attachment ___
 - Public Notice Attachment ___

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment ___

Meeting Date:
Agenda Item:
Page 2

Approve Department Recommendation
 Variance Request Attachment
 Exception to Rule Attachment
 Informational Report Attachment
 Other: (specify) Attachment A
 Accept Activity Report and approve air contaminant
 source plans and specifications.

DESCRIPTION OF REQUESTED ACTION:

(See Purpose Statement above)

AUTHORITY/NEED FOR ACTION:

Required by Statute: _____ Attachment
 Enactment Date: _____
 Statutory Authority: ORS 468.325 Attachment
 (Air Quality Plan Approval)
 Pursuant to Rule: _____ Attachment
 Pursuant to Federal Law/Rule: _____ Attachment
 Other: Attachment
 Time Constraints: (explain)

DEVELOPMENTAL BACKGROUND:

Advisory Committee Report/Recommendation Attachment
 Hearing Officer's Report/Recommendations Attachment
 Response to Testimony/Comments Attachment
 Prior EQC Agenda Items: (list) Attachment
 Other Related Reports/Rules/Statutes: Attachment
 Supplemental Background Information Attachment

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

None

Meeting Date:
Agenda Item:
Page 3

PROGRAM CONSIDERATIONS:

None

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

None

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the attached information report be accepted and that plan and specifications for construction of air containment sources be approved.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Presentation of the activity report to the Commission is not required, but is consistent with the Department's understanding of past Commission policy direction.

ISSUES FOR COMMISSION TO RESOLVE:

None

INTENDED FOLLOWUP ACTIONS:

None

Meeting Date:
Agenda Item:
Page 4

Approved:

Section:

Roberta Young

Division:

Physica Taylor

Director:

Physica Taylor
for Fred Hansen

Report Prepared By: Roberta Young

Phone: 229-6408

Date Prepared: March 16, 1989

RY:y
ap14act
3/16/89

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

January & February 1989

Table of Contents

	<u>Jan</u> <u>Page</u>	<u>Feb</u> <u>Page</u>
<u>Air Quality Division</u>		
Summary of Plan Actions	1 . . .	32
List of Plan Actions Completed	2 . . .	33
Summary of Permit Actions	3 . . .	34
List of Permit Actions Completed	4 . . .	35
Permit Transfers and Name Changes	6 . . .	37
<u>Water Quality Division</u>		
Summary of Plan Actions	1 . . .	32
List of Plan Actions Completed	7 . . .	38
List of Plan Actions Pending	8 . . .	40
Summary of Permit Actions	13 . . .	43
List of Permit Actions Completed	14 . . .	44
Permit Transfers & Name Changes	16 . . .	46
<u>Hazardous and Solid Waste Management Division</u>		
Summary of Plan Actions	1 . . .	32
List of Plan Actions Completed	17 . . .	47
List of Plan Actions Pending	18 . . .	48
Summary of Solid Waste Permit Actions	21 . . .	51
List of Solid Waste Permit Actions Completed	22 . . .	52
Permit Actions Pending	23 . . .	53
Summary of Hazardous Waste Program Activities	26 . . .	56
Disposal Volume Data/Chem. Securities Systems Inc.	27 . . .	57
<u>Noise Control Section</u>		
Summary of Noise Control Actions	29 . . .	59
List of Noise Control Actions Completed	30 . . .	60
<u>Enforcement Section</u>		
Civil Penalties Assessed	31 . . .	61
<u>Hearings Section</u>		
Contested Case Log		62

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
 Water Quality Division and
Hazardous and Solid Waste Division
 (Reporting Unit)

January 1989
 (Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>	
<u>Air</u>							
Direct Sources	3	40	4	53	0	0	11
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	3	40	4	53	0	0	11
<u>Water</u>							
Municipal	6	73	7	88	2	3	23
Industrial	1	48	3	48	0	0	4
Total	7	121	10	136	2	3	27
<u>Solid Waste</u>							
Gen. Refuse	2	19	3	18	1	5	26
Demolition	-	1	0	1	-	-	1
Industrial Sludge	1	6	0	5	1	3	11
Total	3	26	3	24	2	8	40
<hr/>							
<u>GRAND TOTAL</u>	13	187	17	213	4	11	78

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PLAN ACTIONS COMPLETED

Permit Number	Source Name	County	Date Scheduled	Action Description	Date Achieved
06	0010 ROSEBURG FOREST PRODUCTS	COOS	09/29/88	COMPLETED-APRVD	01/12/89
10	0122 ROSEBURG PAVING CO	DOUGLAS	01/05/89	COMPLETED-APRVD	01/25/89
15	0020 BOISE CASCADE CORP	JACKSON	10/13/88	COMPLETED-APRVD	01/12/89
22	0328 OREGON METALLURGICAL CORP	LINN	10/26/88	COMPLETED-APRVD	01/04/89

TOTAL NUMBER QUICK LOOK REPORT LINES 4

00A-2

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

January 1989
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>			
<u>Direct Sources</u>							
New	3	16	3	18	9		
Existing	1	6	3	5	7		
Renewals	15	83	25	65	76		
Modifications	3	23	3	15	17		
Trfs./Name Chng.	<u>1</u>	<u>18</u>	<u>2</u>	<u>18</u>	<u>1</u>		
Total	23	146	36	121	110	1398	1422
<u>Indirect Sources</u>							
New	3	10	0	6	6		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	<u>3</u>	<u>10</u>	<u>0</u>	<u>6</u>	<u>6</u>	<u>292</u>	<u>298</u>
<u>GRAND TOTALS</u>	26	156	36	127	116	1690	1720

Number of
Pending Permits

Comments

11	To be reviewed by Northwest Region
9	To be reviewed by Willamette Valley Region
12	To be reviewed by Southwest Region
5	To be reviewed by Central Region
17	To be reviewed by Eastern Region
19	To be reviewed by Program Operations Section
24	Awaiting Public Notice
<u>13</u>	Awaiting end of 30-day Public Notice Period
110	

MAR. 5
AA5323 (2/89)

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PERMITS ISSUED

Permit Number	Source Name	County Name	Appl. Rcvd.	Status	Date Achvd.	Type Appl.	
03	0173	NORTHWEST SAND & GRAVEL	CLACKAMAS	11/14/88	PERMIT ISSUED	01/25/89	RNW
03	1768	PORTLAND ROAD & DRIVEWAY	CLACKAMAS	10/17/88	PERMIT ISSUED	01/25/89	RNW
03	2469	LONE STAR NORTHWEST	CLACKAMAS	10/21/88	PERMIT ISSUED	01/25/89	RNW
03	2632	STANLEY-PROTO INDUSTRIAL	CLACKAMAS	10/05/88	PERMIT ISSUED	01/30/89	NCH
03	2673	SANDY READY MIX	CLACKAMAS	11/30/88	PERMIT ISSUED	01/25/89	RNW
05	1954	SCAPPOOSE SAND AND GRAVEL	COLUMBIA	12/28/88	PERMIT ISSUED	01/25/89	RNW
06	0102	OCEAN PROTEINS INC.	COOS	12/01/88	PERMIT ISSUED	01/30/89	MOD
14	0028	HOOD RIVER VETERINARY SVC	HOOD RIVER	09/19/88	PERMIT ISSUED	01/30/89	NEW
15	0002	LININGER TRU-MIX	JACKSON	12/05/88	PERMIT ISSUED	01/11/89	RNW
15	0003	LININGER TRU-MIX	JACKSON	12/05/88	PERMIT ISSUED	01/25/89	RNW
22	6030	WESTERN RECOVERY SYSTEMS	LINN	08/02/88	PERMIT ISSUED	01/24/89	NEW
25	0016	PORTLAND GENERAL ELECTRIC	MORROW	12/16/88	PERMIT ISSUED	01/17/89	MOD
26	1765	LONE STAR NORTHWEST	MULTNOMAH	10/21/88	PERMIT ISSUED	01/25/89	RNW
26	1766	OREGON ASPHALTIC PAVING	MULTNOMAH	11/03/88	PERMIT ISSUED	01/25/89	RNW
26	1767	PORTER W YETT CO	MULTNOMAH	09/29/88	PERMIT ISSUED	01/11/89	RNW
26	1891	ASH GROVE CEMENT WEST INC	MULTNOMAH	04/21/88	PERMIT ISSUED	01/25/89	RNW
26	1942	ROSS ISLAND S&G-TAIT DIV	MULTNOMAH	10/04/88	PERMIT ISSUED	01/25/89	RNW
26	2204	BOEING COMPANY	MULTNOMAH	09/19/88	PERMIT ISSUED	01/25/89	MOD
26	2807	COLUMBIA GRAIN, INC.	MULTNOMAH	08/11/88	PERMIT ISSUED	01/24/89	RNW
26	3240	FUJITSU MICROELECTRONICS	MULTNOMAH	08/30/88	PERMIT ISSUED	01/11/89	NEW
26	3245	CALDWELL'S COLONIAL MORT.	MULTNOMAH	11/08/88	PERMIT ISSUED	01/30/89	EXT
33	0018	MID COLUMBIA PRODUGERS	WASCO	12/12/88	PERMIT ISSUED	01/30/89	NCH
34	2021	BAKER ROCK CRUSHING CO	WASHINGTON	11/14/88	PERMIT ISSUED	01/25/89	RNW
34	2565	BANKS LUMBER CO	WASHINGTON	10/17/88	PERMIT ISSUED	01/31/89	RNW
34	2748	FAITHFUL FRIEND/PET CREM	WASHINGTON	04/20/88	PERMIT ISSUED	01/30/89	EXT
37	0022	ROY L HOUCK CONSTR CO	PORT.SOURCE	12/02/88	PERMIT ISSUED	01/18/89	RNW
37	0026	DESCHUTES READY MIX S & G	PORT.SOURCE	12/16/88	PERMIT ISSUED	01/26/89	RNW
37	0034	TILLAMOOK CNTY RD DEPT	PORT.SOURCE	12/15/88	PERMIT ISSUED	01/12/89	RNW
37	0091	ANGELL ASPHALT&AGGREGATE	PORT.SOURCE	12/15/88	PERMIT ISSUED	01/11/89	RNW
37	0192	TRANSTATE ASPHALT CO	PORT.SOURCE	12/15/88	PERMIT ISSUED	01/11/89	RNW
37	0207	DESCHUTES READY MIX S&G	PORT.SOURCE	12/16/88	PERMIT ISSUED	01/26/89	RNW
37	0220	DESCHUTES READY MIX S & G	PORT.SOURCE	12/16/88	PERMIT ISSUED	01/10/89	RNW
37	0240	POE ASPHALT PAVING INC.	PORT.SOURCE	12/02/88	PERMIT ISSUED	01/11/89	RNW
37	0289	BRACELIN-YEAGER EXCAVATING	PORT.SOURCE	11/21/88	PERMIT ISSUED	01/11/89	RNW
37	0293	MORSE BROS., INC.	PORT.SOURCE	12/02/88	PERMIT ISSUED	01/12/89	RNW
37	0397	OREGON ASPHALTIC PAVING	PORT.SOURCE	11/07/88	PERMIT ISSUED	01/25/89	EXT

TOTAL NUMBER QUICK LOOK REPORT LINES

C-A-4

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

Indirect Sources

No final permits in January 1989

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PERMIT TRANSFERS & NAME CHANGES

<u>Permit Number</u>	<u>Company Name</u>	<u>Type of Change</u>	<u>Status of Permit</u>
15-0002	LTM, Incorporated dba Lininger Tru-Mix	Name Change ¹	Issued
15-0003	LTM, Incorporated dba Lininger Tru-Mix	Name Change ¹	Issued
03-2632	Mechanics Tools, Inc. dba Stanley-Proto Industrial Tools	Name Change	Issued
33-0018	Mid-Columbia Producers, Inc.	Name Change	Issued
37-0076	Eucon Corporation	Name Change	Ready to be Issued

¹In conjunction with permit renewal.

²In conjunction with permit modification.

MAR.5TC
AD3481 (2/89)

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action
*	* /Site and Type of Same	* Action	*
*	*	*	*

INDUSTRIAL WASTE SOURCES - 3

Lincoln	Georgia-Pacific 6 FRAMCO Submersible Aerators and Nutrient Adding Equipment	1-10-89	Approved
Clatsop	James River II, Inc. Polymer Flocculators Rotary Screen Prethickeners, and 30 T/D Screw Presses	1-12-89	Approved
Washington	Willamette Industries, Inc. Packaged Wastewater Pretreatment System	1-31-89	Approved

WC4516

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 7

Page 1 of 1

Curry	Brookings Contract No. 1 (outfall)	12-5-88	Comments to Engineer	KMV
Washington	Durham AWWTP (USA) Phase I Expansion (70%)	1-26-88	Verbal Comments to Engineer	DSM
Jackson	David & Nancy Bashore Lagoon	1-9-89	Provisional Approval	
Lane	Westfir System Improvements, Preliminary Plan	2-3-89	Accepted With Comments	
Lincoln	Camp Angell, U.S.F.S. Irrigation Plans	2-16-89	Rejected	
Douglas	Elkton Preliminary Drainfield Layout	2-3-89	Comments to Engineer	
Deschutes	Bend Bend Millwork Pump Station	2-2-89	Design Rejected Holding For Further Revisions	

WC4516

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status
*	* /Site and Type of Same	* Received	*
*	*	*	*

INDUSTRIAL WASTE SOURCES - 4

Clackamas	Hanna Car Wash Systems Closed Loop Acid Recovery System	10-28-88	Review Completion Projected 2-28-89
Tillamook	Tillamook County Creamery Association Wastewater Treatment Facility Modification	11-17-88	Review Completion Projected 2-28-89
Marion	Siltec Corporation Initial Liquid Effluent Treatment Facility	11-22-88	Review Completion Projected 2-28-89
Coos	Weyerhaeuser Paper Co. Aerators, Earthen Dikes and Floating Dikes	12-23-88	Review Completion Project 2-28-89

WC4516

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer *
*	* /Site and Type of Same	* Received *	*	* *
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 23

Page 1 of 3

Umatilla	Larry Greenwalt Shady Rest Mobile Home Court Bottomless Sand Filter	4-21-88	Review Completion Projected 2-28-89	JLV
Lincoln	Coyote Rock RV Park Site Sewers, New Drainfield	8-30-88	Review Completion Projected 2-28-89	JLV
Curry	Brookings Contract No. 1 (outfall)	11-13-89	Review Completion Projected 2-28-89	KMV
Clatsop	Glenwood Mobile Park Modification to dual media filter from anoxic tower	10-4-88	Review Completion Projected 2-28-89	JLV
Clackamas	Government Camp Mt. Hood Motel	11-21-88	Review Completion Projected 2-28-89	JLV
Lane	Veneta Jean's Road Improvements	12-22-88	Review Completion Projected 2-28-89	JLV
Clackamas	West Linn West Linn Library Project	12-27-88	Review Completion Projected 2-28-89	JLV
Curry	Brookings Contract #2 (70%)	12-29-88	Review Completion Projected 3-31-89	KMV
Multnomah	Gresham Belt Filter Press Equipment	1-3-89	Review Completion Projected 3-31-89	DSM
Baker	Baker Ninth Street & Foothill Dr.	1-5-89	Review Completion Projected 3-31-89	JLV
Deschutes	Starwood Service Dist. Block G	1-10-89	Review Completion Projected 3-31-89	JLV

WC4516

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES

Page 2 of 3

Clatsop	Warrenton Seventh & Fourth Streets	1-18-89	Review Completion Projected 3-31-89	JLV
Deschutes	Bend Briggs Road Pressure Sewer	1-30-89	Review Completion Projected 3-31-89	DSM
- - - - - PROJECTS BELOW ARE "ON-HOLD" - - - - -				
Baker	Idaho Power Company Copperfield Campground Reconstruction of On-Site System	8-25-88	Awaiting Resubmittal	JLV
Columbia	Scappoose Sewage Treatment Plant Expansion	3-11-87	On Hold, Financing Incomplete	DSM
Deschutes	Romaine Village Recirculating Gravel Filter (Revised)	4-27-87	On Hold For Surety Bond	Not Assigned
Marion	Breitenbush Hot Springs On-Site System	5-27-86	On Hold, Uncertain Financing	JLV
Benton	North Albany County Service District Spring Hill-Crocker Creek Int.	1-21-87	On Hold, Project Inactive	Not Assigned
Curry	Whaleshead Beach Campground Gravel Recirculation Filter (Revised)	5-20-87	Holding for Field Inspection	JLV
Multnomah	Troutdale Frontage Road Sewage Pump Station Replacement	4-25-88	Bids Rejected, Being Redesigned	DSM

WC4516

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES

Page 3 of 3

Wallowa	Wallowa Lake Co. Service District STEP System Equipment/Materials	6-6-88	Holding for Equipment Submittals	DSM
Deschutes	Bend Bend Millwork Sewer and Pump Station	1-30-89	Plan Rejected Awaiting Design Revisions	DSM
Washington	USA/Durham AWWTP Phase I Exp.	12-27-88	Holding For Substantiation From USA of Basis For Design	DSM

WC4516

Summary of Actions Taken
On Water Permit Applications in JAN 89

8 FEB 89

Source Category & Permit Subtype	Number of Applications Filed						Number of Permits Issued						Applications Pending Permits Issuance (1)			Current Number of Active Permits		
	Month			Fiscal Year			Month			Fiscal Year			NPDES	WPCF	Gen	NPDES	WPCF	Gen
	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen						
Domestic																		
NEW	1	1		1	12	2		1		2	10		4	16	2			
RW				2	1					2	1		3	1				
RWO	6	2		33	12		2	1		10	9		85	37				
MW				3									4					
MWO	1	1		3	7			1		3	5		2	4				
Total	8	4		42	32	2	2	3		17	25		98	58	2	225	203	29
Industrial																		
NEW		2	2	5	7	25			9	1	9	32	6	13	11			
RW				2						2			2					
RWO	6	1		15	13					10	9		26	22				
MW										1			3					
MWO	1		1	6	6	4	1	1		5	7		1	1				
Total	7	3	3	28	26	29	1	1	9	19	25	32	38	36	11	157	134	440
Agricultural																		
NEW		1			3							42		2				
RW																		
RWO					3								1	4				
MW																		
MWO					1						2							
Total		1			7						2	42	1	6		2	8	644
Grand Total	15	8	3	70	65	31	3	4	9	36	52	74	137	100	13	384	345	1113

1) Does not include applications withdrawn by the applicant, applications where it was determined a permit was not needed, and applications where the permit was denied by DEQ.

It does include applications pending from previous months and those filed after 31-JAN-89.

NEW - New application
 RW - Renewal with effluent limit changes
 RWO - Renewal without effluent limit changes
 MW - Modification with increase in effluent limits
 MWO - Modification without increase in effluent limits

PERMIT CAT NUMBER	TYPE	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Cooling Water</u>								
IND	100	GEN01 NEW	OR003268-9	104350/A POINTER, GLENN A.	OREGON CITY	CLACKAMAS/NWR	03-JAN-89	31-DEC-90
IND	100	GEN01 NEW	OR002300-1	94350/B RAMUDA INC.	PORTLAND	MULTNOMAH/NWR	09-JAN-89	31-DEC-90
<u>General: Filter Backwash</u>								
IND	200	GEN02 NEW	OR002867-3	76772/B OAKLAND, CITY OF	OAKLAND	DOUGLAS/SWR	04-JAN-89	31-DEC-90
<u>General: Placer Mining</u>								
IND	600	GEN06 NEW		104347/A BURLEW, JOHN N.		BAKER/ER	17-JAN-89	31-JUL-91
IND	600	GEN06 NEW		102793/A ALLEN, PERRY D.		JACKSON/SWR	25-JAN-89	31-JUL-91
<u>General: Suction Dredges</u>								
IND	700	GEN07 NEW		104331/A FIERKE, BRUCE		MOBILE SRC/ALL	25-JAN-89	31-JUL-91
<u>General: Gravel Mining</u>								
IND	1000	GEN10 NEW	OR003061-9	25192/A DOW CORNING CORPORATION	SPRINGFIELD	LANE/WVR	03-JAN-89	31-DEC-91
IND	1000	GEN10 NEW		28310/A EUGENE SAND & GRAVEL, INC.	EUGENE	LANE/WVR	11-JAN-89	31-DEC-91

A-14

PERMIT CAT NUMBER	TYPE	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
IND 1000	GEN10	NEW		57672/A	MOLALLA SAND & GRAVEL CO.	LIBERAL	CLACKAMAS/NWR	11-JAN-89	31-DEC-91

NPDES

DOM 100554	NPDES	RWO	OR003039-2	98400/A	DOUGLAS COUNTY ENGINEERING DEPARTMENT	ROSEBURG	DOUGLAS/SWR	09-JAN-89	31-DEC-93
IND 3773	NPDES	MWO	OR003098-8	11355/B	BOURNE MINING CORPORATION		BAKER/ER	13-JAN-89	31-DEC-88
DOM 100555	NPDES	RWO	OR003118-6	85860/A	SUNNY SERVICE STATIONS, INC.	HALSEY	LINN/WVR	20-JAN-89	30-NOV-93

WPCF

DOM 100402	WPCF	MWO		67145/A	ADVANCE RESORTS OF AMERICA, INC.	WHEELER	TILLAMOOK/NWR	03-JAN-89	30-JUN-89
DOM 100553	WPCF	RWO		24260/A	LANE COUNTY	DEXTER	LANE/WVR	03-JAN-89	31-DEC-93
IND 3812	WPCF	MWO	OR003271-9	20115/B	HIGHLANDS MINERALS CORPORATION	HALFWAY	BAKER/ER	23-JAN-89	28-FEB-89
DOM 100556	WPCF	NEW		104032/A	BASHORE, DAVID	EAGLE POINT	JACKSON/SWR	25-JAN-89	31-DEC-93

C.A-15

PERMIT TRANSFERS

Part of
Water Quality Division Monthly Activity Report
(Period January 1, 1989 through January 31, 1989)

<u>Permit No.</u>	<u>Previous Facility Name</u>	<u>Facility</u>	<u>New Facility Name</u>	<u>City</u>	<u>County</u>	<u>Date Transferred</u>
0200-J	City of Roseburg	76772	City of Oakland	Oakland	Douglas/ SWR	1/4/89 (Ownership)
0100-J	Ollie Welch Meat Company, Inc.	94350	Ramuda Inc.	Portland	Mult/NWR	1/9/89 (Ownership)
3773-J	Brooks Minerals Incorporated	11355	Bourne Mining Corporation	Bourne	Baker/ER	1/13/89 (Ownership)
3812	Cornucopia Placers, Inc.	20115	Highlands Minerals Corporation	Halfway	Baker/ER	1/23/89 (Ownership)

CA-16

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*
Malheur	Brogan Jameson Landfill	1/4/89	Closure plan approved	
Linn	James River-Lebanon	1/6/89	Plans disapproved	
Yamhill	River Bend Landfill	1/13/89	Plans approved	
Jackson	Dry Creek Landfill	1/24/89	Plans disapproved	
Washington	Hillsboro TS	1/30/89	Plans approved	

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

January 1989
(Month and Year)

PLAN ACTIONS PENDING - 40

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Municipal Waste Sources - 26

Baker	Haines	12/13/85	12/13/85	(R) Plan received	HQ
Deschutes	Knott Pit Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Fryrear Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Negus Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Marion	Ogden Martin Brooks ERF	3/24/87	3/24/87	(N) As-built plans rec'd.	HQ
Douglas	Reedsport Lndfl.	5/7/87	5/7/87	(R) Plan received	HQ
Benton	Coffin Butte	6/1/87	6/1/87	(R) Plan received	HQ
Umatilla	City of Milton-Freewater	11/19/87	11/19/87	(N) Plan received (groundwater study)	HQ
Marion	Ogden-Martin (metal rec.)	11/20/87	11/20/87	(N) Plan received	HQ
Marion	Browns Island Landfill	11/20/87	11/20/87	(C) Plan received (groundwater study)	HQ
Harney	Burns-Hines	12/16/87	12/16/87	(R) Plan received	HQ
Marion	Woodburn TS	1/5/88	1/5/88	(N) Revised plan rec'd.	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Plans received	HQ
Umatilla	Pendleton Landfill	6/6/88	6/6/88	(R) Plans received	HQ
Coos	Les' Sanitary Service TS	6/30/88	6/30/88	(N) Plans received.	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Malheur	Brogan TS	7/1/88	7/1/88	(N) Plans received.	HQ
Marion	Marion Recycling Center, Inc.	7/20/88	7/20/88	(N) Plans received	HQ
Douglas	Lemolo Transfer	9/1/88	9/1/88	(M) Plans received	HQ
Lane	Franklin Landfill	9/29/88	9/29/88	(R) Groundwater report received	HQ
Umatilla	Athena Landfill	11/15/88	11/15/88	(M) Plans received	
Jackson	Ashland Landfill	12/1/88	12/1/88	(N) Plans received	HQ
Lake	Lake County Lndfl.	12/5/88	12/5/88	(C) Plans received	HQ
Deschutes	Alfalfa Landfill	12/19/88	12/19/88	(C) Plans received	HQ
Morrow	Heppner Landfill	12/20/88	12/20/88	(N) Plans received	HQ
Mutlnomah	St. Johns Landfill Groundwater study	12/22/88	12/22/88	(C) GW study received	HQ
Marion	Woodburn Ashfill	1/3/89	1/3/89	() As-built plans rec'd.	HQ
<u>Demolition Waste Sources - 1</u>					
Washington	Hillsboro Landfill	1/29/88	1/29/88	(N) Expansion plans received	
<u>Industrial Waste Sources - 11</u>					
Coos	Rogge Lumber	7/28/86	6/18/87	(C) Additional info. submitted to revise previous application	HQ
Douglas	Louisiana-Pacific Round Prarie	9/30/87	9/30/87	(R) Operational plan	HQ
Clatsop	Nygard Logging	11/17/87	11/17/87	(N) Plan received	HQ
Columbia	Boise Cascade St. Helens	4/6/88	4/6/88	(N) As built plans received.	HQ
Douglas	Sun Studs	6/20/88	6/20/88	(R) Plans received	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Douglas	Sun Studs	7/1/88	7/1/88	(R) Operational/groundwater plans received	HQ
Douglas	IP, Gardiner	8/16/88	8/16/88	(N) Plans received	HQ
Yamhill	Boise Cascade (Willamina)	9/1/88	9/1/88	(N) Plans received	
Grant	Blue Mountain Forest Products	9/7/88	9/7/88	(N) Plans received	HQ
Marion	OWTD - Silverton Forest Products	12/19/88	12/19/88	(C) GW study received	HQ
Yamhill	Boise Cascade-Willamina	1/9/89	1/9/89	() Plans received	HQ

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	11/21/86	12/26/86	(N) Add'l. info. rec'd.	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Plan received	HQ

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

January 1989
(Month and Year)

SUMMARY OF SOLID WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
<u>General Refuse</u>							
New	-	3	1	2	7		
Closures	-	3	-	4	4		
Renewals	-	2	-	3	11		
Modifications	-	16	0	17	0		
Total	0	24	1	26	22	180	180
<u>Demolition</u>							
New	-	1	0	1	0		
Closures	-	-	-	-	-		
Renewals	-	-	-	-	1		
Modifications	-	2	-	2	1		
Total	0	3	0	3	2	11	11
<u>Industrial</u>							
New	1	1	1	2	4		
Closures	-	-	-	-	1		
Renewals	-	1	1	7	5		
Modifications	-	8	-	8	-		
Total	1	10	2	17	10	107	107
<u>Sludge Disposal</u>							
New	-	1	-	1	1		
Closures	-	-	-	-	1		
Renewals	-	-	-	-	-		
Modifications	-	1	-	-	-		
Total	0	2	0	1	2	18	18
Total Solid Waste	1	39	3	47	36	315	315

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

January 1989
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*
Marion	Silverton Forest Products	1/3/89	Permit issued.	
Lane	Bohemia, Dorena Landfill	1/4/89	Permit issued.	
Marion	Marion Recycling Center	1/18/89	Permit issued.	

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

January 1989
(Month and Year)

PERMIT ACTIONS PENDING - 36

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Municipal Waste Sources - 22

Clackamas	Rossmans	3/14/84	2/11/87	(C) Applicant review (second draft)	HQ/RO
Baker	Haines	1/30/85	6/20/85	(R) Applicant review	HQ
Curry	Wridge Creek	2/19/86	9/2/86	(R) Draft received	HQ
Umatilla	Rahn's (Athena)	5/16/86	5/16/86	(R) Application filed	RO
Marion	Woodburn Lndfl.	9/22/86	6/22/88	(R) Applicant review	HQ
Coos	Bandon Landfill	1/20/87	1/7/88	(R) Draft received	HQ
Deschutes	Negus Landfill	2/4/87	11/16/87	(R) Applicant review	HQ
Douglas	Reedsport Lndfl.	5/7/87	1/11/88	(R) Draft received	HQ
Lane	Florence Landfill	9/21/87	1/12/88	(R) Draft received	HQ
Morrow	Tidewater Barge Lines (Finley Butte Landfill)	10/15/87	10/15/87	(N) Application filed	HQ
Douglas	Roseburg Landfill	10/21/87	12/21/87	(R) Draft received	
Curry	Port Orford Lndfl.	12/14/87	8/18/88	(R) Applicant review	HQ
Washington	Hillsboro TS	1/15/88	1/30/89	(N) Applicant review	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Application received	RO/HQ
Coos	Les' Sanitary Service TS	6/30/88	8/19/88	(N) Draft received	HQ
Malheur	Brogan-Jameson	7/1/88	7/1/88	(C) Application received	RO
Malheur	Brogan TS	7/1/88	1/23/89	(N) Draft received	HQ

SB4968 (A) = Amendment; (C) = Closure permit;
MAR.7S (5/79) (N) = New source; (R) = Renewal

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Tillamook	Tillamook Landfill	8/16/88	8/16/88	(N) Application received	RO
Marion	Ogden Martin	10/11/88	10/11/88	(R) Application received	HQ
Gilliam	Arlington Landfill Closure	11/14/88	11/14/88	(C) Closure application	HQ
Deschutes	Alfalfa Landfill Closure	12/19/88	12/19/88	(C) Application received	RO
Union	North Powder	12/20/88	12/20/88	(R) Application received	HQ

Demolition Waste Sources - 2

Coos	Bracelin/Yeager (Joe Ney)	3/28/86	8/11/88	(R) Public hearing held	HQ
Washington	Hillsboro Lndfl.	1/29/88	1/29/88	(A) Application received	HQ

Industrial Waste Sources - 10

Wallowa	Boise Cascade Joseph Mill	10/3/83	5/26/87	(R) Applicant comments received	HQ
Curry	South Coast Lbr.	7/18/86	7/18/86	(R) Application filed	RO
Baker	Ash Grove Cement West, Inc.	4/1/87	4/1/87	(N) Application received	RO
Klamath	Modoc Lumber Landfill	5/4/87	5/4/87	(R) Application filed	RO
Clatsop	Nygaard Logging	11/17/87	3/3/88	(N) Draft received	HQ
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO
Douglas	Glide Lumber Prod.	3/8/88	9/28/88	(R) Applicant comments received	HQ
Douglas	Hayward Disp. Site	6/7/88	8/18/88	(R) Applicant review	HQ
Yamhill	Boise-Cascade (Willamina)	9/1/88	9/1/88	(N) Application received	HQ
Klamath	Modoc Lumber Lndfl.	1/6/89	1/6/89	(N) Application received	HQ

SB4968
MAR.7S (5/79)

(A) = Amendment; (C) = Closure permit;
(N) = New source; (R) = Renewal

Page 2

* County *	Name of Facility	* Date * * Appl. * * Rec'd. *	* Date of * * Last * * Action *	Type of Action and Status	* Location *
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Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	5/30/86	3/10/87	(N) Add'l. info. received (addition of waste oil facility)	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Application received	HQ/RO

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

January 1989
(Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		PLANNED
	No. This Month	No. Fiscal Year to Date (FYTD)	No. in FY 89
Treatment	0	0	0
Storage	0	0	1
Disposal	0	0	0
Post-Closure	0	0	3

INSPECTIONS

	COMPLETED		PLANNED
	No. This Month	No. FYTD	No. in FY 89
Generator	2	26	14*
TSD	1	6	16*

CLOSURES

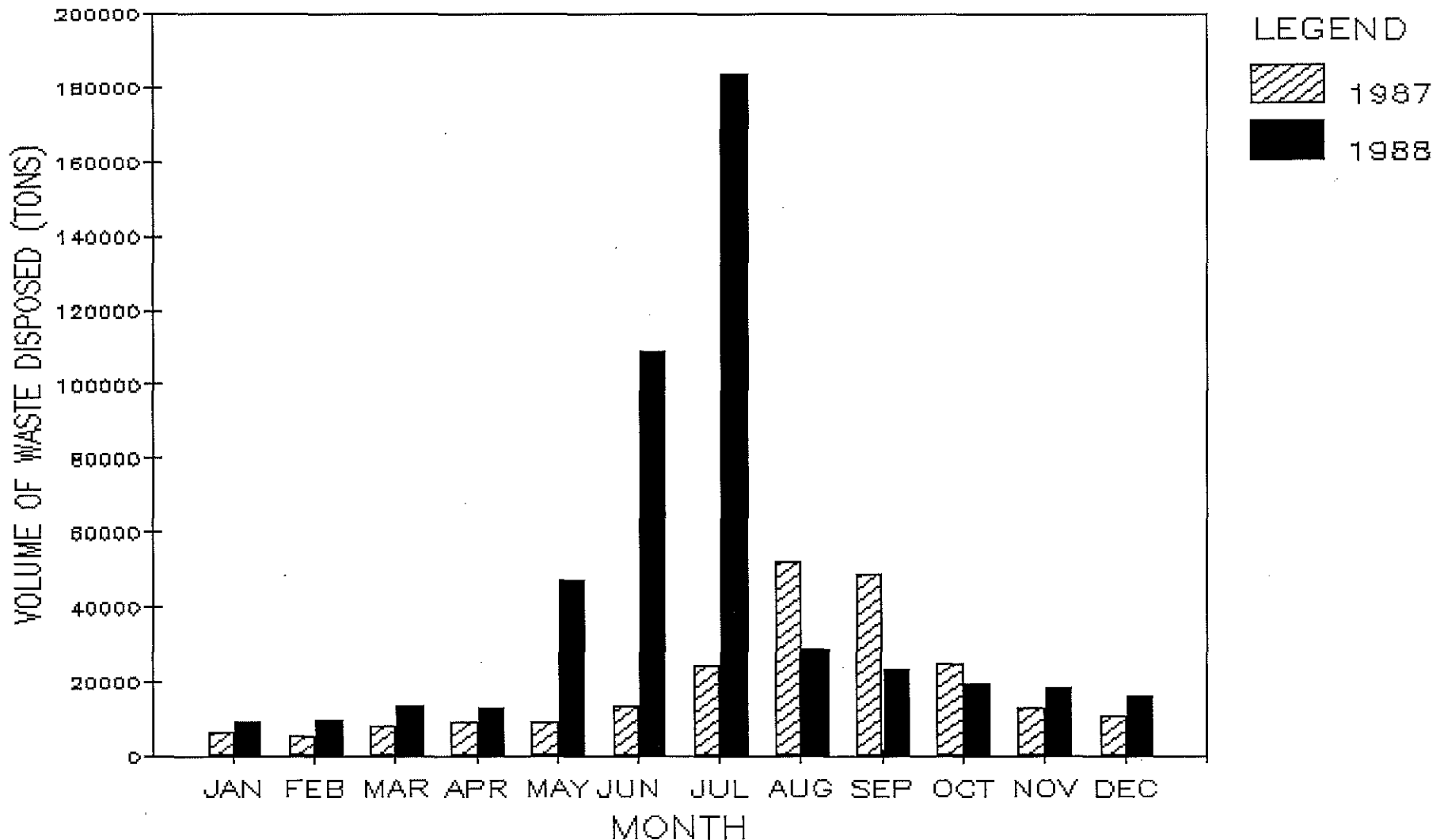
	PUBLIC NOTICES			CERTIFICATIONS		ACCEPTED
	No. This Month	FYTD No.	Planned in FY 89	No. This Month	No. FYTD	No. Planned in FY 89
Treatment	0	0	0	0	0	0
Storage	0	0	3	0	0	4
Disposal	0	0	0	1	1	1

* SEA commitment only.

HAZARDOUS WASTE DISPOSAL CHEM-SECURITY SYSTEMS, INC.

Arlington, Oregon

1987 - 1988 Waste Disposal Volume Comparison



CHEM-SECURITY SYSTEMS, INC.
Arlington, Oregon

1988

HAZARDOUS WASTE ORIGINATION SOURCES

MONTHLY QUANTITY OF WASTE DISPOSED (TONS)¹

<u>Waste Source</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>YTD</u>
Oregon	1,198	1,766	2,845	1,927	1,644	3,602	4,782	5,351	4,690	2,687	1,470	1,644	33,606
Washington	7,698	8,186	10,696	9,986	9,918	14,952	15,595	16,971	17,961	16,522	14,188	10,895	153,568
California	19	-	32	-	46	-	12	9	-	-	-	30	148
Alaska	-	-	-	267	9	-	-	922	540	249	1,725	3,774	7,486
Idaho	41	26	146	35	19	2	8	129	171	169	31	33	810
CSSI ^{2,3}	890	262	319	1,000	96,024	90,790	163,965	5,802	222	301	1,214	495	301,284
Other ⁴	<u>73</u>	<u>32</u>	<u>111</u>	<u>136</u>	<u>43</u>	<u>103</u>	<u>60</u>	<u>106</u>	<u>69</u>	<u>50</u>	<u>288</u>	<u>25</u>	<u>1,096</u>
TOTALS	9,919	10,272	14,149	13,351	47,703	109,449	184,422	29,290	23,653	19,978	18,916	16,896	497,998

Footnotes

- 1 Quantity of waste (both RCRA and non-RCRA) received at the facility.
- 2 Waste generated on-site by CSSI.
- 3 Closure of surface impoundments occurred at the facility during the period May - August, 1988. The waste residue from the surface impoundment closures was landfilled, which accounts for the relatively high amount of waste generated by CSSI during this period.
- 4 Other waste origination sources include Utah, Montana, Hawaii, Wyoming, and British Columbia.

A - 28

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Noise Control Program</u>	<u>January, 1989</u>
(Reporting Unit)	(Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

<u>Source Category</u>	<u>New Actions Initiated</u>		<u>Final Actions Completed</u>		<u>Actions Pending</u>	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	6	63	10	108	144	148
Airports			0	9	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit)	January, 1989 (Month and Year)
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FINAL NOISE CONTROL ACTIONS

County	* * Name of Source and Location	* * Date	* * Action
Clackamas	Avia Corporation, Lake Oswego	1/89	In compliance
Multnomah	Ast Hay Company, Portland	1/89	No violation
Multnomah	Columbia Forge and Machine Works, Portland	1/89	Referred to the City of Portland
Washington	Billet Products, Sherwood	1/89	In compliance
Lane	Dave's Market, Springfield	1/89	In compliance
Lane	Pape Brothers Caterpillar,	1/89	Referred to the City of Eugene
Lane	Starfire Lumber Company, Cottage Grove	1/89	In compliance
Coos	Orca Pacific Products, Charleston	1/89	No violation
Coos	Pacific Choice Seafood Co., Charleston	1/89	No violation
Curry	Cooley Portable Sawmill, near Brookings	1/89	In compliance

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1989

CIVIL PENALTIES ASSESSED DURING MONTH OF JANUARY, 1989:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
McInnis Enterprises, Ltd. Portland, Oregon	56-WQ-NWR-83-79 EQC Stipulation and Consent Order. Disposal of septage into Columbia Slough.	3/11/88	\$1,805. Quarterly	Paid 1/13/89.
George Dudley Coos Bay, Oregon	AQOB-SWR-89-15 Open burning of prohibited material (insulated copper wire).	1/19/89	\$250	Default Order and Judgment issued on 2/21/89.
Safety-Kleen Corp. Springfield, Oregon	HW-WVR-89-02 Violations of hazardous waste management facility regulations.	1/30/89	\$11,800	Contested 2/13/89.

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
 Water Quality Division and
Hazardous and Solid Waste Division
 (Reporting Unit)

February 1989
 (Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>	
<u>Air</u>							
Direct Sources	3	43	6	59	0	0	8
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	3	43	6	59	0	0	8
<u>Water</u>							
Municipal	8	81	12	100	0	3	19
Industrial	2	50	1	49	0	0	4
Total	10	131	13	149	0	3	23
<u>Solid Waste</u>							
Gen. Refuse	3	22	0	18	1	6	28
Demolition	-	1	0	1	-	-	1
Industrial Sludge	0	6	0	5	0	3	11
Total	3	29	0	24	1	9	42
<hr/>							
<u>GRAND TOTAL</u>	16	203	19	232	1	12	73

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PLAN ACTIONS COMPLETED

Permit Number	Source Name	County	Date Scheduled	Action Description	Date Achieved
02	2490 EVANITE FIBER CORPORATION	BENTON	02/07/89	COMPLETED-APRVD	02/13/89
03	2634 JOHNSON CONTROLS, INC.	CLACKAMAS	01/25/89	COMPLETED-APRVD	02/07/89
08	0003 SOUTH COAST LUMBER CO.	CURRY	10/21/88	COMPLETED-APRVD	03/01/89
10	0045 GREGORY FOREST PRODUCTS	DOUGLAS	12/07/88	COMPLETED-APRVD	02/14/89
24	4171 BOISE CASCADE CORP	MARION	01/20/89	COMPLETED-APRVD	02/24/89
26	1865 OREGON STEEL MILLS, INC.	MULTNOMAH	01/26/89	COMPLETED-APRVD	02/09/89

TOTAL NUMBER QUICK LOOK REPORT LINES

6

A-33

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

February 1989
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	2	18	0	18	11		
Existing	1	7	2	7	7		
Renewals	14	97	14	79	76		
Modifications	1	24	2	17	15		
Trfs./Name Chng.	<u>1</u>	<u>19</u>	<u>1</u>	<u>19</u>	<u>1</u>		
Total	19	165	19	140	110	1398	1422
<u>Indirect Sources</u>							
New	1	11	1	7	6		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	<u>1</u>	<u>11</u>	<u>1</u>	<u>7</u>	<u>6</u>	<u>293</u>	<u>299</u>
<u>GRAND TOTALS</u>	20	176	20	147	116	1691	1721

Number of
Pending Permits

Comments

14	To be reviewed by Northwest Region
7	To be reviewed by Willamette Valley Region
15	To be reviewed by Southwest Region
6	To be reviewed by Central Region
7	To be reviewed by Eastern Region
19	To be reviewed by Program Operations Section
27	Awaiting Public Notice
<u>15</u>	Awaiting end of 30-day Public Notice Period
110	

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DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PERMITS ISSUED

Permit Number	Source Name	County Name	Appl. Rcvd.	Status	Date Achvd.	Type Appl.
01	0001 BLUE MOUNTAIN ASPHALT CO	BAKER	12/12/88	PERMIT ISSUED	03/07/89	RNW
01	0003 ELLINGSON LUMBER COMPANY	BAKER	01/17/89	PERMIT ISSUED	02/13/89	MOD
03	2732 PRECISION CASTPARTS CORP.	CLACKAMAS	09/03/87	PERMIT ISSUED	02/16/89	EXT
21	0002 OCEANLAKE PAVING CO.	LINCOLN	12/19/88	PERMIT ISSUED	02/13/89	RNW
22	8039 BETASEED INC	LINN	12/12/88	PERMIT ISSUED	02/13/89	RNW
23	0031 ONTARIO ASPHALT & CONCRTE	MALHEUR	11/16/88	PERMIT ISSUED	03/07/89	RNW
24	7007 WILCO FARMERS	MARION	08/18/88	PERMIT ISSUED	02/13/89	RNW
26	2403 RHONE-POULENC, INC	MULTNOMAH	06/22/88	PERMIT ISSUED	03/07/89	RNW
26	3003 STEINFELD'S PRODUCTS CO	MULTNOMAH	10/12/88	PERMIT ISSUED	02/13/89	RNW
26	3106 FREIGHTLINER CORP	MULTNOMAH	09/14/88	PERMIT ISSUED	03/07/89	RNW
30	0091 PUREGRO COMPANY	UMATILLA	10/28/88	PERMIT ISSUED	03/07/89	RNW
31	0001 ROGERS ASPHALT PAVING CO	UNION	11/21/88	PERMIT ISSUED	03/07/89	RNW
34	2681 INTEL CORPORATION	WASHINGTON	12/08/88	PERMIT ISSUED	03/07/89	MOD
37	0015 KIEWIT PACIFIC CO.	PORT.SOURCE	02/08/89	PERMIT ISSUED	03/07/89	RNW
37	0038 DESCHUTES READY MIX S & G	PORT.SOURCE	02/08/89	PERMIT ISSUED	03/07/89	RNW
37	0039 W. W. D. CORPORATION	PORT.SOURCE	02/01/89	PERMIT ISSUED	03/07/89	RNW
37	0076 EUCON CORPORATION	PORT.SOURCE	01/30/89	PERMIT ISSUED	02/13/89	NCH
37	0134 TIDEWATER CONTRACTORS INC	PORT.SOURCE	01/23/89	PERMIT ISSUED	02/13/89	RNW
37	0398 OREGON ASPHALTIC PAVING	PORT.SOURCE	11/21/88	PERMIT ISSUED	02/13/89	EXT

TOTAL NUMBER QUICK LOOK REPORT LINES

19

A-35

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

Indirect Sources

Multnomah	Fred Meyer - Hollywood West 950 Spaces, File No. 26-8812	2/28/89	Final Permit Issued
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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PERMIT TRANSFERS & NAME CHANGES

<u>Permit Number</u>	<u>Company Name</u>	<u>Type of Change</u>	<u>Status of Permit</u>
37-0076	Eucon Corporation	Name Change	Issued
03-2501	Concrete Services, Inc.	Transfer	Ready to be issued

¹In conjunction with permit renewal.

²In conjunction with permit modification.

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DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

INDUSTRIAL WASTE SOURCES - 1

Clackamas	Hanna Car Wash Systems Closed Loop Acid Recovery System	12-13-88	Approved by Hazardous & Solid Waste Division as HW project
Linn	Teledyne Wah Chang Arc Furnace Cooling Tower Modification	2-23-89	Approved

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DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action
<u>MUNICIPAL WASTE SOURCES - 12</u>		Page 1 of 1	
Lane	Veneta Jean's Road Improvement Project	3-9-89	Provisional Approval
Clackamas	West Linn West Linn Library Project	3-9-89	Provisional Approval
Curry	Brookings Contract No. 1 (Outfall Extension)	3-6-89	Provisional Approval
Multnomah	Gresham Belt Filter Press Equipment	2-21-89	Approved
Baker	Baker Ninth Street (N. of Colorado)	3-9-89	Provisional Approval
Deschutes	Bend Briggs Road Pressure Sewer	2-17-89	Provisional Approval
Lincoln	Tom & Phyllis Canter Coyote Rock RV Park Treatment Plant and Drianfield Addition	2-17-89	Written Comments to Owner
Clatsop	Warrenton Fred meyer Retail Store	3-9-89	Provisional Approval
Baker	Idaho Power Company Copperfield Campground Reconstruction of On-Site System	2-6-89	Final Comments to Region
Linn-Marion	Mill City N. Santiam Hwy Sanitary Improvements	3-8-89	Provisional Approval
Douglas	Elkton Collection and Treatment	3-1-89	Verbal Comments to Engineer
Lane	MWMC Sludge Lagoons Phase II, C-92	3-7-89	Written Use Authorization

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status
*	* /Site and Type of Same	* Received	*
*	*	*	*

INDUSTRIAL WASTE SOURCES - 4

Tillamook	Tillamook County Creamery Association Wastewater Treatment Facility Modification	11-17-88	Review Completion Projected 3-31-89
Marion	Siltec Corporation Initial Liquid Effluent Treatment Facility	11-22-88	Review Completion Projected 3-31-89
Coos	Weyerhaeuser Paper Co. Aerators, Earthen Dikes and Floating Dikes	12-23-88	Review Completion Project 3-31-89
Benton	Hewlett Packard Acid Neutralization and Fluoride Treatment Facilities	2-14-89	Review Completion Projected 3-31-89

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DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 19

Page 1 of 2

Umatilla	Larry Greenwalt Shady Rest Mobile Home Court Bottomless Sand Filter	4-21-88	Review Completion Projected 3-31-89	JLV
Clatsop	Glenwood Mobile Park Modification to dual media filter from anoxic tower	10-4-88	Review Completion Projected 3-31-89	JLV
Clackamas	Government Camp San. Dist. Mt. Hood Motel	11-21-88	Review Completion Projected 4-30-89	JLV
Curry	Brookings Contract #2 (70%)	2-2-88	Review Completion Projected 7-31-89	KMV
Deschutes	Starwood Sanitary District Block G	1-10-89	Review Completion Projected 3-31-89	JLV
Clackamas	Gladstone Marsh Property	2-1-90	Review Completion Projected 3-31-89	JLV
Clackamas	Oak Lodge Sanitary District Dory Bluff	2-1-89	Review Completion Projected 3-31-89	JLV
Umatilla	Ferndale School Dist. No. 1 On-Site System Addition	2-16-89	Review Completion Projected 3-31-89	JLV
Polk	Falls City Phase II Improvement	2-22-89	Review Completion Projected 7-31-89	JLV
Deschutes	Bend Awbrey Butte - Phase 12 List Station	2-28-89	Review Completion Projected 3-31-89	DSM
Benton	Albany STP Phase I 15% Conceptual Design	2-21-89	Review Completion Projected 3-4-89	DSM

SD\SL\WC4659

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES

Page 2 of 2

- - - - - PROJECTS BELOW ARE "ON-HOLD" - - - - -

Columbia	Scappoose Sewage Treatment Plant Expansion	3-11-87	On Hold, Financing Incomplete	DSM
Deschutes	Romaine Village Recirculating Gravel Filter (Revised)	4-27-87	On Hold For Surety Bond	Not Assigned
Marion	Breitenbush Hot Springs On-Site System	5-27-86	On Hold, Uncertain Financing	JLV
Curry	Whaleshead Beach Campground Gravel Recirculation Filter (Revised)	5-20-87	Holding for Field Inspection	JLV
Multnomah	Troutdale Frontage Road Sewage Pump Station Replacement	4-25-88	Bids Rejected, Being Redesigned	DSM
Wallowa	Wallowa Lake Co. Service District STEP System Equipment/Materials	6-6-88	Holding for Equipment Submittals	DSM
Deschutes	Bend Bend Millwork Sewer and Pump Station	1-30-89	Plan Rejected Awaiting Design Revisions	DSM
Washington	USA/Durham AWWTP Phase I Exp.	12-27-88	Holding For Substan- tiation From UAS of Basis For Design	DSM

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Summary of Actions Taken
On Water Permit Applications in FEB 89

3 MAR 89

Source Category & Permit Subtype	Number of Applications Filed						Number of Permits Issued						Applications Pending Permits Issuance (1)			Current Number of Active Permits		
	Month			Fiscal Year			Month			Fiscal Year			NPDES	WPCF	Gen	NPDES	WPCF	Gen
	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen						
Domestic																		
NEW		3		1	15	2		1		2	11		4	18	2			
RW				1	1					2	1		2	1				
RWO	4	6		38	18		1	1		10	10		90	42				
MW				3									4					
MWO				3	7		1			3	5		2	4				
Total	4	9		46	41	2	2	2		17	27		102	65	2	225	204	29
Industrial																		
NEW		1	1	5	8	26			3	1	9	39	6	13	9			
RW				2						2			2					
RWO				15	13		1			11	9		25	21				
MW										1			3					
MWO			2	6	6	6				5	7		1	1				
Total		1	3	28	27	32	1		3	20	25	39	37	35	9	157	133	445
Agricultural																		
NEW					3				4			46		2				
RW																		
RWO					3								1	4				
MW																		
MWO					1						2							
Total					7				4		2	46	1	6		2	8	648
Grand Total	4	10	3	74	75	34	3	2	7	37	54	85	140	106	11	384	345	1122

1) Does not include applications withdrawn by the applicant, applications where it was determined a permit was not needed, and applications where the permit was denied by DEQ.

It does include applications pending from previous months and those filed after 28-FEB-89.

NEW - New application
 RW - Renewal with effluent limit changes
 RWO - Renewal without effluent limit changes
 MW - Modification with increase in effluent limits
 MWO - Modification without increase in effluent limits

A-43

PERMIT CAT NUMBER	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Cooling Water</u>							
IND	100 GEN01 NEW	ORO03243-3	103427/B STAGG FOODS, INC.	HILLSBORO	WASHINGTON/NWR	08-FEB-89	31-DEC-90
<u>General: Placer Mining</u>							
IND	600 GEN06 NEW		104385/A SCHEIBNER, RICHARD R.		GRANT/ER	14-FEB-89	31-JUL-91
<u>General: Confined Animal Feeding</u>							
AGR	800 GEN08 NEW		104392/A RONER, DARWIN C.	VALE	MALHEUR/ER	21-FEB-89	31-JUL-92
AGR	800 GEN08 NEW		104394/A KNUDSON, DEAN	VALE	MALHEUR/ER	21-FEB-89	31-JUL-92
AGR	800 GEN08 NEW		104395/A WYBENGA, GUS	RICKREALL	POLK/WVR	21-FEB-89	31-JUL-92
AGR	800 GEN08 NEW		104393/A KETOLA DAIRY	LINCOLN CITY	LINCOLN/WVR	21-FEB-89	31-JUL-92
<u>General: Oily Stormwater Runoff</u>							
IND	1300 GEN13 NEW	ORO03240-9	103159/A SOUTHERN PACIFIC PIPE LINES PARTNERSHIP, L.P.	EUGENE	LANE/WVR	08-FEB-89	31-JUL-93

A-44

PERMIT CAT NUMBER	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<hr/> <hr/>								
NPDES								
<hr/> <hr/>								
DOM 100489	NPDES	MWO	OR002700-6	20209/B GOULD, ROBERT G. & MARGARET R.	CORVALLIS	BENTON/WVR	07-FEB-89	30-APR-93
DOM 100557	NPDES	RWO	OR003054-6	75500/A STANFIELD, R. IRENE & HOLBROOK, BEVERLEY	GRANTS PASS	JOSEPHINE/SWR	07-FEB-89	30-NOV-93
IND 100560	NPDES	RWO	OR002118-1	20016/A COQUILLE, CITY OF	COQUILLE	COOS/SWR	17-FEB-89	31-DEC-93
<hr/> <hr/>								
WPCF								
<hr/> <hr/>								
DOM 100558	WPCF	RWO		77415/A RUFUS, CITY OF	RUFUS	SHERMAN/CR	17-FEB-89	31-DEC-93
DOM 100559	WPCF	NEW		100067/A CHRISTENSEN, ROBERT	SVENSON	CLATSOP/NWR	17-FEB-89	31-DEC-93

A - 45

PERMIT TRANSFERS

Part of
Water Quality Division Monthly Activity Report
(Period February 1, 1989 through February 28, 1989)

<u>Permit No.</u>	<u>Previous Facility Name</u>	<u>Facility</u>	<u>New Facility Name</u>	<u>City</u>	<u>County</u>	<u>Date Transferred</u>
100489	Jeffrey W. Mabry	20209	Robert G. Gould & Margaret R. Gould	Corvallis	Benton/ WVR	2/7/89 (Ownership)
0100-J	California Home Brands, Inc., dba Haley's Foods	103427	Stagg Foods, Inc.	Hillsboro	Wash./NWR	2/8/89 (Ownership)
1300-J	Southern Pacific Pipe Lines, Inc.	103159	Southern Pacific Pipe Lines Partnership, L.P.	Eugene	Lane/WVR	2/8/89 (Name Change)

A-46

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*
Douglas	Lemolo Landfill	2/15/89	Plans disapproved.	

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

February 1989
(Month and Year)

PLAN ACTIONS PENDING - 42

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Municipal Waste Sources - 28

Baker	Haines	12/13/85	12/13/85	(R) Plan received	HQ
Deschutes	Knott Pit Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Fryrear Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Negus Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Marion	Ogden Martin Brooks ERF	3/24/87	3/24/87	(N) As-built plans rec'd.	HQ
Douglas	Reedsport Lndfl.	5/7/87	5/7/87	(R) Plan received	HQ
Benton	Coffin Butte	6/1/87	6/1/87	(R) Plan received	HQ
Umatilla	City of Milton-Freewater	11/19/87	11/19/87	(N) Plan received (groundwater study)	HQ
Marion	Ogden-Martin (metal rec.)	11/20/87	11/20/87	(N) Plan received	HQ
Marion	Browns Island Landfill	11/20/87	11/20/87	(C) Plan received (groundwater study)	HQ
Harney	Burns-Hines	12/16/87	12/16/87	(R) Plan received	HQ
Marion	Woodburn TS	1/5/88	1/5/88	(N) Revised plan rec'd.	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Plans received	HQ
Umatilla	Pendleton Landfill	6/6/88	6/6/88	(R) Plans received	HQ
Coos	Les' Sanitary Service TS	6/30/88	6/30/88	(N) Plans received.	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Malheur	Brogan TS	7/1/88	7/1/88	(N) Plans received.	HQ
Marion	Marion Recycling Center, Inc.	7/20/88	7/20/88	(N) Plans received	HQ
Douglas	Lemolo Transfer	9/1/88	9/1/88	(M) Plans received	HQ
Lane	Franklin Landfill	9/29/88	9/29/88	(R) Groundwater report received	HQ
Umatilla	Athena Landfill	11/15/88	11/15/88	(M) Plans received	
Jackson	Ashland Landfill	12/1/88	12/1/88	(N) Plans received	HQ
Lake	Lake County Lndfl.	12/5/88	12/5/88	(C) Plans received	HQ
Deschutes	Alfalfa Landfill	12/19/88	12/19/88	(C) Plans received	HQ
Morrow	Heppner Landfill	12/20/88	12/20/88	(N) Plans received	HQ
Mutlnomah	St. Johns Landfill Groundwater study	12/22/88	12/22/88	(C) GW study received	HQ
Marion	Woodburn Ashfill	1/3/89	1/3/89	() As-built plans rec'd.	HQ
Gilliam	Ore. Wste. Sys. (O.W.S.) Landfill	2/14/89	2/14/89	(N) Plans received	HQ
Lincoln	Agate Beach Lndfl.	2/27/89	2/27/89	() Leachate plan rec'd.	HQ

Demolition Waste Sources - 1

Washington	Hillsboro Landfill	1/29/88	1/29/88	(N) Expansion plans received	
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Industrial Waste Sources - 11

Coos	Rogge Lumber	7/28/86	6/18/87	(C) Additional info. submitted to revise previous application	HQ
Douglas	Louisiana-Pacific Round Prarie	9/30/87	9/30/87	(R) Operational plan	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Plan received	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	Type of Action and Status	* Location *
Columbia	Boise Cascade St. Helens	4/6/88	4/6/88	(N) As built plans received.	HQ
Douglas	Sun Studs	6/20/88	6/20/88	(R) Plans received	HQ
Douglas	Sun Studs	7/1/88	7/1/88	(R) Operational/groundwater plans received	HQ
Douglas	IP, Gardiner	8/16/88	8/16/88	(N) Plans received	HQ
Yamhill	Boise Cascade (Willamina)	9/1/88	9/1/88	(N) Plans received	
Grant	Blue Mountain Forest Products	9/7/88	9/7/88	(N) Plans received	HQ
Marion	OWTD - Silverton Forest Products	12/19/88	12/19/88	(C) GW study received	HQ
Yamhill	Boise Cascade-Willamina	1/9/89	1/9/89	() Plans received	HQ

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	11/21/86	12/26/86	(N) Add'l. info. rec'd.	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Plan received	HQ

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

February 1989
(Month and Year)

SUMMARY OF SOLID WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
<u>General Refuse</u>							
New	-	3	0	2	7		
Closures	-	3	-	4	4		
Renewals	-	2	-	3	11		
Modifications	-	16	0	17	0		
Total	0	24	0	26	22	180	180
<u>Demolition</u>							
New	-	1	0	1	0		
Closures	-	-	-	-	-		
Renewals	-	-	-	-	1		
Modifications	-	2	-	2	1		
Total	0	3	0	3	2	11	11
<u>Industrial</u>							
New	0	1	0	2	4		
Closures	-	-	-	-	1		
Renewals	-	1	0	7	5		
Modifications	-	8	-	8	-		
Total	0	10	0	17	10	107	107
<u>Sludge Disposal</u>							
New	-	1	-	1	1		
Closures	-	-	-	-	1		
Renewals	-	-	-	-	-		
Modifications	-	1	-	-	-		
Total	0	2	0	1	2	18	18
Total Solid Waste	0	39	0	47	36	315	315

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

February 1989
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

- None -

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

February 1989
(Month and Year)

PERMIT ACTIONS PENDING - 36

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	Type of Action and Status	* Location *
------------	----------------------	-----------------------	-------------------------	---------------------------	--------------

Municipal Waste Sources - 22

Clackamas	Rossmans	3/14/84	2/11/87	(C) Applicant review (second draft)	HQ/RO
Baker	Haines	1/30/85	6/20/85	(R) Applicant review	HQ
Curry	Wridge Creek	2/19/86	9/2/86	(R) Draft received	HQ
Umatilla	Rahn's (Athena)	5/16/86	5/16/86	(R) Application filed	RO
Marion	Woodburn Lndfl.	9/22/86	6/22/88	(R) Applicant review	HQ
Coos	Bandon Landfill	1/20/87	1/7/88	(R) Draft received	HQ
Deschutes	Negus Landfill	2/4/87	11/16/87	(R) Applicant review	HQ
Douglas	Reedsport Lndfl.	5/7/87	1/11/88	(R) Draft received	HQ
Lane	Florence Landfill	9/21/87	1/12/88	(R) Draft received	HQ
Morrow	Tidewater Barge Lines (Finley Butte Landfill)	10/15/87	10/15/87	(N) Application filed	HQ
Douglas	Roseburg Landfill	10/21/87	12/21/87	(R) Draft received	
Curry	Port Orford Lndfl.	12/14/87	8/18/88	(R) Applicant review	HQ
Washington	Hillsboro TS	1/15/88	1/30/89	(N) Applicant review	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Application received	RO/HQ
Coos	Les' Sanitary Service TS	6/30/88	8/19/88	(N) Draft received	HQ
Malheur	Brogan-Jameson	7/1/88	7/1/88	(C) Application received	RO
Malheur	Brogan TS	7/1/88	1/23/89	(N) Draft received	HQ

SB4968
MAR. 7S (5/79)

(A) = Amendment; (C) = Closure permit;
(N) = New source; (R) = Renewal

Page 1

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
------------	----------------------	-----------------------	-------------------------	-------------------------------	--------------

Tillamook	Tillamook Landfill	8/16/88	8/16/88	(N) Application received	RO
Marion	Ogden Martin	10/11/88	10/11/88	(R) Application received	HQ
Gilliam	Arlington Landfill Closure	11/14/88	11/14/88	(C) Closure application	HQ
Deschutes	Alfalfa Landfill Closure	12/19/88	12/19/88	(C) Application received	RO
Union	North Powder	12/20/88	12/20/88	(R) Application received	HQ

Demolition Waste Sources - 2

Coos	Bracelin/Yeager (Joe Ney)	3/28/86	8/11/88	(R) Public hearing held	HQ
Washington	Hillsboro Lndfl.	1/29/88	1/29/88	(A) Application received	HQ

Industrial Waste Sources - 10

Wallowa	Boise Cascade Joseph Mill	10/3/83	5/26/87	(R) Applicant comments received	HQ
Curry	South Coast Lbr.	7/18/86	7/18/86	(R) Application filed	RO
Baker	Ash Grove Cement West, Inc.	4/1/87	4/1/87	(N) Application received	RO
Klamath	Modoc Lumber Landfill	5/4/87	2/24/89	(R) Draft received	HQ
Clatsop	Nygaard Logging	11/17/87	3/3/88	(N) Draft received	HQ
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO
Douglas	Glide Lumber Prod.	3/8/88	9/28/88	(R) Applicant comments received	HQ
Douglas	Hayward Disp. Site	6/7/88	8/18/88	(R) Applicant review	HQ
Yamhill	Boise-Cascade (Willamina)	9/1/88	9/1/88	(N) Application received	HQ
Klamath	Modoc Lumber Lndfl.	1/6/89	1/6/89	(N) Application received	HQ

SB4968
MAR.7S (5/79)

(A) = Amendment; (C) = Closure permit;
(N) = New source; (R) = Renewal

Page 2

* County *	Name of Facility	* Date * * Appl. * * Rec'd. *	* Date of * * Last * * Action *	Type of Action and Status	* Location *
------------	------------------	-------------------------------------	---------------------------------------	---------------------------	--------------

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	5/30/86	3/10/87	(N) Add'l. info. received (addition of waste oil facility)	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Application received	HQ/RO

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

February 1989
(Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		PLANNED
	No. This Month	No. Fiscal Year to Date (FYTD)	No. in FY 89
Treatment	0	0	0
Storage	0	0	1
Disposal	0	0	0
Post-Closure	0	0	3

INSPECTIONS

	COMPLETED		PLANNED
	No. This Month	No. FYTD	No. in FY 89
Generator	6	32	14*
TSD	0	6	16*

CLOSURES

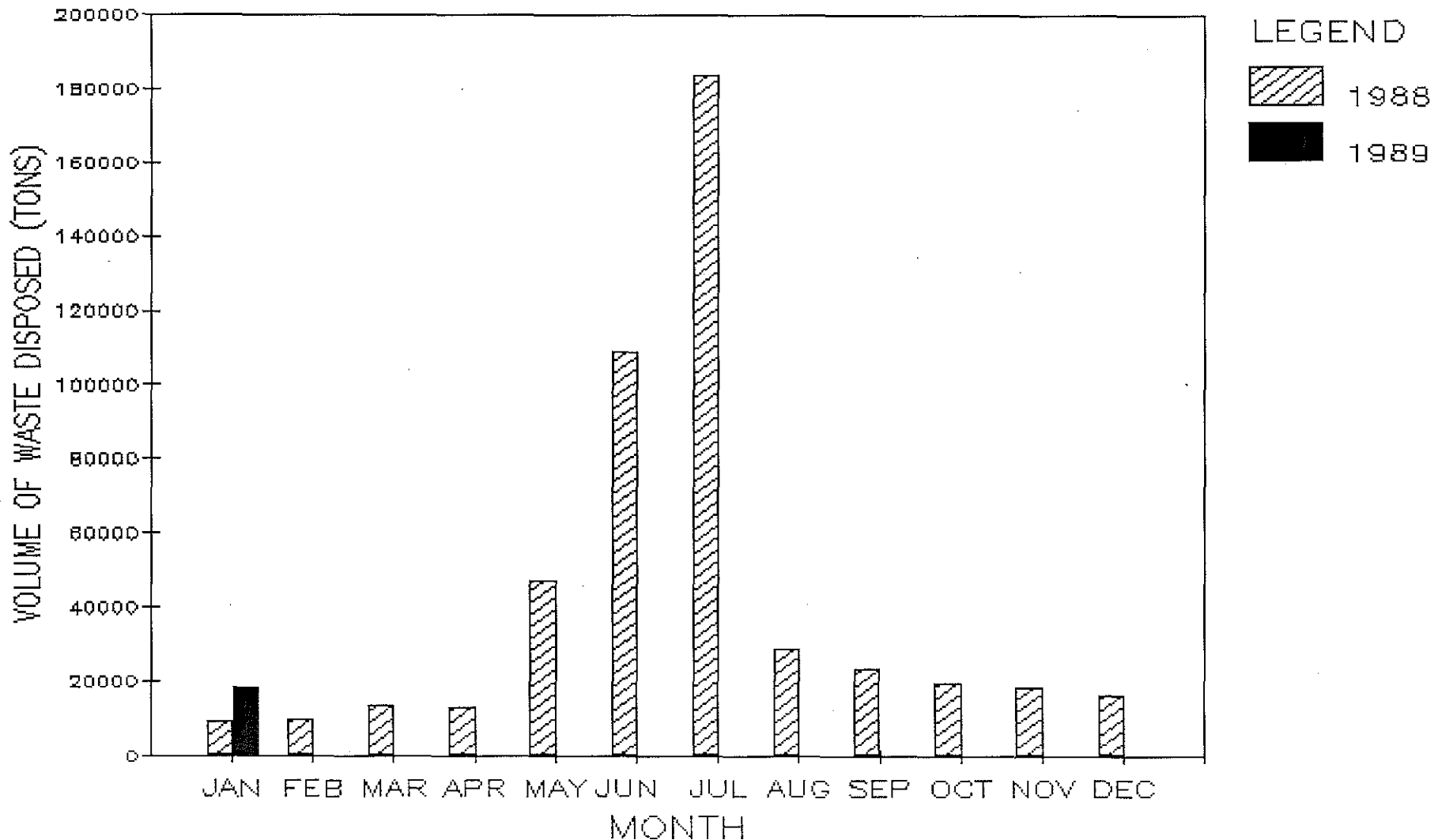
	PUBLIC NOTICES			CERTIFICATIONS ACCEPTED		
	No. This Month	FYTD No.	Planned in FY 89	No. This Month	No. FYTD	No. Planned in FY 89
Treatment	0	0	0	0	0	0
Storage	0	0	3	0	0	4
Disposal	1	1	1	0	1	1

* SEA commitment only.

HAZARDOUS WASTE DISPOSAL CHEM-SECURITY SYSTEMS, INC.

Arlington, Oregon

1988 - 1989 Waste Disposal Volume Comparison



CHEM-SECURITY SYSTEMS, INC.
Arlington, Oregon

1989

HAZARDOUS WASTE ORIGINATION SOURCES

MONTHLY QUANTITY OF WASTE DISPOSED (TONS)¹

<u>Waste Source</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>YTD</u>
Oregon	2,662												2,662
Washington	14,233												14,233
Alaska	1,148												1,148
Idaho	14												14
CSSI ²	752												752
Other	-												-
TOTALS	18,809												18,809

Footnotes

1 Quantity of waste (both RCRA and non-RCRA) received at the facility.

2 Waste generated on-site by CSSI.

A-58

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program
(Reporting Unit)

February, 1989
(Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

<u>Source Category</u>	<u>New Actions Initiated</u>		<u>Final Actions Completed</u>		<u>Actions Pending</u>	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	4	67	4	112	144	144
Airports			0	9	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Noise Control Program</u>	<u>February, 1989</u>
(Reporting Unit)	(Month and Year)

FINAL NOISE CONTROL ACTIONS

<u>County</u>	<u>* Name of Source and Location</u>	<u>* Date</u>	<u>* Action</u>
Multnomah	Air Products/Airweld, Portland	2/89	In compliance
Multnomah	W & W Trailer Repair Works, Portland	2/89	In compliance
Washington	Permapost Products, Inc., Hillsboro	2/89	No violation
Polk	Hanard Machine Company, West Salem	2/89	Referred to the City of Salem

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1989

CIVIL PENALTIES ASSESSED DURING MONTH OF FEBRUARY, 1989:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Chem-Security Systems, Inc. near Arlington, Oregon	HW-ER-89-18 Various violations of a RCRA permit.	2/10/89	\$19,400	Contested on 3/7/89.
Ron Potter Mulino, Oregon	AQOB-NWR-89-22 Open burned domestic waste including tires.	2/13/89	\$250	Default Order and Judgment was issued on 3/9/89.
Don Johnson Portland, Oregon	AQOB-NWR-89-34 Open burned construc- tion waste.	2/15/89	\$50	Trying to serve.
Danni Willis dba/ Peltzer Septic Tank Service Columbia County	OS-NWR-89-23 Advertised as being a sewage disposal service, without being licensed as such.	2/15/89	\$100	Default Order and Judgment was issued on 3/15/89.
Russell Graves near Colton, Oregon	AQOB-NWR-89-36 Open burned tires and asphalt shingles.	2/17/89	\$2,000	Paid 3/3/89.
Phillip Turnbull Oakland, Oregon	SW-SWR-89-03 Established, operated or maintained septage lagoons without a permit; 75 days of violation.	2/22/89	\$3,750	Awaiting response to notice.
Donn Thomas aka/Donn Beam, dba/D.B. Recycling near Tigard, Oregon	SW-WT-89-42 Violated a Stage I waste tire storage permit; 11 days of violation.	2/23/89	\$5,500	Served 3/11/89. Awaiting response to notice.

GB8364

February, 1989
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	0	2
Discovery	2	1
Settlement Action	12	10
Hearing to be scheduled	0	0
Department reviewing penalty	0	0
Hearing scheduled	4	3
HO's Decision Due	1	1
Briefing	0	0
Inactive	<u>2</u>	<u>2</u>
SUBTOTAL of cases before hearings officer	21	19
HO's Decision Out/Option for EQC Appeal	1	2
Appealed to EQC	0	0
EQC Appeal Complete/Option for Court Review	0	0
Court Review Option Taken	0	0
Case Closed	<u>2</u>	<u>3</u>
TOTAL Cases .	24	24

15-AQ-NWR-87-178 15th Hearing Section case in 1987 involving Air Quality Division violation in Northwest Region jurisdiction in 1987; 178th enforcement action in the Department in 1987.

§ Civil Penalty Amount

ACDP Air Contaminant Discharge Permit

AG1 Attorney General 1

AQ Air Quality Division

AQOB Air Quality, Open Burning

CR Central Region

DEC Date Date of either a proposed decision of hearings officer or a decision by Commission

ER Eastern Region

FB Field Burning

HW Hazardous Waste

HSW Hazardous and Solid Waste Division

Hrng Rfrl Date when Enforcement Section requests Hearing Section schedule a hearing

Hrngrs Hearings Section

NP Noise Pollution

NPDES National Pollutant Discharge Elimination System wastewater discharge permit

NWR Northwest Region

OSS On-Site Sewage Section

P Litigation over permit or its conditions

Prtys All parties involved

Rem Order Remedial Action Order

Resp Code Source of next expected activity in case

SS Subsurface Sewage (now OSS)

SW Solid Waste Division

SWR Southwest Region

T Litigation over tax credit matter

Transcr Transcript being made of case

Underlining New status or new case since last month's contested case log

WQ Water Quality Division

WVR Willamette Valley Region

CONTES.B

February, 1989
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
WAH CHANG	04/78	04/78		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	New permit under negotiation. May resolve contested issues.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	New permit under negotiation. May resolve contested issues.
DANT & RUSSELL, INC.	05/31/85	05/31/85	03/21/86	Prtys	15-HW-NWR-85-60 Hazardous waste disposal Civil Penalty of \$2,500	Settlement agreement delayed pending resolution of federal court proceedings.
A-6 C. BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	DEQ	23-HSW-85-60 Declaratory Ruling	Tentative settlement reached. Department of Justice to prepare order for EQC consideration.
CSSI	3/31/88	4/19/88	<u>05/15/89</u>	Prtys	Permit 089-452-353	<u>Hearing tentatively scheduled.</u>
[GUARANTEE [CONSTRUCTION	7/5/88	7/8/88	10/4/88	DEQ	AQAB-NWR-88-31] -\$2,000 -Civil-Penalty]	Hearings Officer dismissed penalty 1/25/89. <u>No appeal.</u> <u>Case closed.</u>
[GLAUDE-ST.-JEAN	9/15/88		1/10/89	-Prtys	OS-SWR-88-68] [\$500 -Civil-Penalty]	<u>EQC approved penalty mitigation.</u> <u>Case closed.</u>
GLENNEDEN BRICK & TILE WORKS	9/15/88		1/18/89	Prtys	AQ-WS-88-70 \$1,500 Civil Penalty	Settlement action.
JOHN BOWERS	9/19/88		1/11/89	Prtys	AQOB-CR-88-58 \$1,500 Civil Penalty	Settlement action.

February, 1989
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
CITY OF SALEM	9/26/88		<u>4/18/89</u>	Prtys	Department Order	<u>Hearing rescheduled.</u>
{DAVIS -dba {TRI-COUNTY -STOVE {AND -GHIMNEY -SERVIGE}	9/27/88		12/1/88	Hrgs ----	AQ-WS-88-69} \$1,500 -Civil -Penalty}	<u>Hearings Officer reduced penalty to \$1,200.</u>
IRVIN HERMENS	9/27/88		1/24/89	Prtys	WQ-WVR-88-61A \$2,500 Civil Penalty and-62B, Department Order	Settlement action.
ARIE JONGANEEL dba A.J. Dairy	10/3/88		1/20/89	Prtys	WQ-WVR-88-73A \$2,500 Civil Penalty and -73B, Department Order	Settlement action.
{JOHN -VOLBEDA	11/15/88	11/17/88	1/27/89	Prtys	WQ-WVR-88-81}	<u>Hearing request with- drawn. Case closed.</u>
HARBOR OIL			2/03/89	Prtys	Permit 1300-J Permit Revocation	Settlement action.
ENVIRONMENTAL PACIFIC CORP.			1/30/89	Prtys	HW-WVR-88-88 Compliance Order	<u>Order of Dismissal issued 3/7/89.</u>
Magar E. Magar dba Riverwood Mobile Home Park	12/20/88 12/23/88	12/28/88 12/28/88	3/1/89	Prtys	WQ-NWR-88-98 Civil Penalty	<u>Settlement action.</u>
{Joe -Schumacher	1/4/89	1/5/89		Prtys	AQ-WVR-89-114} {field-Burning}	<u>EOC reduced penalty from \$500 to \$400 3/3/89. Case closed.</u>
Aart & Sheri Falk	1/5/89	1/6/89	2/17/89	Prtys	AQ-FB-88-115	<u>Settlement action.</u>
Ken Kuderer	1/5/89	1/6/89	3/8/89	Hrgs	AQ-FB-88-117	<u>Decision due.</u>

February, 1989
DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rqst</u>	<u>Hrng Rfrl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type & No.</u>	<u>Case Status</u>
Air Rite Control, Inc.	1/9/89	1/11/89	<u>4/10/89</u>	Prtys	AQ-AB-NWR-88-85 \$2,600 Civil Penalty	<u>Settlement action.</u>
Rahenkamp Wrecking, Inc.	1/18/89	1/23/89	<u>4/14/89</u>	Prtys	AQ-AB-SWR-88-76 \$3,500 Civil Penalty	<u>Hearing rescheduled.</u>
<u>Larry L. Krenik</u>	<u>2/6/89</u>	<u>2/8/89</u>		<u>Resp</u>	<u>SW-WT-89-20</u> <u>Order of Abatement</u>	<u>Timeliness of request</u> <u>for review challenged</u> <u>by DEQ.</u>
<u>Safety-Kleen Corp.</u>	<u>2/13/89</u>	<u>2/13/89</u>		<u>Prtys</u>	<u>HW-WVR-89-02</u> <u>Compliance Order</u> <u>\$11,800 in civil</u> <u>penalties.</u>	<u>Settlement action.</u>
<u>Ron Graham</u>	<u>2/2/89</u>	<u>2/21/89</u>		<u>Resp.</u>	<u>Challenge of agency</u> <u>data collection</u> <u>activity.</u>	<u>Preliminary issues.</u>
<u>Chem-Security</u> <u>Systems, Inc.</u>	<u>3/7/89</u>	<u>3/8/89</u>		<u>Prtys</u>	<u>HW-ER-89-18</u> <u>Compliance Order</u> <u>and \$19,400 in civil</u> <u>penalties.</u>	<u>Informal meeting</u> <u>proposed.</u>

A-63

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: D
Division: Management Services
Section: Administration

SUBJECT:

Pollution Control Tax Credits

PURPOSE:

Approve and Deny Pollution Control Tax Credit Applications.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment ___
 - Rulemaking Statements Attachment ___
 - Fiscal and Economic Impact Statement Attachment ___
 - Public Notice Attachment ___

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment ___

- Approve Department Recommendation
 - Variance Request Attachment ___
 - Exception to Rule Attachment ___
 - Informational Report Attachment ___
 - Other: (specify)
Tax Credit Applications Attachment A

Meeting Date:
Agenda Item:
Page 2

DESCRIPTION OF REQUESTED ACTION:

1. Issue Tax Credit Certificates for Pollution Control Facilities:

T-2331	Reuf's Fur Ranch	Animal Waste Collection & Irrigation
T-2342	Willamina Lumber Co.	Rader Sand Air Filter
T-2375	International Paper Co.	Wastewater Control & Treatment System
T-2417	Bend Millwork Systems, Inc.	Oil Spill Containment Tank
T-2622	Far West Fibers, Inc.	Clark Industrial Forklift
T-2661	McLagan Farms, Inc.	Straw Storage Shed
T-2692	William & Trudy Radke	Tractor to Pull Loافر

2. Deny Tax Credit Certificate for Pollution Control Facility:
T-2191 Forrest Paint, Inc. Groundwater Monitoring Wells

Reason for Denial: Facility does not qualify as a pollution control facility.

3. Deny Tax Credit Certificate for Pollution Control Facilities:

T-2716	Norman Coon Oak Park Farms	Straw Storage Shed
T-2722	Norman Coon Oak Park Farms	Straw Storage Shed

Reason for Denial: Applicant did not file for preliminary certification before construction and the request for EQC waiver does not comply with Department regulations.

AUTHORITY/NEED FOR ACTION:

<input checked="" type="checkbox"/> Required by Statute: <u>ORS 468.150 - 468.190</u>	Attachment <u> </u>
Enactment Date: _____	
<input type="checkbox"/> Statutory Authority: _____	Attachment <u> </u>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment <u> </u>
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment <u> </u>
<input type="checkbox"/> Other: _____	Attachment <u> </u>
<input type="checkbox"/> Time Constraints: (explain)	

Meeting Date:
Agenda Item:
Page 3

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Response to Testimony/Comments	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Prior EQC Agenda Items: (list)		
	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Other Related Reports/Rules/Statutes:		
	Attachment	<input type="checkbox"/>
<input checked="" type="checkbox"/> Supplemental Background Information	Attachment	<input type="checkbox"/>

The pollution control tax credit program has been in effect since 1968 to provide credits for installation of pollution control equipment. The statute requires Commission approval of the amount certified for pollution control.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

1. None for the seven applications recommended for approval.
2. Recommended denial on T-2191, Forrest Paint, Inc.:
 - A. The applicant may perceive that the Departmental review and evaluation process was unjust in that,
 - A Department commitment to support certification was made when the preliminary certificate was approved, and that subsequent law changes should not be applied.
 - Applicant believes the company has been cooperative and has voluntarily taken pollution control actions beyond those required.
3. Recommended denial on T-2716 & T-2722:
 - A. There may be a perception that the existing laws and rules are too stringent in requiring preliminary approval before facility construction or installation.
 - B. There may be a perception that Department staff too narrowly interprets what constitutes "special circumstances" for a waiver of filing a preliminary certificate application.
 - C. EQC denial may lessen the farming community's cooperation in pursuing alternatives to field burning.

Meeting Date:
Agenda Item:
Page 4

PROGRAM CONSIDERATIONS:

None

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. There were no alternatives considered by staff for the seven applications that are recommended for certification. These applications met the Pollution Tax Credit Program's requirements.
2. In the evaluation of T-2191, Forrest Paint, Inc. staff considered the following alternatives before recommending denial:
 - Staff sought Legal Counsel's advice on the applicability of statutory changes which occurred after the approval of the preliminary certificate. The changes state that the clean up of unauthorized spills or releases are not eligible as pollution control facilities.
 - Staff evaluated the circumstances of the company's past practices. The spills have been determined unauthorized releases in that the company was operating without a required permit, and therefore operating out of compliance with DEQ requirements.
3. In the evaluation of T-2716 & T-2727, Norman Coon, staff considered the following alternative before recommending denial:
 - Staff sought Legal Counsel's advice on evaluating the rationale provided by the applicant in determining whether it met the test of "special circumstances" as defined by Department rule.

Meeting Date:
Agenda Item:
Page 5

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

1. The Department recommends that T-2331, T-2342, T-2375, T-2417, T-2622, T-2661, and T-2696 be approved as recommended in that they comply with the Pollution Tax Credit Program's requirements.
2. The Department recommends that T-2191, Forrest Paint, Inc. be denied because the claimed facility is intended as part of clean up of past unauthorized spills and, as such, does not qualify as a pollution control facility.
3. The Department recommends that T-2716 and T-2722 be denied because applicant failed to submit a preliminary certification application before facility construction, and, because the applicant's justification for waiver of preliminary certification does not meet the intent of "special circumstances" as defined in OAR 340-16-010 (11).

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Yes

Note - Pollution Tax Credit Totals:

Proposed April 14, 1989 Totals

Air Quality	\$	274,216
Water Quality		4,936,880
Hazardous/Solid Waste		19,500
Noise		-0-
	\$	<u>5,231,596</u>

1989 Calendar Year Totals (excluding 4-14 certifications)

Air Quality	\$	818,358
Water Quality		756,124
Hazardous/Solid Waste		-0-
Noise		-0-
	\$	<u>1,574,482</u>

Meeting Date:
Agenda Item:
Page 6

ISSUES FOR COMMISSION TO RESOLVE:

In its evaluation of the Department's recommendation of denial for T-2121, T- 2722, and T 2716, the Commission may want to consider the following:

1. Is the Department's interpretation of statutory and rule provisions governing unauthorized spills or releases accurate?

ORS 468.155

(2) "Pollution control facility" or "Facility" does not include: (f) Property installed, constructed, or used for cleanup of emergency spills or unauthorized releases, as defined by the commission.

OAR 340-16-025

(3) "Pollution control facility" or "facility" does not include: (g) Property or facilities installed, constructed or used for cleanup of emergency spills or unauthorized releases. This includes any facility installed, constructed or used for cleanup after a spill or unauthorized release has occurred.

It is the Department's position, which evolved from the Commission's discussion at the time of the rule adoption 12-11-87, that spills or unauthorized releases that have occurred while operating in compliance with DEQ or EPA requirements would be eligible for tax credit. However, spills or releases which occurred outside of DEQ/EPA purview, and, facilities which were not operating in compliance with legal requirements would not be eligible.

2. Should the Department's rule governing "special circumstances" for waiving the filing of a preliminary certificate application be interpreted differently, or, should the rule be revised?

OAR 340-16-015 (1) (c)

The Commission may waive the filing of the application if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification pursuant to ORS 468.150 to 468.190.

Meeting Date:
Agenda Item:
Page 7

OAR 340-16-010 (11)

"Special circumstances" means emergencies which call for immediate erection, construction or installation of a facility, cases where applicant has relied on incorrect information provided by Department personnel as demonstrated by letters, records of conversation or other written evidence, or similar adequately documented circumstances which directly resulted in applicant's failure to file a timely application for preliminary certification. Special circumstances shall not include cases where applicant was unaware of tax credit certification requirements or applied for preliminary certification in a manner other than that prescribed in rule 340-16-015(1).

It is the Department's policy to evaluate the applicant's reasons for request of a waiver against the definition of "special circumstances". The Commission must then determine if it concurs with the Department's position.

INTENDED FOLLOWUP ACTIONS:

Notify tax credit applicants of EQC action.

Approved:

Section:

Division:

Director:

Roberta Young
Alycia Taylor
Alycia Taylor
for Fred Hansen

Report Prepared By: Roberta Young

Phone: 229-6408

Date Prepared: 3-16-89

RYoung
Apr14-TC
3-16-89

Application No. T-2331

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Ruef's Fur Ranch
12305 Ruef Lane
Mt. Angel, Oregon 97362

The applicant owns and operates a fur farm in Mt. Angel, Oregon.

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

2. Description of Facility

The claimed facility is for animal-waste collection and waste-water irrigation and consists of a waste collection system, a 450,000-gallon above-ground holding tank equipped with mixer and pump, a pipeline and sprayer to irrigate the wastes on land and ancillary electrical control equipment.

Claimed facility cost eligible for tax credit: \$107,374.00
(Accountant's Certification was provided).

Ruef's Fur Farm has received \$17,000.00 in federal cost-sharing funds on this facility.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed August 17, 1987, more than 30 days before construction commenced on September 17, 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on March 4, 1988 and the application for final certification was found to be complete on January 25, 1989, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of the facility is to reduce a substantial quantity of water pollution.

This reduction is accomplished by the redesign to eliminate industrial waste as defined in ORS 468.700.

Prior to installation of the facility, animal waste was hauled out of the animal sheds by hand and piled on the ground until weather and field conditions allowed spreading of the waste. Runoff from the manure pile was not controlled and could potentially contaminate surface water and groundwater.

Manure is now collected from the sheds by a wash-down system and stored in the tank until weather and field conditions permit proper application by spraying. This reduces contaminated runoff to surface water and potential seepage into the groundwater.

b. Eligible Cost Findings

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

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

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

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

Potential savings from the new facility such as reduced labor cost in removing animal waste from the animal sheds, better disease and insect control and a generally better environment for the animals were considered by Mr. Rueff as required in the calculation of the ROI.

Mr. Rueff states by letter (January 29, 1989) that the new facility "...really doesn't save us anything." He points out that equipment maintenance is an added cost of the new facility (\$500.00 per year) and, because their strain of mink (Blue Strain) is particularly disease-prone, they have to continue their fly-abatement program as before.

There is no added fertilizer benefit because the animal waste was being applied to the land before installation of the facility.

The calculated ROI is zero since there is no net positive cash flow from the facility.

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

The method chosen is an accepted method for reduction of runoff pollution by animal waste.

Mr. Rueff worked closely with the U.S. Department of Agriculture in the design of the facility. They studied his needs and designed the facility to best meet those needs.

The applicants considered using a lagoon instead of the tank but indicated they didn't have room for a lagoon on the property.

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

Savings and cost increases were considered under Item 2) above.

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of water pollution and accomplishes this purpose by the redesign to eliminate industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.

- d. The portion of the facility cost that is properly allocable to pollution control is 100-percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$107,374.00 with 100-percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2331.

Jerry E. Turnbaugh
WC4497
(503) 229-5374
February 9, 1989

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

International Paper Company
Industrial Packaging Group
77 West 45th Street
New York, NY 10036

The applicant owns and operates a pulp and paper mill in Gardiner, Oregon.

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

2. Description of Facility

The facility described in this application is a wastewater control and treatment system consisting of spill diversion sumps, collection tank, non-contact cooling water diversion system, primary clarifier and sludge system, biological treatment system, and final effluent pumping system.

Claimed Facility Cost: \$4,826,006.44
(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 met all statutory deadlines in that:

- a. The request for preliminary certification was filed February 22, 1985, more than 30 days before construction commenced on May 14, 1985.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on January 31, 1986 and the application for final certification was found to be complete on October 28, 1987, within 2 years of substantial completion of the facility.

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Willamina Lumber Co.
Hampton Veneer
9400 SW Barnes Road, No. 400
Portland, OR 97225

The applicant owns and operates a plywood manufacturing facility on Willamina Creek Road in Willamina, Oregon.

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

2. Description of Facility

The claimed facility consists of a Rader sand air filter to reduce veneer dryer opacity.

Claimed Facility Cost: \$134,312
(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 met all statutory deadlines in that:

- a. The request for preliminary certification was filed September 1, 1987, less than 30 days before installation commenced on September 15, 1987. However, the Willamette Valley Regional Office authorized the installation of the sand air filter prior to that date. At that time, the Willamette Valley Regional Office also approved pouring the concrete slab for the sand air filter to facilitate major water line repair work requiring excavation at that location.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on October 15, 1987, and the application for final certification was found to be complete on January 6, 1989, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution. The requirement is to comply with a schedule of compliance in their Air Contaminant Discharge Permit to reduce opacity from their veneer dryers.

b. Eligible Cost Findings

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

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

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

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

There is no return on the investment in the facility.

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

This method is used throughout the industry and has been very effective in controlling veneer dryer emissions.

The unit purchased was used equipment which was rebuilt. Because of availability and price, no other device was as proven or as competitive.

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

There are no savings from the facility. There will, however, be additional expense for maintaining and operating the facility.

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

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

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$134,312 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2342.

WFuller:k
AK1395
(503) 229-5749
February 13, 1989

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce water pollution. The requirement under a Department order WQ-SWR-84-114 agreed upon before the Environmental Quality Commission (EQC) on March 28, 1985 is for International Paper Company (IPC) to comply with all the limitations of its National Pollutant Discharge Elimination System (NPDES) permit by constructing and operating a new or modified wastewater treatment facility.

On March 17, 1977, the Department issued NPDES Permit No. 2552-J to IPC to operate a wastewater treatment system and to discharge adequately treated wastewaters from its kraft pulp and paper mill located in Gardiner, Oregon to the Pacific Ocean. The permit expired November 30, 1981 and IPC filed a timely application for renewal of its permit. The Department elected to extend rather than renew the permit due to the lack of final federal effluent guidelines. A permit action letter was issued to allow the permit to remain in effect until a new permit is issued.

IPC has been unable to comply with all the waste discharge limitations of their permit at all times during its effectivity. The company relied on in-plant control and spill collection to maintain effluent within the NPDES permit limits. Enforcement actions for certain violations of the permit have been taken by the Department which included civil penalties.

Under a stipulated order before the EQC, the Department and International Paper Company agreed to resolve and settle the violations. IPC was required under a scheduled program to construct a new or modified wastewater treatment facility and attain operational status by February 15, 1986.

The new wastewater treatment facility attained operational status January 31, 1986. Since the installation of the new facility, International Paper has been meeting its monthly average permit limits of 5,500 lbs. per day BOD and 11,700 lbs. per day suspended solids except for the month of September 1988. The violation was caused by unforeseen process upsets. Quick response by plant personnel resulted to a quick recovery of the treatment facility and back into compliance with its permit limits. Furthermore, the Department was advised on a daily basis of the compliance status of the facility. To prevent a recurrence of process upset, permanent corrective actions were taken by the company such as additional monitoring instrumentation and redundant alarm system.

b. Eligible Cost Findings

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

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

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

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

There is no return on investment for this facility.

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

Pilot plant evaluations of three biological treatment systems were conducted at the mill from October 1981 to February 1982. The results of the pilot plant evaluation (summarized below) showed that the aerated stabilization was the most cost effective and can provide better wastewater treatment.

	<u>Effluent BOD Levels</u>	<u>Relative Capital Cost</u>	<u>Relative Annual Operating Cost</u>
Aerated Stabilization Basin	10 mg/l	1.00	1.00
Rotating Biological Contactor	35-40 mg/l	1.45	1.30
Trickling Filter	40-45 mg/l	1.14	0.89

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$197,000 annually.

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control water pollution and accomplishes this purpose by redesign to control industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules, Commission order and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$4,826,006.44 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2375.

RCDulay:crw
WC4455
(503) 229-5876
February 1, 1989

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bend Millwork Systems, Inc.
62845 Boyd Acres Rd.
Bend, OR 97701

The applicant owns and operates a plant manufacturing wooden doors and windows in Bend, Oregon.

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

2. Description of Facility

The claimed facility is a covered oil-spill containment tank to collect motor- and hydraulic-oil that might be spilled as it is dispensed from drums.

Claimed Facility Cost: \$3,500.00

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed January 11, 1988, more than 30 days before construction commenced on March 21, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on July 29, 1988, and the application for final certification was found to be complete on September 30, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of the facility is to prevent a substantial quantity of water pollution.

This prevention is accomplished by elimination of industrial waste as defined in ORS 468.700.

Prior to installation of the spill-containment tank, motor- and hydraulic-oils were stored near a trench that would have conducted spilled oil to the disposal well that serves the lift-truck wash area, thus potentially polluting the groundwater.

OAR-340-44(5) prohibits using a disposal well where petroleum products are stored or handled unless there is containment around the product area which will prevent spillage or leakage from entering the well.

The Central Region office advised the company on December 3, 1987, to provide a containment system to prevent spilled oil from entering the disposal well.

b. Eligible Cost Findings

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

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

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

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

The facility does not produce income or savings and thus provides no return on the investment.

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

The method chosen is an accepted method for control of spilled oil.

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

There are no savings from the facility.

The cost of maintaining and operating the facility is estimated to be \$0.00 annually.

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

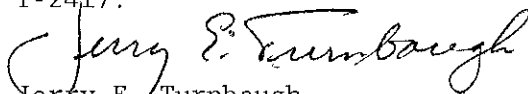
There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to prevent a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100-percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3500.00 with 100-percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2417.



Jerry E. Turnbaugh
WC4296
(503) 229-5374
December 30, 1988

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Far West Fibers, Inc.
P.O. Box 503
Beaverton, OR 97075

The applicant owns and operates a recycled paper processing plant at Beaverton, Oregon.

Application was made for tax credit for solid waste recycling equipment.

2. Description of Facility

The equipment described in the application is a new Clark Industrial Forklift Model GCS-25. The forklift is utilized to transport baled wastepaper from the baler to either inventory or to trucks for shipment to local paper mills for recycling. The forklift will handle approximately 16,000,000 pounds of waste paper per year.

Claimed Facility Cost: \$19,500

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed September 2, 1988 more than 30 days before installation commenced on October 31, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on October 31, 1988 and the application for final certification was found to be complete on January 31, 1989 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of solid waste by recycling.

This reduction is accomplished by the use of a material recovery process. The new truck allows the processing plant to increase its wastepaper recycling rate to 2,600 tons of material per month.

b. Eligible Cost Findings

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

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

This factor is applicable because the entire purpose of the forklift is to handle wastepaper within the plant for the sole purpose of recycling.

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

Average annual cash flow is \$1,000. This results from the value of the recycled material less operating costs. Dividing the annual average cash flow into the cost of the facility gives a return on investment factor of 19.5. Using Table 1 of OAR 340-16-030, for a life of 5 years, the percent return on investment is zero. As a result, the percent allocable would be 100%.

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

The purchase of a reconditioned forklift for approximately \$5,000 was considered but deemed inappropriate since it would not be as dependable in a high volume situation such as the one that exists at Far West Fibers. Four other brands of new forklifts were looked at but it was determined that this model was the best value.

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

There is no notable savings or increase in costs as a result of the facility modification.

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

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

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$19,500 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2622.

Lissa Wienholt:b
(503) 229-6823
February 7, 1989
YB8278

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Willard McLagan
McLagan Farms, Inc.
PO Box 605
Albany, OR 97321

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

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

2. Description of Claimed Facility

The facility described in this application is two galvanized metal pole buildings, each 106' x 180' x 22' with three sides enclosed located two and one-half miles northwest of Shedd, Oregon on Ohling Lane. The buildings will provide cover for 2,400 tons of grass seed straw. The land and building are owned by the applicant.

Claimed facility cost: \$120,779.60
(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 has met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 11, 1988, less than 30 days before construction commenced on September 8, 1988.

However, the applicant relied on information provided by Department personnel which resulted in applicant's failure to file a timely application for preliminary certification for the facility which would otherwise qualify for tax credit pursuant to ORS 468.150 to 468.190.

- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on October 31, 1988, and the application for final certification was found to be complete on January 19, 1989, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The facility also meets the definition provided in OAR 340-16-025 (2)(f)(A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

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

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

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing straw storage.

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

There is no return on investment for this facility because there is a negative average annual cash flow.

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

The method chosen is the accepted method for reduction of air pollution. The method is the least costly most effective method of reducing air contaminants.

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

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

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

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

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility 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 \$120,779.60, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-2661.

J. Britton:ka
(503) 686-7837
January 24, 1988

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

William and Trudy Radke
31014 Green Valley Road
Shedd, Oregon 97377

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

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

2. Description of Claimed Equipment

The equipment described in this application is a used John Deere 4440 tractor used to pull a Heston stack-hand loafer to remove straw and a propane flamer to sanitize fields that would otherwise be open burned. The equipment is owned by the applicant.

Claimed equipment cost: \$19,125
(Accountant's Certification was provided.)

3. 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:

- a. The request for preliminary certification was filed November 28, 1988, less than 30 days before purchase on December 21, 1988.

However, according to the process provided in OAR 340-16-015(1)(b), the application was received by DEQ staff and the applicant was notified that the application was complete, and purchase could commence.

- b. The request for preliminary certification was approved before application for final certification was made.
- c. Purchase of the equipment was substantially completed on December 21, 1988, and the application for final certification was found to be complete on January 31, 1989, within two years of substantial purchase of the equipment.

4. Evaluation of Application

a. The equipment is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the equipment's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The equipment also meets the definition provided 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 facility is used to recover and convert waste products into a saleable or usable commodity.

The equipment promotes the reduction of air pollution by removing straw from fields which would otherwise be open burned.

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

There is no return on investment for this equipment because there is a negative average annual cash flow.

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

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

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

The cost of maintaining and operating the equipment is \$16,440 annually.

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, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

There are no other factors to consider in establishing the actual cost of the 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 100%.

5. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the sole purpose of the equipment is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment 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 \$19,125, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-2692.

J. Britton:ka
(503) 686-7837
February 2, 1989

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Forrest Paint Co.
1011 McKinley St. West
Eugene, OR 97402

The applicant owns and operates a paint and coatings manufacturing facility in Eugene, Oregon.

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

2. Description of Facility

The claimed pollution control facility consists of seven groundwater monitoring wells to characterize the extent of contamination in the groundwater of the plant site.

Soils and groundwater at Forrest Paint have been contaminated with hazardous substances as a result of past disposal practices and spills from underground lines and tanks. A history of the site prepared by Mr. Scott Forrest, President, Forrest Paint Company, is attached.

The site history indicates solvents were disposed in an unpermitted pond from 1973 to 1979. Spills from tanks and underground lines also occurred during this time.

To address cleanup of the contamination, Forrest Paint is subject to a Stipulation and Consent Decree signed August 8, 1988 pursuant to ORS 466.540 through 466.590. The Decree requires a Remedial Investigation, Feasibility Study, Selection of Remedial Action by DEQ, and selection and implementation of remedial design.

The above activities and the remedial investigation activities occurring prior to the Consent Decree, including installation of monitoring wells, were and will be carried out to acquire enough information about the release to design and implement a remedial action.

Had the monitoring wells been installed before release as preventive or early detection measures, they would be eligible. The wells were installed to assess the extent of releases which occurred years before and to collect information leading to a cleanup.

Claimed Facility Cost: \$41,671.72 (includes engineering costs of \$26,111.37).

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 met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 2, 1986, more than 30 days before construction commenced on December 1, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on December 9, 1987 and the application for final certification was found to be complete on December 14, 1988, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. Applicant's groundwater monitoring wells do not qualify for tax credit for the following reasons:
 - 1) ORS 468.155(2)(f) does not allow pollution control facility tax credits for property installed, constructed or used for cleanup of emergency spills or unauthorized releases, as defined by the Commission. OAR 340-16-010(12)(a) defines emergency spill or unauthorized release in part as the discharge, deposit, injection, dumping, spillage, emitting, releasing, leakage or placing of oil, hazardous materials or other polluting substances into the air or onto any land or waters of the state. It exempts from such a definition facilities which were operated in compliance with requirements imposed by the Department or the Federal Environmental Protection Agency where the polluting substances which must now be cleaned up are determined by the Department to have been an unanticipated result of the approved facility or activity.
 - 2) Unauthorized releases occurred on the property as documented by Forrest Paint Co. and DEQ's Environmental Cleanup Division.
 - 3) In 1971, the Oregon Legislature passed ORS 459.205 which prohibited the depositing of solid waste on or off site without a permit from the Department. The Department

shows no record of Forrest Paint Company being permitted for this activity.

- 4) It is the Department's opinion that the applicant's past practice does not qualify under ORS 468.155(2)(f) as an activity allowed previously and the facility is not eligible for pollution control tax credit.

b. Eligible Cost Findings

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

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

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

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

There is no income or savings from the monitoring wells so there is no return on the investment.

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

The method chosen is an accepted method for assisting in the control/cleanup of groundwater pollution.

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

There are no savings from the facility.

The cost of maintaining and operating the facility is estimated by the applicant to be \$1000 annually.

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

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

5. Summation

The applicant's groundwater monitoring wells do not qualify for tax credit under ORS 468.155(2)(f) because they are part of a facility for cleanup of an unauthorized release of pollutants.

6. Director's Recommendation

Based upon applicant's request for final tax credit certification and agency files, the Director determines that the facility does not comply with ORS Chapter 468 and related regulations and is not eligible for tax credit certification.

It is recommended that the Commission deny the request.

Jerry E. Turnbaugh
(IW\WJ1651) (WTRR)
(503) 229-5374
3/15/89

February 28, 1989

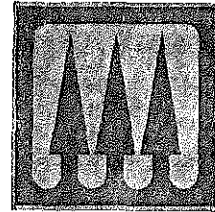
RECEIVED
MAR 3 1989

FAX (503) 344-5137

1011 MCKINLEY WEST POST OFFICE BOX 2768
EUGENE, OREGON 97402 (503) 342-1821

FORREST PAINT CO.

Water Quality Division
Dept. of Environmental Quality



Mr. Jerry E. Turnbaugh
Industrial Waste Engineer
Water Quality Division
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204-1390

Dear Mr. Turnbaugh:

Forrest Paint would like to continue to pursue the application for Pollution Tax Credit (Your Number T2191). We feel that your reading of the situation at Forrest Paint and of the Rules is wrong and would like to appeal this either to the director of your department or to the Environmental Quality Commission.

We appeal this on the following grounds:

Amended
1. You state that the law ORS 468.155 (2)(f) does not allow pollution control facility tax credits for "property installed, constructed or used for clean-up of emergency spill or unauthorized release....."

However, ORS 340-16-025 (2) (g) specifically authorizes Tax Credits for "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

It appears to me that the difference is whether the equipment was installed to detect or to cleanup a spill or unauthorized release.

The monitoring wells were installed first of all to detect if a release occurred. This is very clear in the fact that as a result of the monitoring wells we signed a consent decree agreeing to more fully investigate and address problems at the site. Without the data gathered from these wells, it would have been impossible to determine if a "release" occurred.

Secondly, the consent decree we signed with the

Department only requires a "Remedial Investigation" (ie detect and determine extent of pollution on site) and a "Feasibility Study". It will only reach the point of a "Clean-up" if the Remedial Investigation and Feasibility Study require this and "Clean-up" will be only one of the Remedy's studied.

I am enclosing a letter, dated December 12, 1988, from Sandra Anderson, Project Manager for the DEQ responsible for oversight at the Forrest Paint Site. She states that "Also, as you know, no remedial activities will take place until the Director has selected a remedy after completion of the RI/FS in accordance with Oregon Administrative Rule (OAR) 340-122." The latest schedule included with our Workplan submitted to the DEQ envisions the RI/FS being completed July of 1990. I understand her use of the term "remedial activities" to be the same as the law uses the term "cleanup". I cannot see how we would have spent over \$40,000 in 1986 - 1987 on a "remedial activity" which the director will not determine until late in 1990.

2. You state that "The record shows that beginning in 1972 and ending in 1977, Forrest Paint Company disposed of paint-mixing residue and solvents in two receiving pits on its property." I do not know what "record" you are referring to but Forrest Paint did not even own this property until 1973. I have records of two separate examinations by personnel from the DEQ during the period of 1973 to 1979. In neither of these two inspections did the Department note any violation of the law neither did they request any permit.

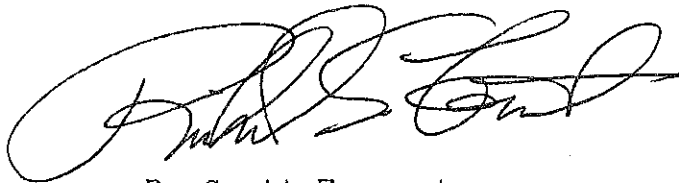
The two primary causes of pollution on this property were the existence of a buried waste pit which was covered over in 1969-70 and which contained large quantities of Lead, Chromium, and solvents. We purchased this facility 12 years before we learned of the existence of this pit. Forrest Paint voluntarily cleaned up this source of contamination in 1988 without any order from (but with the approval of) the DEQ. The second large area of contamination is where there is some Solvent in the perched water and in the upper aquifer. This contamination was caused primarily by the failure of underground pipes and due to the action of vandals. Again much of this activity occurred prior to our ownership. If you examine the position of the groundwater monitoring wells, you will see that they are positioned to "detect" contamination coming from these two sources.

3. You stated to Mr. Hillier over the phone that because the Monitoring wells are vaguely associated with the overall examination of the site which may lead to a "Cleanup" you feel justified in considering them as equipment bought for the "cleanup". However this is analogous to the situation in OAR 340-16-010 (7) where it addresses facilities which are part of a process which burns waste which is a non eligible activity but "it does not eliminate from eligibility a pollution control device associated with a process which burns waste if such device is otherwise eligible for pollution control tax credit under these rules." I suggest that it is also not right to condemn these detection wells for guilt by association.

Mr. Turnbaugh, I request that you either take another look at the application or that you pass it on to the Environmental Quality Commission with my comments. I also request to be notified of the time and place of that meeting and be given a chance to speak.

Because OAR 340-16-015 (4) requires that the request for hearing shall be mailed to the Director of the Department, I am Mailing a copy of this with a cover letter to Mr. Fred Hanson.

Sincerely,

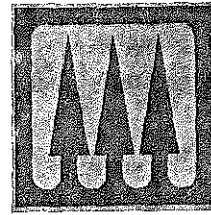
A handwritten signature in black ink, appearing to read "R. Scott Forrest". The signature is fluid and cursive, with a large initial "R" and "S".

R. Scott Forrest
President

February 28, 1989

*Rec'd 3/3/89***FORREST PAINT CO.**

Mr. Fred Hanson
Director
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204-1390



Dear Mr. Hanson,

I am attaching a copy of an appeal that I mailed to Mr. Jerry Turnbaugh of your Department. It appears to me that OAR 340-16-015 (4) may require that this be directed to your office.

At the same time, I would like to bring to your attention some of my feelings about the way my company is being treated by your department.

Forrest Paint is a small, local Oregon owned and operated company. We have 55 employees in the state of Oregon. We have been from early on in 1978 a leader in trying to implement the laws and rules related to using and disposing of hazardous materials. We have never been convicted of violating any hazardous waste laws. We are in an unfortunate situation because the laws changed rapidly and many of the early practices here by our predecessors and us was unwise in retrospect.

The changes in laws are often hard to understand and to cope with. For example, I felt that we had made an agreement with the state on these monitoring wells, but this law we are discussing here was passed after we had agreed to put the wells in, after the DEQ had given us preliminary certification, and after we had installed the first half of the wells. We have spent in excess of \$400,000 to date on this problem, this tax credit would amount to about \$2000 per year, a tiny part of that expense. I do not understand why the Department of Environmental Quality wants to push us to extreme limits every time at every juncture. We fulfilled every commitment we made to your department, but many times they feel that then the Department has no responsibility to fulfill commitments made to us. I am sure that the state legislature did not intend to put companies like mine out of existence by unilaterally changing the rules after we had reached an agreement with the State.

We filed for the tax credit on April 6, 1988. The law states OAR 340-16-020 (2) (a) "The commission shall act on an application for certification before the 120th day after the

filing of a complete application." It was 293 days after the filing of our application before the DEQ took action on it. Mr. Turnbaugh was very gracious in giving me all of 14 days to respond to his letter. I did agree to an extension but at the time the only alternative given me was "otherwise we will reject it without looking at it". The department clearly disregarded the law in handling this. I feel that in this case that I have been wronged by the Department.

Though I have never met you, I have heard from several sources (such as Tom Donaca) that your attitude is to try to get these problems solved without putting Oregon Businesses out of Business. Forrest Paint has tried to be cooperative with the DEQ each time we have interacted with them. We have voluntarily done many things above and beyond what would be required by law. We believe in doing what we can to make the environment as clean as possible. However, it will cost this company a lot of money if in every transaction with the DEQ we have to pay a lawyer to represent us. This is money which does us no good and the environment no good.

Sincerely,

R. Scott Forrest
President

Appendix D
HISTORY OF FORREST PAINT COMPANY
PREPARED BY SCOTT FORREST, PRESIDENT

The site that the Forrest Paint Company plant sits on today consists of 3.72 acres on the east side of McKinley Street in west Eugene about 150 feet north of 11th Avenue. Originally, it was farm land owned by Mr. and Mrs. Conger. Iverson Paint Company bought this land around 1960 from the Congers. Iverson Paint was a corporation owned largely by Mr. Vernon and Mrs. Margaret Iverson.

In or around 1961, Iverson Paint constructed the first building on this site. It was a 6,832-square-foot concrete building. Original use was as a factory and warehouse for Iverson Paints who continued to operate a store at another location. We now refer to this building as the "factory." Soon after the construction of this building, two large (believed to be 4,000 gallon) storage tanks, containing toluene and paint thinner, were placed behind the building.

In 1965, a second larger (12,000-square-foot) building was constructed to the north side of the first building. This building was used for warehousing raw material and finished goods. We now refer to this building as the "warehouse." When this building was built, there was built a diked storage area for six 4,000-gallon storage tanks. The two original tanks were moved into this area. In 1966 or 1967, four more 4,000-gallon tanks were installed in the diked area.

When Iverson Paint began production in 1961, most paints, including the house paints produced at the time, were thinned with paint thinner (light petroleum distillate fractions). After making a batch of paint, the production people would clean the mixing tank with paint thinner and save that thinner for use in a later batch of paint. When a batch of water-based paint was made, the tank was washed out with water. The dirty water was put into the floor drains, which led to the city storm sewer.

As time went on, the production increased. At the same time, more and more water-base paints began to be produced. By 1965, the company had begun to dump the dirty wash water into a pond-like depression on the south side of the property. It appears that the use of the floor drains had been reduced to an occasional thing. Starting in 1965 or 1966, Iverson paint began to make more sophisticated industrial coatings, which used a wide variety of solvents and produced more wash solvent than could be conveniently reused. Sometime, they began to also flush this dirty solvent into the pond that was being used to accumulate the dirty wash water. In 1968, under pressure from the city, the floor drains were

disconnected from the sewer, and all waste water went into the "pond." The pond by now had a wooden trough leading to it to facilitate the movement of waste to the pond area.

In June 1969, Iverson Paint Company was sold to Cascade Paint Company soon to become Cascade Chemical Coatings. Somewhere soon before, or soon after this transaction, the pond was covered over with a layer of dirt and a "new pond" was dug out immediately next to the south side of the building. Cascade then also constructed a third building on the site west of where the pond was and south of the factory building. This new building is now known as the "store." They also built a road from McKinley Street to the rear of the property at about this time.

Cascade continued to use the new pond next to the building to dispose of the waste from cleaning paint tubs containing both solvent and water. The big difference in the operation was that as the solids in the pond accumulated, the pond was periodically cleaned and the residue from the pond was taken to city or county landfills.

During Cascade's ownership, local junior high school students began to break into the tanks to obtain solvents (primarily toluene) to "sniff" and get high. It has been suggested that on at least two occasions, the valves on the bottom of the tanks were left open and entire tank loads of material were dumped into the dike. Unfortunately, the dike was not watertight, and the solvent (believed to be toluene) leaked onto the ground.

Cascade went bankrupt during the last half of 1972. On January 5, 1973, Forrest Paint Company obtained the purchasers rights from Cascade Chemical Coatings to the contract to purchase the property. Forrest Paint Company continued the same practice of using the new pond next to the building to dispose of both solvent and water-base tank washings until late 1979. Being aware of the new environmental laws being passed in 1978 and 1979, Forrest Paint dug up all of the paint in this pit in October and November 1979, and had the waste hauled to a hazardous waste dump. A new system was installed in late 1979, which consisted of recycling both water-based washes directly into some paints and recycling solvents through a solvent recovery system and again back into production. Since November 1979, no product was released onto the ground. Forrest Paint Company operated the pit from 1973 to 1979.

Soon after buying the property, Forrest Paint was bothered by juveniles breaking into the storage tanks to obtain toluene to sniff. Forrest Paint Company took many actions over the years to prevent this from happening (Forrest Paint was primarily worried about liability if one of the juveniles were

to be injured by the solvent). Initially, a fence was built on top of the dike that surrounded the tanks. The company later put three strands of barbed wire on top of the fence around the tanks. Finally, a locked fence was constructed around the entire back lot of the property. Warning signs were placed around the property warning of the dangers. Unfortunately, one of the steps taken was to place a lock on the bottom valve of the tank. One night, some juveniles broke both the lock and the valve off of the tank to get some solvent. The entire contents of the tank were spilled onto the ground. The vandalism and problems were finally stopped in 1978, and there have not been any problems since then. The dike was sealed in 1985 to make it watertight so any lost solvent would be caught before reaching the environment.

In August 1981, Forrest Paint Company installed two 10,000-gallon and one 2,000-gallon underground storage tanks. The two big tanks contained toluene and xylene. The smaller tank contained acetone. In November 1985, because of the impending underground storage tank laws, all of the underground tanks were removed. The two larger tanks were reinstalled in a diked above ground area. There were no confirmed leaks found when the tanks were dug up.

In 1975, an underground line leading from the toluene tank to the factory leaked due to corrosion and most of the contents of one tank was lost to the environment. In November 1978, a different underground line failed and a tank of methyl ethyl ketone was leaked into the ground. In late 1978, all of the underground lines were replaced with new lines. In 1985, most of the below ground lines were replaced with lines above the ground. There was one section of lines about 16 feet long where the lines were run in the ground below a doorway, which was not replaced. These lines were replaced in 1986. Forrest Paint Company no longer has any chemical lines below the ground.

In later 1984 and early 1985, Forrest Paint Company constructed the fourth building on the site; this was a 5,000-square-foot building and aerosol production building. This building is the most easterly of all the buildings and is generally referred to as the "new warehouse."

In June 1988, the house originally owned by the Congers on the site was torn down. In its place, an 8,000-square-foot diked slab was installed. Forrest Paint intends to use this slab eventually for a new warehouse.

CVR34/011

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Norman Coon, President
Oak Park Farms, Inc.
31310 Peoria Road
Shedd, Oregon 97377

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

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

2. Description of Claimed Facility

The facility described in this application is a 106' x 180' x 26' grass straw storage shed located one and three-quarters miles east of Highway 99E on Oak Plain Drive. The land and buildings are owned by the applicant.

Claimed facility cost: \$66,641.00
(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 has not met all the statutory deadlines in that:

- a. The request for preliminary certification was not filed.
- b. Construction of the facility was substantially completed during July, 1988. The notice of construction completion was not filed. The application for final certification was found to be complete on January 20, 1989. The applicant filed the final application with a request for waiver of statutory deadlines in accordance with OAR 340-16-015(c). Refer to attachments A, B, and C.
- c. The applicant's facility does not qualify for tax credit as a pollution control facility for the following reasons:
 - (1) The preliminary certification is required to be filed 30 days prior to construction.
 - (2) OAR 340-16-015(c) grants the Environmental Quality Commission authority to waive preliminary certification filing requirements under special circumstances. The applicant submitted a request for waiver stating unawareness of preliminary certification requirements. The appeal also refers to a need to comply with field

burning rules. To staff's knowledge, there were no rule requirements which would have justified construction prior to submitting a preliminary certification application. Applicant's reason does not comply under special circumstances defined in OAR 340-16-010(11).

4. Evaluation of Application

The facility meets the requirements for certification as an air pollution facility except for the failure to file a preliminary certification or notice of construction completion.

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The facility also meets the definition provided in OAR 340-16-025 (2) (f) (A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

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

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

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing straw storage.

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

Using Table 1 of OAR 340-16-030 for a life of 15 years, the annual percent return on investment is 0%.

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

The method chosen is the accepted method for reduction of air pollution. The method is the least costly most effective method of reducing air contaminants.

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

There is no savings or increase in costs which occur or may occur as a result of the installation of the facility.

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

solid or hazardous waste or to recycling or properly disposing of used oil.

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

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

5. Summation

- a. The facility was not constructed in accordance with all regulatory deadlines. Applicant has submitted a request for waiver pursuant to OAR 340-16-015.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, the Director has determined that the application does not comply with OAR 340-16-015 and therefore is not eligible for tax credit certification. It is recommended that a Pollution Control Facility Certificate not be issued for the facility claimed in Tax Credit Application Number TC-2716.

J. Britton:ka
(503) 686-7837
March 8, 1989

October 3, 1988
31310 Peoria Road
Shedd, Or 97377

Fred Hanson
Department of Environmental Quality
522 SW 5th
Portland, Or.

Dear Mr. Hanson:

This summer we built two sheds to hold straw. We inquired about a tax credit through our accountant at the time we built them, and now we find that we were required to have approval before they were built.

These sheds are 108 x 180 feet. They cost \$112,000.00, plus \$17,000.00 for the shale, to make them able to hold the straw off the wet ground all winter, and the area for the trucks to be accessible to the buildings in the winter. We feel this is a considerable amount of money to have spent to comply with the field burning rules that were in effect this summer.

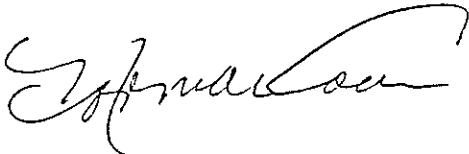
One of these buildings was built before, and one after the I-5 accident. It was obvious that we had an impossible situation that we had to work with this summer, and our fields had to be cleaned of the straw so they could be prepared for next years crops. We made the decisions to do this in a very short period of time. If we were going to get the buildings up before rain in a normal year, it had to be done at once.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
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OCT 14 1988
OFFICE OF THE DIRECTOR

I understand that the Oregon Seed Council had put out information that an inspection before the building was started was necessary about 1½ years back. We feel that since there is a tax credit available, and since we have built these buildings during the crisis that we were in to comply with the needs that a variance for this situation is appropriate.

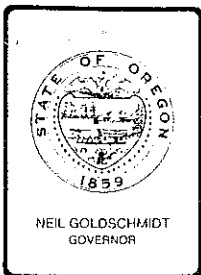
We would appreciate it if you would send us the forms necessary to get this tax credit. Your prompt response will be appreciated.

Sincerely,

A handwritten signature in cursive script, appearing to read "Norman Coon".

Norman Coon

CC: Liz VanLeeuwen
Mae Yih
Robert Buchanan
Dave Nelson
Dale Fisk



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

October 18, 1988

Norman Coon
31310 Peoria Road
Shedd, Or. 97377

Re: Pollution Control Tax Credit

Dear Mr. Coon:

The Environmental Quality Commission has the authority to waive the requirement for an applicant to file a preliminary application for tax credit under ORS 468.175 if special circumstances make such a filing unreasonable. Please complete the enclosed final applications for tax credit and submit them with a letter requesting that the Commission waive the preliminary application requirement. Since the storage sheds were built at different times you should complete an application for each.

If you need assistance in completing the form, contact Brian Finneran of our Field Burning office in Eugene at 686-7837 or Lydia Taylor of our Management Services Division at 229-6485.

Sincerely,

Fred Hansen
Director

LRT

Enclosure: Law
Application forms

cc: Brian Finneran - *Field Burning*
Representative Liz VanLeeuwen
Senator Mae Yih
Robert Buchanan
Dave Nelson

RECEIVED
OCT 20 1988

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
FIELD BURNING OFFICE

Nov. 9, 1988

31310 Beoria Rd.

Shedd, Oregon 97377

Department of Environmental Quality

811 S.W. Sixth Ave.

Portland, Oregon

Dear Sirs:

This summer we had two straw sheds constructed on our property. We inquired about a tax credit through our accountant at the time of construction. We found out too late that we were to have detailed approval prior to construction.

The sheds that were built are 108 x 180' and will hold approx. 1400-1600 tons of straw a piece. The cost of the buildings are 112,000⁰⁰ and the shale base and turnaround \$17,000⁰⁰. The shale being used in the buildings to keep the straw dry from ground water and a turnaround area for the trucks hauling the straw during the year. We feel we have spent a considerable amount of money in a short time to adjust to conditions for field sanitation that changed in a short time this summer.

One of these buildings was built before the I-5 accident and one following. We feel because of the rule changes and the D. E. 2. being even more

positions on any further field burning that we would have to make further adjustments in our straw removal program.

We were fortunate in finding a market for the bulk of our fescue straw, in addition to the ryegrass straw that was already committed to the Japanese straw market. The fescue straw is going to a seed farm in southern California. The arrangements were made in less than a weeks time. The user flew up here on a weekend and finalized the arrangements. We were fortunate that the straw we had and the seed he used were compatible. We see this as a limited market but unique and solid market at this time. As with the ryegrass straw it must be kept dry and shipped throughout the year.

We feel that these buildings were built for only one specific purpose and should be an allowable tax credit under the law. They were built during a time of great uncertainty and we had to get the straw off of the fields as soon as possible to prepare for next years crop.

We would appreciate it if you would consider our request for a variance on the buildings we have constructed.

We have also applied for and received preliminary approval for a third straw shed to be built May-June of next year. We hope this will complete construction of our storage facilities for straw.

Vernon Foo

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Norman Coon, President
Oak Park Farms, Inc.
31310 Peoria Road
Shedd, Oregon 97377

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

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

2. Description of Claimed Facility

The facility described in this application is a 106' x 180' x 26' grass straw storage shed located one and three-quarter miles east of Highway 99E on Oak Plain Drive. The land and buildings are owned by the applicant.

Claimed facility cost: \$66,641.00
(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 has not met all the statutory deadlines in that:

- a. The request for preliminary certification was not filed.
- b. Construction of the facility was substantially completed during July, 1988. The notice of construction completion was not filed. The application for final certification was found to be complete on January 20, 1989. The applicant filed the final application with a request for waiver of statutory deadlines in accordance with OAR 340-16-015(c). Refer to attachments A, B, and C.
- c. The applicant's facility does not qualify for tax credit as a pollution control facility for the following reasons:
 - (1) The preliminary certification is required to be filed 30 days prior to construction.
 - (2) OAR 340-16-015(c) grants the Environmental Quality Commission authority to waive preliminary certification filing requirements under special circumstances. The applicant submitted a request for waiver stating unawareness of preliminary certification requirements. The appeal also refers to a need to comply with field

burning rules. To staff's knowledge, there were no rule requirements which would have justified construction prior to submitting a preliminary certification application. Applicant's reason does not comply under special circumstances defined in OAR 340-16-010(11).

4. Evaluation of Application

The facility meets the requirements for certification as an air pollution facility except for the failure to file a preliminary certification or notice of construction completion.

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The facility also meets the definition provided in OAR 340-16-025 (2) (f) (A): "Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning."

- b. Eligible Cost Findings

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

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

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing straw storage.

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

Using Table 1 of OAR 340-16-030 for a life of 15 years, the annual percent return on investment is 7%.

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

The method chosen is the accepted method for reduction of air pollution. The method is the least costly most effective method of reducing air contaminants.

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

There is no savings or increase in costs which occur or may occur as a result of the installation of this facility.

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

solid or hazardous waste or to recycling or properly disposing of used oil.

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

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 59.06%.

5. Summation

- a. The facility was not constructed in accordance with all regulatory deadlines. Applicant has submitted a request for waiver pursuant to OAR 340-16-015.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 59.06%.

6. Director's Recommendation

Based upon these findings, the Director has determined that the application does not comply with OAR 340-16-015 and therefore is not eligible for tax credit certification. It is recommended that a Pollution Control Facility Certificate not be issued for the facility claimed in Tax Credit Application Number TC-2722.

J. Britton:ka
(503) 686-7837
March 8, 1989

October 3, 1988
31310 Peoria Road
Shedd, Or 97377

Fred Hanson
Department of Environmental Quality
522 SW 5th
Portland, Or.

Dear Mr. Hanson:

This summer we built two sheds to hold straw. We inquired about a tax credit through our accountant at the time we built them, and now we find that we were required to have approval before they were built.

These sheds are 108 x 180 feet. They cost \$112,000.00, plus \$17,000.00 for the shale, to make them able to hold the straw off the wet ground all winter, and the area for the trucks to be accessible to the buildings in the winter. We feel this is a considerable amount of money to have spent to comply with the field burning rules that were in effect this summer.

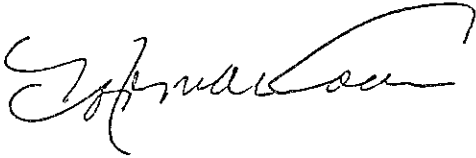
One of these buildings was built before, and one after the I-5 accident. It was obvious that we had an impossible situation that we had to work with this summer, and our fields had to be cleaned of the straw so they could be prepared for next years crops. We made the decisions to do this in a very short period of time. If we were going to get the buildings up before rain in a normal year, it had to be done at once.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
OCT 14 1988
OFFICE OF THE DIRECTOR

I understand that the Oregon Seed Council had put out information that an inspection before the building was started was necessary about 1½ years back. We feel that since there is a tax credit available, and since we have built these buildings during the crisis that we were in to comply with the needs that a variance for this situation is appropriate.

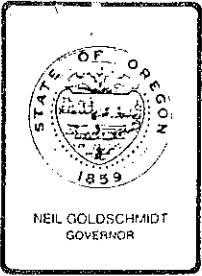
We would appreciate it if you would send us the forms necessary to get this tax credit. Your prompt response will be appreciated.

Sincerely,

A handwritten signature in cursive script, appearing to read "Norman Coon".

Norman Coon

CC: Liz VanLeeuwen
Mae Yih
Robert Buchanan
Dave Nelson
Dale Fisk



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

October 18, 1988

Norman Coon
31310 Peoria Road
Shedd, Or. 97377

Re: Pollution Control Tax Credit

Dear Mr. Coon:

The Environmental Quality Commission has the authority to waive the requirement for an applicant to file a preliminary application for tax credit under ORS 468.175 if special circumstances make such a filing unreasonable. Please complete the enclosed final applications for tax credit and submit them with a letter requesting that the Commission waive the preliminary application requirement. Since the storage sheds were built at different times you should complete an application for each.

If you need assistance in completing the form, contact Brian Finneran of our Field Burning office in Eugene at 686-7837 or Lydia Taylor of our Management Services Division at 229-6485.

Sincerely,

Fred Hansen
Director

LRT

Enclosure: Law
Application forms

cc: Brian Finneran - *Field Burning*
Representative Liz VanLeeuwen
Senator Mae Yih
Robert Buchanan
Dave Nelson

RECEIVED
OCT 20 1988

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
FIELD BURNING OFFICE

Nov. 9, 1988

31310 Beoria Rd.

Shedd, Oregon 97377

Department of Environmental Quality
 811 S.W. Sixth Ave.
 Portland, Oregon

Dear Sirs:

This summer we had two straw sheds constructed on our property. We inquired about a tax credit through our accountant at the time of construction. We found out too late that we were to have detailed approval prior to construction.

The sheds that were built are 108 x 180' and will hold approx. 1400-1600 tons of straw a piece. The cost of the buildings are 112,000⁰⁰ and the shale base and turnaround \$17,000⁰⁰. The shale being used in the buildings to keep the straw dry from ground water and a turnaround area for the trucks hauling the straw during the year. We feel we have spent a considerable amount of money in a short time to adjust to conditions for field sanitation that changed in a short time this summer.

One of these buildings was built before the I-5 accident and one following. We feel because of the rule changes and the D.E.Q. being even more A-55

cautions on any further field burning that we would have to make further adjustments in our straw removal program.

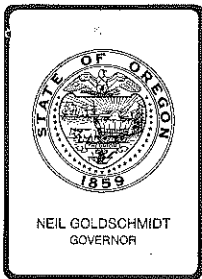
We were fortunate in finding a market for the bulk of our fescue straw, in addition to the ryegrass straw that was already committed to the Japanese straw market. The fescue straw is going to a seed farm in southern California. The arrangements were made in less than a weeks time. The user flew up here on a weekend and finalized the arrangements. We were fortunate that the straw we had and the seed he used were compatible. We see this as a limited market but unique and solid market at this time. As with the ryegrass straw it must be kept dry and shipped throughout the year.

We feel that these buildings were built for only one specific purpose and should be an allowable tax credit under the law. They were built during a time of great uncertainty and we had to get the straw off of the fields as soon as possible to prepare for next years crop.

We would appreciate it if you would consider our request for a variance on the buildings we have constructed.

We have also applied for and received preliminary approval for a third straw shed to be built May-June of next year. We hope this will complete construction of our storage facilities for straw.

Norman Foon



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: F
Division: Air Quality
Section: Field Burning

SUBJECT:

Request for authorization to conduct a public hearing on proposed Open Field Burning rules, OAR 340-26-001 through 340-26-055.

PURPOSE:

In conjunction with the State Fire Marshal's new Field Burning Rules, to improve public safety near open field burning, propane flaming, and stack burning operations, and to improve general air quality from increased propaning activity in the Willamette Valley.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Proposed Rules Incorporated Attachment E
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment B
 - Public Notice Attachment C
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment

Meeting Date: April 14, 1989
Agenda Item:
Page 2

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Approve Department Recommendation | |
| <input type="checkbox"/> Variance Request | Attachment <input type="checkbox"/> |
| <input type="checkbox"/> Exception to Rule | Attachment <input type="checkbox"/> |
| <input type="checkbox"/> Informational Report | Attachment <input type="checkbox"/> |
| <input type="checkbox"/> Other: (specify) | Attachment <input type="checkbox"/> |

DESCRIPTION OF REQUESTED ACTION:

The Department of Environmental Quality and the State Fire Marshal developed new fire safety rules for open field burning and propane flaming at the request of Governor Goldschmidt following the multi-car accident on Interstate 5 south of Albany on August 3, 1988. On August 12, 1988, both the State Fire Marshal and the Environmental Quality Commission adopted temporary emergency rules which addressed this issue.

Recently, the State Fire Marshal's emergency rules were permanently adopted. These rules specify fire equipment, water supplies, and other requirements for conducting open field burning and propaning, particularly near highways and major roadways.

The Department's emergency rules were in effect for 180 days until March 12, 1989. These rules incorporated the "fire safety buffer zones" as defined by the State Fire Marshal, and required prior Department authorization for conducting open burning within these zones. The Department's rules included additional restrictions within the fire safety buffer zones that went beyond the State Fire Marshal's rules, specifically, to minimize smoke emissions from propane flaming operations.

Since the adoption of the Department's emergency rules last year, the Department observed an increase in propane flaming and stack burning within the fire safety buffer zones, due to the increased restrictions on field burning in these areas. The Department has also been monitoring the trend in increased propaning on a Valley-wide basis over the last several years. Therefore, in addition to last year's emergency rules, the Department is proposing tighter controls on propaning and prohibiting stack burning within the first half of the fire safety buffer zones.

Meeting Date: April 14, 1989
Agenda Item:
Page 3

AUTHORITY/NEED FOR ACTION:

Required by Statute: _____ Attachment _____
 Enactment Date: _____
 Statutory Authority: _____ Attachment _____
 Pursuant to Rule: _____ Attachment _____
 Pursuant to Federal Law/Rule: _____ Attachment _____

 Other: Attachment _____

 Time Constraints: (explain)

DEVELOPMENTAL BACKGROUND:

Advisory Committee Report/Recommendation Attachment _____
 Hearing Officer's Report/Recommendations Attachment _____
 Response to Testimony/Comments Attachment _____
 Prior EQC Agenda Items:
 August 12, 1988; Proposed Emergency
 Rulemaking on Propaning Attachment D

 Other Related Reports/Rules/Statutes:
 OAR 837-110, Fire Marshal Attachment F

 Supplemental Background Information Attachment _____

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The proposed rule revisions should reduce smoke from propane flaming and stack burning near highways and major roadways, improving public safety and general air quality.

Some growers may be disadvantaged by the proposed rule to prohibit stack burning within the non-combustible area of the fire safety buffer zones. This would require either finding alternative methods to dispose of the straw, or moving the straw stack farther away from the highway/major roadway. Additional propaning restrictions within the fire safety buffer zones, and the proposal to impose further limits on propaning Valley-wide, may cause some growers greater inconvenience in time and expense.

PROGRAM CONSIDERATIONS:

The Department foresees many requests to authorize fields for open field burning in the second 1/4 mile of the fire safety buffer zone along Interstate 5 and the second 1/8 mile of the fire safety buffer zone along designated roadways. The

Meeting Date: April 14, 1989
Agenda Item:
Page 4

proposed rules could require considerable additional staff time to evaluate meteorological conditions specific to the location of each field and to log each request and make final authorization.

Anticipated increases in propane flaming in the non-combustible portions of the fire safety buffer zones will require increased monitoring of Interstate 5 and designated highways by enforcement personnel to curtail operations creating visibility impairment.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The Department considered the following alternatives in drafting the proposed rules and amendments:

1. Relying solely upon State Fire Marshal's Open Burning Rules to address the issue of fire/public safety.
2. Permanent adoption of Department's Emergency Rules on field burning and propaning.
3. Including provisions not addressed in the original emergency rules, prohibiting stack burning in the non-combustible portion of the fire safety buffer zone, and restricting propane flaming amounts, density and location based on meteorological or air quality concerns.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission review proposed rule revisions and authorize public hearings to take place. This will provide the Department with public comment on the proposed rule revisions.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Not aware of conflict with any agency or legislative policies.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the Department be directly involved in on-site field burning authorizations along Interstate 5 and designated roadways?
2. Should the Department further restrict propaning based on meteorological or air quality considerations?

Meeting Date: April 14, 1989
Agenda Item:
Page 5

3. Should stack burning be prohibited in the non-combustible areas of the fire safety buffer zones?

INTENDED FOLLOWUP ACTIONS:

Actions on draft rules and amendments:

- File hearing notice with the Secretary of State
- Hold public hearing.
- Review oral and written testimony and revise proposed rules and amendments as appropriate
- Return to Commission for final rule adoption

Approved:

Section: Nate Jobb

Division: Nate Jobb

Director: Judicia Taylor
for Fred Hansen

Report Prepared By: Jim Britton, Brian Finneran

Phone: 687-7837

Date Prepared: March 29, 1989

BF:x
PLAX809
3/29/89

Proposed Rule Revisions

Definitions

340-26-005

Insert the following as (16) and renumber the previous (16) through (43):

(16) "Fire safety buffer zone" shall have the same meaning as defined in the State Fire Marshal rules.

Amend (27)(e) [(28)(e) after renumbering] as follows:

Areas on the west and east side of and within 1/4 mile of [these highways: Interstate 5, 99, 99E and 99W. Areas on the south and north side of and within 1/4 mile of US Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis,] Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.

General Requirements

340-26-010

Delete existing (7) and replace with:

(7) No open field burning shall be conducted within 1/4 mile of either side of any Interstate freeway within the Willamette Valley or within 1/8 mile of either side of the designated roadways, as specified in State Fire Marshal Rules OAR 837-110-080. In addition, no open field burning shall be conducted in any of the remaining area within a fire safety buffer zone without prior authorization from the Department.

Delete current text of (9)(b) and replace with:

(9) Utilizing ignition devices and fire control equipment which shall meet the requirements of the State Fire Marshal pursuant to OAR 837-110-030 and 837-110-040.

Registration, Permits, Fees, Records

340-26-012

Amend existing (2)(e)(B) as follows:

(2)(e)(B) Priority or fire safety buffer zone acreage located on the upwind side of any city, airport, Interstate freeway or [highway] designated roadway within the same priority area or buffer zone.

Daily Burning Authorization Criteria
340-26-015

Amend existing (5)(a)(A) as follows:

(5)(a)(A) No priority or fire safety buffer zone acreage shall be burned upwind of any city, airport, Interstate freeway or [highway] designated roadway within the same priority area or buffer zone.

Approved Alternate Methods of Burning (Propane Flaming)
340-26-045

Add (1)(b)(E) as follows:

(1)(b)(E) Every effort shall be made to conduct propane flaming in a manner which minimizes smoke emissions.

Add (1)(b)(F) as follows:

(1)(b)(F) No person shall cause or allow to maintain any propane flaming which results in visibility impairment on any highway or roadway as specified in OAR 837-110-080. Should visibility impairment occur all flames and smoke sources shall be immediately and actively extinguished.

Add (1)(c) as follows:

(1)(c) In addition to the conditions specified in paragraphs (a) and (b) of this section, propane flaming operations within any fire safety buffer zone must comply with the following criteria:

(A) Propaning shall be conducted at a vehicle speed appropriate for complete combustion and minimum smoke emissions but should not exceed 5 miles per hour.

(B) No propaning shall be allowed when either the relative humidity at the nearest reliable measuring station exceeds 65 percent or the surface winds exceed 15 miles per hour.

(C) The presence of any regrowth in the field between 6 and 12 inches in height shall be mowed or cut close to the ground and removed, providing mechanical removal of the resultant field residue is practicable. Any regrowth exceeding 12 inches in height must be mowed or cut close to the ground and removed.

Add (3) as follows:

(3) The Department may issue limitations on the amount, density or frequency of propane flaming in any area when meteorological or air quality condition in its judgement warrant such action.

Add (4) as follows:

(4) All propane flaming operations must be conducted in accordance with the State Fire Marshal's Safety requirements, as specified in OAR 837-110-100 through 837-110-160.

Add (1)(e) as follows:

(1)(e) No stack burning shall be conducted within any State Fire Marshal buffer zone "non-combustible ground surface" area (e.g. within 1/4 mile of Interstate I-5, or 1/8 mile of any designated roadway), as specified in OAR 837-110-080.

PLAN\AK1503 (3/89)

Agenda Item _____, April 14, 1989 EQC Meeting

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(2), this statement provides information on the intended action to amend rules.

1. Legal Authority

ORS 468.460 (1) provides legal authority for this action.

2. Need for the Rule

The proposed amendments and additions are needed to address air pollution problems generated by increase use of propane flaming in the Willamette Valley. Rules would also address propane flaming and stack burning in the State Fire Marshal's fire safety buffer zones. Other minor or clarifying changes are proposed. Rule revisions will be submitted to the U.S. Environmental Protection Agency as an Amendment to the State Implementation Plan.

3. Principal Documents Relied Upon in this Rulemaking

- a. Oregon Revised Statutes 468.450 through 468.495
- b. Oregon Administrative Rules Chapter 340, Division 23, Rules for Open Burning
- c. Oregon Administrative Rules Chapter 837, Division 110, Fire Marshal
- d. Proposed Emergency Rulemaking on Propaning, August 12, 1988

LAND USE COMPATIBILITY STATEMENT

The Department has concluded that portions of the proposed rules appear to affect land use and will be consistent with Statewide Planning Goals and Guidelines.

Goal 6 (Air, Water and Land Resources Quality): The proposal is designed to improve and maintain air quality in the affected area and is therefore consistent with the goal.

Goal 11 (Public Facilities and Services) is deemed unaffected by the rules.

Public comment on any land use issue involved is welcome and may be submitted in the same manner as indicated for testimony in this notice.

FISCAL AND ECONOMIC IMPACT

There should be no significant adverse economic impact on small businesses. Proposed regulations could result in prohibition of propane flaming on some days; however, the extent of curtailment is likely to be negligible. Proposed restriction on stack burning in the fire safety buffer zone could have an economic and fiscal impact because of the transportation expense to move straw residue outside the non-combustible portion of the fire safety buffer zone. Cost to individual and small businesses will depend on the distance the residue will have to be moved. The Department believes that the criteria will significantly reduce air quality impacts from propane flaming and stack burning as well as benefit public safety

PLAX808

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Public Hearing

Hearing Date:

Comments Due:

**WHO IS
AFFECTED:**

Residents of the State of Oregon and those involved with the grass seed industry.

**WHAT IS
PROPOSED:**

The Department of Environmental Quality is proposing to amend the Open Field Burning Rules (OAR 340-26-001 through 340-26-055) particularly related to propane flaming, stack burning, and activities within the State Fire Marshal's fire safety buffer zones.

**WHAT ARE THE
HIGHLIGHTS:**

The proposed rule changes would:

- Allow the Department to regulate amounts, density, and frequency of propane flaming when meteorological and air quality conditions warrant such action.
- Set restrictions on the way propane flaming operations are conducted within the non-combustible portions of fire safety buffer zones to reduce smoke emissions.
- Prohibit burning of straw stacks within the non-combustible portions of fire safety buffer zones to reduce smoke emissions along Interstate 5 and designated highways.
- Require growers to use lighting equipment as prescribed by State Fire Marshal rules.
- Defines "fire safety buffer zone" to have the same meaning as defined in the State Fire Marshal rules.
- Requires Department authorization on a field-by-field basis prior to conducting any open field burning in the fire safety buffer zone.

**PUBLIC
HEARINGS:**

Public hearings will be held before a hearings official at:

TIME: _____
 DATE: _____
 PLACE: _____

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 686-7837 in the Eugene area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

**HOW TO
COMMENT:**

Written or oral comments may be presented at the hearings. Written comments may also be sent to the Department of Environmental Quality, Air Quality Division, Field Burning Program, 1244 Walnut Street, Eugene, Oregon 97403, and must be received no later than 5:00 p.m., _____, 1989.

Copies of the complete proposed rule package may be obtained from the Department of Environmental Quality, Air Quality Division, Field Burning Program. For further information, contact Jim Britton at 1-503-686-7837.

**WHAT IS THE
NEXT STEP:**

The Environmental Quality Commission may adopt new rules identical to the ones proposed, adopt modified rules as a result of the testimony received, or may decline to adopt rules. The Commission will consider the proposed rule revisions at its meeting on _____, 1989.

PROPOSED EMERGENCY RULEMAKING ON PROPANING

COMMISSION DISCUSSION FORMAT

August 12, 1988

OAR 837-110-080

Definitions

340-26-005

Insert the following as (16) and renumber the previous (16) through (43):

(16) "Fire safety buffer zone" shall have the same meaning as defined in the State Fire Marshall rules.

Amend (27)(e) as follows:

(27)(e) Areas on the south and north side of and within 1/4 mile of ORE 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.

General Requirements

340-26-010

Delete existing (7) and replace with:

(7) No open field burning shall be conducted within 1/4 mile of either side of any Interstate freeway within the Willamette Valley or within 1/8 mile of either side of the designated roadways listed in rule 340-26-005(16). In addition, no open field burning shall be conducted in any of the remaining area within a fire safety buffer zone without prior authorization from the Department.

Amend (8) as follows:

(8) Each responsible person open field burning within a priority area around a designated city[,] or airport [or highway] shall refrain from burning and promptly extinguish any burning if it is likely that the resulting smoke would noticeably affect the designated city[,] or airport [or highway].

Delete current text of (9)(b) and replace with:

(9) Utilizing ignition devices and fire control equipment which shall meet the requirements of the State Fire Marshall pursuant to 837-110-030.

Registration, Permits, Fees, Records
340-26-012

Amend (2)(e)(B) as follows:

(2)(e)(B) Priority acreage or fire safety buffer zone located on the upwind side of any city, airport, Interstate freeway or [highway] designated roadway within the same priority area or buffer zone.

Daily Burning Authorization Criteria
340-26-015

Amend (5)(a)(A) as follows:

(5)(a)(A) Priority acreage or fire safety buffer zone located on the upwind side of any city, airport, Interstate freeway or [highway] designated roadway within the same priority area or buffer zone.

Approved Alternative Methods of Burning (Propane Flaming)
340-26-045

Add (1)(b)(E) as follows:

(1)(b)(E) Every effort shall be made to conduct propane flaming in a manner which minimizes smoke emissions.

Approved Alternative Methods of Burning (Propane Flaming)
340-26-045 (continued)

Add (1)(c) as follows:

(1)(c) In addition to the conditions specified in paragraphs (a) and (b) of this section, propane flaming operations within any fire safety buffer zone must comply with the following criteria:

(A) Propaning shall be conducted at a vehicle speed appropriate for complete combustion and minimum smoke emissions but should not exceed 5 miles per hour.

(B) No propaning shall be allowed when either the relative humidity at the nearest reliable measuring station exceeds 65 percent or the surface winds exceed 15 miles per hour.

(C) The presence of any regrowth in the field between 6 and 12 inches in height shall be mowed or cut close to the ground, and removed providing mechanical removal of the resultant field residue is practicable. Any regrowth exceeding 12 inches in height must be mowed or cut close to the ground and removed.

(D) No person shall cause or allow to maintain any propane flaming which results in visibility impairment on any roadway specified in rule 340-26-005(16).

(E) Should a violation of 340-26-045(1)(c)(D) occur, all flame and smoke sources shall be immediately and actively extinguished.

DIVISION 26

RULES FOR OPEN FIELD BURNING
(Willamette Valley)

Introduction

340-26-001 (1) These rules apply to the open burning of all perennial and annual grass seed and cereal grain crops or associated residue within the Willamette Valley, hereinafter referred to as "open field burning". The open burning of all other agricultural waste material (referred to as "fourth priority agricultural burning") is governed by OAR Chapter 340, Division 23, Rules for Open Burning.

(2) Organization of rules:

(a) OAR 340-26-003 is the policy statement of the Environmental Quality Commission setting forth the goals of these rules:

(b) OAR 340-26-005 contains definitions of terms which have specialized meanings within the context of these rules.

(c) OAR 340-26-010 lists general provisions and requirements pertaining to all open field burning with particular emphasis on the duties and responsibilities of the grower registrant.

(d) OAR 340-26-012 lists procedures and requirements for registration of acreage, issuance of permits, collection of fees, and keeping of records, with particular emphasis on the duties and responsibilities of the local permit issuing agencies.

(e) OAR 340-26-013 establishes acreage limits and methods of determining acreage allocations.

(f) OAR 340-26-015 establishes criteria for authorization of open field burning pursuant to the administration of a daily smoke management control program.

(g) OAR 340-26-025 establishes civil penalties for violations of these field burning rules.

(h) OAR 340-26-031 establishes special provisions pertaining to field burning by public agencies for official purposes, such as "training fires".

(i) OAR 340-26-033 establishes special provisions pertaining to "preparatory burning".

(j) OAR 340-26-035 establishes special provisions pertaining to open field burning for experimental purposes.

(k) OAR 340-26-040 establishes special provisions and procedures pertaining to emergency open field burning and emergency cessation of burning.

(l) OAR 340-26-045 establishes provisions pertaining to approved alternative methods of burning, such as "propane flaming".

(m) OAR 340-26-055 establishes provisions pertaining to "stack burning."

Policy

340-26-003 In the interest of public health and welfare pursuant to ORS 468.455, it is the declared public policy of the State of Oregon to control, reduce, and prevent air pollution from open field burning by smoke management. In developing and carrying out a smoke management control program it is the policy of the Environmental Quality Commission:

(1) To provide for a maximum level of burning with a minimum level of smoke impact on the public, recognizing:

(a) The importance of flexibility and judgement in the daily decision-making process, within established and necessary limits;

(b) The need for operational efficiency within and between each organizational level;

(c) The need for effective compliance with all regulations and restrictions.

(2) To study, develop and encourage the use of reasonable and economically feasible alternatives to the practice of open field burning.

Definitions

340-26-005 As used in these rules, unless otherwise required by context:

(1) "Actively extinguish" means the direct application of water or other fire retardant to an open field fire.

(2) "Approved alternative method(s)" means any method approved by the Department to be a satisfactory alternative field sanitation method to open field burning.

(3) "Approved alternative facilities" means any land, structure, building, installation, excavation, machinery, equipment, or device approved by the Department for use in conjunction with an approved alternative method.

(4) "Commission" means the Environmental Quality Commission.

(5) "Cumulative hours of smoke intrusion in the Eugene-Springfield area" means the average of the totals of cumulative hours of smoke intrusion recorded for the Eugene site and the Springfield site. Provided the Department

determines a smoke intrusion to have been significantly contributed to by field burning, it shall record for each hour of the intrusion which causes the nephelometer hourly reading to exceed background levels (the average of the three hourly readings immediately prior to the intrusion) by:

(a) 5.0×10^{-4} b-scat units or more, two hours of smoke intrusion;

(b) 4.0×10^{-4} b-scat units or more, for intrusions after September 15 of each year, two hours of smoke intrusion;

(c) 1.8×10^{-4} b-scat units or more but less than the applicable value in subsection (a) or (b), one hour of smoke intrusion.

(6) "Department" means the Department of Environmental Quality.

(7) "Director" means the Director of the Department or delegated employee representative pursuant to ORS 468.045(3).

(8) "District allocation" means the total amount of acreage sub-allocated annually to the fire district, based on the district's pro rata share of the maximum annual acreage limitation, representing the maximum amount for which burning permits may be issued within the district, subject to daily authorization. District allocation is defined by the following identity:

$$\text{District Allocation} = \frac{\text{Maximum annual acreage limit}}{\text{Total acreage registered in the Valley}} \times \frac{\text{Total acreage registered in the District}}$$

(9) "Drying day" means a 24-hour period during which the relative humidity reached a minimum less than 50% and no rainfall was recorded at the nearest reliable measuring site.

(10) "Effective mixing height" means either the actual height of plume rise as determined by aircraft measurement or the calculated or estimated mixing height as determined by the Department, whichever is greater.

(11) "Field-by-field burning" means burning on a limited restricted basis in which the amount, rate, and area authorized for burning is closely controlled and monitored. Included under this definition are "training fires" and experimental open field burning.

(12) "Field reference code" means a unique four-part code which identifies a particular registered field for mapping purposes. The first part of the code shall indicate the grower registration (form) number, the second part the line number of the field as listed on the registration form, the third part the crop type, and the fourth part the size (acreage) of the field (e.g., a 35 acre perennial (bluegrass) field registered on line 2 of registration form number 1953 would be 1953-2-P-BL-35).

(13) "Fire district" or "district" means a fire permit issuing agency.

(14) "Fire permit" means a permit issued by a local fire permit issuing agency pursuant to ORS 477.515, 477.530, 476.380, or 478.960.

(15) "Fires-out time" means the time announced by the Department at which all flames and major smoke sources associated with open field burning should be out, and prohibition conditions are scheduled to be imposed.

(16) "Fire safety buffer zone" shall have the same meaning as defined in the State Fire Marshal rules.

~~[(16)]~~ (17) "Fluffing" means an approved mechanical method of stirring or tending crop residues for enhanced aeration and drying of the full fuel load, thereby improving the field's combustion characteristics.

~~[(17)]~~ (18) "Grower allocation" means the amount of acreage sub-allocated annually to the grower registrant, based on the grower registrant's pro rata share of the maximum annual acreage limitation, representing the maximum amount for which burning permits may be issued, subject to daily authorization. Grower allocation is defined by the following identity:

Grower Allocation =

$$\frac{\text{Maximum annual acreage limit}}{\text{Total acreage registered in the Valley}}$$

$$\times \text{Total acreage registered by grower registrant}$$

~~[(18)]~~ (19) "Grower registrant" means any person who registers acreage with the Department for purposes of open field burning.

~~[(19)]~~ (20) "Marginal conditions" means conditions defined in ORS 468.450(1) under which permits for open field burning may be issued in accordance with these rules and other restrictions set forth by the Department.

~~[(20)]~~ (21) "Nephelometer" means an instrument for measuring ambient smoke concentrations.

~~[(21)]~~ (22) "Northerly winds" means winds coming from directions from 290 to 90 in the north part of the compass, averaged through the effective mixing height.

~~[(22)]~~ (23) "Open field burning" means burning of any perennial or annual grass seed or cereal grain crop, or associated residue, in such manner that combustion air and combustion products are not effectively controlled.

~~[(23)]~~ (24) "Open field burning permit" means a permit issued by the Department pursuant to ORS 468.458.

~~[(24)]~~ (25) "Permit issuing agency" or "Permit agent" means the county court or board of county commissioners, or fire chief or a rural fire protection district or other person authorized to issue fire permits pursuant to ORS 477.515, 477.530, 476.380, or 478.960.

~~[(25)]~~ (26) "Preparatory burning" means controlled burning of portions of selected problem fields for the specific purpose of reducing the fire hazard potential or other conditions which would otherwise inhibit rapid ignition burning when the field is subsequently open burned.

~~[(26)]~~ (27) "Priority acreage" means acreage located within a priority area.

[~~(27)~~] (28) "Priority areas" means the following areas of the Willamette Valley:

(a) Areas in or within three miles of the city limits of incorporated cities having populations of 10,000 or greater.

(b) Areas within one mile of airports servicing regularly scheduled airline flights.

(c) Areas in Lane County south of the line formed by U.S. Highway 126 and Oregon Highway 126.

(d) Areas in or within three miles of the city limits of the City of Lebanon.

(e) Areas on the west and east side of and within 1/4 mile of these highways: [~~U.S. Interstate 5,~~] 99, 99E, and 99W. Areas on the south and north side of and within 1/4 mile of U.S. Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis, Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.

[~~(28)~~] (29) "Prohibition conditions" means conditions under which open field burning is not allowed except for individual burns specifically authorized by the Department pursuant to rule 340-26-015(2).

[~~(29)~~] (30) "Propane flaming" means an approved alternative method of burning which employs a mobile flamer device [utilizing] which meets the following design specifications and utilizes an auxiliary fuel such that combustion is nearly complete and emissions significantly reduced:

(a) Flamer nozzles must be not more than 15 inches apart.

(b) A heat deflecting hood is required and must extend a minimum of 3 feet beyond the last row of nozzles.

[~~(30)~~] (31) "Quota" means an amount of acreage established by the Department for each fire district for use in authorizing daily burning limits in a manner to provide, as reasonably as practicable, an equitable opportunity for burning in each area.

[~~(31)~~] (32) "Rapid ignition techniques" means a method of burning in which all sides of the field are ignited as rapidly as practical in order to maximize plume rise. Little or no preparatory backfire burning shall be done.

[~~(32)~~] (33) "Residue" means straw, stubble and associated crop material generated in the production of grass seed and cereal grain crops.

[~~(33)~~] (34) "Responsible person" means each person who is in ownership, control, or custody of the real property on which open burning occurs,

including any tenant thereof, or who is in ownership, control or custody of the material which is burned, or the grower registrant. Each person who causes or allows open field burning to be maintained shall also be considered a responsible person.

[~~(34)~~] (35) "Small-seeded seed crops requiring flame sanitation" means small-seeded grass, legume, and vegetable crops, or other types approved by the Department, which are planted in early autumn, are grown specifically for seed production, and which require flame sanitation for proper cultivation. For purposes of these rules, clover and sugar beets are specifically included. Cereal grains, hairy vetch, or field peas are specifically not included.

[~~(35)~~] (36) "Smoke management" means a system for the daily (or hourly) control of open field burning through authorization of the times, locations, amounts and other restrictions on burning, so as to provide for suitable atmospheric dispersion of smoke particulate and to minimize impact on the public.

[~~(36)~~] (37) "Southerly winds" means winds coming from directions from 90 to 290 in the south part of the compass, averaged through the effective mixing height.

[~~(37)~~] (38) "Stack burning" means the open burning of piled or stacked residue from perennial or annual grass seed or cereal grain crops used for seed production.

[~~(38)~~] (39) "Test fires" means individual field burns specifically authorized by the Department for the purpose of determining or monitoring atmospheric dispersion conditions.

[~~(39)~~] (40) "Training fires" means individual field burns set by or for a public agency for the official purpose of training personnel in fire-fighting techniques.

[~~(40)~~] (41) "Unusually high evaporative weather conditions" means a combination of meteorological conditions following periods of rain which result in sufficiently high rates of evaporation, as determined by the Department, where fuel (residue) moisture content would be expected to approach about 12 percent or less.

[~~(41)~~] (42) "Validation number" means a unique five-part number issued by a permit issuing agency which validates a specific open field burning permit for a specific acreage in a specific location on a specific day. The first part of the validation number shall indicate the grower registration (form) number, the

second part the line number of the field as listed on the registration form, the third part the number of the month and the day of issuance, the fourth part the hour burning authorization was given based on a 24-hour clock, and the fifth part shall indicate the size of acreage to be burned (e.g., a validation number issued August 26 at 2:30 p.m. for a 70-acre burn for a field registered on line 2 of registration form number 1953 would be 1953-2-0826-1430-070).

[~~(42)~~] (43) "Ventilation Index (VI)" means a calculated value used as a criterion of atmospheric ventilation capabilities. The Ventilation Index as used in these rules is defined by the following identity:

$$VI = \frac{\text{(Effective mixing height (feet))}}{1000} \times \text{(Average wind speed through the effective mixing height (knots))}$$

[~~(43)~~] (44) "Willamette Valley" means the areas of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties lying between the crest of the Coast Range and the crest of the Cascade Mountains, and includes the following:

(a) "South Valley", the areas of jurisdiction of all fire permit issuing agents or agencies in the Willamette Valley portions of the counties of Benton, Lane, or Linn.

(b) "North Valley", the areas of jurisdiction of all other fire permit issuing agents or agencies in the Willamette Valley.

General Requirements

340-26-010 (1) No person shall cause or allow open field burning on any acreage unless said acreage has first been registered and mapped pursuant to rule 340-26-012(1), the registration fee has been paid, and the registration (permit application) has been approved by the Department.

(2) No person shall cause or allow open field burning without first obtaining (and being able to readily demonstrate) a valid open field burning permit and fire permit from the appropriate permit issuing agent pursuant to rule 340-26-012(2).

(3) No person shall open field burn cereal grain acreage unless that person first issues to the Department a signed statement, and then acts to insure, that said acreage will be planted in the following growing season to a small-seeded seed crop requiring flame sanitation for proper cultivation as defined in rule 340-26-005(34).

(4) No person shall cause or allow open field burning which is contrary to the Department's announced burning schedule specifying the times, locations and amounts of burning permitted, or to any other provision announced or set forth by the Department or these rules.

(5) Each responsible person open field burning shall have an operating radio receiver and shall directly monitor the Department's burn schedule announcements at all times while open field burning.

(6) Each responsible person open field burning shall actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department or when instructed to do so by an agent or employe of the Department.

(7) [~~No person shall open field burn priority acreage on the west side of and abutting U.S. Interstate 5 without first providing a non combustibile strip at least 8 feet in width between the combustibile materials of said field and the freeway right of way, to serve as fireguard for safety purposes.~~] No open field burning shall be conducted within 1/4 mile of either side of any Interstate freeway within the Willamette Valley or within 1/8 mile of either side of the designated roadways listed in rule 837-110-080(2)(c). In addition, no open field burning shall be conducted in any of the remaining area within a fire safety buffer zone without prior authorization from the Department.

(8) Each responsible person open field burning within a priority area around a designated city, airport or highway shall refrain from burning and promptly extinguish any burning if it is likely that the resulting smoke would noticeably affect the designated city, airport or highway.

(9) Each responsible person open field burning shall make every reasonable effort to expedite and promote efficient burning and prevent excessive emissions of smoke by:

(a) Ensuring that field residues are evenly distributed and in generally good burning condition;

(b) [~~Utilizing approved lighting devices (drip torch, propane torch or other pressurized lighting device) and fire control (recommend minimum 500 gallons water) equipment;~~] Utilizing ignition devices and fire control equipment which shall meet the requirements of the State Fire Marshall pursuant to 837-110-030;

(c) Employing rapid ignition techniques on all acreage where there are no imminent fire hazards or public safety concerns.

(10) Each responsible person open field burning shall attend the burn until effectively extinguished.

(11) Open field burning in compliance with the rules of this Division does not exempt any person from any civil or criminal liability for consequences or damages resulting from such burning, nor does it exempt any person from complying with any other applicable law, ordinance, regulation, rule, permit, order or decree of the Commission or any other government entity having jurisdiction.

(12) Any revisions to the maximum acreage to be burned, allocation or permit issuing procedures, or any other substantive changes to these rules affecting open field burning for any year shall be made prior to June 1 of that year. In making rule changes, the Commission shall consult with Oregon State University.

(13) Open field burning shall be regulated in a manner consistent with the requirements of the Oregon Visibility Protection Plan for Class I areas (OAR 340-20-047, sec. 5.2).

Certified Alternative to Open Field Burning

340-26-011 [DEQ 105, f.& ef. 12-36-75;
DEQ 114, f.6-4-76;
DEQ 138, f.6-30-77;
DEQ 140(Temp), f.& ef. 7-27-77 thru 11-23-77;
DEQ 6-1978, f.& ef. 4-18-78 thru 10-5-78;
DEQ 2-1980, f.& ef. 1-21-80;
DEQ 12-1980, f.& ef. 4-21-80;
DEQ 9-1981, f. & ef. 3-19-81;
Repealed by DEQ 5-1984, f. & ef. 3-7-84]

Registration, Permits, Fees, Records

340-26-012 In administering a field burning smoke management program, the Department may contract with counties or fire districts to administer registration of acreage, issuance of permits, collection of fees and keeping of records for open field burning within their permit jurisdictions. The Department shall pay said authority for these services in accordance with the payment schedule provided for in ORS 468.480:

(1) Registration of acreage:

(a) On or before April 1 of each year, all acreage to be open burned under these rules shall be registered with the Department or its authorized permit agent on registration forms provided by the Department. Said acreage shall also be delineated on specially provided registration map materials and

identified using a unique field reference code. Registration and mapping shall be completed according to the established procedures of the Department. A non-refundable registration fee of \$1 for each acre registered shall be paid at the time of registration. A complete registration (permit application) shall consist of a fully executed registration form, map and fee.

(b) Registration of acreage after April 1 of each year shall require the prior approval of the Department and an additional \$1 per acre late registration fee if the late registration is due to the fault of the late registrant or one under his control.

(c) Copies of all registration forms and fees shall be forwarded to the Department promptly by the permit agent. Registration map materials shall be made available to the Department at all times for inspection and reproduction.

(d) The Department shall act on any registration application within 60 days of receipt of a completed application. The Department may deny or revoke any registration application which is incomplete, false or contrary to state law or these rules.

(e) It is the responsibility of the grower registrant to insure that the information presented on the registration form and map is complete and accurate.

(2) Permits:

(a) Permits for open field burning shall be issued by the Department, or its authorized permit agent, to the grower registrant in accordance with the established procedures of the Department, and the times, locations, amounts and other restrictions set forth by the Department or these rules.

(b) A fire permit from the local fire permit issuing agency is also required for all open burning pursuant to ORS 477.515, 477.530, 476.380, 478.960.

(c) A valid open field burning permit shall consist of:

(A) An open field burning permit issued by the Department which specifies the permit conditions in effect at all times while burning and which identifies the acreage specifically registered and annually allocated for burning;

(B) A validation number issued by the local permit agent on the day of the burn identifying the specific acreage allowed for burning and the date and time the permit was issued; and

(C) Payment of the required \$2.50 per acre burn fee.

(d) Open field burning permits shall at all times be limited by and subject

to the burn schedule and other requirements or conditions announced or set forth by the Department.

(e) No person shall issue open field burning permits for open field burning of:

(A) More acreage than the amount sub-allocated annually to the District by the Department pursuant to rule 340-26-013(2);

(B) [~~Priority acreage located on the upwind side of any city, airport or highway within the same priority area.~~] Priority or fire safety buffer zone acreage located on the upwind side of any city, airport, Interstate freeway or designated roadway within the same priority area or buffer zone.

(f) It is the responsibility of each local permit issuing agency to establish and implement a system for distributing open field burning permits to individual grower registrants when burning is authorized, provided that such system is fair, orderly and consistent with state law, these rules and any other provisions set forth by the Department.

(3) Fees: Permit agents shall collect, properly document and promptly forward all required registration and burn fees to the Department.

(4) Records:

(a) Permit agents shall at all times keep proper and accurate records of all transactions pertaining to registrations, permits, fees, allocations, and other matters specified by the Department. Such records shall be kept by the permit agent for a period of at least five years and made available for inspection by the appropriate authorities.

(b) Permit agents shall submit to the Department on specially provided forms weekly reports of all acreage burned in their jurisdictions. These reports shall cover the weekly period of Monday through Sunday, and shall be mailed and post-marked no later than the first working day of the following week.

Acreage Limitations, Allocations

340-26-013 (1) Limitation of Acreage:

(a) Except for acreage and residue open burned pursuant to rules 340-26-035, 340-26-040, 340-26-045, and 340-26-055 the maximum acreage to be open burned annually in the Willamette Valley under these rules shall not exceed 250,000 acres.

(b) The maximum acreage allowed to be open burned under these rules on a

single day in the south Valley under southerly winds shall not exceed 46,934 acres.

(c) Other limitations on acreage allowed to be open burned are specified in rules 340-26-015(7), 340-26-033(2), and 340-26-035(1).

(2) Allocation of Acreage:

(a) In the event that total registration as of April 1 is less than or equal to the maximum acreage allowed to be open burned annually, pursuant to subsection (1)(a) of this rule, the Department may sub-allocate to growers on a pro rata share basis not more than 100 percent of the maximum acreage limit, referred to as "grower allocation". In addition, the Department shall sub-allocate to each respective fire district, its pro rata share of the maximum acreage limit based on acreage registered within the district, referred to as "district allocation".

(c) In order to insure optimum permit utilization, the Department may adjust fire district allocations.

(d) Transfer of allocations for farm management purposes may be made within and between fire districts and between grower registrants on a one-in/one-out basis under the supervision of the Department.

Daily Burning Authorization Criteria

340-26-015 As part of the smoke management program provided for in ORS 468.470 the Department shall set forth the types and extent of open field burning to be allowed each day according to the provisions established in this section and these rules:

(1) During the active field burning season and on an as needed basis, the Department shall announce the field burning schedule over the field burning radio network operated specifically for this purpose. The schedule shall specify the times, locations, amounts and other restrictions in effect for open field burning. The Department shall notify the State Fire Marshal of the burning schedule for dissemination to appropriate Willamette Valley agencies.

(2) Prohibition conditions:

(a) Prohibition conditions shall be in effect at all times unless specifically determined and announced otherwise by the Department.

(b) Under prohibition conditions, no permits shall be issued and no open field burning shall be conducted in any area except for individual burns specifically authorized by the Department on a limited extent basis. Such

limited burning may include field-by-field burning[, preparatory burning,] or burning of test fires, except that:

(A) No open field burning shall be allowed:

(i) In any area subject to a ventilation index of less than 10.0 (ii)
In any area upwind, or in the immediate vicinity, of any area in which, based upon real-time monitoring, a violation of federal or state air quality standards is projected to occur.

(B) Only test-fire burning may be allowed:

(i) In any area subject to a ventilation index of between 10.0 and 15.0, inclusive[, except for experimental burning specifically authorized by the Department pursuant to rule 340-26-035];

(ii) When relative humidity at the nearest reliable measuring station exceeds 50 percent under forecast northerly winds or 65 percent under forecast southerly winds.

(3) Marginal conditions:

(a) The Department shall announce that marginal conditions are in effect and open field burning is allowed when, in its best judgement and within the established limits of these rules, the prevailing atmospheric dispersion and burning conditions are suitable for satisfactory smoke dispersal with minimal impact on the public, provided that the minimum conditions set forth in paragraphs (2) (b)

(A) and (B) of this rule are satisfied.

(b) Under marginal conditions, permits may be issued and open field burning may be conducted in accordance with the times, locations, amounts, and other restrictions set forth by the Department and these rules.

(4) Hours of burning:

(a) Burning hours shall be limited to those specifically authorized by the Department each day and may be changed at any time when necessary to attain and maintain air quality.

(b) Burning hours may be reduced by the fire chief or his deputy, and burning may be prohibited by the State Fire Marshal, when necessary to prevent danger to life or property from fire, pursuant to ORS 478.960.

(5) Locations of burning:

(a) Locations of burning shall at all times be limited to those areas specifically authorized by the Department, except that:

(A) [~~No priority acreage shall be burned upwind of any city, airport, or highway within the same priority area;~~] No priority or fire safety buffer zone acreage shall be burned upwind of any city, airport, Interstate freeway or designated roadway within the same priority area or buffer zone;

(B) No south Valley priority acreage shall be burned upwind of the Eugene-Springfield non-attainment area.

(6) Amounts of burning:

(a) In order to provide for an efficient and equitable distribution of burning, daily authorizations of acreages shall be issued by the Department in terms of single or multiple fire district quotas. The Department shall establish quotas for each fire district and may adjust the quotas of any district when conditions in its judgement warrant such action.

(b) Unless otherwise specifically announced by the Department, a one quota limit shall be considered in effect for each district authorized for burning.

(c) The Department may issue more restrictive limitations on the amount, density or frequency of burning in any area or on the basis of crop type, when conditions in its judgement warrant such action.

(7) Limitations on burning based on air quality:

(a) The Department shall establish the minimum allowable effective mixing height required for burning based upon cumulative hours of smoke intrusion in the Eugene-Springfield area as follows:

(A) Except as provided in paragraph (B) of this subsection, burning shall not be permitted whenever the effective mixing height is less than the minimum allowable height specified in Table 1, and by reference made a part of these rules.

(B) Notwithstanding the effective mixing height restrictions of paragraph (A) of this subsection, the Department may authorize burning of up to 1000 acres total per day for the Willamette Valley, consistent with smoke management considerations and these rules.

(8) Limitations on burning based on rainfall:

(a) Burning shall not be permitted in an area for one drying day (up to a maximum of four consecutive drying days) for each 0.10 inch increment of rainfall received per day at the nearest reliable measuring station.

(b) The Department may waive the restrictions of subsection (a) of this section when dry fields are available as a result of special field preparation

or condition, irregular rainfall patterns, or unusually high evaporative weather condition.

(9) Other discretionary provisions and restrictions:

(a) The Department may require special field preparations before burning, such as, but not limited to, mechanical fluffing of residues, when conditions in its judgement warrant such action.

(b) The Department may designate specified periods following permit issuance within which time active field ignition must be initiated and/or all flames must be actively extinguished before said permit is automatically rendered invalid.

(c) The Department may designate additional areas as priority areas when conditions in its judgement warrant such action.

Winter Burning Season Regulations

340-26-020 [DEQ 29, f.6-12-71, ef. 7-12-71;
DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75;
DEQ 104, f. & ef. 12-26-75;
DEQ 114, f. 6-4-76;
DEQ 138, f. 6-30-77;
DEQ 6-1978, f. 4-18-78;
DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78;
DEQ 2-1980, f. & ef. 1-21-80;
DEQ 12-1980, f. & ef. 4-21-80;
DEQ 9-1981, f. & ef. 3-19-81;
Repealed by DEQ 5-1984, f. & ef. 3-7-84]

Civil Penalties

340-26-025 In addition to any other penalty provided by law:

(1) Any person who intentionally or negligently causes or allows open field burning contrary to the provisions of ORS 468.450, 468.455 to 468.480, 476.380, and 478.960 or these rules shall be assessed by the Department a civil penalty of at least \$20, but not more than \$40 for each acre so burned.

(2) In lieu of any per-acre civil penalty assessed pursuant to section (1) of this rule, the Director may assess a specific civil penalty for any open field burning violation by service of a written notice of assessment of civil penalty upon the respondent. The amount of such civil penalty shall be established consistent with the following schedule:

(a) Not less than \$500 nor more than \$10,000 upon any person who:

(A) Causes or allows open field burning on any acreage which has not been registered with the Department for such purposes.

(B) Causes or allows open field burning on any acreage without first obtaining and readily demonstrating a valid open field burning permit for all acreage so burned.

(b) Not less than \$300 nor more than \$10,000 upon any person who fails to actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department or when instructed to do so by any agent or employe of the Department.

(c) Not less than \$200 nor more than \$10,000 upon any person who:

(A) Conducts burning using an approved alternative method contrary to any specific conditions or provisions governing such method.

(B) Fails to readily demonstrate at the site of the burn operation the capability to monitor the Department's field burning schedule broadcasts.

(d) Not less than \$50 nor more than \$10,000 upon any person who commits any other violation pertaining to the rules of this Division.

(3) In establishing a civil penalty greater than the minimum amount specified in sections (1) and (2) of this rule, the Director may consider any mitigating and aggravating factors as provided for in OAR 340-12-045.

(4) Any person planting contrary to the restrictions of subsection (1) of ORS 468.465 pertaining to the open burning of cereal grain acreage shall be assessed by the Department a civil penalty of \$25 for each acre planted contrary to the restrictions.

Tax Credits for Approved Alternative Methods, and Approved Alternative Facilities

340-26-030 [DEQ 114, f. & ef. 6-4-76;

DEQ 138, f. 6-30-77;

DEQ 6-1978, f. & ef. 4-18-78;

DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78;

DEQ 2-1980, f. & ef. 1-21-80;

DEQ 12-1980, f. & ef. 4-21-80;

DEQ 9-1981, f. & ef. 3-19-81;

DEQ 5-1984, f. & ef. 3-7-84;

Repealed by DEQ 12-1984, f. & ef. 7-13-84]

Burning by Public Agencies (Training Fires)

340-26-031 Open field burning on grass seed or cereal grain acreage by or for any public agency for official purposes, including the training of fire-fighting personnel, may be permitted by the Department on a prescheduled basis consistent with smoke management considerations and subject to the following conditions:

- (1) Such burning must be deemed necessary by the official local authority having jurisdiction and must be conducted in a manner consistent with its purpose.
- (2) Such burning must be limited to the minimum number of acres and occasions reasonably needed.
- (3) Such burning must comply with the provisions of rules 340-26-010 through 340-26-013.

Preparatory Burning

340-26-033 The Department may allow preparatory burning of portions of selected problem fields, consistent with smoke management considerations and subject to the following conditions:

- (1) Such burning must, in the opinion of the Department, be necessary to reduce or eliminate a potential fire hazard or safety problem in order to expedite the subsequent burning of the field.
- (2) Such burning shall be limited to the minimum number of acres necessary, in no case exceeding 5 acres for each burn or a maximum of 50 100 acres each day.
- (3) Such burning must employ backfiring burning techniques.
- (4) Such burning is exempt from the provisions of rule 340-26-015 but must comply with the provisions of rules 340-26-010 through 340-26-013.

Experimental Burning

340-26-035 The Department may allow open field burning for demonstration or experimental purposes pursuant to the provisions of ORS 468.490, consistent with smoke management considerations and subject to the following conditions:

- (1) Acreage experimentally open burned shall not exceed 5,000 acres annually.
- (2) Acreage experimentally open burned shall not apply to the district

allocation or to the maximum annual acreage limit specified in rule 340-26-013-
(1) (a).

(3) Such burning is exempt from the provisions of rule 340-26-015 but must comply with the provisions of rules 340-26-010 and 340-26-012, except that the Department may elect to waive all or part of the \$2.50 per acre burn fee.

Emergency Burning, Cessation

340-26-040 (1) Pursuant to ORS 468.475 and upon a finding of extreme hardship, disease outbreak, insect infestation or irreparable damage to the land, the Commission may by order, and consistent with smoke management considerations and these field burning rules, permit the emergency open burning of more acreage than the maximum annual acreage limitation specified in rule 340-26-013(1) (a). The Commission shall act upon emergency burning requests within 10 days of receipt of a properly completed application form and supporting documentation:

(a) Emergency open burning on the basis of extreme financial hardship must be documented by an analysis and signed statement from a CPA, public accountant, or other recognized financial expert which established that failure to allow emergency open burning as requested will result in extreme financial hardship above and beyond mere loss of revenue that would ordinarily accrue due to inability to open burn the particular acreage for which emergency open burning is requested. The analysis shall include an itemized statement of the applicant's net worth and include a discussion potential alternatives and probable related consequences.

(b) Emergency open burning on the basis of disease outbreak or insect infestation must be documented by an affidavit or signed statement from the County Agent. State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists that can only be dealt with effectively and practicably by open burning. The statement shall also specify: time of field investigation; location and description of field, crop and infestation; extent of infestation (compared to normal) and the necessity for urgent control; availability efficacy, and practicability of alternative control procedures, and; probable consequences of non-control.

(c) Emergency open burning on the basis of irreparable damage to the land must be documented by an affidavit or signed statement from the County Agent,

State Department of Agriculture, or other public agricultural expert authority that, based on his personal investigation, a true emergency exists which threatens irreparable damage to the land and which can only be dealt with effectively and practicably by open burning. The statement shall also specify: time of field investigation; location and description of field, crop, and soil slope characteristics; necessity for urgent control: availability, efficacy, and practicability of alternative control procedures, and; probable consequences of non-control.

(2) Pursuant to ORS 468.475 and upon finding of extreme danger to public health or safety, the Commission may order temporary emergency cessation of all open field burning in any area of the Willamette Valley.

Approved Alternative Methods of Burning (Propane Flaming)

340-26-045 (1) The use of propane flammers, mobile field sanitizing devices, and other field sanitation methods specifically approved by the Department are considered alternatives to open field burning pursuant to the provisions of ORS 468.472 and 468.480, subject to the following conditions:

(a) The field must first be prepared as follows [been]:

(A) Either the field must have previously been open burned and the appropriate fees paid; or

(B) The remaining field stubble must be flail-chopped, mowed, or otherwise cut close to the ground and to the extent practicable;

(b) Propane flaming operations must comply with the following criteria:

(A) Unless otherwise specifically restricted by the Department, and except for the use of propane flammers in preparing fire breaks, propane flaming may be conducted only between the hours of 9 a.m. and sunset (9 a.m. to one-half hour before sunset on or after September 1).

(B) Every effort must be made to operate P propane flammers must be operated in overlapping strips, crosswise to the prevailing wind, beginning along the downwind edge of the field.

(C) The remaining field stubble will not sustain an open fire[; and].

(D) A fire permit has been must first be obtained from the local fire permit issuing agency.

(E) Every effort shall be made to conduct propane flaming in a manner which minimizes smoke emissions.

(F) No person shall cause or allow to maintain any propane flaming which results in visibility impairment on any Interstate highways or roadways specified in rule 837-110-080(1) and (2). Should visibility impairment occur all flame and smoke sources shall be immediately and actively extinguished.

(G) The Department may issue restrictive limitations on the amount, density or frequency of propane flaming in any area when meteorological or air quality conditions in its judgment warrant such action.

(c) In addition to the conditions specified in paragraphs (a) and (b) of this section, propane flaming operations within any fire safety buffer zone must comply with the following criteria:

(A) Propaning shall be conducted at a vehicle speed appropriate for complete combustion and minimum smoke emissions but should not exceed 5 miles per hour.

(B) No propaning shall be allowed when either the relative humidity at the nearest reliable measuring station exceeds 65 percent or the surface winds exceed 15 miles per hour.

(C) The presence of any regrowth in the field between 6 and 12 inches in height shall be mowed or cut close to the ground, and removed providing mechanical removal of the resultant fields residue is practicable. Any regrowth exceeding 12 inches in height must be mowed or cut close to the ground and removed.

(2) No person shall cause or allow to be initiated or maintained any propane flaming on any day or at any time if the Department has determined and notified the State Fire Marshal that propane flaming is prohibited because of adverse meteorological or air quality conditions.

Stack Burning

340-26-055 (1) The open burning of piled or stacked residue from perennial or annual grass seed or cereal grain crops used for seed production is allowed, subject to the following conditions:

(a) No person shall cause or allow to be initiated or maintained any stack burning on any day or at any time if the Department has notified the State Fire Marshal that such burning is prohibited because of meteorological or air quality conditions. Unless otherwise specified by the Department, stack burning shall be subject to the same daily open burning schedule set forth and announced by the Department for "fourth priority agricultural burning" (which

is separately governed under OAR Chapter 340, Division 23, Rules for Open Burning).

(b) A fire permit must be obtained from the local permit issuing agency.

(c) All residue to be burned must be dry to the extent practicable and free of all other combustible and non-combustible material. Covering the stacks is advised when necessary and practicable to protect the material from moisture.

(d) It shall be the duty of each responsible person to make every reasonable effort to extinguish any stack burning which is in violation of any rule of the Commission.

(e) No person shall cause or allow to be initiated or maintained any stack burning within any State Fire Marshal fire safety buffer zone except as provided in (A) and (B) below.

(A) Along Interstate 5, stack burning may be permitted only where a 1/4 mile wide non-combustible ground surface is provided between the stack to be burned and the nearest edge of the freeway right-of-way.

(B) Along other roadways specified in 837-110-080(2)(c), stack burning may be permitted only where a 1/8 mile wide non-combustible ground surface is provided between the stack to be burned and the nearest edge of the roadway right-of-way.

(2) Provided the conditions of this rule are met, stack burning is exempt from rules 340-26-010 through 340-26-015 and is therefore not subject to open field burning requirements related to registration, permits, fees, allocations, and acreage limitations.

TABLE 1
(340-26-015)

MINIMUM ALLOWABLE EFFECTIVE MIXING HEIGHT
REQUIRED FOR BURNING BASED UPON THE CUMULATIVE HOURS
OF SMOKE INTRUSION IN THE EUGENE-SPRINGFIELD AREA

<u>Cumulative Hours of Smoke Intrusion In the Eugene-Springfield Area</u>	<u>Minimum Allowable Effective Mixing Height (feet)</u>
0 - 14	no minimum height
15 - 19	4,000
20 - 24	4,500
25 and greater	5,500

**OREGON ADMINISTRATIVE RULES
CHAPTER 837, DIVISION 110--FIRE MARSHAL**

**DIVISION 110
FIELD BURNING**

Purpose and Scope

837-110-005 The purpose of these rules is to increase the degree of public safety by preventing unwanted wild fires and smoke from field burning near highways and freeways within the State of Oregon. These rules shall apply to that area west of the crest of the Cascade Range and south to the Douglas/Lane County lines.

Field Preparation

837-110-010 (1) Prior to burning, all fields shall be prepared by plowing and disking a 20-foot noncombustible barrier around the perimeter.

(2) The 20-foot barrier may be provided by noncombustible vegetation, bare earth, or other method(s) to prevent any flame spread through the 20-foot barrier approved by the State Fire Marshal or designee.

(3) The barrier need not be provided where the perimeter of the field lies adjacent to a field that meets the provision of this section.

Firefighting Water Supplies

837-110-020 (1) When burning acreage, the following firefighting vehicles shall be provided:

(a) Up to 50 acres, at least two water tank vehicles with a minimum of 1,000 gallon water capacity to be on site.

(b) 50 to 200 acres, at least three water tank vehicles with a minimum of 1,500 gallon water capacity to be on site.

(c) Acreage over 200 acres, at least four water tank vehicles with a minimum of 3000 gallon water capacity to be on site.

(2) Refill Requirements: During actual firefighting operations the water requirements described in this section shall be maintained at or above 25% of the specified amount. Within the buffer zone described in 837-110-080, this requirement shall be raised to at least 50%.

NOTE: Vehicles with smaller capacity water tanks may be used to meet the total gallonage capacity required by (a) through (c) above.

Firefighting Equipment

837-110-030 The person(s) responsible for the acreage to be burned shall use firefighting equipment that meets or exceeds the following standards:

(1) All water tank vehicles shall be equipped with a pump in working order with a pumping capability of 30 gallons per minute or more and capable of extinguishing a flame at a distance of at least 40 feet.

(2) All firefighting vehicles shall be adequately staffed to assure proper operation. It is recommended that at least two employees who have received basic safety training be assigned to each firefighting vehicle.

(3) All water tanks shall be filled prior to ignition of the field.

Ignition Criteria

837-110-040 A minimum of two drip torches, propane lighters, or other pressurized fuel torches shall be on the burn site at the time of ignition.

Prohibited Use

837-110-050 The use of pitch forks, harrows, or the dragging of burning tires to ignite the fire is prohibited.

Communication

837-110-060 Radio communications shall be maintained between:

- (1) All firefighting equipment utilized in the burning of the field(s).
- (2) The crew at the burn site and a constantly manned base station or home that will receive a call for assistance and summon help from an appropriate emergency response agency.

Fire Safety Watch

837-110-070 In addition to the firefighting equipment required by OAR 837-110-020 and 837-110-030, a continuous fire safety watch shall be provided. The fire safety watch shall:

- (1) Patrol the perimeter of the field during burning operations.
- (2) Begin prior to the ignition of the field and continue for at least 30 minutes after open flame ceases. However, the fire watch shall not leave until it is confirmed that the fire is completely out.
- (3) Consist of at least one firefighting vehicle having a water tank with at least a 200 gallon water capacity and which meets the requirements of 837-110-030 and 837-110-060.

Fire Safety Buffer Zones

837-110-080 A fire safety buffer zone shall parallel both sides of all highways and roadways within the scope and application of these rules. The buffer zone shall extend 1/2 mile in a perpendicular direction from the outer edge of each highway or roadway right-of-way. No field burning shall be allowed in fire safety buffer zones except as provided in (1) and (2) below.

(1) Interstate Highways. West of the crest of the Cascade Range, south to the Douglas/Lane County lines.

(a) Field burning may be permitted in the fire safety buffer zone only where a 1/4 mile wide noncombustible ground surface is provided between the field to be burned and the nearest edge of the freeway right-of-way. Noncombustible ground surfaces shall meet the criteria described in (3) of this section.

(b) The 1/4 mile noncombustible ground surface shall extend 1/4 mile each direction beyond the permitted field boundaries parallel to the freeway right-of-way. Where natural barriers such as rivers or other noncombustible surfaces recognized by the State Fire Marshal or designee exist, extensions are not required.

(2) Other Roadways.

(a) Field burning may be permitted in the fire safety buffer zone only where a 1/8 mile wide noncombustible ground surface is provided between the field to be burned and the nearest edge of the highway right-of-way. Noncombustible ground surfaces shall meet the criteria described in (3) of this section.

(b) The 1/8 mile noncombustible ground surface shall extend 1/8 mile in each direction beyond the permitted field boundaries parallel to the highway right-of-way. Where natural barriers such as rivers or other noncombustible surfaces recognized by the State Fire Marshal or designee exist, extensions are not required.

(c) The designated roadways to which this section applies are:

- (A) ORE 99: The section from Junction City to Eugene
- (B) ORE 99E: The sections from Oregon City to Salem, and from Albany to Junction City
- (C) ORE 99W: The entire section from Portland to Eugene ORE 18: The section from ORE 22 to Dayton
- (D) US 20: The section from Philomath to Lebanon
- (E) ORE 22: The section from ORE 18 to Mehama
- (F) US 26: The section from ORE 47 interchange to Portland
- (G) ORE 34: The section from Corvallis to Lebanon

(3) Noncombustible ground surfaces mentioned in (1) and (2) above may be provided by planting noncombustible ground cover or by disking and plowing the surface. Other alternative methods may be recognized by the State Fire Marshal or designee.

Ban on Burning

837-110-090 All field burning is banned when any two of the three criteria below are present:

- (1) Temperature of 95 degrees Fahrenheit or above
- (2) Relative humidity of 30 percent or below
- (3) Wind speed of 15 miles per hour or higher

PROPANING

Purpose and Scope

837-110-100 The purpose of these rules is to increase the degree of public safety by preventing unwanted wild fires and smoke from propaning near highways and freeways within the State of Oregon. These rules shall apply to that area west of the crest of the Cascade Range and south to the Douglas/Lane County lines.

Field Preparation

837-110-110 (1) Prior to propaning, all fields shall be prepared by plowing and disking a 10-foot noncombustible barrier around the perimeter.

(2) The 10-foot barrier may be provided by noncombustible vegetation, bare earth, or other method(s) to prevent any flame spread through the 10-foot barrier if approved by the State Fire Marshal or designee.

(3) The barrier need not be provided where the perimeter of the field lies adjacent to a field that meets the provision of this section.

Firefighting Water Supplies

837-110-120 When propaning acreage, the following safety measures shall apply:

(1) At least one firefighting water tank vehicle meeting the equipment requirements of 837-110-120 and 837-110-140 and which has a minimum water tank capacity of 200 gallons shall be on site.

(2) If additional firefighting assistance is more than five (5) minutes from a burn site within a fire safety buffer zone, or ten (10) minutes otherwise, then water tank capacity mentioned in (1) above shall be raised to 500 gallons.

(3) A means to refill the tanks mentioned in (1) and (2) above shall be provided within a ten (10) minutes turn-around time.

EXCEPTION: Water tank vehicles of smaller capacity may be used provided the total gallonage capacity complies with the above.

Firefighting Equipment

837-110-130 The person(s) responsible for the acreage to be propaned shall use firefighting equipment that meets or exceeds the following standards:

(1) All water tank vehicles shall be equipped with a pump in working order with a pumping capability of 30 gallons per minute or more and capable of extinguishing a flame at a distance of at least 40 feet.

(2) All water tank vehicles shall be adequately staffed to assure proper operation. It is recommended that at least two employees who have received basic safety training be assigned to each firefighting vehicle.

(3) All water tanks shall be filled prior to ignition of the field.

Communication

837-110-140 (1) Radio communications shall be maintained:

- (a) Between all firefighting equipment utilized in the propaning of the field(s).
- (b) Between the crew at the propane site and a constantly manned base station or how to receive a call for assistance and summon help from an appropriate emergency response :

Fire Safety Watch

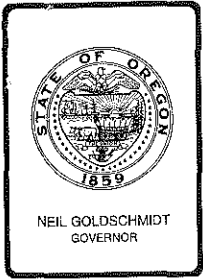
837-110-150 A fire watch shall:

- (a) Begin following the propaning of the field and continue for 30 minutes after completion.
- (b) Consist of at least one firefighting vehicle with at least a 200 gallon water tank w manned and equipped as stipulated in OAR 837-110-020, 837-110-030, and 837-110-0

Ban on Burning

837-110-160 All propaning shall be banned when any two of the following criteria present:

- (1) Temperature of 95 degrees Fahrenheit or above
- (2) Relative humidity of 25 percent or below
- (3) Wind speed of 20 miles per hour or higher



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

April 14, 1989

TO: Environmental Quality Commission
FROM: Fred Hansen *Fred*
SUBJECT: Agenda Item G

Based upon discussions between the UST Compliance Section in the Hazardous and Solid Waste Division and the UST Cleanup Section in the Environmental Cleanup Division, it has been determined that it is both necessary and appropriate to establish consistent sampling and analytical protocols for the determination of the cleanliness of a site. In order to ensure that sites that are determined to be sufficiently clean under the UST Decommissioning Rules meet the same cleanup standards as those remediated under the UST Cleanup Rules, the attached modification to existing UST Decommissioning Rules is proposed.

This issue was discussed with the UST Advisory Committee at their April 13, 1989 meeting and they support the proposed modification.

AMENDMENTS TO OAR 340-150-130

340-150-130 Permanent Decommissioning of an Underground Storage Tank

(7) Measure for the presence of a release from the UST system. A release shall be considered to have occurred if, by following the sampling and analytical procedures specified in OAR 340-122-301 to 340-122-360, contaminant levels are found which exceed the levels specified in those rules.

(8) [(7)] If contaminated soil, contaminated groundwater, or free product as a liquid or vapor [evidence of a release] is discovered during measurement for the presence of a release, the tank owner or permittee must:

- (a) Notify the department within 24 hours. (Phone: 1-800-452-0311 or 1-800-452-4011).
- (b) Assess the source and extent of the release.
- (c) Meet with the department to set up a cleanup standard and a schedule for cleanup.
- (d) Cleanup the release.

(9) [(8)] All underground storage tank owners must maintain records which are capable of demonstrating compliance with the permanent decommissioning requirement under this section. These records must be maintained for at least three years after permanent decommissioning and made available, upon request, to the department during business hours.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: G
Division: Environmental Cleanup
Section: UST Cleanup

SUBJECT:

Soil cleanup levels for motor fuel and heating oil.

PURPOSE:

To augment previously-adopted petroleum cleanup rules with rules aimed at facilitating the cleanup of minor releases of motor fuel and heating oil in soils while maintaining a high degree of protection of public health, safety, welfare and the environment.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment C
 - Public Notice Attachment D
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment ___
- Approve Department Recommendation
 - ___ Variance Request Attachment ___
 - ___ Exception to Rule Attachment ___
 - ___ Informational Report Attachment ___
 - ___ Other: (specify) Attachment ___

DESCRIPTION OF REQUESTED ACTION:

The rules proposed for public hearing contain the following elements:

- Definitions of terms;
- A choice of cleaning up a site to the most stringent level without evaluation, or evaluating the site to determine a site-specific cleanup level;
- A matrix of numeric soil cleanup standards for motor fuel and heating oil;
- A process for evaluating the required cleanup levels;
- Specific requirements for
 - the number of samples at a given site,
 - where the samples should be collected,
 - how the samples should be collected,
 - how the samples should be analyzed, and
 - how the data should be interpreted; and
- What information needs to be reported to the Department and how the Department must respond to this information.

AUTHORITY/NEED FOR ACTION:

- | | |
|---|---------------------|
| <input type="checkbox"/> Required by Statute: _____ | Attachment _____ |
| Enactment Date: _____ | |
| <input checked="" type="checkbox"/> Statutory Authority: <u>ORS 466.540 to 590</u> | |
| <u>and ORS 466.705 to 835 and 895</u> | Attachment <u>E</u> |
| <input checked="" type="checkbox"/> Pursuant to Rule: <u>OAR 340-122-201 to 260</u> | Attachment <u>F</u> |
| <input type="checkbox"/> Pursuant to Federal Law/Rule: _____ | Attachment _____ |
| <input type="checkbox"/> Other: _____ | Attachment _____ |
| <input checked="" type="checkbox"/> Time Constraints: (explain) | |

In the development of the initial petroleum cleanup rules (OAR 340-122-201 to 260, adopted 11/4/88), the Remedial Action Advisory Committee recognized that not only was there a need for a simpler process for minor releases, but also that time was of the essence in the development of these rules. Unnecessary delays will only result in more people being put out of business. As a result, the Department is required by OAR 340-122-245 to develop rules for numeric soil cleanup levels for motor fuel and heating oil, and to return to the EQC within six months to request authorization to hold public hearings on the proposed rules.

Meeting Date: 4/14/89
Agenda Item: G
Page 3

DEVELOPMENTAL BACKGROUND:

<input checked="" type="checkbox"/> Advisory Committee Report/Recommendation	Attachment <u>G</u>
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u> </u>
<input type="checkbox"/> Response to Testimony/Comments	Attachment <u> </u>
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment <u> </u>
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment <u> </u>
<input checked="" type="checkbox"/> Supplemental Background Information	Attachment <u>H</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The current Cleanup Rules for Leaking Petroleum UST Systems (OAR 340-122-201 to 340-122-260) provide the framework for addressing the remediation of petroleum releases. However, in many cases where the size of a release is small and there does not appear to be a significant threat to the environment, completing a cleanup by means of the current rules may result in unnecessary added costs and delays. This would be an increased burden on the regulated community without really providing increased protection to the public health, safety, welfare and the environment.

The proposed rules establish numeric soil cleanup standards for simple soil cleanups which are based on site-specific parameters. As such, they allow the regulated community to move forward quickly and efficiently with the cleanup of minor petroleum releases.

PROGRAM CONSIDERATIONS:

The numeric soil cleanup rules allow the regulated community to proceed on simple cleanups with a minimum amount of Departmental oversight. This is an important component of the Department's strategy for cleaning up the large number of currently known as well as projected future petroleum-contaminated sites. The rules will free up limited staff time so that the Department can focus its attention on the more complex and environment-threatening petroleum releases.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Adopt a new set of rules which establish numeric soil cleanup levels applicable to situations involving minor releases of motor fuel and heating oil.

This would result in the more rapid cleanup of a large number of minor petroleum releases. Time and money would be saved by eliminating the need to develop a site-specific corrective action plan and to have the plan reviewed and approved by the Department before cleanup could proceed. Although this would reduce the Department's oversight in the cleanup of minor releases, this oversight would only be relinquished in cases where the Department feels confident that the rules offer adequate protection to the public health, safety, welfare and the environment.

2. Have all releases of motor fuel and heating oil cleaned up under the previously adopted Cleanup Rules for Leaking Petroleum UST Systems (OAR 340-122-201 to 260) which require a corrective action plan that addresses the unique problems of each specific site.

This alternative would let the Department continue with the remediation of both major and minor releases under the current rules. It would also allow the Department to maintain more oversight over each phase of the cleanup process regardless of the size of the spill. Complete oversight of all cleanups would, however, require significantly more Departmental staff time.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends Alternative 1; and asks for authorization to hold Public Hearings on the proposed numeric soil cleanup rules.

The proposed rules would benefit the regulated community by establishing a more rapid and less costly cleanup process for minor petroleum releases. The rules would also benefit the Department by providing the guidance necessary to allow cleanup of the simple sites while freeing up staff time to work on the more complex sites. Although the Department would be relinquishing some of its oversight under the proposed rules, it is felt that the benefits of this plan outweigh the risks.

Meeting Date: 4/14/89
Agenda Item: G
Page 5

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The development of these rules is consistent with the legislative policy, as stated in ORS 466.705 through 466.835, of adopting a state-wide program for the prevention and reporting of releases and for taking corrective action to protect the public and the environment from releases from underground storage tanks.

It is also stated in OAR 340-122-245 that these rules shall be developed.

ISSUES FOR COMMISSION TO RESOLVE:

The main issue for the Commission to resolve is the timing of the public hearings. As mentioned above, the Department was given six months to develop the proposed rules and to return to the Commission to request Public Hearings on them. Despite the short time allowed, the Department has been able to develop a rules package which the Department feels is ready to go out for Public Hearings. This would not have been possible without the cooperation of many advisory committee members who agreed to an aggressive schedule of weekly day-long meetings to discuss these rules.

Although many issues have been resolved, the Advisory Committee has not yet reached consensus on the complete rules package. The main areas of concern are:

- The matrix scores which determine the required cleanup level for a site (OAR 340-122-335(1)); some members of the committee are concerned that if the scores are not set correctly, the rules might require a more stringent cleanup level than current professional judgement would deem appropriate; the Department feels that sufficient data will be available in time to make changes if necessary before requesting adoption of the rules; and
- The numeric cleanup levels required by the rules (OAR 340-122-335(2)); some members of the committee feel that the proposed levels are too stringent; the Department feels that these levels are necessary for the protection of human health, safety, welfare and the environment; also, they are not out of line with rules being proposed by other states, being slightly higher than some and slightly lower than others.

Meeting Date: 4/14/89
Agenda Item: G
Page 6

Those committee members who are concerned about the cleanup levels in the proposed rules are worried that the cleanups under these rules would be too costly, resulting in:

- Orphan sites for the state to clean up; and
- Increased insurance costs for operating businesses.

The Department wants to reach consensus on these issues. (A more detailed discussion of them is contained in Attachment G.) To that end it is continuing to work with the Committee and is gathering data from regional staff members and outside professionals to determine how the cleanup levels in these rules compare to current professional judgement. Such data will be available to make minor adjustments to the rules, if necessary, before returning to the Commission to propose adoption of the rules.

The Department feels that delaying permission to hold Public Hearings would be detrimental to the regulated community which has asked that this simpler, expedited approach be developed. The proposed Public Hearings would allow the Department to gather additional information on the issues still being debated by the Committee as well as issues of concern to other parties. It would also allow the Department to stay on schedule for adoption of this important rules package.

INTENDED FOLLOWUP ACTIONS:

1. Receive public input on the draft rules in a series of public hearings to be held in Portland, Bend, Medford, Pendleton and Eugene.
2. Summarize and evaluate comments received at the hearings.
3. Meet with the Underground Storage Tank Advisory Committee to solicit their advice and comments on any proposed modifications resulting from the public hearings.
4. Revise the draft rules as necessary taking into consideration both public and advisory committee comments. Prepare a report for the Commission explaining the Department's position on the main issues of concern in these rules. Return to the Commission at the July 14, 1989 meeting to propose adoption of the revised rules.

Meeting Date: 4/14/89
Agenda Item: G
Page 7

Approved:

Section: Sam Rival

Division: Michael Dours

Director: Suzanne Taylor
for Fred Hansen

Report Prepared By: Michael R. Anderson

Phone: 229-6764

Date Prepared: March 28, 1989

MRA:mra
staffrpt
3-28-89

Proposed
Numeric Soil Cleanup Levels
For
Motor Fuel and Heating Oil
OAR 340-122-301 to 340-122-360

340-122-301	<u>Outline of Rules</u>
340-122-305	Purpose
340-122-310	Definitions
340-122-315	Scope and Applicability
340-122-320	Soil Cleanup Options
340-122-325	Evaluation of Matrix Cleanup Levels
340-122-330	Evaluation Parameters
340-122-335	Numeric Soil Cleanup Standards
340-122-340	Sample Number and Location
340-122-345	Sample Collection Methods
340-122-350	Required Analytical Methods
340-122-355	Evaluation of Analytical Results
340-122-360	Reporting Requirements

340-122-305 Purpose

These rules establish numeric soil cleanup standards pursuant to ORS 466.745 and OAR 340-122-245 (1988) for the remediation of motor fuel and heating oil releases from underground storage tanks. The soil cleanup levels have been developed to facilitate the cleanup of these releases while maintaining a high degree of protection of public health, safety, welfare and the environment.

340-122-310 Definitions

Terms not defined in this section have the meanings set forth in ORS 466.540, ORS 466.705, and OAR 340-122-210. Additional terms are defined as follows unless the context requires otherwise:

- (1) "Gasoline" means any petroleum distillate used for motor fuel or heating oil which consists predominantly of hydrocarbons in the C4 - C12 range.
- (2) "Groundwater" means any water, except capillary moisture, beneath the land surface or beneath the bed of any stream, lake, reservoir or other body of surface water within the boundaries of the state, whatever may be the geological formation or structure in which such water stands, flows, percolates or otherwise moves.
- (2) "Native soil" means the soil outside of the immediate boundaries of the pit that was originally excavated for the purpose of installing an underground storage tank.
- (3) "Non-gasoline fraction" refers to diesel and any other petroleum distillate used for motor fuel or heating oil which consists predominantly of hydrocarbons greater than C12.
- (4) "Soil" means any unconsolidated geologic materials including, but not limited to, clay, loam, loess, silt, sand, gravel, tills or any combination of these materials.

340-122-315 Scope and Applicability

- (1) These rules shall apply to the cleanup of releases from UST systems containing motor fuel and heating oil.
- (2) Matrix cleanup levels established by these rules are not applicable to the cleanup of petroleum releases which, due to their magnitude or complexity, are ordered by the Director to be conducted under OAR 340-122-010 through OAR 340-122-110.

340-122-320 Soil Cleanup Options

When using the numeric soil cleanup standards specified in these rules, the owner, permittee, or responsible person has the option of:

- (1) Cleaning up the site as specified in these rules to the numeric soil cleanup standard defined as Level 1 in 340-122-335(2); or
- (2) Evaluating the site as specified in 340-122-325 to determine the required Matrix cleanup level, and then cleaning up the site as specified in these rules to the numeric soil cleanup standard defined by that Matrix cleanup level.

340-122-325 Evaluation of Matrix Cleanup Level

- (1) In order to determine a specific Matrix cleanup level, the site must first be evaluated by:
 - (a) Assigning a numerical score to each of the five site-specific parameters in 340-122-330(1)-(5); and
 - (b) Totaling the parameter scores to arrive at the Matrix Score.
- (2) The Matrix Score shall then be used to select the appropriate numeric soil cleanup standard as specified in 340-122-335.

340-122-330 Evaluation Parameters

The site-specific parameters are to be scored as specified in this section. If any of the parameters in 340-122-330(1)-(5) is unknown, that parameter shall be given a score of 10.

- (1) Depth to Groundwater: This is the vertical distance from the surface of the ground to the highest seasonal elevation of the saturated zone.

The score for this parameter is:

>100 feet	1
51 -100 feet	4
25 - 50 feet	7
< 25 feet	10

- (2) Mean Annual Precipitation: This measurement may be obtained from the nearest appropriate weather station.

The score for this parameter is:

< 20 inches	1
20 - 40 inches	5
> 40 inches	10

- (3) Native Soil Type:

The score for this parameter is:

Low permeability materials such as clays, compact tills, shales, and unfractured metamorphic and igneous rocks. 1

Moderate permeability materials such as sandy loams, loamy sands, silty clays, and clay loams; moderately permeable limestones, dolomites and sandstones; and moderately fractured igneous and metamorphic rocks. 5

High permeability materials such as fine and silty sands, sands and gravels, highly fractured igneous and metamorphic rocks, permeable basalts and lavas, and karst limestones and dolomites. 10

- (4) Sensitivity of the Uppermost Aquifer: Due to the uncertainties involved in the Matrix evaluation process, this factor is included to add an extra margin of safety in situations where critical aquifers have the potential to be affected.

The score for this parameter is:

Unusable aquifer, either due to water quality conditions such as salinity, etc.; or due to hydrologic conditions such as extremely low yield.	1
Potable aquifer not currently used for drinking water, but the quality is such that it could be used for drinking water.	4
Potable aquifer currently used for drinking water; alternate unthreatened sources of water readily available.	7
Sole source aquifer currently used for drinking water; there are no alternate unthreatened sources of water readily available.	10

- (5) Potential Receptors: The score for potential receptors is based on both the distance to the nearest well and also the number of people at risk. Each of these two components is to be evaluated using the descriptors defined in this section.

(a) The distance to the nearest well is measured from the area of contamination to the nearest well that draws water from the aquifer of concern. If a closer well exists which is known to draw water from a deeper aquifer, but there is no evidence that the deeper aquifer is completely isolated from the contaminated aquifer, then the distance must be measured to the closer, deeper well.

The distance descriptors are:

Near	< 1/2 mile
Medium	1/2 - 3 miles
Far	> 3 miles

(b) The number of people at risk is to include all people located within 3 miles of the contaminated area. This number is to include not only residents of the area, but also others who regularly enter the area such as employees in restaurants, motels, or campgrounds.

The number descriptors are:

Many	> 3000
Medium	101 - 3000
Few	< 100

(c) The score for this parameter is taken from the combination of the two descriptors using the following grid:

	Many	Medium	Few
Near	10	10	5
Medium	10	5	1
Far	5	1	1

(6) The Matrix Score for a site is the sum of the five parameter scores in 340-122-330(1)-(5).

340-122-335 Numeric Soil Cleanup Standards

- (1) If the Matrix Score evaluated in 340-122-330 is:
 - (a) Greater than 40, the site must be cleaned up to at least the Level 1 standards listed in 340-122-335(2).
 - (b) From 25 to 40, inclusive, the site must be cleaned up to at least the Level 2 standards in 340-122-335(2).
 - (c) Less than 25, the site must be cleaned up to at least the Level 3 standards listed in 340-122-335(2).

- (2) The following table contains the required numeric soil cleanup standards based on a measurement of Total Petroleum Hydrocarbons (TPH):

	Level 1	Level 2	Level 3
TPH (Gasoline)	10 ppm	50 ppm	100 ppm
TPH (Diesel)	100 ppm	500 ppm	1000 ppm

- (3) The Gasoline TPH value shall be the target cleanup level for all sites unless a hydrocarbon identification test clearly shows that the contaminant is Diesel or another non-gasoline fraction hydrocarbon such as a heating oil. Under these conditions, the Diesel TPH value may be used as the target cleanup level.

340-122-340 Sample Number and Location

The collection and analysis of soil samples is required to verify that a site meets the requirements of these rules. These samples must represent the soils remaining at the site and shall be collected after contaminated soils have been removed or remediated. The number of soil samples required for a given site and the location at which the samples are to be collected are as follows:

- (1) A minimum of two soil samples must be collected from the site:
- (a) These samples must be taken from those areas where obviously stained or contaminated soils have been identified and excavated.
 - (b) If there are two or more distinct areas from which contaminated soils have been removed, then a minimum of one sample must be collected from each of these areas.
 - (c) The samples must be taken from within the first foot of native soil directly beneath the areas where the contaminated soil has been removed.

(d) A field instrument sensitive to volatile organic compounds may be used to aid in identifying areas that should be sampled, but the field data may not be substituted for laboratory analyses of the soil samples.

(e) If there are no areas of obvious contamination, then samples must be collected from the locations specified in subsections (2) to (5) of this section which are most appropriate for the situation.

(2) If water is not present in the tank pit:

(a) Soil samples must be collected from the native soils located no more than two feet beneath the tank pit in areas where contamination is most likely to be found.

(b) For the removal of an individual tank, samples must be collected from beneath both ends of the tank. For the removal of multiple tanks from the same pit, a minimum of one sample must be collected for each 250 square feet of area in the pit.

(3) In situations where leaks have been found in the piping, or in which released product has preferentially followed the fill around the piping, samples are to be collected from the native soils directly beneath the areas where obvious contamination has been removed. Samples should be collected at 20 lateral foot intervals.

(4) If water is present in the tank pit, the Department must be notified of this fact and a determination must be made as to whether contamination is likely to have affected the groundwater outside of the confines of the pit. To accomplish this, the owner, permittee, or responsible person shall either investigate the matter under OAR 340-122-240, or do the following:

(a) Purge the water from the tank pit and dispose of it in accordance with all currently applicable requirements.

(b) If the pit remains dry for 24 hours, testing and cleanup may proceed according to the applicable sections of these soil cleanup rules. If water returns to the pit in less than 24 hours, a determination must be made as to whether contamination is likely to have affected the groundwater outside of the confines of the pit as indicated below:

- (A) For the removal of an individual tank, soil samples are to be collected from the walls of the excavation next to the ends of the tank at the original soil/water interface. For the removal of multiple tanks from the same pit, a soil sample is to be collected from each of the four walls of the excavation at the original soil/water interface.
 - (B) At least one sample must be taken of the water in the pit.
 - (C) The soil samples must be analyzed for TPH and benzene, toluene, ethylbenzene and xylenes (BTEX). The water sample must be analyzed for BTEX. The results of these analyses must be submitted to the Department.
 - (D) The Department shall then determine how the cleanup shall proceed as specified in 340-122-355(3).
- (5) In situations where tanks and lines are to remain in place in areas of suspected contamination, the owner, permittee or responsible person shall submit a specific soil sampling plan to the Department for its approval.

340-122-345 Sample Collection Methods

- (1) The following information must be kept during the sampling events:
 - (a) A sketch of the site must be made which clearly shows all of the sample locations and identifies each location with a unique sample identification code.
 - (b) Each soil and water sample must be clearly labeled with its sample identification code. A written record must be maintained which includes, but is not limited to: the date, time and location of the sample collection; the name of the person collecting the sample; how the sample was collected; and any unusual or unexpected problems encountered during the sample collection which may have affected the sample integrity.
 - (c) Formal chain-of-custody records must be maintained for each sample.
- (2) If soil samples cannot be safely collected from the excavation, a backhoe may be used to remove a bucket of native soil from each of the sample areas. The soil is to be brought rapidly to the surface where samples are to be immediately taken from the soil in the bucket.

- (3) The following procedures must be used for the collection of soil samples from open pits or trenches:
- (a) Just prior to collecting each soil sample, approximately three inches of soil must be rapidly scraped away from the surface of the sample location.
 - (b) To minimize the loss of volatile materials, samples are to be taken using a driven-tube type sampler. A clean brass or stainless steel tube of at least one inch in diameter and three inches in length may be used for this purpose. The tube should be driven into the soil with a suitable instrument such as a wooden mallet or hammer.
 - (c) The ends of the sample-filled tube must be immediately covered with clean aluminum foil. The aluminum foil must be held in place by plastic end caps which are then sealed onto the tube with a suitable tape such as duct tape.
 - (d) After the samples are properly sealed, they are to be immediately placed on ice and maintained at a temperature of no greater than 4 °C (39 °F) until being prepared for analysis in the laboratory. All samples must be analyzed within 14 days of collection.
- (4) The following procedures must be used for the collection of water samples from the tank pit:
- (a) After the water has been purged from the pit in accordance with 340-122-340(4)(a), it is not necessary to wait for the pit to refill to its original depth, only for sufficient water to return to properly use the sampling device.
 - (b) Samples are to be taken with a device designed to reduce the loss of volatile components. A bailer with a sampling port is suitable for this purpose.
 - (c) The water is to be transferred into a glass vial with as little agitation as possible and immediately sealed with a teflon-lined cap. The vial must be filled completely so that no air bubbles remain trapped inside.
 - (d) After the samples are properly sealed, they are to be immediately placed on ice and maintained at a temperature of no greater than 4 °C (39 °F) until being prepared for analysis in the laboratory. All samples must be analyzed within 14 days of collection.

- (5) The Department may adopt alternative sampling methods which have been clearly shown to be at least as effective with respect to minimizing the loss of volatile materials during sampling and storage as the methods listed in 340-122-345(1)-(4).

340-122-350 Required Analytical Methods

The following methods are to be used for the analysis of the soil and water samples, as applicable:

- (1) Total Petroleum Hydrocarbons (TPH) shall be analyzed by means of EPA Method 418.1 using 20 grams of soil and a simple rinsing extraction in series.
- (2) Hydrocarbon Identification (HCID) shall be made, using the extract from EPA Method 418.1, by a gas chromatographic method capable of identifying, in terms of the number of carbon atoms, the range of hydrocarbons present in a sample. This test only needs to be qualitative rather than quantitative in nature.
- (3) Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) shall be analyzed by means of EPA Methods 5030 (Purge and Trap) and EPA Method 8020 (Aromatic Volatile Organics) or EPA Method 8240 (GC/MS Volatile Organics).
- (4) The Department may adopt alternative analytical methods which have been clearly shown to be applicable for the compounds of interest and which have detection limits at least as low the methods listed in 340-122-350(1)-(3).

340-122-355 Evaluation of Analytical Results

- (1) The results of the soil analyses shall be interpreted as follows:
 - (a) If a sample has a concentration less than or equal to the required matrix level, the area represented by that sample shall have met the requirements of these rules.
 - (b) If a sample has a concentration exceeding the required matrix level by more than 10%, the area represented by that sample has not met the requirements of these rules. Further remediation, sampling and testing is necessary until the required level is attained.

- (c) If a sample has a concentration exceeding the required matrix level by less than 10%, the responsible person has the option of collecting and analyzing two more samples from the same area and using the average of all three to determine if the standard has been met; or further remediating the area and then collecting and analyzing one new sample and using the concentration of the new sample to determine if the standard has been met.
- (2) A site shall be considered sufficiently clean when all of the sampled areas have concentrations less than or equal to the required matrix cleanup level, and when the possibility of any human contact with the residual soil contamination remaining on the site has been precluded.
- (3) If water is present in the tank pit, the Department shall decide if cleanup may proceed under these rules or if further action must be taken such as the installation of monitoring wells, or the development of a Corrective Action Plan under OAR 340-122-250. This decision shall be based on, but is not limited to:
- (a) The apparent extent of the contamination;
 - (b) The likelihood that groundwater contamination exists beyond the boundaries of the tank pit;
 - (c) The likelihood that the BTEX concentrations in the water and the BTEX and TPH concentrations in the soil indicate a situation which poses a threat to public health, safety, welfare and the environment; and
 - (d) Any other site-specific factors deemed appropriate by the Department.
- (4) If a pocket of contamination exceeding the required Matrix cleanup level is located under a building or other structure where further removal would endanger the structure or be prohibitively expensive, the Department must be notified of this situation. The Director shall then decide whether such contamination can remain without threatening human health, safety, and welfare and the environment. If not, the Department shall require further remediation.

340-122-360 Reporting Requirements

- (1) An owner, permittee, or responsible person shall submit a final report to the Department for a site that has been cleaned up according to these rules, which report shall contain, but is not limited to:

- (a) A list of the individual parameter and factor scores used to arrive at the Matrix score for the site;
 - (b) All of the sampling documentation required in 340-122-345(4);
 - (c) Copies of the laboratory reports for all of the samples collected at the site, including samples that were too high and which required further action under 340-122-355(1);
 - (d) A brief explanation of what was done in the case of any samples that initially exceeded the required cleanup levels;
 - (e) A summary of the concentrations measured in the final round of samples from each sampling location;
 - (f) An explanation of what was done with any contaminated soil that was removed from the site;
 - (g) In cases where groundwater was present in the pit, a summary of the data collected and the decision made by the Department under 340-122-355(3).
 - (h) In cases where pockets of excess contamination remain on site in accordance with 340-122-355(4), a description of this contamination including location, approximate volume and concentration.
- (2) The owner, permittee, or responsible person shall retain a copy of the report submitted to the Department under this section until the time of first transfer of the property, plus 10 years.
- (3) Within 120 days after receipt of the final report under this section, the Department shall:
- (a) Provide the person submitting the report a written statement that, based upon information contained in the report, the site has been cleaned up in accordance with OAR 340-122-301 through 340-122-360; or
 - (b) Request the owner, permittee, or responsible person to submit additional information or perform further investigation; or
 - (c) Request the owner, permittee, or responsible person to develop and submit a corrective action plan in accordance with OAR 340-122-250.

**AMENDMENTS TO OAR 340-122-030 AND
OAR 340-122-201 TO 340-122-260**

340-122-030

SCOPE AND APPLICABILITY

- (4) OAR 340-122-205 to 340-122-360 shall apply to corrective action for releases of petroleum from underground storage tanks that are subject to ORS 466.705 to 466.835 and 466.895, except as provided under OAR 340-122-215(2) which authorizes the Director to order the cleanup under 340-122-010 to 340-122-110.

340-122-215

Scope and Applicability

- (1) Sections 340-122-205 [to 340-122-260] through 340-122-360 of these rules apply to:
- (2) Notwithstanding OAR 340-122-215(1)(b) and 340-122-360(3), the Director may require that investigation and cleanup of a release from a petroleum UST system be governed by OAR 340-122-010 to 340-122-110, if, based on the magnitude or complexity of the release or other considerations, the Director determines that application of OAR 340-122-010 through 340-122-110 is necessary to protect the public health, safety, welfare and the environment.
- (4) The Director may determine that the investigation and cleanup of releases from petroleum underground storage tank systems which are exempted under ORS 466.710(1) through (10) inclusive, shall be conducted under 340-122-205 [to 340-122-260] through 340-122-360, based upon the authority provided under ORS 466.540 to 466.590.

[340-122-245

Numeric Soil Cleanup Levels for Motor
Fuel and Heating Oil

- (1) The Director shall develop and propose to the Environmental Quality Commission for rulemaking, matrices with numeric soil cleanup levels for motor fuel and heating oil, which may include but are not limited to specific constituents such as benzene, xylene, toluene, and ethylbenzene.

- (2) The matrices shall establish numeric soil cleanup levels that provide a high degree of protection in accordance with OAR 340-122-040(1).
- (3) Within 6 months after the effective date of these rules, the Director shall request the Environmental Quality Commission to commence rulemaking and authorize a public hearing on the proposed matrices, in accordance with ORS 466.745.
- (4) Until adoption of such matrices by rule, cleanup levels shall be determined under OAR 340-122-250(2) as applicable, unless the Director determines that abatement and cleanup conducted under subsections 340-122-220 and 340-122-225 have resulted in a cleanup level adequate to protect public health, safety, welfare and the environment.
- (5) The matrices may include, but not be limited to, the following factors:
 - (a) Distance to groundwater;
 - (b) Soil type;
 - (c) Geology of the site;
 - (d) Average annual precipitation; and
 - (e) Other factors deemed appropriate by the Director.
- (6) The owner, permittee, or responsible person may either:
 - (a) Propose clean up of the soils to a level specified in the matrices; or
 - (b) Develop a Corrective Action Plan for soils under OAR 340-122-250(2).
- (7) The Director shall not approve cleanup actions proposed under OAR 340-122-245(6)(a) if the Director determines that the numeric soil cleanup levels are not appropriate or adequate to protect public health, safety, welfare and the environment. In such cases, the Director shall require the owner, permittee, or responsible person, to develop a corrective action plan, under OAR 340-122-250, or 340-122-010 to 340-122-110.]

Corrective Action Plan

- (1) At any point after reviewing the information submitted in compliance with subsections 340-122-220 through 340-122-230 or 340-122-301 through 340-122-360, the Director may require owners, permittees or responsible persons to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and groundwater. If a plan is required, owners, permittees or responsible persons shall submit the plan according to a schedule and format established by the Director. Alternatively, owners, permittees or responsible persons may, after fulfilling the requirements of subsections 340-122-220 through 340-122-230 or 340-122-301 through 340-122-360, choose to submit a corrective action plan for responding to contaminated soil and groundwater. In either case, owners, permittees or responsible persons are responsible for submitting a plan that provides for adequate protection of public health, safety, welfare and the environment as determined by the Director, and shall modify their plan as necessary to meet this standard.

RULEMAKING STATEMENTS

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to hold public hearings and adopt a rule.

(1) **Legal Authority**

ORS 466.553(1) authorizes the Environmental Quality Commission to adopt rules, in accordance with the applicable provision of ORS 183.310 to 183.550, necessary to carry out the provisions of ORS 466.540 to 466.590. ORS 466.720(1) directs the Commission to adopt a state-wide underground storage tank program. ORS 466.745(1) authorizes the Commission to adopt rules necessary to carry out the provisions of 466.705 to 466.835 and 466.895. In addition, ORS 468.020 authorizes the Commission to adopt such rules and standards as it considers necessary and proper in performing the functions vested by law in the Commission.

(2) **Need for the Rule**

ORS 466.553(2)(a) requires the Commission to adopt rules establishing the levels, factors, criteria or other provisions for the degree of cleanup including the control of further releases of a hazardous substance, and the selection of the remedial actions necessary to assure protection of the public health, safety, welfare and the environment.

ORS 466.745(1)(e)(j)(k) and (L) authorize the Commission to adopt rules establishing requirements for reporting a release from an underground storage tank, reporting corrective action taken in response to a release, taking corrective action in response to a release, and any other requirements necessary to carry out the provisions of ORS 466.705 to 466.835 and 466.895. Although both sets of statutes require protection of public health, safety, welfare and the environment, they do not define or specify the level of protection or the degree of cleanup. Hazardous Substance Remedial Action Rules (adopted September 16, 1988) and Cleanup Rules for Leaking Petroleum UST Systems (adopted November 4, 1988) were adopted to implement the statutes and delineate the decision making process for degree of cleanup and selection of cleanup action. OAR 340-122-245 directs the Department to propose to the Commission for rulemaking, matrices with numeric soil cleanup levels for motor fuel and heating oil.

(3) Principal Documents Relied Upon in this Rulemaking

- ORS 466.705 to 466.835 and 466.895
- ORS 466.540 to 466.590
- OAR Chapter 340, Divisions 41, 47, 50, 61, 108 and 122
- Comprehensive Environmental Response, Compensation, and Liability Act, P.L. 96-510, as amended by P.L. 99-499.
- Environmental Protection Agency's final Technical Requirements for Underground Storage Tanks, 40 CFR Part 280.

FISCAL AND ECONOMIC IMPACT STATEMENT

As required in subsection 340-122-245 of the UST Cleanup Rules, the Department has developed matrices of soil cleanup levels for motor fuel and heating oil releases. If the EQC adopts the soil cleanup matrices, this will probably result in significant but indeterminable savings to owners, permittees and responsible persons.

Providing a predetermined cleanup level will result in significant but indeterminable savings because the owner, permittee, or responsible person would not have to perform more extensive and costly investigation and reporting procedures in other subsections of the adopted UST cleanup rules or the adopted remedial action cleanup rules.

This approach was selected, in part, because a very large number of the sites that will be cleaned up, and most of the underground storage tank sites, will be for releases of motor fuel and heating oil into soils. Many of these tanks are owned by small businesses, which cannot afford the economic burden of closing down operations and conducting extensive investigation and cleanup, nor is that necessary for relatively simple soil contamination cleanups.

The costs of cleanups for leaking underground storage tanks have ranged from \$25,000 to \$1 million nationally and from \$5,000 to \$200,000 in Oregon. Average costs in Oregon may be approximately \$50,000. If there are 2,000 sites with leaking petroleum USTs over the next 10 years, the total costs will be approximately \$100 million.

A small portion of these costs will be paid by the Federal Leaking Underground Storage Tank Trust Fund for releases with no viable responsible person. The balance will be paid by the liable person(s). Close to a majority of these costs may be borne by small businesses that own gas stations. Local and state agencies, which operate gasoline stations for fleets or otherwise own underground storage tanks, will bear some of these costs.

PUBLIC NOTICE

If the Commission approves this request for public hearings, the Department will hold a series of five hearings around the state. The tentative schedule for the hearings is as follows:

1. Portland
Tuesday, May 16
7:00 - 9:00 PM
Meeting room to be announced
2. Pendleton
Thursday, May 18
7:00 - 9:00 PM
Meeting room to be announced
3. Bend
Tuesday, May 23
7:00 - 9:00 PM
Meeting room to be announced
4. Eugene
Wednesday, May 24
7:00 - 9:00 PM
Meeting room to be announced
5. Medford
Thursday, May 25
7:00 - 9:00 PM
Meeting room to be announced

Adequate notice will be provided in order to maximize public comment on the draft rules. There will also be an opportunity for written comments to be submitted to the Department.

**REMOVAL OR REMEDIAL ACTION TO
ABATE HEALTH HAZARDS**

466.540 Definitions for ORS 466.540 to 466.590. As used in ORS 466.540 to 466.590 and 466.900:

(1) "Claim" means a demand in writing for a sum certain.

(2) "Commission" means the Environmental Quality Commission.

(3) "Department" means the Department of Environmental Quality.

(4) "Director" means the Director of the Department of Environmental Quality.

(5) "Environment" includes the waters of the state, any drinking water supply, any land surface and subsurface strata and ambient air.

(6) "Facility" means any building, structure, installation, equipment, pipe or pipeline including any pipe into a sewer or publicly owned treatment works, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, above ground tank, underground storage tank, motor vehicle, rolling stock, aircraft, or any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located and where a release has occurred or where there is a threat of a release, but does not include any consumer product in consumer use or any vessel.

(7) "Fund" means the Hazardous Substance Remedial Action Fund established by ORS 466.590.

(8) "Guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under ORS 466.540 to 466.590 and 466.900.

(9) "Hazardous substance" means:

(a) Hazardous waste as defined in ORS 466.005.

(b) Any substance defined as a hazardous substance pursuant to section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act, P.L. 96-510, as amended, P.L. 96-510 and P.L. 99-499.

(c) Oil.

(d) Any substance designated by the commission under ORS 466.553.

(10) "Natural resources" includes but is not limited to land, fish, wildlife, biota, air, surface water, groundwater, drinking water supplies and any other resource owned, managed, held in trust or otherwise controlled by the State of Oregon or a political subdivision of the state.

(11) "Oil" includes gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge or refuse and any other petroleum-related product, or waste or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and pressure of 14.7 pounds per square inch absolute.

(12) "Owner or operator" means any person who owned, leased, operated, controlled or exercised significant control over the operation of a facility. "Owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect a security interest in the facility.

(13) "Person" means an individual, trust, firm, joint stock company, joint venture, consortium, commercial entity, partnership, association, corporation, commission, state and any agency thereof, political subdivision of the state, interstate body or the Federal Government including any agency thereof.

(14) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance, or threat thereof, but excludes:

(a) Any release which results in exposure to a person solely within a workplace, with respect to a claim that the person may assert against the person's employer under ORS chapter 656;

(b) Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine;

(c) Any release of source, by-product or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, as amended, if such release is subject to requirements with respect to financial protection

established by the Nuclear Regulatory Commission under section 170 of the Atomic Energy Act of 1954, as amended, or, for the purposes of ORS 466.570 or any other removal or remedial action, any release of source by-product or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978; and

(d) The normal application of fertilizer.

(15) "Remedial action" means those actions consistent with a permanent remedial action taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of a hazardous substance so that they do not migrate to cause substantial danger to present or future public health, safety, welfare or the environment. "Remedial action" includes, but is not limited to:

(a) Such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incineration, provision of alternative drinking and household water supplies, and any monitoring reasonably required to assure that such actions protect the public health, safety, welfare and the environment.

(b) Offsite transport and offsite storage, treatment, destruction or secure disposition of hazardous substances and associated, contaminated materials.

(c) Such actions as may be necessary to monitor, assess, evaluate or investigate a release or threat of release.

(16) "Remedial action costs" means reasonable costs which are attributable to or associated with a removal or remedial action at a facility, including but not limited to the costs of administration, investigation, legal or enforcement activities, contracts and health studies.

(17) "Removal" means the cleanup or removal of a released hazardous substance from the environment, such actions as may be necessary taken in the event of the threat of release of a hazardous substance into the environment, such actions as may be necessary to monitor, assess and evaluate the release or threat of release of a hazardous substance, the disposal of removed

material, or the taking of such other actions as may be necessary to prevent, minimize or mitigate damage to the public health, safety, welfare or to the environment, which may otherwise result from a release or threat of release. "Removal" also includes but is not limited to security fencing or other measures to limit access, provision of alternative drinking and household water supplies, temporary evacuation and housing of threatened individuals and action taken under ORS 466.570.

(18) "Transport" means the movement of a hazardous substance by any mode, including pipeline and in the case of a hazardous substance which has been accepted for transportation by a common or contract carrier, the term "transport" shall include any stoppage in transit which is temporary, incidental to the transportation movement, and at the ordinary operating convenience of a common or contract carrier, and any such stoppage shall be considered as a continuity of movement and not as the storage of a hazardous substance.

(19) "Underground storage tank" has the meaning given that term in ORS 466.705.

(20) "Waters of the state" has the meaning given that term in ORS 468.700. [1987 c.539 §52; 1987 c.735 §1]

466.547 Legislative findings. (1) The Legislative Assembly finds that:

(a) The release of a hazardous substance into the environment may present an imminent and substantial threat to the public health, safety, welfare and the environment; and

(b) The threats posed by the release of a hazardous substance can be minimized by prompt identification of facilities and implementation of removal or remedial action.

(2) Therefore, the Legislative Assembly declares that:

(a) It is in the interest of the public health, safety, welfare and the environment to provide the means to minimize the hazards of and damages from facilities.

(b) It is the purpose of ORS 466.540 to 466.590 and 466.900 to:

(A) Protect the public health, safety, welfare and the environment; and

(B) Provide sufficient and reliable funding for the department to expediently and effectively authorize, require or undertake removal or remedial action to abate hazards to the public health, safety, welfare and the environment. [1987 c.735 §2]

466.550 Authority of department for removal or remedial action. (1) In addition to any other authority granted by law, the department may:

(a) Undertake independently, in cooperation with others or by contract, investigations, studies, sampling, monitoring, assessments, surveying, testing, analyzing, planning, inspecting, training, engineering, design, construction, operation, maintenance and any other activity necessary to conduct removal or remedial action and to carry out the provisions of ORS 466.540 to 466.590 and 466.900; and

(b) Recover the state's remedial action costs.

(2) The commission and the department may participate in or conduct activities pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, P.L. 96-510 and P.L. 99-499, and the corrective action provisions of Subtitle I of the federal Solid Waste Disposal Act, as amended, P.L. 96-482 and P.L. 98-616. Such participation may include, but need not be limited to, entering into a cooperative agreement with the United States Environmental Protection Agency.

(3) Nothing in ORS 466.540 to 466.590 and 466.900 shall restrict the State of Oregon from participating in or conducting activities pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, P.L. 96-510 and P.L. 99-499. [1987 c.735 §3]

466.553 Rules; designation of hazardous substance. (1) In accordance with the applicable provisions of ORS 183.310 to 183.550, the commission may adopt rules necessary to carry out the provisions of ORS 466.540 to 466.590 and 466.900.

(2)(a) Within one year after the effective date of this Act, the commission shall adopt rules establishing the levels, factors, criteria or other provisions for the degree of cleanup including the control of further releases of a hazardous substance, and the selection of remedial actions necessary to assure protection of the public health, safety, welfare and the environment.

(b) In developing rules pertaining to the degree of cleanup and the selection of remedial actions under paragraph (a) of this subsection, the commission may, as appropriate, take into account:

(A) The long-term uncertainties associated with land disposal;

(B) The goals, objectives and requirements of ORS 466.005 to 466.385;

(C) The persistence, toxicity, mobility and propensity to bioaccumulate of such hazardous substances and their constituents;

(D) The short-term and long-term potential for adverse health effects from human exposure to the hazardous substance;

(E) Long-term maintenance costs;

(F) The potential for future remedial action costs if the alternative remedial action in question were to fail;

(G) The potential threat to human health and the environment associated with excavation, transport and redispersion or containment; and

(H) The cost effectiveness.

(3)(a) By rule, the commission may designate as a hazardous substance any element, compound, mixture, solution or substance or any class of substances that, should a release occur, may present a substantial danger to the public health, safety, welfare or the environment.

(b) Before designating a substance or class of substances as a hazardous substance, the commission must find that the substance, because of its quantity, concentration, or physical, chemical or toxic characteristics, may pose a present or future hazard to human health, safety, welfare or the environment should a release occur. [1987 c.735 §4]

466.555 Remedial Action Advisory Committee. The director shall appoint a Remedial Action Advisory Committee in order to advise the department in the development of rules for the implementation of ORS 466.540 to 466.590 and 466.900. The committee shall be comprised of members representing at least the following interests:

- (1) Citizens;
- (2) Local governments;
- (3) Environmental organizations; and
- (4) Industry. [1987 c.735 §5]

466.557 Inventory of facilities where release confirmed. (1) For the purposes of providing public information, the director shall develop and maintain an inventory of all facilities where a release is confirmed by the department.

(2) The director shall make the inventory available for the public at the department's offices.

(3) The inventory shall include but need not be limited to the following items, if known:

- (a) A general description of the facility;
- (b) Address or location;

(c) Time period during which a release occurred;

(d) Name of the current owner and operator and names of any past owners and operators during the time period of a release of a hazardous substance;

(e) Type and quantity of a hazardous substance released at the facility;

(f) Manner of release of the hazardous substance;

(g) Levels of a hazardous substance, if any, in ground water, surface water, air and soils at the facility;

(h) Status of removal or remedial actions at the facility; and

(i) Other items the director determines necessary.

(4) Thirty days before a facility is added to the inventory the director shall notify by certified mail the owner of all or any part of the facility that is to be included in the inventory. The decision of the director to add a facility may be appealed in writing to the commission within 15 days after the owner receives notice. The appeal shall be conducted in accordance with provisions of ORS 183.310 to 183.550 governing contested cases.

(5) The department shall, on or before January 15, 1989, and annually thereafter, submit the inventory and a report to the Governor, the Legislative Assembly and the Environmental Quality Commission.

(6) Nothing in this section, including listing of a facility in the inventory or commission review of the listing shall be construed to be a prerequisite to or otherwise affect the authority of the director to undertake, order or authorize a removal or remedial action under ORS 466.540 to 466.590 and 466.900. [1987 c.735 §6]

466.560 Comprehensive state-wide identification program; notice. (1) The department shall develop and implement a comprehensive state-wide program to identify any release or threat of release from a facility that may require remedial action.

(2) The department shall notify all daily and weekly newspapers of general circulation in the state and all broadcast media of the program developed under subsection (1) of this section. The notice shall include information about how the public may provide information on a release or threat of release from a facility.

(3) In developing the program under subsection (1) of this section, the department shall

examine, at a minimum, any industrial or commercial activity that historically has been a major source in this state of releases of hazardous substances.

(4) The department shall include information about the implementation and progress of the program developed under subsection (1) of this section in the report required under ORS 466.557 (5). [1987 c.735 §7]

466.563 Preliminary assessment of potential facility. (1) If the department receives information about a release or a threat of release from a potential facility, the department shall conduct a preliminary assessment of the potential facility. The preliminary assessment shall be conducted as expeditiously as possible within the budgetary constraints of the department.

(2) A preliminary assessment conducted under subsection (1) of this section shall include a review of existing data, a good faith effort to discover additional data and a site inspection to determine whether there is a need for further investigation. [1987 c.735 §8]

466.565 Accessibility of information about hazardous substances. (1) Any person who has or may have information, documents or records relevant to the identification, nature and volume of a hazardous substance generated, treated, stored, transported to, disposed of or released at a facility and the dates thereof, or to the identity or financial resources of a potentially responsible person, shall, upon request by the department or its authorized representative, disclose or make available for inspection and copying such information, documents or records.

(2) Upon reasonable basis to believe that there may be a release of a hazardous substance at or upon any property or facility, the department or its authorized representative may enter any property or facility at any reasonable time to:

- (a) Sample, inspect, examine and investigate;
- (b) Examine and copy records and other information; or
- (c) Carry out removal or remedial action or any other action authorized by ORS 466.540 to 466.590 and 466.900.

(3) If any person refuses to provide information, documents, records or to allow entry under subsections (1) and (2) of this section, the department may request the Attorney General to seek from a court of competent jurisdiction an order requiring the person to provide such information, documents, records or to allow entry.

(4)(a) Except as provided in paragraphs (b) and (c) of this subsection, the department or its authorized representative shall, upon request by the current owner or operator of the facility or property, provide a portion of any sample obtained from the property or facility to the owner or operator.

(b) The department may decline to give a portion of any sample to the owner or operator if, in the judgment of the department or its authorized representative, apportioning a sample:

(A) May alter the physical or chemical properties of the sample such that the portion of the sample retained by the department would not be representative of the material sampled; or

(B) Would not provide adequate volume to perform the laboratory analysis.

(c) Nothing in this subsection shall prevent or unreasonably hinder or delay the department or its authorized representative in obtaining a sample at any facility or property.

(5) Persons subject to the requirements of this section may make a claim of confidentiality regarding any information, documents or records, in accordance with ORS 466.090. [1987 c.735 §9]

466.567 Strict liability for remedial action costs for injury or destruction of natural resource; limited exclusions. (1) The following persons shall be strictly liable for those remedial action costs incurred by the state or any other person that are attributable to or associated with a facility and for damages for injury to or destruction of any natural resources caused by a release:

(a) Any owner or operator at or during the time of the acts or omissions that resulted in the release.

(b) Any owner or operator who became the owner or operator after the time of the acts or omissions that resulted in the release, and who knew or reasonably should have known of the release when the person first became the owner or operator.

(c) Any owner or operator who obtained actual knowledge of the release at the facility during the time the person was the owner or operator of the facility and then subsequently transferred ownership or operation of the facility to another person without disclosing such knowledge.

(d) Any person who, by any acts or omissions, caused, contributed to or exacerbated the release, unless the acts or omissions were in material compliance with applicable laws, standards, regulations, licenses or permits.

(e) Any person who unlawfully hinders or delays entry to, investigation of or removal or remedial action at a facility.

(2) Except as provided in paragraphs (b) to (e) of subsection (1) of this section and subsection (4) of this section, the following persons shall not be liable for remedial action costs incurred by the state or any other person that are attributable to or associated with a facility, or for damages for injury to or destruction of any natural resources caused by a release:

(a) Any owner or operator who became the owner or operator after the time of the acts or omissions that resulted in a release, and who did not know and reasonably should not have known of the release when the person first became the owner or operator.

(b) Any owner or operator if the facility was contaminated by the migration of a hazardous substance from real property not owned or operated by the person.

(c) Any owner or operator at or during the time of the acts or omissions that resulted in the release, if the release at the facility was caused solely by one or a combination of the following:

(A) An act of God. "Act of God" means an unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

(B) An act of war.

(C) Acts or omissions of a third party, other than an employe or agent of the person asserting this defense, or other than a person whose acts or omissions occur in connection with a contractual relationship, existing directly or indirectly, with the person asserting this defense. As used in this subparagraph, "contractual relationship" includes but is not limited to land contracts, deeds or other instruments transferring title or possession.

(3) Except as provided in paragraphs (c) to (e) of subsection (1) of this section or subsection (4) of this section, the following persons shall not be liable for remedial action costs incurred by the state or any other person that are attributable to or associated with a facility, or for damages for injury to or destruction of any natural resources caused by a release:

(a) A unit of state or local government that acquired ownership or control of a facility in the following ways:

(A) Involuntarily by virtue of its function as sovereign, including but not limited to escheat, bankruptcy, tax delinquency or abandonment; or

(B) Through the exercise of eminent domain authority by purchase or condemnation.

(b) A person who acquired a facility by inheritance or bequest.

(4) Notwithstanding the exclusions from liability provided for specified persons in subsections (2) and (3) of this section such persons shall be liable for remedial action costs incurred by the state or any other person that are attributable to or associated with a facility, and for damages for injury to or destruction of any natural resources caused by a release, to the extent that the person's acts or omissions contribute to such costs or damages, if the person:

(a) Obtained actual knowledge of the release and then failed to promptly notify the department and exercise due care with respect to the hazardous substance concerned, taking into consideration the characteristics of the hazardous substance in light of all relevant facts and circumstances; or

(b) Failed to take reasonable precautions against the reasonably foreseeable acts or omissions of a third party and the reasonably foreseeable consequences of such acts or omissions.

(5)(a) No indemnification, hold harmless, or similar agreement or conveyance shall be effective to transfer from any person who may be liable under this section, to any other person, the liability imposed under this section. Nothing in this section shall bar any agreement to insure, hold harmless or indemnify a party to such agreement for any liability under this section.

(b) A person who is liable under this section shall not be barred from seeking contribution from any other person for liability under ORS 466.540 to 466.590 and 466.900.

(c) Nothing in ORS 466.540 to 466.590 and 466.900 shall bar a cause of action that a person liable under this section or a guarantor has or would have by reason of subrogation or otherwise against any person.

(d) Nothing in this section shall restrict any right that the state or any person might have under federal statute, common law or other state statute to recover remedial action costs or to seek any other relief related to a release.

(6) To establish, for purposes of paragraph (b) of subsection (1) of this section or paragraph (a) of subsection (2) of this section, that the person did or did not have reason to know, the person must have undertaken, at the time of acquisition, all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice in an effort to minimize liability.

(7)(a) Except as provided in paragraph (b) of this subsection, no person shall be liable under ORS 466.540 to 466.590 and 466.900 for costs or damages as a result of actions taken or omitted in the course of rendering care, assistance or advice in accordance with rules adopted under ORS 466.553 or at the direction of the department or its authorized representative, with respect to an incident creating a danger to public health, safety, welfare or the environment as a result of any release of a hazardous substance. This paragraph shall not preclude liability for costs or damages as the result of negligence on the part of such person.

(b) No state or local government shall be liable under ORS 466.540 to 466.590 and 466.900 for costs or damages as a result of actions taken in response to an emergency created by the release of a hazardous substance generated by or from a facility owned by another person. This paragraph shall not preclude liability for costs or damages as a result of gross negligence or intentional misconduct by the state or local government. For the purpose of this paragraph, reckless, wilful or wanton misconduct shall constitute gross negligence.

(c) This subsection shall not alter the liability of any person covered by subsection (1) of this section. [1987 c.735 §10]

466.570 Removal or remedial action; reimbursement of costs. (1) The director may undertake any removal or remedial action necessary to protect the public health, safety, welfare and the environment.

(2) The director may authorize any person to carry out any removal or remedial action in accordance with any requirements of or directions from the director, if the director determines that the person will commence and complete removal or remedial action properly and in a timely manner.

(3) Nothing in ORS 466.540 to 466.590 and 466.900 shall prevent the director from taking any emergency removal or remedial action necessary to protect public health, safety, welfare or the environment.

(4) The director may require a person liable under ORS 466.567 to conduct any removal or remedial action or related actions necessary to protect the public health, safety, welfare and the environment. The director's action under this subsection may include but need not be limited to issuing an order specifying the removal or remedial action the person must take.

(5) The director may request the Attorney General to bring an action or proceeding for legal

or equitable relief, in the circuit court of the county in which the facility is located or in Marion County, as may be necessary:

(a) To enforce an order issued under subsection (4) of this section; or

(b) To abate any imminent and substantial danger to the public health, safety, welfare or the environment related to a release.

(6) Notwithstanding any provision of ORS 183.310 to 183.550, and except as provided in subsection (7) of this section, any order issued by the director under subsection (4) of this section shall not be appealable to the commission or subject to judicial review.

(7)(a) Any person who receives and complies with the terms of an order issued under subsection (4) of this section may, within 60 days after completion of the required action, petition the director for reimbursement from the fund for the reasonable costs of such action.

(b) If the director refuses to grant all or part of the reimbursement, the petitioner may, within 30 days of receipt of the director's refusal, file an action against the director seeking reimbursement from the fund in the circuit court of the county in which the facility is located or in the Circuit Court of Marion County. To obtain reimbursement, the petitioner must establish by a preponderance of the evidence that the petitioner is not liable under ORS 466.567 and that costs for which the petitioner seeks reimbursement are reasonable in light of the action required by the relevant order. A petitioner who is liable under ORS 466.567 may also recover reasonable remedial action costs to the extent that the petitioner can demonstrate that the director's decision in selecting the removal or remedial action ordered was arbitrary and capricious or otherwise not in accordance with law.

(8) If any person who is liable under ORS 466.567 fails without sufficient cause to conduct a removal or remedial action as required by an order of the director, the person shall be liable to the department for the state's remedial action costs and for punitive damages not to exceed three times the amount of the state's remedial action costs.

(9) Nothing in this section is intended to interfere with, limit or abridge the authority of the State Fire Marshal or any other state agency or local unit of government relating to an emergency that presents a combustion or explosion hazard. [1987 c.735 §11]

466.573 Standards for degree of cleanup required; exemption. (1)(a) Any

removal or remedial action performed under the provisions of ORS 466.540 to 466.590 and 466.900 shall attain a degree of cleanup of the hazardous substance and control of further release of the hazardous substance that assure protection of present and future public health, safety, welfare and of the environment.

(b) To the maximum extent practicable, the director shall select a remedial action that is protective of human health and the environment, that is cost effective, and that uses permanent solutions and alternative treatment technologies or resource recovery technologies.

(2) Except as provided in subsection (3) of this section, the director may exempt the onsite portion of any removal or remedial action conducted under ORS 466.540 to 466.590 and 466.900 from any requirement of ORS 466.005 to 466.385 and ORS chapter 459 or 468.

(3) Notwithstanding any provision of subsection (2) of this section, any onsite treatment, storage or disposal of a hazardous substance shall comply with the standard established under subsection (1) of this section. [1987 c.735 §12]

466.575. Notice of cleanup action; receipt and consideration of comment; notice of approval. Except as provided in ORS 466.570 (3), before approval of any remedial action to be undertaken by the department or any other person, or adoption of a certification decision under ORS 466.577, the department shall:

(1) Publish a notice and brief description of the proposed action in a local paper of general circulation and in the Secretary of State's Bulletin, and make copies of the proposal available to the public.

(2) Provide at least 30 days for submission of written comments regarding the proposed action, and, upon written request by 10 or more persons or by a group having 10 or more members, conduct a public meeting at or near the facility for the purpose of receiving verbal comment regarding the proposed action.

(3) Consider any written or verbal comments before approving the removal or remedial action.

(4) Upon final approval of the remedial action, publish notice, as provided under subsection (1) of this section, and make copies of the approved action available to the public. [1987 c.735 §13]

466.577 Agreement to perform removal or remedial action; reimbursement; agreement as order and consent decree; effect on liability. (1) The director, in the director's discretion, may enter into an agree-

ment with any person including the owner or operator of the facility from which a release emanates, or any other potentially responsible person to perform any removal or remedial action if the director determines that the actions will be properly done by the person. Whenever practicable and in the public interest, as determined by the director, the director, in order to expedite effective removal or remedial actions and minimize litigation, shall act to facilitate agreements under this section that are in the public interest and consistent with the rules adopted under ORS 466.553. If the director decides not to use the procedures in this section, the director shall notify in writing potentially responsible parties at the facility of such decision. Notwithstanding ORS 183.310 to 183.550, a decision of the director to use or not to use the procedures described in this section shall not be appealable to the commission or subject to judicial review.

(2)(a) An agreement under this section may provide that the director will reimburse the parties to the agreement from the fund, with interest, for certain costs of actions under the agreement that the parties have agreed to perform and the director has agreed to finance. In any case in which the director provides such reimbursement and, in the judgment of the director, cost recovery is in the public interest, the director shall make reasonable efforts to recover the amount of such reimbursement under ORS 466.540 to 466.590 and 466.900 or under other relevant authority.

(b) Notwithstanding ORS 183.310 to 183.550, the director's decision regarding fund financing under this subsection shall not be appealable to the commission or subject to judicial review.

(c) When a remedial action is completed under an agreement described in paragraph (a) of this subsection, the fund shall be subject to an obligation for any subsequent remedial action at the same facility but only to the extent that such subsequent remedial action is necessary by reason of the failure of the original remedial action. Such obligation shall be in a proportion equal to, but not exceeding, the proportion contributed by the fund for the original remedial action. The fund's obligation for such future remedial action may be met through fund expenditures or through payment, following settlement or enforcement action, by persons who were not signatories to the original agreement.

(3) If an agreement has been entered into under this section, the director may take any action under ORS 466.570 against any person who is not a party to the agreement, once the

period for submitting a proposal under paragraph (c) of subsection (5) of this section has expired. Nothing in this section shall be construed to affect either of the following:

(a) The liability of any person under ORS 466.567 or 466.570 with respect to any costs or damages which are not included in the agreement.

(b) The authority of the director to maintain an action under ORS 466.540 to 466.590 and 466.900 against any person who is not a party to the agreement.

(4)(a) Whenever the director enters into an agreement under this section with any potentially responsible person with respect to remedial action, following approval of the agreement by the Attorney General and except as otherwise provided in the case of certain administrative settlements referred to in subsection (8) of this section, the agreement shall be entered in the appropriate circuit court as a consent decree. The director need not make any finding regarding an imminent and substantial endangerment to the public health, safety, welfare or the environment in connection with any such agreement or consent decree.

(b) The entry of any consent decree under this subsection shall not be construed to be an acknowledgment by the parties that the release concerned constitutes an imminent and substantial endangerment to the public health, safety, welfare or the environment. Except as otherwise provided in the Oregon Evidence Code, the participation by any party in the process under this section shall not be considered an admission of liability for any purpose, and the fact of such participation shall not be admissible in any judicial or administrative proceeding, including a subsequent proceeding under this section.

(c) The director may fashion a consent decree so that the entering of the decree and compliance with the decree or with any determination or agreement made under this section shall not be considered an admission of liability for any purpose.

(d) The director shall provide notice and opportunity to the public and to persons not named as parties to the agreement to comment on the proposed agreement before its submittal to the court as a proposed consent decree, as provided under ORS 466.575. The director shall consider any written comments, views or allegations relating to the proposed agreement. The director or any party may withdraw, withhold or modify its consent to the proposed agreement if the comments, views and allegations concerning

the agreement disclose facts or considerations which indicate that the proposed agreement is inappropriate, improper or inadequate.

(5)(a) If the director determines that a period of negotiation under this subsection would facilitate an agreement with potentially responsible persons for taking removal or remedial action and would expedite removal or remedial action, the director shall so notify all such parties and shall provide them with the following information to the extent the information is available:

(A) The names and addresses of potentially responsible persons including owners and operators and other persons referred to in ORS 466.567.

(B) The volume and nature of substances contributed by each potentially responsible person identified at the facility.

(C) A ranking by volume of the substances at the facility.

(b) The director shall make the information referred to in paragraph (a) of this subsection available in advance of notice under this subsection upon the request of a potentially responsible person in accordance with procedures provided by the director. The provisions of ORS 466.565 (5) regarding confidential information apply to information provided under paragraph (a) of this subsection.

(c) Any person receiving notice under paragraph (a) of this subsection shall have 60 days from the date of receipt of the notice to submit to the director a proposal for undertaking or financing the action under ORS 466.570. The director may grant extensions for up to an additional 60 days.

(6)(a) Any person may seek contribution from any other person who is liable or potentially liable under ORS 466.567. In resolving contribution claims, the court may allocate remedial action costs among liable parties using such equitable factors as the court determines are appropriate.

(b) A person who has resolved its liability to the state in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement. Such settlement does not discharge any of the other potentially responsible persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement.

(c)(A) If the state has obtained less than complete relief from a person who has resolved its liability to the state in an administrative or

judicially approved settlement, the director may bring an action against any person who has not so resolved its liability.

(B) A person who has resolved its liability to the state for some or all of a removal or remedial action or for some or all of the costs of such action in an administrative or judicially approved settlement may seek contribution from any person who is not party to a settlement referred to in paragraph (b) of this subsection.

(C) In any action under this paragraph, the rights of any person who has resolved its liability to the state shall be subordinate to the rights of the state.

(7)(a) In entering an agreement under this section, the director may provide any person subject to the agreement with a covenant not to sue concerning any liability to the State of Oregon under ORS 466.540 to 466.590 and 466.900, including future liability, resulting from a release of a hazardous substance addressed by the agreement if each of the following conditions is met:

(A) The covenant not to sue is in the public interest.

(B) The covenant not to sue would expedite removal or remedial action consistent with rules adopted by the commission under ORS 466.553 (2).

(C) The person is in full compliance with a consent decree under paragraph (a) of subsection (4) of this section for response to the release concerned.

(D) The removal or remedial action has been approved by the director.

(b) The director shall provide a person with a covenant not to sue with respect to future liability to the State of Oregon under ORS 466.540 to 466.590 and 466.900 for a future release of a hazardous substance from a facility, and a person provided such covenant not to sue shall not be liable to the State of Oregon under ORS 466.567 with respect to such release at a future time, for the portion of the remedial action:

(A) That involves the transport and secure disposition offsite of a hazardous substance in a treatment, storage or disposal facility meeting the requirements of section 3004(c) to (g), (m), (o), (p), (u) and (v) and 3005(c) of the federal Solid Waste Disposal Act, as amended, P.L. 96-482 and P.L. 98-616, if the director has rejected a proposed remedial action that is consistent with rules adopted by the commission under ORS 466.553 that does not include such offsite disposition and has thereafter required offsite disposition; or

(B) That involves the treatment of a hazardous substance so as to destroy, eliminate or permanently immobilize the hazardous constituents of the substance, so that, in the judgment of the director, the substance no longer presents any current or currently foreseeable future significant risk to public health, safety, welfare or the environment, no by-product of the treatment or destruction process presents any significant hazard to public health, safety, welfare or the environment, and all by-products are themselves treated, destroyed or contained in a manner that assures that the by-products do not present any current or currently foreseeable future significant risk to public health, safety, welfare or the environment.

(c) A covenant not to sue concerning future liability to the State of Oregon shall not take effect until the director certifies that the removal or remedial action has been completed in accordance with the requirements of subsection (10) of this section at the facility that is the subject of the covenant.

(d) In assessing the appropriateness of a covenant not to sue under paragraph (a) of this subsection and any condition to be included in a covenant not to sue under paragraph (a) or (b) of this subsection, the director shall consider whether the covenant or conditions are in the public interest on the basis of factors such as the following:

(A) The effectiveness and reliability of the remedial action, in light of the other alternative remedial actions considered for the facility concerned.

(B) The nature of the risks remaining at the facility.

(C) The extent to which performance standards are included in the order or decree.

(D) The extent to which the removal or remedial action provides a complete remedy for the facility, including a reduction in the hazardous nature of the substances at the facility.

(E) The extent to which the technology used in the removal or remedial action is demonstrated to be effective.

(F) Whether the fund or other sources of funding would be available for any additional removal or remedial action that might eventually be necessary at the facility.

(G) Whether the removal or remedial action will be carried out, in whole or in significant part, by the responsible parties themselves.

(e) Any covenant not to sue under this subsection shall be subject to the satisfactory per-

formance by such party of its obligations under the agreement concerned.

(f)(A) Except for the portion of the removal or remedial action that is subject to a covenant not to sue under paragraph (b) of this subsection or de minimis settlement under subsection (8) of this section, a covenant not to sue a person concerning future liability to the State of Oregon:

(i) Shall include an exception to the covenant that allows the director to sue the person concerning future liability resulting from the release or threatened release that is the subject of the covenant if the liability arises out of conditions unknown at the time the director certifies under subsection (10) of this section that the removal or remedial action has been completed at the facility concerned; and

(ii) May include an exception to the covenant that allows the director to sue the person concerning future liability resulting from failure of the remedial action.

(B) In extraordinary circumstances, the director may determine, after assessment of relevant factors such as those referred to in paragraph (d) of this subsection and volume, toxicity, mobility, strength of evidence, ability to pay, litigative risks, public interest considerations, precedential value and the inequities and aggravating factors, not to include the exception referred to in subparagraph (A) of paragraph (f) of this subsection if other terms, conditions or requirements of the agreement containing the covenant not to sue are sufficient to provide all reasonable assurances that public health, safety, welfare and the environment will be protected from any future release at or from the facility.

(C) The director may include any provisions allowing future enforcement action under ORS 466.570 that in the discretion of the director are necessary and appropriate to assure protection of public health, safety, welfare and the environment.

(8)(a) Whenever practicable and in the public interest, as determined by the director, the director shall as promptly as possible reach a final settlement with a potentially responsible person in an administrative or civil action under ORS 466.567 if such settlement involves only a minor portion of the remedial action costs at the facility concerned and, in the judgment of the director, both of the following are minimal in comparison to any other hazardous substance at the facility:

(A) The amount of the hazardous substance contributed by that person to the facility; and

(B) The toxic or other hazardous effects of the substance contributed by that person to the facility.

(b) The director may provide a covenant not to sue with respect to the facility concerned to any party who has entered into a settlement under this subsection unless such a covenant would be inconsistent with the public interest as determined under subsection (7) of this section.

(c) The director shall reach any such settlement or grant a covenant not to sue as soon as possible after the director has available the information necessary to reach a settlement or grant a covenant not to sue.

(d) A settlement under this subsection shall be entered as a consent decree or embodied in an administrative order setting forth the terms of the settlement. The circuit court for the county in which the release or threatened release occurs or the Circuit Court of Marion County may enforce any such administrative order.

(e) A party who has resolved its liability to the state under this subsection shall not be liable for claims for contribution regarding matters addressed in the settlement. The settlement does not discharge any of the other potentially responsible persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement.

(f) Nothing in this subsection shall be construed to affect the authority of the director to reach settlements with other potentially responsible persons under ORS 466.540 to 466.590 and 466.900.

(9)(a) Notwithstanding ORS 183.310 to 183.550, except for those covenants required under subparagraphs (A) and (B) of paragraph (b) of subsection (7) of this section, a decision by the director to agree or not to agree to inclusion of any covenant not to sue in an agreement under this section shall not be appealable to the commission or subject to judicial review.

(b) Nothing in this section shall limit or otherwise affect the authority of any court to review, in the consent decree process under subsection (4) of this section, any covenant not to sue contained in an agreement under this section.

(10)(a) Upon completion of any removal or remedial action under an agreement under this section, or pursuant to an order under ORS 466.570, the party undertaking the removal or remedial action shall notify the department and request certification of completion. Within 90 days after receiving notice, the director shall determine by certification whether the removal or remedial action is completed in accordance with the applicable agreement or order.

(b) Before submitting a final certification decision to the court that approved the consent

decree, or before entering a final administrative order, the director shall provide to the public and to persons not named as parties to the agreement or order notice and opportunity to comment on the director's proposed certification decision, as provided under ORS 466.575.

(c) Any person aggrieved by the director's certification decision may seek judicial review of the certification decision by the court that approved the relevant consent decree or, in the case of an administrative order, in the circuit court for the county in which the facility is located or in Marion County. The decision of the director shall be upheld unless the person challenging the certification decision demonstrates that the decision was arbitrary and capricious, contrary to the provisions of ORS 466.540 to 466.590 and 466.900 or not supported by substantial evidence. The court shall apply a presumption in favor of the director's decision. The court may award attorney fees and costs to the prevailing party if the court finds the challenge or defense of the director's decision to have been frivolous. The court may assess against a party and award to the state, in addition to attorney fees and costs, an amount equal to the economic gain realized by the party if the court finds the only purpose of the party's challenge to the director's decision was delay for economic gain. [1987 c.735 §14]

466.580 State costs; payment; effect of failure to pay. (1) The department shall keep a record of the state's remedial action costs.

(2) Based on the record compiled by the department under subsection (1) of this section, the department shall require any person liable under ORS 466.567 or 466.570 to pay the amount of the state's remedial action costs and, if applicable, punitive damages.

(3) If the state's remedial action costs and punitive damages are not paid by the liable person to the department within 45 days after receipt of notice that such costs and damages are due and owing, the Attorney General, at the request of the director, shall bring an action in the name of the State of Oregon in a court of competent jurisdiction to recover the amount owed, plus reasonable legal expenses.

(4) All moneys received by the department under this section shall be deposited in the Hazardous Substance Remedial Action Fund established under ORS 466.590 if the moneys received pertain to a removal or remedial action taken at any facility. [1987 c.735 §15]

466.583 Costs as lien; enforcement of lien. (1) All of the state's remedial action costs,

penalties and punitive damages for which a person is liable to the state under ORS 466.567, 466.570 or 466.900 shall constitute a lien upon any real and personal property owned by the person.

(2) At the department's discretion, the department may file a claim of lien on real property or a claim of lien on personal property. The department shall file a claim of lien on real property to be charged with a lien under this section with the recording officer of each county in which the real property is located and shall file a claim of lien on personal property to be charged with a lien under this section with the Secretary of State. The lien shall attach and become enforceable on the day of such filing. The lien claim shall contain:

(a) A statement of the demand;

(b) The name of the person against whose property the lien attaches;

(c) A description of the property charged with the lien sufficient for identification; and

(d) A statement of the failure of the person to conduct removal or remedial action and pay penalties and damages as required.

(3) The lien created by this section may be foreclosed by a suit on real and personal property in the circuit court in the manner provided by law for the foreclosure of other liens.

(4) Nothing in this section shall affect the right of the state to bring an action against any person to recover all costs and damages for which the person is liable under ORS 466.567, 466.570 or 466.900. [1987 c.735 §16]

466.585 Contractor liability. (1)(a) A person who is a contractor with respect to any release of a hazardous substance from a facility shall not be liable under ORS 466.540 to 466.590 and 466.900 or under any other state law to any person for injuries, costs, damages, expenses or other liability including but not limited to claims for indemnification or contribution and claims by third parties for death, personal injury, illness or loss of or damage to property or economic loss that result from such release.

(b) Paragraph (a) of this subsection shall not apply if the release is caused by conduct of the contractor that is negligent, reckless, wilful or wanton misconduct or that constitutes intentional misconduct.

(c) Nothing in this subsection shall affect the liability of any other person under any warranty under federal, state or common law. Nothing in this subsection shall affect the liability of an

employer who is a contractor to any employe of such employer under any provision of law, including any provision of any law relating to workers' compensation.

(d) A state employe or an employe of a political subdivision who provides services relating to a removal or remedial action while acting within the scope of the person's authority as a governmental employe shall have the same exemption from liability subject to the other provisions of this section, as is provided to the contractor under this section.

(2)(a) The exclusion provided by ORS 466.567 (2)(c)(C) shall not be available to any potentially responsible party with respect to any costs or damages caused by any act or omission of a contractor.

(b) Except as provided in paragraph (d) of subsection (1) of this section and paragraph (a) of this subsection, nothing in this section shall affect the liability under ORS 466.540 to 466.590 and 466.900 or under any other federal or state law of any person, other than a contractor.

(c) Nothing in this section shall affect the plaintiff's burden of establishing liability under ORS 466.540 to 466.590 and 466.900.

(3)(a) The director may agree to hold harmless and indemnify any contractor meeting the requirements of this subsection against any liability, including the expenses of litigation or settlement, for negligence arising out of the contractor's performance in carrying out removal or remedial action activities under ORS 466.540 to 466.590 and 466.900, unless such liability was caused by conduct of the contractor which was grossly negligent, reckless, wilful or wanton misconduct, or which constituted intentional misconduct.

(b) This subsection shall apply only to a removal or remedial action carried out under written agreement with:

(A) The director;

(B) Any state agency; or

(C) Any potentially responsible party carrying out any agreement under ORS 466.570 or 466.577.

(c) For purposes of ORS 466.540 to 466.590 and 466.900, amounts expended from the fund for indemnification of any contractor shall be considered remedial action costs.

(d) An indemnification agreement may be provided under this subsection only if the director determines that each of the following requirements are met:

(A) The liability covered by the indemnification agreement exceeds or is not covered by insurance available, at a fair and reasonable price, to the contractor at the time the contractor enters into the contract to provide removal or remedial action, and adequate insurance to cover such liability is not generally available at the time the contract is entered into.

(B) The contractor has made diligent efforts to obtain insurance coverage.

(C) In the case of a contract covering more than one facility, the contractor agrees to continue to make diligent efforts to obtain insurance coverage each time the contractor begins work under the contract at a new facility.

(4)(a) Indemnification under this subsection shall apply only to a contractor liability which results from a release of any hazardous substance if the release arises out of removal or remedial action activities.

(b) An indemnification agreement under this subsection shall include deductibles and shall place limits on the amount of indemnification to be made available.

(c)(A) In deciding whether to enter into an indemnification agreement with a contractor carrying out a written contract or agreement with any potentially responsible party, the director shall determine an amount which the potentially responsible party is able to indemnify the contractor. The director may enter into an indemnification agreement only if the director determines that the amount of indemnification available from the potentially responsible party is inadequate to cover any reasonable potential liability of the contractor arising out of the contractor's negligence in performing the contract or agreement with the party. In making the determinations required under this subparagraph related to the amount and the adequacy of the amount, the director shall take into account the total net assets and resources of the potentially responsible party with respect to the facility at the time the director makes the determinations.

(B) The director may pay a claim under an indemnification agreement referred to in subparagraph (A) of this paragraph for the amount determined under subparagraph (A) of this paragraph only if the contractor has exhausted all administrative, judicial and common law claims for indemnification against all potentially responsible parties participating in the cleanup of the facility with respect to the liability of the contractor arising out of the contractor's negligence in performing the contract or agreement with the parties. The indemnification agreement

shall require the contractor to pay any deductible established under paragraph (b) of this subsection before the contractor may recover any amount from the potentially responsible party or under the indemnification agreement.

(d) No owner or operator of a facility regulated under the federal Solid Waste Disposal Act, as amended, P.L. 96-482 and P.L. 98-616, may be indemnified under this subsection with respect to such facility.

(e) For the purposes of ORS 466.567, any amounts expended under this section for indemnification of any person who is a contractor with respect to any release shall be considered a remedial action cost incurred by the state with respect to the release.

(5) The exemption provided under subsection (1) of this section and the authority of the director to offer indemnification under subsection (3) of this section shall not apply to any person liable under ORS 466.567 with respect to the release or threatened release concerned if the person would be covered by the provisions even if the person had not carried out any actions referred to in subsection (6) of this section.

(6) As used in this section:

(a) "Contract" means any written contract or agreement to provide any removal or remedial action under ORS 466.540 to 466.590 and 466.900 at a facility, or any removal under ORS 466.540 to 466.590 and 466.900, with respect to any release of a hazardous substance from the facility or to provide any evaluation, planning, engineering, surveying and mapping, design, construction, equipment or any ancillary services thereto for such facility, that is entered into by a contractor as defined in subparagraph (A) of paragraph (b) of this subsection with:

(A) The director;

(B) Any state agency; or

(C) Any potentially responsible party carrying out an agreement under ORS 466.570 or 466.577.

(b) "Contractor" means:

(A) Any person who enters into a removal or remedial action contract with respect to any release of a hazardous substance from a facility and is carrying out such contract; and

(B) Any person who is retained or hired by a person described in subparagraph (A) of this paragraph to provide any services relating to a removal or remedial action.

(c) "Insurance" means liability insurance that is fair and reasonably priced, as determined by

the director, and that is made available at the time the contractor enters into the removal or remedial action contract to provide removal or remedial action. [1987 c.735 §17]

466.587 Monthly fee of operators. Beginning on July 1, 1987, every person who operates a facility for the purpose of disposing of hazardous waste or PCB that is subject to interim status or a license issued under ORS 466.005 to 466.385 and 466.890 shall pay a monthly hazardous waste management fee by the 45th day after the last day of each month in the amount of \$20 per ton of hazardous waste or PCB brought into the facility for treatment by incinerator or for disposal by landfill at the facility. [1987 c.735 §18]

466.590 Hazardous Substance Remedial Action Fund; sources; uses. (1) The Hazardous Substance Remedial Action Fund is established separate and distinct from the General Fund in the State Treasury.

(2) The following shall be deposited into the State Treasury and credited to the Hazardous Substance Remedial Action Fund:

(a) Fees received by the department under ORS 466.587.

(b) Moneys recovered or otherwise received from responsible parties for remedial action costs.

(c) Any penalty, fine or punitive damages recovered under ORS 466.567, 466.570, 466.583 or 466.900.

(3) The State Treasurer may invest and reinvest moneys in the Hazardous Substance Remedial Action Fund in the manner provided by law.

(4) The moneys in the Hazardous Substance Remedial Action Fund are appropriated continuously to the department to be used as provided in subsection (5) of this section.

(5) Moneys in the Hazardous Substance Remedial Action Fund may be used for the following purposes:

(a) Payment of the state's remedial action costs;

(b) Funding any action or activity authorized by ORS 466.540 to 466.590 and 466.900; and

(c) Providing the state cost share for a removal or remedial action, as required by section 104(c)(3) of the federal Comprehensive Environmental Response, Compensation and Liability Act, P.L. 96-510 and as amended by P.L. 99-499. [1987 c.735 §19]

UNDERGROUND STORAGE TANKS
(General Provisions)

466.705 Definitions for ORS 466.705
to 466.835 and 466.895. As used in ORS
466.705 to 466.835 and 466.895:

(1) "Corrective action" means remedial action taken to protect the present or future public health, safety, welfare or the environment from a release of a regulated substance. "Corrective action" includes but is not limited to:

(a) The prevention, elimination, removal, abatement, control, minimization, investigation, assessment, evaluation or monitoring of a hazard or potential hazard or threat, including migration of a regulated substance; or

(b) Transportation, storage, treatment or disposal of a regulated substance or contaminated material from a site.

(2) "Decommission" means to remove from operation an underground storage tank, including temporary or permanent removal from operation, abandonment in place or removal from the ground.

(3) "Fee" means a fixed charge or service charge.

(4) "Guarantor" means any person other than the permittee who by guaranty, insurance, letter of credit or other acceptable device, provides financial responsibility for an underground storage tank as required under ORS 466.815.

(5) "Investigation" means monitoring, surveying, testing or other information gathering.

(6) "Local unit of government" means a city, county, special service district, metropolitan service district created under ORS chapter 268 or a political subdivision of the state.

(7) "Oil" means gasoline, crude oil, fuel oil, diesel oil, lubricating oil, sludge, oil refuse and any other petroleum related product or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute.

(8) "Owner" means the owner of an underground storage tank.

(9) "Permittee" means the owner or a person designated by the owner who is in control of or has responsibility for the daily operation or maintenance of an underground storage tank under a permit issued pursuant to ORS 466.760.

(10) "Person" means an individual, trust, firm, joint stock company, corporation, partnership, joint venture, consortium, association, state, municipality, commission, political subdivision of a state or any interstate body, any commercial entity and the Federal Government or any agency of the Federal Government.

(11) "Regulated substance" means:

(a) Any substance listed by the United States Environmental Protection Agency in 40 CFR

Table 302.4 pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended (P.L. 96-510 and P.L. 98-80), but not including any substance regulated as a hazardous waste under 40 CFR Part 261 and OAR 340 Division 101;

(b) Oil; or

(c) Any other substance designated by the commission under ORS 466.630.

(12) "Release" means the discharge, deposit, injection, dumping, spilling, emitting, leaking or placing of a regulated substance from an underground storage tank into the air or into or on land or the waters of the state, other than as authorized by a permit issued under state or federal law.

(13) "Underground storage tank" means any one or combination of tanks and underground pipes connected to the tank, used to contain an accumulation of a regulated substance, and the volume of which, including the volume of the underground pipes connected to the tank, is 10 percent or more beneath the surface of the ground.

(14) "Waters of the state" has the meaning given that term in ORS 468.700. [1987 c.539 §2 (enacted in lieu of 468.901)]

466.710 Application of ORS 466.705 to 466.835. ORS 466.705 to 466.835 and 466.895 shall not apply to a:

(1) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.

(2) Tank used for storing heating oil for consumptive use on the premises where stored.

(3) Septic tank.

(4) Pipeline facility including gathering lines regulated:

(a) Under the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. 1671);

(b) Under the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. 2001); or

(c) As an intrastate pipeline facility under state laws comparable to the provisions of law referred to in paragraph (a) or (b) of this subsection.

(5) Surface impoundment, pit, pond or lagoon.

(6) Storm water or waste water collection system.

(7) Flow-through process tank.

(8) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.

(9) Storage tank situated in an underground area if the storage tank is situated upon or above the surface of a floor. As used in this subsection, "underground area" includes but is not limited to a basement, cellar, mine, drift, shaft or tunnel.

(10) Pipe connected to any tank described in subsections (1) to (8) of this section. [Formerly 468.911; 1987 c.539 §18]

466.715 Legislative findings. (1) The Legislative Assembly finds that:

(a) Regulated substances hazardous to the public health, safety, welfare and the environment are stored in underground tanks in this state; and

(b) Underground tanks used for the storage of regulated substances are potential sources of contamination of the environment and may pose dangers to the public health, safety, welfare and the environment.

(2) Therefore, the Legislative Assembly declares:

(a) It is the public policy of this state to protect the public health, safety, welfare and the environment from the potential harmful effects of underground tanks used to store regulated substances.

(b) It is the purpose of ORS 466.705 to 466.835 and 466.895 to enable the Environmental Quality Commission to adopt a state-wide program for the prevention and reporting of releases and for taking corrective action to protect the public and the environment from releases from underground storage tanks. [1987 c.539 §4 (enacted in lieu of 468.902)]

(Administration)

466.720 State-wide underground storage tank program; federal authorization.

(1) The Environmental Quality Commission shall adopt a state-wide underground storage tank program. Except as otherwise provided in ORS 466.705 to 466.835 and 466.895, the state-wide program shall establish uniform procedures and standards to protect the public health, safety, welfare and the environment from the consequences of a release from an underground storage tank.

(2) The commission and the department are authorized to perform or cause to be performed any act necessary to gain interim and final authorization of a state program for the regulation of underground storage tanks under the provisions of Section 9004 of the Federal Resource Conservation and Recovery Act, P.L. 94-580 as amended

and P.L. 98-616, Section 205 of the federal Solid Waste Disposal Act, P.L. 96-482 as amended and federal regulations and interpretive and guidance documents issued pursuant to P.L. 94-580 as amended, P.L. 98-616 and P.L. 96-482. The commission may adopt, amend or repeal any rule necessary to implement ORS 466.705 to 466.835 and 466.895. [Subsection (1) enacted as 1987 c.539 §6; subsection (2) formerly 468.913]

466.725 Limitation on local government regulation. (1) Except as provided in ORS 466.730, a local unit of government may not enact or enforce any ordinance, rule or regulation relating to the matters encompassed by the state program established under ORS 466.720.

(2) Any ordinance, rule or regulation enacted by a local unit of government of this state that encompasses the same matters as the state program shall be unenforceable, except for an ordinance, rule or regulation:

(a) That requires an owner or permittee to report a release to the local unit of government; or

(b) Adopted by a local unit of government operating an underground storage tank program pursuant to a contract entered into according to the provisions of ORS 466.730. [1987 c.539 §8 (enacted in lieu of 468.904)]

Note: Section 46, chapter 539, Oregon Laws 1987, provides:

Sec. 46. Section 8 of this Act [ORS 466.725] does not become operative until nine months after the Environmental Quality Commission adopts a state-wide underground storage tank program under section 6 of this Act [ORS 466.720] and has filed a copy of such rules with the Secretary of State as prescribed in ORS 183.310 to 183.550. [1987 c.539 §46]

466.730 Delegation of program administration to state agency or local government by agreement. (1) The commission may authorize the department to enter into a contract or agreement with an agency of this state or a local unit of government to administer all or part of the underground storage tank program.

(2) Any agency of this state or any local unit of government that seeks to administer an underground storage tank program under this section shall submit to the department a description of the program the agency or local unit of government proposes to administer in lieu of all or part of the state program. The program description shall include at least the following:

(a) A description in narrative form of the scope, structure, coverage and procedures of the proposed program.

(b) A description, including organization charts, of the organization and structure of the

contracting state agency or local unit of government that will have responsibility for administering the program, including:

(A) The number of employes, occupation and general duties of each employe who will carry out the activities of the contract.

(B) An itemized estimate of the cost of establishing and administering the program, including the cost of personnel listed in subparagraph (A) of this paragraph and administrative and technical support.

(C) An itemization of the source and amount of funding available to the contracting state agency or local unit of government to meet the costs listed in subparagraph (B) of this paragraph, including any restrictions or limitations upon this funding.

(D) A description of applicable procedures, including permit procedures.

(E) Copies of the permit form, application form and reporting form the state agency or local unit of government intends to use in the program.

(F) A complete description of the methods to be used to assure compliance and for enforcement of the program.

(G) A description of the procedures to be used to coordinate information with the department, including the frequency of reporting and report content.

(H) A description of the procedures the state agency or local unit of government will use to comply with trade secret laws under ORS 192.500 and 468.910.

(3) Any program approved by the department under this section shall at all times be conducted in accordance with the requirements of ORS 466.705 to 466.835 and 466.895.

(4) An agency or local unit of government shall exercise the functions relating to underground storage tanks authorized under a contract or agreement entered into under this section according to the authority vested in the commission and the department under ORS 466.705 to 466.835 and 466.895 insofar as such authority is applicable to the performance under the contract or agreement. The agency or local unit of government shall carry out these functions in the manner provided for the commission and the department to carry out the same functions. [1987 c.539 §9]

466.735 Cooperation with Building Codes Agency and State Fire Marshal. Nothing in ORS 466.705 to 466.835 and 466.895 is intended to interfere with, limit or abridge the

authority of the Building Codes Agency or the State Fire Marshal, or any other state agency or local unit of government relating to combustion and explosion hazards, hazard communications or land use. The complementary relationship between the protection of the public safety from combustion and explosion hazards, and protection of the public health, safety, welfare and the environment from releases of regulated substances from underground storage tanks is recognized. Therefore, the department shall work cooperatively with the Building Codes Agency, the State Fire Marshal and local units of government in developing the rules and procedures necessary to carry out the provisions of ORS 466.705 to 466.835 and 466.895. [1987 c.539 §10]

466.740 Noncomplying installation prohibited. No person shall install an underground storage tank for the purpose of storing regulated substances unless the tank complies with the standards adopted under ORS 466.745 and any other rule adopted under ORS 466.705 to 466.835 and 466.895. [1987 c.539 §11]

Note: Section 47, chapter 539, Oregon Laws 1987, provides:

Sec. 47. Section 11 of this Act [ORS 466.740] does not become operative until the Environmental Quality Commission has adopted rules under section 13 of this Act [ORS 766.745] and has filed a copy of such rules with the Secretary of State, as prescribed in ORS 183.310 to 183.550. [1987 c.539 §47]

466.745 Commission rules; considerations. (1) The commission may establish by rule:

(a) Performance standards for leak detection systems, inventory control, tank testing or comparable systems or programs designed to detect or identify releases in a manner consistent with the protection of public health, safety, welfare or the environment;

(b) Requirements for maintaining records and submitting information to the department in conjunction with a leak detection or identification system or program used for each underground storage tank;

(c) Performance standards for underground storage tanks including but not limited to design, retrofitting, construction, installation, release detection and material compatibility;

(d) Requirements for the temporary or permanent decommissioning of an underground storage tank;

(e) Requirements for reporting a release from an underground storage tank;

(f) Requirements for a permit issued under ORS 466.760;

(g) Procedures that distributors of regulated substances and sellers of underground storage tanks must follow to satisfy the requirements of ORS 466.760;

(h) Acceptable methods by which an owner or permittee may demonstrate financial responsibility for responding to the liability imposed under ORS 466.815;

(i) Procedures for the disbursement of monies collected under ORS 466.795;

(j) Requirements for reporting corrective action taken in response to a release;

(k) Requirements for taking corrective action in response to a release; and

(L) Any other rule necessary to carry out the provisions of ORS 466.705 to 466.835 and 466.895.

(2) The commission may adopt different requirements for different areas or regions of the state if the commission finds either of the following:

(a) More stringent rules or standards are necessary:

(A) To protect specific waters of the state, a sole source or sensitive aquifer or any other sensitive environmental amenity; or

(B) Because conditions peculiar to that area or region require different standards to protect public health, safety, welfare or the environment.

(b) Less stringent rules or standards are:

(A) Warranted by physical conditions or economic hardship;

(B) Consistent with the protection of the public health, safety, welfare or the environment; and

(C) Not less stringent than minimum federal requirements.

(3) The rules adopted by the commission under subsection (1) of this section may distinguish between types, classes and ages of underground storage tanks. In making such distinctions, the commission may consider the following factors:

- (a) Location of the tanks;
- (b) Soil and climate conditions;
- (c) Uses of the tanks;
- (d) History of maintenance;
- (e) Age of the tanks;
- (f) Current industry recommended practices;
- (g) National consensus codes;
- (h) Hydrogeology;

(i) Water table;

(j) Size of the tanks;

(k) Quantity of regulated substances periodically deposited in or dispensed from the tank;

(L) The technical ability of the owner or permittee; and

(m) The compatibility of the regulated substance and the materials of which the tank is fabricated.

(4) In adopting rules under subsection (1) of this section, the commission shall consider all relevant federal standards and regulations on underground storage tanks. If the commission adopts any standard or rule that is different than a federal standard or regulation on the same subject, the report submitted to the commission by the department at the time the commission adopts the standard or rule shall indicate clearly the deviation from the federal standard or regulation and the reasons for the deviation. [1987 c.539 §13 (enacted in lieu of 468.908)]

(Licenses; Permits)

466.750 License procedure for persons servicing underground tanks. (1) In order to safeguard the public health, safety and welfare, to protect the state's natural and biological systems, to protect the public from unlawful underground tank installation and retrofit procedures and to assure the highest degree of leak prevention from underground storage tanks, the commission may adopt a program to regulate persons providing underground storage tank installation and removal, retrofit, testing and inspection services.

(2) The program established under subsection (1) of this section may include a procedure to license persons who demonstrate, to the satisfaction of the department, the ability to service underground storage tanks. This demonstration of ability may consist of written or field examinations. The commission may establish different types of licenses for different types of demonstrations, including but not limited to:

(a) Installation, removal, retrofit and inspection of underground storage tanks;

(b) Tank integrity testing; and

(c) Installation of leak detection systems.

(3) The program adopted under subsection (1) of this section may allow the department after opportunity for hearing under the provisions of ORS 183.310 to 183.550, to revoke a license of any person offering underground tank services who commits fraud or deceit in obtaining a license or who demonstrates negligence or incompetence in performing underground tank services.

(4) The program adopted under subsection (1) of this section shall:

(a) Provide that no person may offer to perform or perform services for which a license is required under the program without such license.

(b) Establish a schedule of fees for licensing under the program. The fees shall be in an amount sufficient to cover the costs of the department in administering the program.

(5) The following persons shall apply for an underground storage tank permit from the department:

(a) An owner of an underground storage tank currently in operation;

(b) An owner of an underground storage tank taken out of operation between January 1, 1974, and the operative date of this section; and

(c) An owner of an underground storage tank that was taken out of operation before January 1, 1974, but that still contains a regulated substance. [1987 c.539 §§14, 15]

Note: Section 48, chapter 539, Oregon Laws 1987, provides:

Sec. 48. Section 15 of this Act [ORS 466.750 (5)] does not become operative until 90 days after the Environmental Quality Commission has adopted rules under section 13 of this Act [ORS 466.745] and has filed a copy of such rules with the Secretary of State, as prescribed in ORS 183.310 to 183.550. [1987 c.539 §48]

466.760 When permit required; who required to sign application. (1) No person shall install, bring into operation, operate or decommission an underground storage tank without first obtaining a permit from the department.

(2) No person shall deposit a regulated substance into an underground storage tank unless the tank is operating under a permit issued by the department.

(3) Any person who assumes ownership of an underground storage tank from a previous permittee must complete and return to the department an application for a new permit before the person begins operation of the underground storage tank under the new ownership.

(4) Any person who deposits a regulated substance into an underground storage tank or sells an underground storage tank shall notify the owner or operator of the tank of the permit requirements of this section.

(5) The following persons must sign an application for a permit submitted to the department under this section or ORS 466.750 (5):

(a) The owner of an underground storage tank storing a regulated substance;

(b) The owner of the real property in which an underground storage tank is located; and

(c) The proposed permittee, if a person other than the owner of the underground storage tank or the owner of the real property. [1987 c.539 §16]

Note: Section 49, chapter 539, Oregon Laws 1987, provides:

Sec. 49. Section 16 of this Act [ORS 466.760] does not become operative until one year after the Environmental Quality Commission has adopted rules under section 13 of this Act [ORS 466.745] and has filed a copy of such rules with the Secretary of State, as prescribed in ORS 183.310 to 183.550. [1987 c.539 §49]

Note: Section 17, chapter 539, Oregon Laws 1987, provides:

Sec. 17. If the department is unable to issue a final permit before the operative date of section 16 of this 1987 Act [ORS 466.760], the department may issue a temporary or conditional permit. A temporary or conditional permit shall expire when the department grants or denies the final permit. A temporary or conditional permit does not authorize any activity, operation or discharge that violates any law or rule of the State of Oregon or the Department of Environmental Quality. [1987 c.539 §17]

466.765 Duty of owner or permittee of underground storage tank. In addition to any other duty imposed by law and pursuant to rules adopted under ORS 466.705 to 466.835 and 466.895, the owner or the permittee of an underground storage tank shall:

(1) Prevent releases;

(2) Install, operate and maintain underground storage tanks and leak detection devices and develop and maintain records in connection therewith in accordance with standards adopted and permits issued under ORS 466.705 to 466.835 and 466.895;

(3) Furnish information to the department relating to underground storage tanks, including information about tank equipment and regulated substances stored in the tanks;

(4) Promptly report releases;

(5) Conduct monitoring and testing as required by rules adopted under ORS 466.745 and permits issued under ORS 466.760;

(6) Permit department employes or a duly authorized and identified representative of the department at all reasonable times to have access to and to copy all records relating to underground storage tanks;

(7) Pay all costs of investigating, preventing, reporting and stopping a release;

(8) Decommission tanks, as required by rules adopted under ORS 466.745 and permits issued under ORS 466.760;

(9) Pay all fees;

(10) Conduct any corrective action required under ORS 466.810; and

(11) Perform any other requirement adopted under ORS 466.540, 466.705 to 466.835, 466.895 and 478.308. [1987 c.539 §20 (enacted in lieu of 468.905)]

466.770 Corrective action required on contaminated site. (1) If any owner or permittee of a contaminated site fails without sufficient cause to conduct corrective action under ORS 466.765, the department may undertake any investigation or corrective action with respect to the contamination on the site.

(2) The department shall keep a record of all expenses incurred in carrying out any corrective action authorized under subsection (1) of this section, including charges for services performed and the state's equipment and materials utilized.

(3) Any owner or permittee of a contaminated site who fails without sufficient cause to conduct corrective action as required by an order of the department under ORS 466.810 shall be liable to the department for damages not to exceed three times the amount of all expenses incurred by the department in carrying out the necessary corrective action.

(4) Based on the record compiled by the department under subsection (2) of this section, the commission shall make a finding and enter an order against the person described in subsection (1) or (3) of this section for the amount of damages, not to exceed treble damages, and the expenses incurred by the state in carrying out the actions authorized by this section. The order may be appealed in the manner provided for appeal of a contested case order under ORS 183.310 to 183.550.

(5) If the amount of corrective action costs incurred by the department and damages under this section are not paid by the responsible person to the department within 15 days after receipt of notice that such expenses are due and owing, or, if an appeal is filed within 15 days after the court renders its decision if the decision affirms the order, the Attorney General, at the request of the director, shall bring an action in the name of the State of Oregon in a court of competent jurisdiction to recover the amount specified in the notice of the director.

(6) Subsection (5) of this section shall not apply if the department and the responsible person are negotiating or have entered into a settlement agreement, except that if the responsible person fails to pay the corrective action costs as provided in the negotiated settlement the direc-

tor may request the Attorney General to take action as set forth in subsection (5) of this section.

(7) All moneys received by the department under this section shall be paid into the fund established in ORS 466.790.

(8) As used in this section:

(a) "Contamination" means any abandoning, spilling, releasing, leaking, disposing, discharging, depositing, emitting, pumping, pouring, emptying, injecting, escaping, leaching, placing or dumping of a regulated substance from an underground storage tank into the air or on any lands or waters of the state, so that such regulated substance may enter the environment, be emitted into the air or discharged into any waters. Such contamination authorized by and in compliance with a permit issued under ORS chapter 454, 459, 468, 469, ORS 466.005 to 466.385 or federal law shall not be considered as contamination under ORS 466.540, 466.705 to 466.835, 466.895 and 478.308.

(b) "Site" means any area or land. [1987 c.539 §24]

466.775 Grounds for refusal, modification, suspension or revocation of permit. (1) The department may refuse to issue, modify, suspend, revoke or refuse to renew a permit if the department finds:

(a) A material misrepresentation or false statement in the application for the permit;

(b) Failure to comply with the conditions of the permit; or

(c) Violation of any applicable provision of ORS 466.705 to 466.835 and 466.895, any applicable rule or standard adopted under ORS 466.705 to 466.835 and 466.895 or an order issued under ORS 466.705 to 466.835 and 466.895.

(2) The department may modify a permit issued under ORS 466.760 if the department finds, after notice and opportunity for hearing, that modification is necessary to protect the public health, safety, welfare or the environment.

(3) The department shall modify, suspend, revoke or refuse to issue or renew a permit according to the provisions of ORS 183.310 to 183.550 for a contested case proceeding. [1987 c.539 §21]

466.780 Variance upon petition. (1) Upon petition by the owner and the permittee of an underground storage tank, the commission may grant a variance from the requirements of any rule or standard adopted under ORS 466.745 if the commission finds:

(a) The alternative proposed by the petitioner provides protection to the public health, safety, welfare and the environment, equal to or greater than the rule or standard; and

(b) The alternative proposal is at least as stringent as any applicable federal requirements.

(2) The commission may grant a variance under subsection (1) of this section only if the commission finds that strict compliance with the rule or standard is inappropriate because:

(a) Conditions exist that are beyond the control of the petitioner; or

(b) Special physical conditions or other circumstances render strict compliance unreasonable, burdensome or impracticable.

(3) The commission may delegate the authority to grant a variance to the department.

(4) Within 15 days after the department denies a petition for a variance, the petitioner may file with the commission a request for review by the commission. The commission shall review the petition for variance and the reasons for the department's denial of the petition within 150 days after the commission receives a request for review. The commission may approve or deny the variance or allow a variance on terms different than the terms proposed by the petitioner. If the commission fails to act on a denied petition within the 150-day period the variance shall be considered approved by the commission. [1987 c.539 §22]

(Finance)

466.785 Fees. (1) Fees may be required of every permittee of an underground storage tank. Fees shall be in an amount determined by the commission to be adequate to carry on the duties of the department or the duties of a state agency or local unit of government that has contracted with the department under ORS 466.730. Such fees shall not exceed \$25 per tank per year.

(2) Fees collected by the department under this section shall be deposited in the State Treasury to the credit of an account of the department. All fees paid to the department shall be continuously appropriated to the department to carry out the provisions of ORS 466.705 to 466.835 and 466.895. [1987 c.539 §23]

Note: The amendments to section 23, chapter 539, Oregon Laws 1987 [compiled as ORS 466.785], by section 50, chapter 539, Oregon Laws 1987, become effective July 1, 1989. See section 51, chapter 539, Oregon Laws 1987.

466.785. (1) Fees may be required of every permittee of an underground storage tank. Fees shall be in an amount determined by the commission to be adequate to carry on the

duties of the department or the duties of a state agency or local unit of government that has contracted with the department under ORS 466.730. Such fees shall not exceed \$20 per tank per year.

(2) Fees collected by the department under this section shall be deposited in the State Treasury to the credit of an account of the department. All fees paid to the department shall be continuously appropriated to the department to carry out the provisions of ORS 466.705 to 466.835 and 466.895.

466.790 Leaking Underground Storage Tank Cleanup Fund; sources; uses. (1) The Leaking Underground Storage Tank Cleanup Fund is established separate and distinct from the General Fund in the State Treasury.

(2) The following moneys, as they pertain to an underground storage tank, shall be deposited into the State Treasury and credited to the Leaking Underground Storage Tank Cleanup Fund:

(a) Moneys recovered or otherwise received from responsible parties for corrective action; and

(b) Any penalty, fine or damages recovered under ORS 466.770.

(3) The State Treasurer may invest and reinvest moneys in the Leaking Underground Storage Tank Cleanup Fund in the manner provided by law.

(4) The moneys in the Leaking Underground Storage Tank Cleanup Fund are appropriated continuously to the department to be used as provided in subsection (5) of this section.

(5) Moneys in the Leaking Underground Storage Tank Cleanup Fund may be used by the department for the following purposes:

(a) Payment of corrective action costs incurred by the department in responding to a release from underground storage tanks;

(b) Funding of all actions and activities authorized by ORS 466.770; and

(c) Payment of the state cost share for corrective action, as required by section 9003(h)(7)(B) of the federal Solid Waste Disposal Act, P.L. 96-482. [1987 c.539 §26]

466.795 Underground Storage Tank Insurance Fund. (1) The Underground Storage Tank Insurance Fund is established separate and distinct from the General Fund in the State Treasury to be used solely for the purpose of satisfying the financial responsibility requirements of ORS 466.815.

(2) Fees received by the department pursuant to subsection (6) of this section, shall be deposited into the State Treasury and credited to the Underground Storage Tank Insurance Fund.

(3) The State Treasurer may invest and reinvest moneys in the Underground Storage Tank Insurance Fund in the manner provided by law.

(4) The moneys in the Underground Storage Tank Insurance Fund are appropriated continuously to the department to be used as provided for in subsection (5) of this section.

(5) Moneys in the Underground Storage Tank Insurance Fund may be used by the department for the following purposes, as they pertain to underground storage tanks:

(a) Compensation to the department or any other person, for taking corrective actions; and

(b) Compensation to a third party for bodily injury and property damage caused by a release.

(6) The commission may establish an annual financial responsibility fee to be collected from an owner or permittee of an underground storage tank. The fee shall be in an amount determined by the commission to be adequate to meet the financial responsibility requirements established under ORS 466.815 and any applicable federal law.

(7) Before the effective date of any regulations relating to financial responsibility adopted by the United States Environmental Protection Act pursuant to P.L. 98-616 and P.L. 99-499, the department shall formulate a plan of action to be followed if it becomes necessary for the Underground Storage Tank Insurance Fund to become operative in order to satisfy the financial responsibility requirements of ORS 466.815. In formulating the plan of action, the department shall consult with the Director of the Department of Insurance and Finance, owners and permittees of underground storage tanks and any other interested party. The plan of action must be reviewed by the Legislative Assembly or the Emergency Board before implementation. [1987 c.539 §28]

466.800 Records as public records; exceptions. (1) Except as provided in subsection (2) of this section, any records, reports or information obtained from any persons under ORS 466.765 and 466.805 shall be made available for public inspection and copying during the regular office hours of the department at the expense of any person requesting copies.

(2) Unless classified by the director as confidential, any records, reports or information obtained under ORS 466.705 to 466.835 and 466.895 shall be available to the public. Upon a showing satisfactory to the director by any person that records, reports or information, or particular parts thereof, if made public, would divulge methods, processes or information

entitled to protection as trade secrets under ORS 192.501 to 192.505, the director shall classify as confidential such record, report or information, or particular part thereof. However, such record, report or information may be disclosed to any other officer, medical or public safety employe or authorized representative of the state concerned with carrying out ORS 466.705 to 466.835 and 466.895 or when relevant in any proceeding under ORS 466.705 to 466.835 and 466.895.

(3) Any record, report or information obtained or used by the department or the commission in administering the state-wide underground storage tank program under ORS 466.705 to 466.835 and 466.895 shall be available to the United States Environmental Protection Agency upon request. If the record, report or information has been submitted to the state under a claim of confidentiality, the state shall make that claim of confidentiality to the Environmental Protection Agency for the requested record, report or information. The federal agency shall treat the record, report or information subject to the confidentiality claim as confidential in accordance with applicable federal law. [Formerly 468.910]

(Enforcement)

466.805 Site inspection; subpoena or warrant. (1) In order to determine compliance with the provisions of ORS 466.705 to 466.835 and 466.895 and rules adopted under ORS 466.705 to 466.835 and 466.895 and to enforce the provisions of ORS 466.705 to 466.835 and 466.895, any employe of or an authorized and identified representative of the department may:

(a) Enter at reasonable times any establishment or site where an underground storage tank is located;

(b) Inspect and obtain samples of a regulated substance contained in an underground storage tank; and

(c) Conduct an investigation of an underground storage tank, associated equipment, contents or the soil, air or waters of the state surrounding an underground storage tank.

(2) If any person refuses to comply with subsection (1) of this section, the department or a duly authorized and identified representative of the department may obtain a warrant or subpoena to allow such entry, inspection, sampling or copying. [1987 c.539 §30 (enacted in lieu of 468.907)]

466.810 Investigation on non-compliance; findings and orders; decommissioning tank; hearings; other remedies. (1) Whenever the department has reasonable

cause to believe that an underground storage tank or the operation of an underground storage tank violates ORS 466.705 to 466.835 and 466.895 or fails to comply with a rule, order or permit issued under ORS 466.705 to 466.835 and 466.895, the department may investigate the underground storage tank.

(2) After the department investigates an underground storage tank under subsection (1) of this section, the department may, without notice or hearing, make such findings and issue such orders as it considers necessary to protect the public health, safety, welfare or the environment.

(3) The findings and orders made by the department under subsection (2) of this section may:

(a) Require changes in the operation, practices or operating procedures found to be in violation of ORS 466.705 to 466.835 and 466.895 or the rules adopted under ORS 466.705 to 466.835 and 466.895;

(b) Require the owner or operator to comply with the provisions of a permit;

(c) Require compliance with a schedule established in the order; and

(d) Require any other actions considered necessary by the department.

(4) After the department issues an order under subsection (2) of this section, the department may decommission the underground storage tank or contract with another person to decommission the underground storage tank.

(5) The department shall serve a certified copy of any order issued by it under subsection (2) of this section to the permittee or the permittee's duly authorized representative at the address furnished to the department in the permit application or other address as the department knows to be used by the permittee. The order shall take effect 20 days after the date of its issuance, unless the permittee requests a hearing on the order before the commission. The request for a hearing shall be submitted in writing within 20 days after the department issues the order.

(6) All hearings before the commission or its hearing officer shall be conducted according to applicable provisions of ORS 183.310 to 183.550 for contested cases.

(7) Whenever it appears to the department that any person is engaged or about to engage in any act or practice that constitutes a violation of ORS 466.705 to 466.835 and 466.895 or the rules and orders adopted under ORS 466.705 to 466.835 and 466.895 or of the terms of any permit issued under ORS 466.705 to 466.835 and

466.895, the department, without prior administrative hearing, may institute actions or proceedings for legal or equitable remedies to enforce compliance therewith or to restrain further violations thereof. [1987 c.539 §32]

466.815 Financial responsibility of owner or permittee. (1) The commission may by rule require an owner or permittee to demonstrate and maintain financial responsibility for:

(a) Taking corrective action;

(b) Compensating a third party for bodily injury and property damage caused by a release; and

(c) Compensating the department, or any other person, for expenses incurred by the department or any other person in taking corrective action.

(2) The financial responsibility requirements established by subsection (1) of this section may be satisfied by insurance, guarantee by third party, surety bond, letter of credit or qualification as a self-insurer or any combination of these methods. In adopting rules under subsection (1) of this section, the commission may specify policy or other contractual terms, conditions or defenses necessary or unacceptable to establish evidence of financial responsibility.

(3) If an owner or permittee is in bankruptcy, reorganization or arrangement pursuant to the federal bankruptcy law, or if jurisdiction in any state or federal court cannot be obtained over either an owner or a permittee likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this section may be asserted directly against the guarantor. In the case of action under paragraph (b) of subsection (1) of this section, the guarantor is entitled to invoke all rights and defenses that would have been available to the owner or permittee if the action had been brought against the owner or permittee by the claimant and all rights and defenses that would have been available to the guarantor if the action had been brought against the guarantor by the owner or permittee.

(4) The total liability of a guarantor shall be limited to the aggregate amount the guarantor provided as evidence of financial responsibility to the owner or permittee under subsection (2) of this section. This subsection does not limit any other state or federal statutory, contractual or common law liability of the guarantor for bad faith in negotiating or in failing to negotiate the settlement of any claim. This subsection does not diminish the liability of any person under section

107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, or other applicable law.

(5) Corrective action and compensation programs financed by a fee paid by owners and permittees and administered by the department may be used to satisfy all or part of the financial responsibility requirements of this section.

(6) No rule requiring an owner or permittee to demonstrate and maintain financial responsibility shall be adopted by the commission before review by the appropriate legislative committee as determined by the President of the Senate and the Speaker of the House of Representatives. [1987 c.539 §27]

466.820 Reimbursement to department; procedure for collection; treble damages. (1) The owner and the permittee of an underground storage tank found to be in violation of any provision of ORS 466.705 to 466.835 and 466.895, shall reimburse the department for all costs reasonably incurred by the department, excluding administrative costs, in the investigation of a leak from an underground storage tank. Department costs may include investigation, design engineering, inspection and legal costs necessary to correct the leak.

(2) Payment of costs to the department under subsection (1) of this section shall be made to the department within 15 days after the end of the appeal period or, if an appeal is filed, within 15 days after the court or the commission renders its decision, if the decision affirms the order.

(3) If such costs are not paid by the owner or the permittee of the underground storage tank to the department within the time provided in subsection (2) of this section, the Attorney General, upon the request of the director, shall bring action in the name of the State of Oregon in the Circuit Court of Marion County or the circuit court of any other county in which the violation may have taken place to recover the amount specified in the order of the department.

(4) In addition to any other penalty provided by law, if any person is found in violation of any provision of ORS 466.540, 466.705 to 466.835, 466.895 and 478.308, the commission or the court may award damages in the amount equal to three times the amount of all expenses incurred by the department in investigating the violation.

(5) Moneys reimbursed shall be deposited to the State Treasury to the credit of an account of the department and are continuously appropriated to the department for the purposes of administering ORS 466.540, 466.705 to 466.835,

466.895 and 478.308. [1987 c.539 §34 (enacted in lieu of 468.914)]

466.825 Strict liability of owner or permittee. The owner and permittee of an underground storage tank found to be the source of a release shall be strictly liable to any owner or permittee of a nonleaking underground storage tank in the vicinity, for all costs reasonably incurred by such nonleaking underground storage tank owner or permittee in determining which tank was the source of the release. [1987 c.539 §35]

466.830 Halting tank operation upon clear and immediate danger. (1) Whenever, in the judgment of the department from the results of monitoring or observation of an identified release, there is reasonable cause to believe that a clear and immediate danger to the public health, welfare, safety or the environment exists from the continued operation of an underground storage tank, the department may, without hearing or prior notice, order the operation of the underground storage tank or site halted by service of an order on the owner or permittee of the underground storage tank or site.

(2) Within 24 hours after the order is served under subsection (1) of this section, the department shall appear in the appropriate circuit court to petition for the equitable relief required to protect the public health, safety, welfare or the environment. [1987 c.539 §36]

466.835 Compliance and correction costs as lien; enforcement. (1) All compliance and corrective action costs, penalties and damages for which a person is liable to the state under ORS 466.705 to 466.835 and 466.895 shall constitute a lien upon any real and personal property owned by the person.

(2) The department shall file a claim of lien on real property to be charged with a lien under subsection (1) of this section with the recording officer of each county in which the real property is located and shall file a claim of lien on personal property to be charged with a lien under subsection (1) of this section with the Secretary of State. The lien shall attach and become enforceable on the date of the filing. The lien claim shall contain:

- (a) A statement of the demand;
- (b) The name of the person against whose property the lien attaches;
- (c) A description of the property charged with the lien sufficient for identification; and
- (d) A statement of the failure of the person to conduct compliance and corrective actions as required.

(3) A lien created by this section may be foreclosed by a suit on real and personal property in the circuit court in the manner provided by law for the foreclosure of liens.

(4) Nothing in this section shall affect the right of the state to bring an action against any person to recover all costs and damages for which a person is liable under the provisions of ORS 466.705 to 466.835 and 466.895. [1987 c.539 §37]

OREGON HANFORD WASTE BOARD

Note: Sections 1 to 16, chapter 514 Oregon Laws 1987, provide:

Sec. 1. (1) The Legislative Assembly finds and declares that Oregon is not assured that the United States Department of Energy will:

(a) Consider the unique features of Oregon and the needs of the people of Oregon when assessing Hanford, Washington, as a potentially suitable location for the long-term disposal of high-level radioactive waste; or

(b) Insure adequate opportunity for public participation in the assessment process.

(2) Therefore, the Legislative Assembly declares that it is in the best interests of the State of Oregon to establish an Oregon Hanford Waste Board to serve as a focus for the State of Oregon in the development of a state policy to be presented to the Federal Government, to insure a maximum of public participation in the assessment process. [1987 c.514 §1]

Sec. 2. Nothing in sections 1 to 16 of this Act shall be interpreted by the Federal Government or the United States Department of Energy as an expression by the people of Oregon to accept Hanford, Washington, as the site for the long-term disposal of high-level radioactive waste. [1987 c.514 §2]

Sec. 3. As used in sections 1 to 16 of this Act:

(1) "Board" means the Oregon Hanford Waste Board.

(2) "High-level radioactive waste" means fuel or fission products from a commercial nuclear reactor after irradiation that is packaged and prepared for disposal.

(3) "United States Department of Energy" means the federal Department of Energy established under 42 U.S.C.A. 7131 or any successor agency assigned responsibility for the long-term disposal of high-level radioactive waste. [1987 c.514 §3]

Sec. 4. There is created an Oregon Hanford Waste Board which shall consist of the following members:

(1) The Director of the Oregon Department of Energy or designee;

(2) The Water Resources Director or designee;

(3) The Director of the Department of Environmental Quality or designee;

(4) The Assistant Director for Health or designee;

(5) The State Geologist or designee;

(6) A representative of the Public Utility Commission who has expertise in motor carriers;

(7) A representative of the Governor;

(8) One member representing the Confederated Tribes of the Umatilla Indian Reservation;

(9) One member of the public, appointed by the Governor subject to confirmation by the Senate in the manner provided in ORS 171.562 and 171.565, who shall serve as chairperson;

(10) Two members of the public advisory committee created under section 9 of this Act, selected by the public advisory committee; and

(11) Three members of the Senate, appointed by the President of the Senate, and three members of the House of Representatives, appointed by the Speaker of the House of Representatives who shall serve as advisory members without vote. [1987 c.514 §4]

Sec. 5. (1) Each member of the Oregon Hanford Waste Board shall serve at the pleasure of the appointing authority. For purposes of this subsection, for those members of the board selected by the public advisory committee, the appointing authority shall be the public advisory committee.

(2) Each public member of the board shall receive compensation and expenses as provided in ORS 292.495. Each legislative member shall receive compensation and expenses as provided in ORS 171.072.

(3) The board shall be under the supervision of the chairperson. [1987 c.514 §5]

Sec. 6. The Oregon Hanford Waste Board:

(1) Shall serve as the focal point for all policy discussions within the state government concerning the disposal of high-level radioactive waste in the northwest region.

(2) Shall recommend a state policy to the Governor and to the Legislative Assembly.

(3) After consultation with the Governor, may make policy recommendations on other issues related to the United States Hanford Reservation at Richland, Washington, including but not limited to defense wastes, disposal and treatment of chemical waste and plutonium production. [1987 c.514 §6]

Sec. 7. In carrying out its purpose as set forth in section 6 of this Act, the Oregon Hanford Waste Board shall:

(1) Serve as the initial agency in this state to be contacted by the United States Department of Energy or any other federal agency on any matter related to the long-term disposal of high-level radioactive waste.

(2) Serve as the initial agency in this state to receive any report, study, document, information or notification of proposed plans from the Federal Government on any matter related to the long-term disposal of high-level radioactive waste. Notification of proposed plans includes notification of proposals to conduct field work, onsite evaluation or onsite testing.

(3) Disseminate or arrange with the United States Department of Energy or other federal agency to disseminate the information received under subsection (2) of this section to appropriate state agencies, local governments, regional planning commissions, American Indian tribal governing bodies, the general public and interested citizen groups who have requested in writing to receive this information.

(4) Recommend to the Governor and Legislative Assembly appropriate responses to contacts under subsection (1) of

this section and information received under subsection (2) of this section if a response is appropriate. The board shall consult with the appropriate state agency, local government, regional planning commission, American Indian tribal governing body, the general public and interested citizen groups in preparing this response.

(5) Promote and coordinate educational programs which provide information on the nature of high-level radioactive waste, the long-term disposal of this waste, the activities of the board, the activities of the United States Department of Energy and any other federal agency related to the long-term disposal of high-level radioactive waste and the opportunities of the public to participate in procedures and decisions related to this waste.

(6) Review any application to the United States Department of Energy or other federal agency by a state agency, local government or regional planning commission for funds for any program related to the long-term disposal of high-level radioactive waste. If the board finds that the application is not consistent with the state's policy related to such waste or that the application is not in the best interest of the state, the board shall forward its findings to the Governor and the appropriate legislative committee. If the board finds that the application of a state agency is not consistent with the state's policy related to long-term disposal of high-level radioactive waste or that the application of a state agency is not in the best interest of the state, the findings forwarded to the Governor and legislative committee shall include a recommendation that the Governor act to stipulate conditions for the acceptance of the funds which are necessary to safeguard the interests of the state.

(7) Monitor activity in Congress and the Federal Government related to the long-term disposal of high-level radioactive waste.

(8) If appropriate, advise the Governor and the Legislative Assembly to request the Attorney General to intervene in federal proceedings to protect the state's interests and present the state's point of view on matters related to the long-term disposal of high-level radioactive waste. [1987 c.514 §7]

Sec. 8. The chairperson of the Oregon Hanford Waste Board shall:

(1) Supervise the day-to-day functions of the board;

(2) Hire, assign, reassign and coordinate the administrative personnel of the board, prescribe their duties and fix their compensation, subject to the State Personnel Relations Law; and

(3) Request technical assistance from any other state agency. [1987 c.514 §8]

Sec. 9. (1) There is created a public advisory committee which shall consist of not less than 15 members to advise the Oregon Hanford Waste Board on the development and administration of the policies and practices of the board. Members shall be appointed by the Governor and shall serve a term of two years.

(2) Advisory committee members shall be selected from all areas of the state and shall include a broad range of citizens, representatives of local governments and representatives of other interests as the Governor determines will best further the purposes of this Act.

(3) Members of the advisory committee shall receive no compensation for their services. Members of the advisory committee other than members employed in full-time public service shall be reimbursed for their actual and necessary expenses incurred in the performance of their duties. Such reimbursements shall be subject to the provisions of ORS 292.210 to 292.288. Members of the advisory committee who are employed in full-time public service may be reimbursed for their actual and necessary expenses incurred in the performance of their duties by their employing agency.

(4) The advisory committee shall meet at least once every three months. [1987 c.514 §9]

Sec. 10. (1) If the United States Department of Energy selects Hanford, Washington, as the site for the construction of a repository for the long-term disposal of high-level radioactive waste, the Oregon Hanford Waste Board shall review the selected site and the site plan prepared by the United States Department of Energy. In conducting its review the board shall:

(a) Include a full scientific review of the adequacy of the selected site and of the site plan;

(b) Use recognized experts;

(c) Conduct one or more public hearings on the site plan;

(d) Make available to the public arguments and evidence for and against the site plan; and

(e) Solicit comments from appropriate state agencies, local governments, regional planning commissions, American Indian tribal governing bodies, the general public and interested citizen groups on the adequacy of the Hanford site and the site plan.

(2) After completing the review under subsection (1) of this section, the board shall submit a recommendation to the Speaker of the House of Representatives, the President of the Senate and the Governor on whether the state should accept the Hanford site. [1987 c.514 §10]

Sec. 11. (1) In addition to any other duty prescribed by law and subject to the policy direction of the board, a lead agency designated by the Governor shall negotiate written agreements and modifications to those agreements, with the United States Department of Energy or any other federal agency or state on any matter related to the long-term disposal of high-level radioactive waste.

(2) Any agreement or modification to an agreement negotiated by the agency designated by the Governor under subsection (1) of this section shall be consistent with the policy expressed by the Governor and the Legislative Assembly as developed by the Oregon Hanford Waste Board.

(3) The Oregon Hanford Waste Board shall make recommendations to the agency designated by the Governor under subsection (1) of this section concerning the terms of agreements or modifications to agreements negotiated under subsection (1) of this section. [1987 c.514 §11]

Sec. 12. The Oregon Hanford Waste Board shall implement agreements, modifications and technical revisions approved by the agency designated by the Governor under section 11 of this Act. In implementing these agreements, modifications and revisions, the board may solicit the views of any appropriate state agency, local government, regional planning commission, American Indian tribal governing body, the general public and interested citizen groups. [1987 c.514 §12]

Sec. 13. The Oregon Hanford Waste Board may accept moneys from the United States Department of Energy, other federal agencies, the State of Washington and from gifts and grants received from any other person. Such moneys are continuously appropriated to the board for the purpose of carrying out the provisions of this Act. The board shall establish by rule a method for disbursing such funds as necessary to carry out the provisions of sections 1 to 16 of this Act, including but not limited to awarding contracts for studies pertaining to the long-term disposal of radioactive waste. Any disbursement of funds by the board or the lead agency shall be consistent with the policy established by the board under section 6 of this Act. [1987 c.514 §13]

Sec. 14. In addition to the public advisory committee established under section 9 of this Act, the Oregon Hanford Waste Board may establish any advisory and technical committee it considers necessary. Members of any advisory or technical committee established under this section may receive reimbursement for travel expenses incurred in the performance of their duties in accordance with ORS 292.495. [1987 c.514 §14]

Sec. 15. All departments, agencies and officers of this state and its political subdivisions shall cooperate with the Oregon Hanford Waste Board in carrying out any of its activities under sections 1 to 16 of this Act and, at the request of the chairperson, provide technical assistance to the board. [1987 c.514 §15]

Sec. 16. In accordance with the applicable provisions of ORS 183.310 to 183.550, the Oregon Hanford Waste Board shall adopt rules and standards to carry out the requirements of sections 1 to 16 of this Act. [1987 c.514 §16]

FEDERAL SITE SELECTION

Note: Sections 1 and 2, chapter 13, Oregon Laws 1987, provide:

Sec. 1. The Legislative Assembly and the people of the State of Oregon find that:

(1) In order to solve the problem of high-level radioactive waste disposal, Congress established a process for selecting two sites for the safe, permanent and regionally equitable disposal of such waste.

(2) The process of selecting three sites as final candidates, including the Hanford reservation in the State of Washington, for a first high-level nuclear waste repository by the United States Department of Energy violated the intent and the mandate of Congress.

(3) The United States Department of Energy has prematurely deferred consideration of numerous potential sites and disposal media that its own research indicates are more appropriate, safer and less expensive.

(4) Placement of a repository at Hanford without methodical and independently verified scientific evaluation threatens the health and safety of the people and the environment of this state.

(5) The selection process is flawed and not credible because it did not include independent experts in the selection of the sites and in the review of the selected sites, as recommended by the National Academy of Sciences.

(6) By postponing indefinitely all site specific work for an eastern repository, the United States Department of Energy has not complied with the intent of Congress expressed in the Nuclear Waste Policy Act, Public Law 97-425, and the fundamental compromise which enabled its enactment. [1987 c.13 §1]

Sec. 2. In order to achieve complete compliance with federal law and protect the health, safety and welfare of the people of the State of Oregon, the Legislative Assembly, other state-wide officials and state agencies shall use all legal means necessary to:

(1) Suspend the preliminary site selection process for a high-level nuclear waste repository, including the process of site characterization, until there is compliance with the intent of the Nuclear Waste Policy Act;

(2) Reverse the Secretary of Energy's decision to postpone indefinitely all site specific work on locating and developing an eastern repository for high-level nuclear waste;

(3) Insist that the United States Department of Energy's site selection process, when resumed, considers all acceptable geologic media and results in safe, scientifically justified and regionally and geographically equitable high-level nuclear waste disposal;

(4) Demand that federal budget actions fully and completely follow the intent of the Nuclear Waste Policy Act;

(5) Continue to pursue alliances with other states and interested parties, particularly with Pacific Northwest Governors, legislatures and other parties, affected by the site selection process and transportation of high-level nuclear waste; and

(6) Assure that Oregon, because of its close geographic and geologic proximity to the proposed Hanford site, be accorded the same status under federal law as a state in which a high-level nuclear repository is proposed to be located. [1987 c.13 §2]

CIVIL PENALTIES

466.880 Civil penalties generally. (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 established, imposed, collected and appealed in the same manner as civil penalties are established, imposed and collected under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapter 468.

(3) In addition to any other penalty provided by law, any person who violates a provision of ORS 466.605 to 466.680, or any rule or order

entered or adopted under ORS 466.605 to 466.680, may incur a civil penalty not to exceed \$10,000. Each day of violation shall be considered a separate offense.

(4) The civil penalty authorized by subsection (3) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed, collected and appealed under ORS 468.090 to 468.130, except that a penalty collected under this section shall be deposited to the fund established in ORS 466.670. [Formerly 459.995; (3) and (4) enacted by 1985 c.733 §17; 1987 c.266 §1]

466.890 Civil penalties for damage to wildlife resulting from contamination of food or water supply. (1) Any person who has care, custody or control of a hazardous waste or a substance which would be a hazardous waste except for the fact that it is not discarded, useless or unwanted shall incur a civil penalty according to the schedule set forth in subsection (2) of this section for the destruction, due to contamination of food or water supply by such waste or substance, of any of the wildlife referred to in subsection (2) of this section that are the property of the state.

(2) The penalties referred to in subsection (1) of this section shall be as follows:

(a) Each game mammal other than mountain sheep, mountain goat, elk or silver gray squirrel, \$400.

(b) Each mountain sheep or mountain goat, \$3,500.

(c) Each elk, \$750.

(d) Each silver gray squirrel, \$10.

(e) Each game bird other than wild turkey, \$10.

(f) Each wild turkey, \$50.

(g) Each game fish other than salmon or steelhead trout, \$5.

(h) Each salmon or steelhead trout, \$125.

(i) Each fur-bearing mammal other than bobcat or fisher, \$50.

(j) Each bobcat or fisher, \$350.

(k) Each specimen of any wildlife species whose survival is specified by the wildlife laws or the laws of the United States as threatened or endangered, \$500.

(L) Each specimen of any wildlife species otherwise protected by the wildlife laws or the laws of the United States, but not otherwise referred to in this subsection, \$25.

(3) The civil penalty imposed under this section shall be in addition to other penalties prescribed by law. [1985 c.685 §2]

466.895 Civil penalties for violations of underground storage tank regulations.

(1) Any person who violates any provision of ORS 466.705 to 466.835 and 466.895, a rule adopted under ORS 466.705 to 466.835 and 466.895 or the terms or conditions of any order or permit issued by the department under ORS 466.705 to 466.835 and 466.895 shall be subject to a civil penalty not to exceed \$10,000 per violation per day of violation.

(2) Each violation may be a separate and distinct offense and in the case of a continuing violation, each day's continuance thereof may be deemed a separate and distinct offense.

(3) The department may levy a civil penalty up to \$100 for each day a fee due and owing under ORS 466.785 and 466.795 is unpaid. A penalty collected under this subsection shall be placed in the State Treasury to the credit of an account of the department.

(4) The civil penalties authorized under this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed, collected and appealed under ORS 468.090 to 468.125 and 468.135 except that a penalty collected under this section shall be deposited to the fund established in ORS 466.790. [1987 c.539 §39]

466.900 Civil penalties for violation of removal or remedial actions. (1) In addition to any other penalty provided by law, any person who violates a provision of ORS 466.540 to 466.590, or any rule or order entered or adopted under ORS 466.540 to 466.590, shall incur a civil penalty not to exceed \$10,000 a day for each day that such violation occurs or that failure to comply continues.

(2) The civil penalty authorized by subsection (1) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed, collected and appealed under ORS 468.090 to 468.125, except that a penalty collected under this section shall be deposited in the Hazardous Substance Remedial Action Fund established under ORS 466.590, if the penalty pertains to a release at any facility. [1987 c.735 §23]

CRIMINAL PENALTIES

466.995 Criminal penalties. (1) Penalties provided in this section are in addition to and not in lieu of any other remedy specified in ORS

459.005 to 459.105, 459.205 to 459.245, 459.255 to 459.285, 466.005 to 466.385 or 466.890.

(2) Violation of ORS 466.005 to 466.385 or 466.890 or of any rule or order entered or adopted under those sections is punishable, upon conviction, by a fine of not more than \$10,000 or by imprisonment in the county jail for not more than one year, or by both. Each day of violation shall be deemed a separate offense.

(3) Violation of a provision of ORS 466.605 to 466.680 or of any rule or order entered or adopted under ORS 466.605 to 466.680 is punishable, upon conviction, by a fine of not more than \$10,000 or by imprisonment in the county jail for not more than one year or both. Each day of violation shall be considered a separate offense.

(4) Any person who knowingly or intentionally violates any provision of ORS 466.705 to

466.835 and 466.895 or the rules adopted under ORS 466.705 to 466.835 and 466.895 shall be subject to a criminal penalty not to exceed \$10,000 or imprisonment for not more than one year or both. Each day of violation shall be deemed a separate offense.

(5)(a) Any person who knowingly or wilfully violates any provision of ORS 466.540 to 466.590 or any rule or order adopted or issued under ORS 466.540 to 466.590 shall, upon conviction, be subject to a criminal penalty not to exceed \$10,000 or imprisonment for not more than one year, or both.

(b) Each day of violation shall be deemed a separate offense. [Formerly 459.992; (3) enacted by 1985 c.733 §18; 1987 c.158 §93; subsection (4) enacted as 1987 c.539 §38; subsection (5) enacted as 1987 c.735 §24]

CLEANUP RULES FOR LEAKING PETROLEUM UST SYSTEMS
OAR 340-122-201 to 340-122-260

340-122-201 OUTLINE OF RULES

- 340-122-205 Purpose
- 340-122-210 Definitions
- 340-122-215 Scope and Applicability
- 340-122-220 Initial Response
- 340-122-225 Initial Abatement Measures and Site Check
- 340-122-230 Initial Site Characterization
- 340-122-235 Free Product Removal
- 340-122-240 Investigations for Soil and Groundwater Cleanup
- 340-122-245 Numeric Soil Cleanup Levels for Motor Fuel and Heating Oil
- 340-122-250 Corrective Action Plan
- 340-122-255 Additional Reporting
- 340-122-260 Public Notice and Participation

CLEANUP RULES FOR LEAKING PETROLEUM UST SYSTEMS

340-122-205 Purpose

- (1) These rules establish the standards and process to be used for the determination of investigation and cleanup activities necessary to protect the public health, safety, welfare and the environment in the event of a release or threat of a release from a petroleum UST system subject to regulation under ORS 466.705 to 466.835 and 466.895, and 466.540 to 466.590.

340-122-210 Definitions

For the purpose of this section, terms not defined in this subsection have the meanings set forth in ORS 466.540 and 466.705. Additional terms are defined as follows unless the context requires otherwise:

- (1) "Above-ground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above-ground portion of a petroleum UST system and releases associated with overfills and transfer operations during petroleum deliveries to or dispensing from a petroleum UST system.
- (2) "Ancillary equipment" means any devices including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps used to distribute, meter, or control the flow of regulated substances to and from a petroleum UST system.
- (3) "Below-ground release" means any release to the subsurface of the land or to groundwater. This includes, but is not limited to, releases from the below-ground portion of a petroleum UST system and releases associated with overfills and transfer operations as the petroleum is delivered to or dispensed from a petroleum UST system.
- (4) "Cleanup" or "cleanup activity" has the same meaning as "corrective action" as defined in ORS 466.705 or "remedial action" as defined in ORS 466.540.
- (5) "Director" means the Director of the Department of Environmental Quality or the Director's authorized representative.

- (6) "Excavation zone" means the area containing the tank system and backfill material bounded by the ground surface, walls, and floor of the pit and trenches into which the petroleum UST system is placed at the time of installation.
- (7) "Free product" means petroleum in the non-aqueous phase (e.g., liquid not dissolved in water).
- (8) "Heating oil" means petroleum that is No. 1, No.2, No.4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils.
- (9) "Motor fuel" means petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No.1 or No.2 diesel fuel, or any grade of gasohol, typically used in the operation of a motor engine.
- (10) "Owner", as used in this section, has the meaning set forth in ORS 466.705(8).
- (11) "Permittee", as used in this section, has the meaning set forth in ORS 466.705(9).
- (12) "Petroleum" means gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge, oil refuse, and crude oil fractions and refined petroleum fractions, including gasoline, kerosene, heating oils, diesel fuels, and any other petroleum related product, or waste or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute. (Note: this definition does not include any substance identified as a hazardous waste under 40 CFR Part 261.)
- (13) "Petroleum UST system" means any one or combination of tanks, including underground pipes connected to the tanks, that is used to contain an accumulation of petroleum and the volume of which, including the volume of the underground pipes connected to the tank, is 10 percent or more beneath the surface of the ground; and includes associated ancillary equipment and containment system.
- (14) "Responsible person" means any person ordered or authorized to undertake remedial actions or related activities under ORS 466.540 through 466.590.

340-122-215 Scope and Applicability

- (1) Sections 340-122-205 to 340-122-260 of these rules apply to:
 - (a) An owner or permittee ordered or authorized to conduct cleanup or related activities by the Director under ORS 466.705 to 466.835 and 466.895; or
 - (b) Any person ordered or authorized to conduct remedial actions or related activities by the Director under ORS 466.540 to 466.590.
- (2) Notwithstanding OAR 340-122-215(1)(b), the Director may require that investigation and cleanup of a release from a petroleum UST system be governed by OAR 340-122-010 to 340-122-110, if, based on the magnitude or complexity of the release or other considerations, the Director determines that application of OAR 340-122-010 through 340-122-110 is necessary to protect the public health, safety, welfare and the environment.
- (3) Cleanup of releases from UST systems containing regulated substances under ORS 466.705 other than petroleum shall be governed by OAR 340-122-010 to 340-122-110 or as otherwise provided under applicable law.
- (4) The Director may determine that the investigation and cleanup of releases from petroleum underground storage tank systems which are exempted under ORS 466.710(1) through (10) inclusive, shall be conducted under 340-122-205 to 340-122-260, based upon the authority provided under ORS 466.540 to 466.590.

340-122-220 Initial Response

Upon confirmation of a release or after a release from the UST system is identified in any manner, owners, permittees or responsible persons shall perform the following initial response actions within 24 hours of the discovery of a release.

- (1) Report the following releases to the Department:
 - (a) All below-ground releases from the petroleum UST system in any quantity;

(b) All above-ground releases to land from the petroleum UST system in excess of 42 gallons, or less than 42 gallons if the owner, permittee or responsible person is unable to contain or clean up the release within 24 hours; and

(c) All above-ground releases to water which result in a sheen on the water.

- (2) Take immediate action to prevent any further release of the regulated substance into the environment; and
- (3) Identify and mitigate fire, explosion, and vapor hazards.

340-122-225 Initial abatement measures and site check

- (1) Unless directed to do otherwise by the Director, owners, permittees or responsible persons shall perform the following abatement measures:

(a) Remove as much of the regulated substance from the UST system as is necessary to prevent further release to the environment;

(b) Visually inspect any aboveground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater;

(c) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures;

(d) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release. confirmation, site investigation, abatement, or cleanup activities. If these remedies include treatment or disposal of soils, the owner, permittee or responsible person shall comply with applicable state and local requirements;

(e) Measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, the owner, permittee and responsible person shall consider the nature of the stored substance, the type of backfill, depth to

groundwater and other factors as appropriate for identifying the presence and source of the release; and

(f) Investigate to determine the possible presence of free product, and begin free product removal as soon as practicable and in accordance with subsection 340-122-235.

- (2) Within 20 days after release confirmation, or within another reasonable period of time determined by the Director, owners, permittees or responsible persons shall submit a report to the Director summarizing the initial abatement steps taken under paragraph (1) of this subsection and any resulting information or data.

340-122-230 Initial site characterization

- (1) Unless directed to do otherwise by the Director, owners, permittees or responsible persons shall assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in subsection 340-122-225(1). This information shall include, but is not necessarily limited to the following:

(a) Data on the nature and estimated quantity of release;

(b) Data from available sources and/or site investigations concerning the following factors: surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions, and land use;

(c) Results of the measurements required under subsection 340-122-225(1)(e); and

(d) Results of the free product investigations required under subsection 340-122-225(1)(f), to be used by owners, permittees, or responsible persons to determine whether free product shall be recovered under subsection 340-122-235.

- (2) Within 45 days of release confirmation or another reasonable period of time determined by the Director, owners, permittees or responsible persons shall submit the information collected in compliance with paragraph (1) of this subsection to the Director in a manner that

demonstrates its applicability and technical adequacy, or in a format and according to the schedule required by the Director.

340-122-235 Free product removal

At sites where investigations under subsection 340-122-225(1)(f) indicate the presence of free product, owners, permittees or responsible persons shall remove free product to the maximum extent practicable as determined by the Director while continuing, as necessary, any actions initiated under subsection 340-122-220 through 340-122-230, or preparing for actions required under subsections 340-122-240 through 340-122-250. In meeting the requirements of this subsection, owners, permittees or responsible persons shall:

- (1) Conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, state and federal regulations;
- (2) Use abatement of free product migration as a minimum objective for the design of the free product removal system;
- (3) Handle any flammable products in a safe and competent manner to prevent fires or explosions; and
- (4) Unless directed to do otherwise by the Director, prepare and submit to the Director, within 45 days after confirming a release, a free product removal report that provides at least the following information:
 - (a) The name of the person(s) responsible for implementing the free product removal measures;
 - (b) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;
 - (c) The type of free product recovery system used;
 - (d) Whether any discharge has taken place on-site or off-site during the recovery operation and where this discharge is located or will be located;

(e) The type of treatment applied to, and the effluent quality from, any discharge;

(f) The steps that have been or are being taken to obtain necessary permits for any discharge;

(g) The disposition of the recovered free product; and

(h) Other matters deemed appropriate by the Director.

340-122-240 Investigations for soil and groundwater cleanup

(1) In order to determine the full extent and location of soils contaminated by the release and the presence and concentrations of dissolved product contamination in the groundwater, owners, permittees or responsible persons shall conduct investigations of the release, the release site, and the surrounding area possibly affected by the release if any of the following conditions exist:

(a) There is evidence that groundwater wells have been affected by the release;

(b) Free product is found to need recovery in compliance with subsection 340-122-235;

(c) There is evidence that contaminated soils may be in contact with groundwater (e.g., as found during conduct of the initial response measures or investigations required under subsections 340-122-225 through 340-122-235); and

(d) The Director requests an investigation, based on the potential effects of contaminated soil or groundwater on nearby surface water and groundwater resources.

(2) Owners, permittees or responsible persons shall submit the information collected under paragraph (1) of this subsection as soon as practicable or in accordance with a schedule established by the Director.

340-122-245 Numeric Soil Cleanup Levels for Motor Fuel and Heating Oil

(1) The Director shall develop and propose to the Environmental Quality Commission for rulemaking, matrices with numeric soil cleanup levels for motor fuel and heating oil, which may include but are not limited to specific constituents such as benzene, xylene, toluene, and ethylbenzene.

- (2) The matrices shall establish numeric soil cleanup levels that provide a high degree of protection in accordance with OAR 340-122-040(1).
- (3) Within 6 months after the effective date of these rules, the Director shall request the Environmental Quality Commission to commence rulemaking and authorize a public hearing on the proposed matrices, in accordance with ORS 466.745.
- (4) Until adoption of such matrices by rule, cleanup levels shall be determined under OAR 340-122-250(2) as applicable, unless the Director determines that abatement and cleanup conducted under subsections 340-122-220 and 340-122-225 have resulted in a cleanup level adequate to protect public health, safety, welfare and the environment.
- (5) The matrices may include, but not be limited to, the following factors;
 - (a) Distance to groundwater;
 - (b) Soil type;
 - (c) Geology of the site;
 - (d) Average annual precipitation; and
 - (e) Other factors deemed appropriate by the Director.
- (6) The owner, permittee, or responsible person may either:
 - (a) Propose clean up of the soils to a level specified in the matrices; or
 - (b) Develop a Corrective Action Plan for soils under OAR 340-122-250(2).
- (7) The Director shall not approve cleanup actions proposed under OAR 340-122-245(6)(a) if the Director determines that the numeric soil cleanup levels are not appropriate or adequate to protect public health, safety, welfare and the environment. In such case, the Director shall require the owner, permittee, or responsible person, to develop a corrective action plan, under OAR 340-122-250, or 340-122-010 to 340-122-110.

340-122-250 Corrective Action Plan

- (1) At any point after reviewing the information submitted in compliance with subsections 340-122-220 through 340-122-230, the Director may require owners, permittees or responsible persons to submit additional information or to develop and submit a corrective action plan for responding to contaminated soils and groundwater. If a plan is required, owners, permittees or responsible persons shall submit the plan according to a schedule and format established by the Director. Alternatively, owners, permittees or responsible persons may, after fulfilling the requirements of subsections 340-122-220 through 340-122-230, choose to submit a corrective action plan for responding to contaminated soil and groundwater. In either case, owners, permittees or responsible persons are responsible for submitting a plan that provides for adequate protection of public health, safety, welfare and the environment as determined by the Director, and shall modify their plan as necessary to meet this standard.

- (2) The Director shall approve the corrective action plan only after ensuring that implementation of the plan will adequately protect public health, safety, welfare and the environment. In making this determination, the Director shall consider the following factors, as appropriate:
 - (a) The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;
 - (b) The hydrogeologic characteristics of the facility and the surrounding area;
 - (c) The proximity, quality, and current and future uses of nearby surface water and groundwater;
 - (d) The potential effects of residual contamination of nearby surface water and groundwater;
 - (e) An exposure assessment;
 - (f) Any information assembled in compliance with this subsection;
 - (g) The impact of the release on adjacent properties; and
 - (h) Other matters deemed appropriate by the Director.

(3) Upon approval of the corrective action plan or as directed by the Director, owners, permittees or responsible persons shall implement the plan, including modifications to the plan made by the Director. They shall monitor, evaluate, and report the results of implementing the plan in accordance with a schedule and in a format established by the Director.

(4) Owners, permittees or responsible persons may, in the interest of minimizing environmental contamination and promoting more effective cleanup, begin cleanup of soil and groundwater before the corrective action plan is approved provided that they:

(a) Notify the Director of their intention to begin cleanup;

(b) Comply with any conditions imposed by the Director, including halting cleanup or mitigating adverse consequences from cleanup activities; and

(c) Incorporate these self-initiated cleanup measures in the corrective action plan that is submitted to the Director for approval.

340-122-255 Additional reporting

The owner, permittee, or responsible person shall provide any additional information beyond that required under subsection 340-122-225(2), as requested by the Director.

340-122-260 Public participation

(1) The Department shall maintain a list of all confirmed releases and ensure that site release and cleanup information are made available to the public for inspection upon request.

(2) For each confirmed release, upon written request by 10 or more persons or by a group having 10 or more members, the Department shall conduct a public meeting at or near the facility for the purpose of receiving verbal comment regarding proposed cleanup activities, except for those cleanup activities conducted under OAR 340-122-245.

- (3) For each confirmed release that requires a corrective action plan, the Department shall provide notice to the public by means designed to reach those members of the public directly affected by the release and the planned corrective action. This notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, publication in a state register, letters to individual households, or personal contacts by field staff.
- (4) The Department shall ensure that site release information and decisions concerning the corrective action plan are made available to the public for inspection upon request.
- (5) Before approving a corrective action plan, the Department may hold a public meeting to consider comments on the proposed corrective action plan if there is sufficient public interest, or for any other reason.
- (6) The Department shall give public notice that complies with paragraph (3) of this subsection if implementation of an approved corrective action plan does not achieve the established cleanup levels in the plan and termination of that plan is under consideration by the Department.

ADVISORY COMMITTEE REPORT

The Department has been actively working with the regulated/affected community throughout the development of these rules. After initially gathering and critically reviewing information from other state programs as well as from the scientific literature, the Department first met with an informal matrix working group to discuss the overall design and goals of the rules. These meetings were held on January 19 and February 16, 1989.

With the information and feedback gathered at the working group meetings, the Department made a first rough draft of the proposed rules and scheduled a series of day-long meetings with the Underground Storage Tank Advisory Committee (USTAC) to hammer out the details of the draft rules. These meetings were held on February 24, March 3 and March 9, 1989. Due to the rather aggressive schedule of these meetings, much progress was made in a rather short period of time. There is general agreement on the goals and the basic format of the proposed rules. Consensus was also reached on many of the specific sections within the rules. However, there are still some issues which need to be addressed.

The comments and concerns of some members of the USTAC are summarized below. Each comment is followed by the Department's response.

1. Members of the committee wanted to know where current sites would fall in the three cleanup levels outlined in the rules. The main concern was that the rules might be written so that almost all sites will require the most stringent level of cleanup (Level 1).

The Department assured the committee that it is currently seeking data on that matter from Regional Staff members as well as from area consultants. From discussions with professional staff and outside consultants, the Department feels that professional judgement would place many 'typical' cleanup sites in Level 2 rather than Level 1. It is the goal of the Department to gather sufficient data to make sure that the matrix places sites into a cleanup category similar to where professional judgement would place them. The Department has already made plans to continue to meet with the USTAC to make sure that if any minor adjustments to the scoring are required, the committee will be able to review and comment on them.

2. Some other states have set cleanup levels at 100 ppm TPH. The current proposed Level 2 cleanup in these rules is 50 ppm.

The committee felt that the matrix levels were too low and could not be met. How did the Department set these levels?

First of all, for the most critical cases (Level 1), the Department felt that the levels must be such that groundwater would be protected under all conditions. In the case of 10 ppm TPH as gasoline in soil, since benzene is approximately 1% - 3% of gasoline (see Table 2 in Attachment H), this would lead to a benzene level in soil of about 100 - 300 ppb. A rough rule-of-thumb for leaching indicates that resulting water levels would be about 1% of the soil levels. This would lead to a benzene level in water of 1 - 3 ppb. This is within the 5 ppb drinking water standard set for benzene by the EPA. The level of 10 ppm TPH is comparable to the most stringent levels in California, South Carolina, Tennessee and Wisconsin.

For the other levels (Level 2 or 3) where conditions would permit higher concentrations, the crucial question is "how much higher?" In order to critically evaluate cleanup levels from other states, the Department called agency personnel in about a dozen other states to discuss petroleum-contaminated soil cleanups. There are many factors which caused the Department to hesitate at simply adopting a level of 100 ppm TPH.

(a) The most common reason given by other states for choosing 100 ppm as a cleanup level is because "that's what other states are doing." In other words, they could not defend that number on either health or environmental grounds.

(b) Other state programs have not "locked in" their 100 ppm level in rule form; it remains part of policy and is more readily changed.

(c) Other states have not incorporated their 100 ppm level into a "responsible-party managed" cleanup program. In most cases, this level is only advisory and is a target for cleanup. However, these states supply oversight and have the opportunity to modify the level as the situation demands.

(d) According to our regional staff, 50 ppm TPH is comparable to what is currently being achieved by the odor and sheen standard. This standard seems to work reasonably well for simple sites. Therefore, the proposed rules would not create more stringent cleanup levels than what is currently thought to be adequate, they would only put the guidelines into clearly spelled-out numerical standards.

Since the goal of these proposed rules is to establish a protective program for cleaning up minor petroleum releases with little or no Departmental oversight, it was felt that it would be best to err on the side of caution and set a slightly more stringent cleanup level than the 100 used in many other states.

3. The state of Washington is proposing a cleanup level of 200 ppm. Since many conditions such as weather and geology should be similar in Washington as they are in Oregon, why is Washington's cleanup level higher?

Washington's proposed cleanup level of 200 ppm is ONLY for DIESEL and is actually more stringent than is currently being proposed for typical sites under Oregon's rules. Washington's proposed cleanup level for GASOLINE is based on concentrations of benzene, toluene and ethylbenzene. The acceptable level for benzene is 660 ppb. If it is assumed that gasoline is 1% - 3% benzene, 660 ppb benzene equates to 22 - 66 ppm TPH. This, obviously, is comparable to the 50 ppm TPH value being proposed for the typical gasoline cleanup under the proposed rules.

4. The stringent cleanup levels would lead to noncompliance and many orphan sites, resulting in costly state-led cleanups.

As already pointed out in 2(d) above, the Department does not feel that the proposed levels are necessarily more stringent than those already in existence. Therefore, cleanup costs should not be greater. The Department feels that to recommend less-than-protective cleanup levels in an attempt to save money is a false economy. If a soil cleanup fails and significant contamination ends up in the groundwater, cleanup costs could easily escalate to well over a million dollars per site. Obviously, it is both better and cheaper to clean up petroleum contamination correctly while it is still isolated in the soil.

5. The stringent cleanup levels would lead to higher insurance costs for the regulated community. Insurance costs in California are already 3-4 times higher than those in Oregon.

This comment implies that Oregon's proposed rules are as stringent as those in effect in California and would therefore lead to comparable cleanup costs. The Department feels that this is not true. Using California's rules, a typical Willamette Valley site would require at gasoline cleanup level of 10 ppm TPH. Oregon's proposed rules would require 50 ppm TPH. Sites exceeding the proposed level in California require three soil borings completely through the contaminated zone with samples collected every 5 feet and analyzed for benzene, toluene, ethylbenzene and xylenes. In the San Francisco, North Coast and Central Valley Regions of California, monitoring wells are also required whenever a site is found where levels exceed 100 ppm TPH. Since soil borings and monitoring wells are not a part of Oregon's proposed rules for minor petroleum releases, the Department feels that the proposed rules would be much less expensive to implement and would therefore not result in significantly higher insurance costs.

6. The regulated community is going to need more guidance than is available in the rules in order to follow the proposed rules.

This is a problem which the Department recognizes and is already in the process of addressing. It has already developed a brochure to provide interim guidance on soil cleanups prior to the adoption of the Matrix. If the proposed rules are eventually adopted by the Commission at a later meeting, the Department plans to revise the interim guidance to cover the Matrix. Included in that guidance will be specific explanations of what each of the components of the rules mean, as well as information about where and how to obtain the information needed to "score" a site and determine its required cleanup level.

In conclusion, the Department feels that although consensus has not yet been reached by the USTAC, there is not likely to be major changes in the rules format and therefore the Department should be allowed to hold Public Hearings. The Department will also continue to gather more data on the specifics of how current sites would be scored in the Matrix and meet with the USTAC for further discussions.

THE DEVELOPMENT OF
NUMERIC SOIL CLEANUP LEVELS
FOR OREGON'S
LEAKING PETROLEUM UST CLEANUP RULES

1. Introduction

In order to address the need to clean up sites within the state that are contaminated with hazardous substances, the 1987 Oregon Legislature enacted Senate Bill 122 (ORS 466.540 - 466.590), often referred to as the state superfund law. Recognizing the fact that leaking underground storage tanks (USTs) are not only the source of much existing contamination, but are also a potential source for future contamination, Senate Bill 115 (ORS 466.705 - 466.835 and 466.895) was passed to establish a statewide program for regulating UST systems and guaranteeing that releases from these systems are properly cleaned up. Both of these laws were passed with the goal of providing protection of public health, safety and welfare and the environment from the harmful effects of hazardous substances.

To meet the goals and requirements of Senate Bills 115 and 122, it was necessary to adopt rules establishing levels, factors, criteria or other provisions for the degree of cleanup of hazardous substances. For this purpose, the Department of Environmental Quality (DEQ) organized the Remedial Action Advisory Committee (RAAC) to work with the Department in considering a number of possible cleanup alternatives. As a result of the efforts of the DEQ and the RAAC, the Environmental Quality Commission (EQC) adopted the Cleanup Rules for Hazardous Substances (OAR 340-122-001 to 340-122-110) on September 9, 1988, and the Cleanup Rules for Leaking Petroleum Underground Storage Tank Systems (OAR 340-122-201 to 340-122-260) on November 4, 1988.

One key difference between the Hazardous Substances Cleanup Rules and the Leaking Petroleum UST Systems Cleanup Rules is the target cleanup level. The goal of the Hazardous Substances Cleanup Rules is to clean up sites to background or to the lowest concentration level that is "feasible". The Leaking Petroleum UST System Rules, however, only require that the corrective action will adequately protect public health, safety and welfare and the environment.

The adoption of a separate set of rules for the cleanup of sites contaminated as a result of leaks from petroleum USTs was considered a reasonable strategy because:

- o An expedited approach to cleanup is necessary to effectively handle the large number of existing and potential petroleum contaminated sites.
- o All of these sites are contaminated with compounds having very similar chemical and physical properties, and it is therefore practical to handle them in a similar manner.
- o The most hazardous components of petroleum products can often be removed from soil or water more easily than many other hazardous substances.
- o In many cases, the less hazardous residual contaminants which are not removed by the corrective action will eventually be removed by biodegradation.

In cases where the magnitude of the leak, the complexity of the site conditions and/or the sensitivity of the local environment demand a more thorough cleanup, the Leaking Petroleum UST System Rules allow the Department to require the cleanup to follow the more rigorous Hazardous Substances Cleanup Rules. This will probably be the course of action followed in situations where extensive groundwater contamination is discovered.

For the most part, the Cleanup Rules for Leaking Petroleum UST Systems are based directly on Subpart F of the Environmental Protection Agency's final regulations for USTs (40 CFR Part 280) which were published on September 23, 1988. However, the RAAC expressed a concern that despite the expedited cleanup approach used in these rules, there was still too much of a burden being placed on those parties responsible for small releases which are primarily contained in the soil and which present little or no threat to groundwater. In response to this concern, subsection 340-122-245 was added to the cleanup rules to require the DEQ to develop matrices of numeric soil cleanup levels for motor fuel and heating oil.

The purpose of the matrices is to specify required soil cleanup levels for petroleum products which will be applicable to a broad range of situations by taking into account site-specific factors such as depth to groundwater, annual precipitation, and the geology of the area. These guidelines have been developed to meet the legislature's goal of

protecting human health, safety and welfare and the environment, while providing target cleanup levels for the remediation of petroleum-contaminated sites. For situations where the volume of the release is small and groundwater has not been seriously impacted, a responsible party should be able to more rapidly complete the cleanup process by meeting the specified matrix levels rather than by having to develop and execute a specific corrective action plan for the site. For sites requiring a corrective action plan due to groundwater contamination, the matrix may still be useful for establishing soil cleanup levels which can be incorporated into the overall cleanup plan. Figure 1 presents a flowchart of the Leaking Petroleum UST cleanup rules showing where the matrix will fit in along with the Corrective Action Plan and the Hazardous Substance Rules Remedial Action Plan.

The establishment of numeric soil cleanup levels will be beneficial for several reasons:

- o Responsible parties will immediately know what degree of cleanup is necessary.
- o A more rapid and efficient cleanup process will be less costly.
- o An expedited approach will reduce the amount of oversight time required by departmental staff to deal with a potentially large number of sites.

2. Assessment of Risk

It is important to realize that in establishing numeric soil cleanup levels, it is not the intention of the Department to provide a "quick and dirty" alternative to a corrective action plan. Rather, this approach is being proposed because it is felt that not all petroleum cleanups demand the same amount of attention and effort in order to produce the desired level of protection.

When proposing a remediation plan that does not achieve background, the main concern to be addressed is the level of risk that will be incurred as a result of leaving a given amount of contamination on the site. The soil cleanup levels proposed for petroleum products should, therefore, be based on minimizing the risk from the contaminants that will remain in the soil. To evaluate the level of risk, it is necessary to consider three components: (1) the toxicity of the source, (2) the possible exposure pathways, and (3) the number and location of potential receptors (Kostecki *et al.*, 1989). Each of these components will be discussed below in the context of how they apply to residual petroleum contamination in soils.

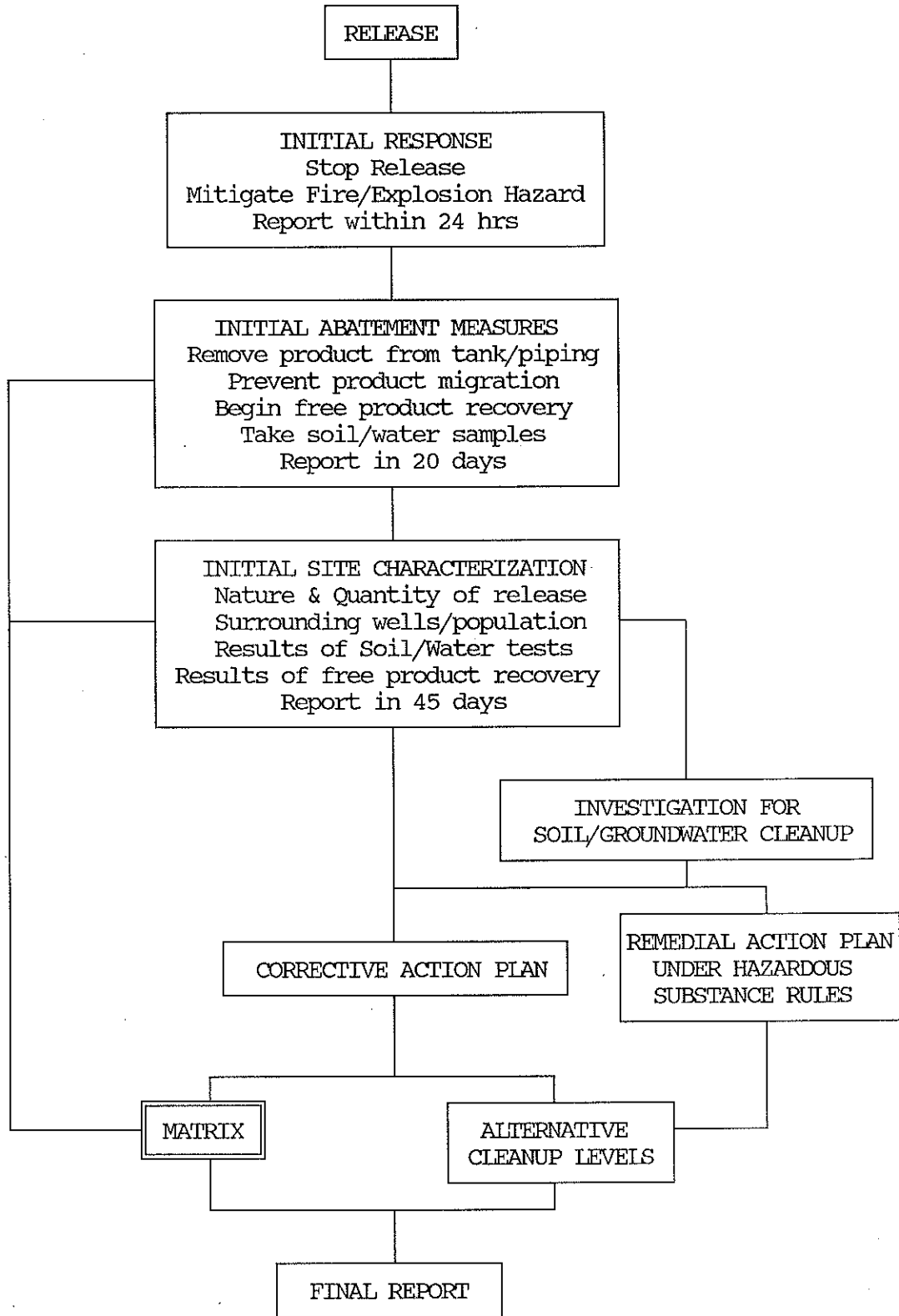


Figure 1: Leaking Petroleum UST Cleanup Rules Flowchart

2.1 Source Toxicity

The first step in assessing the risk from residual petroleum products in soil is to evaluate the toxicity of the compounds in question. According to the Leaking Petroleum UST Cleanup Rules, matrices of soil cleanup levels are to be proposed for motor fuel and heating oil. As used in the rules, motor fuel means

"petroleum or a petroleum-based substance that is motor gasoline, aviation gasoline, No. 1 or No. 2 diesel fuel, or any grade of gasohol, typically used in the operation of a motor engine";

and heating oil means

"petroleum that is No. 1, No. 2, No. 4-heavy, No. 5-light, No. 5-heavy, and No. 6 technical grades of fuel oil; other residual fuel oils (including Navy Special Fuel Oil and Bunker C); and other fuels when used as substitutes for one of these fuel oils."

Obviously, this is a rather wide range of products, and although they may have many common physical and chemical characteristics, they may not all present the same degree of toxicological risk.

To complicate matters even further, each of the regulated products is actually a complex mixture of many different individual compounds. For example, gasoline contains as many as 200 different petroleum-derived chemicals. Most of these are hydrocarbons containing from four to twelve carbon atoms. Gasoline also contains synthetic additives such as tetraethyl lead and ethylene dibromide which are added by the refiner to improve performance (State of California Leaking Underground Fuel Tank (LUFT) Task Force, 1988).

Since it is impractical to analyze for and assess the risk of every component, the commonly accepted procedure is to limit the analysis to those components which are thought to be the most toxic. If a corrective action plan can be fashioned to reduce the risk from these compounds to within acceptable limits, then the risk from the less toxic compounds must also be within acceptable limits (Conway and Boutwell, 1987). For petroleum products, the most toxic components are usually benzene, toluene, ethylbenzene, and the xylenes (the xylenes are actually three separate isomers, the concentrations of which are often reported as a sum) (BTEX). Benzene is a known carcinogen and has an EPA Maximum Contaminant Level (MCL) for drinking water of 5 parts per billion (ppb). The other compounds are neurotoxins and have EPA proposed MCLs of 2000 ppb for toluene, 680 ppb for ethylbenzene and 440 ppb for the xylenes (Stokman, 1987).

Table 1: The solubilities of BTEX in water at 25 °C
(LUFT Task Force, 1988).

<u>Compound</u>	<u>Solubility</u>
Benzene	1780 ppm
Toluene	535 ppm
Ethylbenzene	152 ppm
Xylenes	175 ppm

The solubilities of BTEX in water are all relatively high (Table 1). A comparison of the values listed in Table 1 with the drinking water standards given above show that the solubility of benzene is over 300,000 times greater than its MCL. The situation is not quite as bad for toluene, ethylbenzene and the xylenes due to their lower solubilities and less stringent proposed standards. However, even these compounds have solubilities 200-400 times greater than their proposed standards.

The percentages by weight of BTEX in gasoline are listed in Table 2. Although considerable variation can be found in the concentrations, these compounds are always present. That is not necessarily the case for other petroleum products. Two separate studies on the composition of No. 2 Fuel Oil have found no detectable concentrations of benzene. Toluene and xylene concentrations were found to be 0.025 - 0.11% and 0.15 - 0.42%, respectively (ENVIRON Corporation, 1987). Very little data exists on the detailed composition of the other grades of motor fuel and heating oil for which soil cleanup standards are to be established. However, due to the fact that the various fractions of petroleum are distilled off at progressively higher temperatures, and that the BTEX compounds all have relatively low boiling points, it is to be expected that the levels of BTEX in the other products would also be less than 1%.

2.2 Exposure Pathways

Routes for human exposure to the effects of toxic compounds normally fall into three categories: (1) inhalation, (2) ingestion, and (3) absorption through the skin (Conway and Boutwell, 1987). During the investigation and the cleanup phases of a petroleum spill, care obviously must be taken to reduce exposure to both the vapors and the free product. In order to establish protective soil cleanup guidelines, however, it is only necessary to consider the possible pathways for exposure from the residual contaminants in the soils. For the purposes of this discussion, then, it will be assumed that after cleanup has taken place, there will be little or no risk of exposure to contaminants from: (1) direct contact with free product, (2) inhalation of vapors or contaminated dust, or (3) ingestion of contaminated soil or vegetation. The principle exposure pathway to be dealt with will be from the ingestion of contaminated water. For this reason, the driving force behind the soil cleanup guidelines must be the protection of groundwater. In other words, in situations where there is no immediate impact on groundwater due to a petroleum release, matrix levels must ensure that there will be no future impact due to the leaching of contaminants out of the soil by infiltrating rainwater.

Table 2: The concentrations of BTEX in gasoline (LUFT Task Force, 1988).

<u>Compound</u>	<u>Weight Percent</u>
Benzene	0.12 - 3.50
Toluene	2.73 - 21.80
Ethylbenzene	0.36 - 2.86
ortho-Xylene	0.68 - 2.86
meta-Xylene	1.77 - 3.87
para-Xylene	0.77 - 1.58

As mentioned in the previous section, BTEX are all relatively soluble in water. Therefore, even if the gasoline spilled at a site does not reach the water table and remains trapped in the pore spaces of the soil, rain water flowing down through the soil can still dissolve BTEX from the gasoline and carry these compounds down to the groundwater. Studies have been made on the ability of infiltrating water to dissolve hydrocarbons trapped in porous media (Fried et al., 1979; van der Waarden et al., 1971). Results have shown that such compounds dissolve very readily under these conditions. Depth to groundwater, annual precipitation, and the permeability of the native soils are, therefore, important parameters to consider in cleanup guidelines.

2.3 Potential Receptors

Because of the nature of petroleum leaks or spills, shallow unconfined aquifers are the ones that are likely to be immediately affected. The most obvious potential receptors will be people who live downgradient from a release and who have wells which tap the shallow aquifers. However, even downgradient wells which tap into a deeper aquifer may be in danger. Depending on the hydrology, it is possible for contaminated water to make its way down from the unconfined aquifer by flowing along the well casing through the confining layer. It is also possible that the confining layer is intermittent and does not completely separate the lower aquifer from the upper aquifer. In either case, all nearby users of wells located downgradient from a release should be considered potential receptors.

Although there is a tendency to limit our concerns to how contamination from hazardous substances might affect people, the cleanup rules state quite clearly that the numeric soil cleanup levels specified in the matrices must minimize potential and adverse impacts to: (1) biological receptors; (2) present and future uses of the environment; (3) ecosystems and natural resources; and (4) aesthetic characteristics of the environment. Therefore, the cleanup rules cannot disregard situations where there are no people directly impacted by a spill.

3. Cleanup Programs in Other States

A survey was made of the UST programs in other states to find out the status of their petroleum cleanup rules. This section summarizes some of these programs. Since California has developed one of the most comprehensive programs, it will be discussed first and in the most detail. Some other state programs will then be briefly covered.

3.1 California

In 1985, the California Department of Health Services (DHS) and the State Water Resources Control Board established a task force to develop procedures and guidelines for cleaning up petroleum products released from leaking USTs. As a result of their work, in 1988 the task force released the Leaking Underground Fuel Tank (LUFT) Field Manual which contains guidelines for site assessment, cleanup, and UST closure. It was originally intended to include this document as part of the state's water quality policy for UST leak cleanups which was adopted on February 18, 1988. However, the consensus at that time was that the LUFT Field Manual should remain a technical staff report. The Manual, therefore, presents recommended but not mandatory cleanup measures.

The LUFT Manual currently deals only with gasoline and diesel fuel products. Other products may be treated in future supplements. To assess the severity of the contamination, soil samples are collected one to two feet below the bottom of the excavation at suspected worst-case locations. If it is not safe to enter the excavation, soil may be removed from the bottom of the pit with a back hoe and immediately sampled. The samples are to be analyzed for both BTEX and total petroleum hydrocarbons (TPH). TPH is required along with BTEX because the high mobility of BTEX due to both volatilization and dissolution may lead to low concentrations of these compounds near the surface even though extensive contamination exists. The TPH results would therefore provide a backup check on the degree of contamination.

The results of the soil analyses are compared to maximum allowable values given in tables of leaching potentials. The maximum allowable levels depend on the minimum depth to groundwater from the soil sample and the average annual precipitation as well as the presence or absence of subsurface fractures, man-made conduits and unique site features. Depending on the sensitivity of the site, acceptable levels may be either 10, 100, or 1000 ppm TPH for gasoline or 100, 1000 or 10000 ppm TPH for diesel. If any of the allowable limits are exceeded, then additional site analysis is needed. The values given in the leaching potential tables are based on modeling results "and the best professional judgement of experienced field staff."

Sites having TPH concentrations which exceed those allowed by the leaching potential analysis require a more extensive risk analysis. This procedure employs a minimum of three borings to collect soil samples at 5 foot depth intervals throughout the entire zone of contamination. These samples are analyzed for BTEX. The sums of the concentrations at each

depth (cumulative contamination levels (CCLs)) are then determined and compared to acceptable levels. As with the leaching potentials, these levels are dependent upon the distance to groundwater and the average annual precipitation. The acceptable CCLs were derived from computer modeling studies. They are theoretically the maximum levels of contamination that can remain in the soil and still ensure that the underlying groundwater will not receive enough BTEX to exceed the California DHS action levels. If the measured CCL for any of the BTEX compounds exceeds the acceptable level for the site, or if any individual sample has a concentration exceeding 100 ppm benzene, 80 ppm toluene, 40 ppm ethylbenzene or 40 ppm xylene, further remediation is necessary.

Despite the apparent thoroughness of the LUFT Manual, it has not been adopted in its entirety by all of the Regional Water Quality Control Boards (RWQCB). The boards from the North Coast (NC), Central Valley (CV) and San Francisco Bay (SF) Regions collaborated on their own set of guidelines (NC-SF-CV RWQCB, 1988). These were adopted primarily to address the need to deal with the many shallow groundwater areas found in these regions. One of the main differences between the NC-SF-CV RWQCB guidelines and the LUFT manual is that the RWQCB guidelines also define an action level for when monitoring wells are required. This level was set at 100 ppm TPH for soil samples collected within the first one to two feet of native soil beneath the excavation. According to Peter Johnson of the SF-RWQCB, in about 80% of the cases where monitoring wells have been required under this action level, contamination of the groundwater has been discovered. The RWQCB guidelines also specify the actual number and location of samples for both dry excavations and for excavations which contain groundwater.

3.2 Other State Programs

ARIZONA has established action levels for a number of petroleum-related compounds in soils and groundwater. Action levels are those concentrations, which, when exceeded, indicate that a site requires remediation. An acceptable cleanup cannot necessarily be achieved by merely reducing the concentrations below the action levels. According to Dr. Norman Peterson, toxicologist with the Arizona Department of Health Services, the soil levels for BTEX were decided upon by taking drinking water levels which were derived from a 1-in-a-million increased cancer risk level, and applying a 100-fold soil-to-water attenuation level which was recommended in a report by Battelle Research Laboratories. The TPH level was obtained by determining what other states are currently requiring.

Arizona's numbers are:

	Soils	Groundwater
Benzene	130 ppb	5 ppb
Toluene	200 ppm	2 ppm
Ethylbenzene	68 ppm	680 ppb
Xylenes	44 ppm	440 ppb
TPH	100 ppm	1 ppm

FLORIDA has established guidelines for cleanups based on the concentration of total Volatile Organic Aromatics and Benzene found at the contaminated site, the distance to the nearest potable well, and the classification of the groundwater (G-II or G-III) at the site.

ILLINOIS has established Generic Fuel Cleanup Objectives (GFCOs). These objectives were established with the goal of protecting the state's groundwater. An important consideration when setting the GFCOs was the shallow groundwater conditions often encountered throughout the state.

Illinois' objectives are:

	Soils	Groundwater
Benzene	5 ppb (2.2 ppm*)	5 ppb
Toluene	2 ppm	2 ppm
Ethyl Benzene	13.6 ppm	680 ppb
Xylenes	440 ppb	440 ppb

*Alternative value for "no groundwater use" situations.

MICHIGAN has no numerical soil cleanup levels. Each site is handled on an individual basis.

MINNESOTA currently has no numerical soil cleanup levels other than background.

NEW JERSEY passed a comprehensive Environmental Cleanup Responsibility Act (ECRA) to handle the cleanup of hazardous waste. Problems are dealt with on a site specific basis. ECRA does not establish cleanup levels, but action levels. For petroleum contamination, the action levels are:

Soils	100 ppm TPH
Water	1 ppm TPH

New Jersey's soil value was chosen with the goal of protecting groundwater.

NEW YORK is still using a standard of odor and sheen. Odor is tested using an H-NU (a vapor analyzer) and sheen is tested by placing a soil sample in a jar containing water. If the soil fails either test it is treated or taken off site. If it passes both tests, it is given an EP-TOX test to determine whether or not it contains excessive amounts of other contaminants such as metals. If the soil passes this test, it can go back into the excavation.

PENNSYLVANIA handles releases at the regional level on a case-by-case basis. They have no specific policy or regulations. In fact, they do not yet have an UST program. The State Police are in charge of their petroleum USTs.

SOUTH CAROLINA currently has no established guidelines. Each site is still handled on an individual basis. Their unofficial "word of mouth" guidelines for soils are:

< 10 ppm TPH is probably clean enough;
>100 ppm TPH probably needs remedial action;
10-100 ppm TPH is a matter of debate.

Their main concern in soil cleanups is the protection of groundwater.

WASHINGTON has adopted interim guidelines for soil and water sampling and cleanup levels of petroleum products from underground storage tanks. They require excavation until no odor or visual signs are detected. Representative soil samples are then taken from the pit walls and bottom and analyzed. The soil cleanup levels that must be met are:

Contaminant	Parameter	Cleanup Level
Gasoline	Benzene	660 ppb
	Toluene	143 ppm
	Ethyl Benzene	14 ppm
Diesel	TPH	200 ppm

If there is a potential threat to ground water, monitoring wells and ground water sampling may be required.

WISCONSIN currently has no established guidelines. As an interim guideline they are using 10 ppm TPH as a cleanup level.

4. Developing a Program for Oregon

In the Cleanup Rules for Leaking Petroleum USTs which were adopted by the EQC on November 4, 1988, the Department was given 6 months to return to the EQC to request authorization for a Public Hearing on proposed numeric soil cleanup levels. Because of the short timeframe, it was felt that the best approach for developing standards was to critically examine the programs from other states and to try to adapt and/or adopt those portions that seemed appropriate for the State of Oregon. The Department first met with an informal working group made up of regional staff and outside interested parties. After using the recommendations of the working group to put together a rough draft of the rules, the Department met with the Underground Storage Tank Advisory Committee to work on the details of the rules which are the focus of this staff report.

The major factors covered in these rules are summarized below.

1. Numeric soil cleanup levels should be developed for:
 - (a) gasoline, and
 - (b) diesel and other non-gasoline fraction petroleum products such as heating oil.
2. The degree of contamination should be based on measurements of total petroleum hydrocarbons taking into account typical concentrations of BTEX found in gasoline and diesel.
3. The target cleanup levels for sites should be based on the potential for groundwater contamination to result from residual soil contamination. This should be based on the following site-specific factors:
 - (a) depth to groundwater,
 - (b) mean annual precipitation,
 - (c) native soil type,
 - (d) sensitivity of the uppermost aquifer, and
 - (e) number and proximity of potential receptors.
4. Cleanup levels should be accompanied by specific sampling, analysis and reporting requirements to ensure both the quality and the meaningfulness of the data.

Abbreviations Used in This Report

BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
CCL	Cumulative Contamination Level
DEQ	Department of Environmental Quality
DHS	Department of Health Services
EPA	Environmental Protection Agency
EQC	Environmental Quality Commission
LUFT	Leaking Underground Fuel Tank
MCL	Maximum Contaminant Level
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statute
PAH	Polynuclear Aromatic Hydrocarbon
ppb	parts per billion (1000 ppb = 1 ppm)
ppm	parts per million (10,000 ppm = 1%)
ppt	parts per trillion (1000 ppt = 1 ppb)
RAAC	Remedial Action Advisory Committee
RWQCB	Regional Water Quality Control Board (California)
CV	Central Valley RWQCB
NC	North Coast RWQCB
SF	San Francisco RWQCB
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank

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companies.

"We're actually positioning ourselves much the same as we did with keyboards, but in other industries," Petkevicius said.

Target industries include medical, electronics and aerospace, among others, he added.

Storage tank bill passes Senate

OLYMPIA, Wash. (UPI) — A bill that would let the state help underground petroleum storage tank owners meet federal liability insurance requirements unanimously passed the Senate Tuesday and is headed back to the House for consideration of an amendment.

The measure (HB1180) is based on findings of the Joint Select Committee on Storage Tanks created last year. The group was organized in response to passage of a federal law this year that requires underground petroleum storage tank owners show financial responsibility for damages caused by leaks from tanks.

dants to pay either little or nothing at all.

Bondholders initially claimed losses of more than \$7 billion in bond principal and interest. The default was the largest in the history of the U.S. municipal bond market.

The federal law permits states to help insure storage tank owners, since private insurance companies often will not insure those owners or because private insurance is too costly.

The bill would set up an agency to provide discounted reinsurance for private insurance companies that help storage tank owners meet federal requirements.

Funds for the reinsurance program would come from a .5 percent tax on the wholesale value of petroleum products of tank owners participating in the program.

production delays and quality problems, said late Tuesday it is concerned because drug use by its employees leads to safety hazards, lost productivity and a bad public image, Boeing spokesman Lee Lathrop said.

"Our approach has been employment testing," Lathrop said, "but now we are looking at the whole area with an eye to rewriting the policy. There is a very high probability that we will be doing testing of our employees."

Lathrop said it has not been determined how many of the company's 155,000 workers would be tested or whether they will be tested randomly or only when they are suspected of using drugs.

"People who are flying in our airplanes like to believe that everyone had their wits about them as they were being built," Lathrop said. "Because of public perception about our integrity, we have to take a pretty hard line."

Lathrop said testing of job applicants, instituted in 1987, has screened out some drug users. In addition, about 20 employees were terminated for drug violations last year.

Some workers say drug use is on the rise at Boeing, as it is with the public at large.

"I know it's gotten worse," said Michael Gatewood, a 22-

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That's a good idea like that do you think?

AIRPORT Continued from Page 2

pipelines, in existing and proposed streets, parking lots and aircraft aprons to the Columbia River slough.

Bertek said the plan to discharge storm water into the slough has been discussed with environmental regulatory agencies including the state Department of Environmental Quality.

Total cost for the project is estimated at almost \$3.2 million with \$494,450 going to cover engineering, administration, permits and inspection costs, \$250,000 for contingencies and \$50,000 for other anticipated costs.

The \$1.3 million contract with Lakeside Industries is for a 2,000-foot extension of Taxiway E north from Taxiway C to the edge of Runway 10L.

Extension of the taxiway was anticipated in the airport's 1986 master plan update and FAA-approved Airport Layout Plan. It is required to provide an alternate

route to minimize delays and improve airfield capacity.

Lakeside Industries' work includes grading, drainage, asphalt paving, taxiway lighting, pavement marking and aircraft guidance signs.

The FAA is funding 83.3 percent of the project.

Port commissioners also approved acceptance of a \$391,682 grant from the FAA that will be used to partially fund relocation of the Airport Surveillance Radar from the Airtrans Center to the southwest area of the airport.

The FAA will pay for the \$1.2 million relocation and the Port will reimburse the FAA for 83 percent of the project with the approved grant and grants that will be received in the next two fiscal years.

The Port's 17 percent will be funded with the airport's general account.

In addition to the radar relocation, the grant offer will fund

the federal share of improvements to the terminal building, electrical transformers, airfield lighting and ramp pavement.

Also under aviation, the commission approved a proposal to reimburse Delta Air Lines for an estimated \$280,000 of asbestos removal at the former Federal Inspection Station, located in the lower level of Concourse K.

Delta plans to use the leased lower level for office space.

The price of the removal is based on a bid submitted last week by Central Industries of Seattle, which was the lowest received.

The \$280,000 includes a \$34,000 contingency, and funds for Hoffman Construction Co., which was the general contractor on Delta's Concourse K project, and a firm that will monitor air quality.

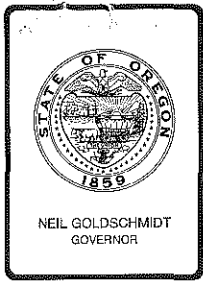
Because the asbestos is in a public leased space, it is the Port's responsibility to pay for the removal.

SALE Continued from Page 2

The tanks were discovered during removal of two, 1,000-gallon underground tanks, swelling a project originally estimated to cost \$4,158 to a \$42,000-plus job.

Under federal laws, the Port, as owner of the property, was obligated to remove the tanks,

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Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: H
Division: Water Quality
Section: Planning/Monitoring

SUBJECT:

Hearing authorization to adopt rules which will establish instream criteria for total phosphorus, ammonia nitrogen, and biochemical oxygen demand in Bear Creek.

PURPOSE:

Water Quality standards are violated in Bear Creek basin for pH, dissolved oxygen, and ammonia toxicity standards. The criteria will provide the basis for developing and allocating the total maximum daily loads (TMDLs) for nutrients and biochemical oxygen demand in Bear Creek, a tributary to the Rogue River. The TMDLs are required to achieve dissolved oxygen, pH, and ammonia toxicity standards. Achieving water quality standards is required to protect the recognized beneficial uses of fish and aquatic life, salmonid spawning and rearing, anadromous fish passage, fishing, and aesthetic quality.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules

Proposed Rules	Attachment <u>A</u>
Rulemaking Statements	Attachment <u>B</u>
Fiscal and Economic Impact Statement	Attachment <u>C</u>
Public Notice	Attachment <u>D</u>

Meeting Date: April 14, 1989
Agenda Item: H
Page 2

<input type="checkbox"/> Issue a Contested Case Order	
<input type="checkbox"/> Approve a Stipulated Order	
<input type="checkbox"/> Enter an Order	
Proposed Order	Attachment <input type="checkbox"/>
<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

The proposed rule would:

1. Identify the assimilative capacity of Bear Creek for nutrients and biochemical oxygen demand by season.
2. Define the time frame for the Department to publish interim waste load and load allocations based on the proposed criteria established in the rule. Interim allocations will be used to develop and review program plans.
3. Require the point sources which discharge to Bear Creek to develop and submit to the Department a program plan which describes strategies, options, and costs for achieving specified allocations.
4. Require that nonpoint source program plans which describe strategies and options for achieving load allocations be submitted to the Department by Jackson County and the incorporated cities within the Bear Creek basin.
5. Require that memorandums of agreement between DEQ and the Departments of Agriculture and Forestry include program plans for agricultural and forested nonpoint sources, respectively.

AUTHORITY/NEED FOR ACTION:

<input checked="" type="checkbox"/> Required by Statute: <u>ORS 468.735</u>	Attachment <u>B</u>
Enactment Date: _____	
<input type="checkbox"/> Statutory Authority: _____	Attachment _____
<input type="checkbox"/> Pursuant to Rule: _____	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment _____
<input type="checkbox"/> Other: Implement Public Law 92-500 as amended, specifically Section 303.	Attachment <u>B</u>

X Time Constraints:

The Department is required under a Federal District Court Consent Decree to establish TMDLs for identified water quality limited streams at the rate of 20% annually, but in no event less than two annually. Allocations must be established for Bear Creek to comply with the requirements stated in the consent decree. Oregon's failure to establish allocations will require the Environmental Protection Agency to notice in the Federal Register proposed action within 90 days after the deadline.

DEVELOPMENTAL BACKGROUND:

<u> </u> Advisory Committee Report/Recommendation	Attachment	<u> </u>
<u> </u> Hearing Officer's Report/Recommendations	Attachment	<u> </u>
<u> </u> Response to Testimony/Comments	Attachment	<u> </u>
<u> X</u> Prior EQC Agenda Items: (list)		
March 13, 1987, Agenda Item O	Attachment	<u> </u>
(Not Attached)		
<u> </u> Other Related Reports/Rules/Statutes:	Attachment	<u> </u>
<u> X</u> Supplemental Background Information	Attachment	<u> E</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

1. The City of Ashland operates the Ashland Sewage Treatment Plant (STP). The Ashland STP is the major source of nutrients and biochemical oxygen demand to Bear Creek. Bear Creek does not have enough flow to assimilate the waste from the Ashland STP. Inadequate dilution is most apparent in the late summer - fall when flows are routinely below 15 cubic feet per second (cfs).

Effluent limitations based on Bear Creek's assimilative capacity would require significant load reductions from the Ashland STP during the summer and late fall. Load reductions could occur through alternative disposal or improved treatment. Either option would be expected to increase cost of treatment for the City of Ashland.

The proposed rule will define a final compliance date and require a program plan which describes strategies and time frames for achieving the waste load allocations (WLAs). Several additional localized water quality issues and concerns, such as chlorine toxicity, are discussed in this staff report including the attached problem statement (Attachment E). The Department expects these local issues to be addressed prior to the compliance date.

Achieving water quality standards will require modifying existing treatment facilities. The Ashland STP will be required to achieve the minimum design requirements already described in OAR 340-41-375(1) for the basin as well as waste load allocations. These include achieving minimum treatment standards as well as meeting instream dilution requirements unless otherwise specified by the Commission. Both the intent and potential effect of the basin requirements are discussed in the attached problem assessment (Attachment E).

2. Industries with log ponds currently have either general or National Pollution Discharge Elimination System (NPDES) permits. Very little monitoring information is required by these permits. The proposed TMDL would require that the existing permit conditions of no discharge during the summer be met. This permit requirement is not being met by the Medco log pond. Achieving proposed winter WLAs may require additional controls. Existing general permit conditions for log ponds require 50 to 1 dilution of log pond runoff. This condition is not always met and may not be possible at some of the identified receiving stream discharge locations. Industries with discharge permits for log pond effluent will be required to submit program plans to the Department describing strategies and time frames for achieving the WLAs.
3. Nonpoint source controls from urban and agricultural areas will be required to achieve the proposed TMDLs. Increased cost may be associated with achieving the load allocations (LAs). Program plans identifying strategies and options for achieving the nonpoint source load allocations will be required from designated agriculture and forestry management agencies, as well as Jackson County and the incorporated cities within the Bear Creek Basin. The Rogue Valley Council of Governments currently coordinates a water quality program and may provide assistance and coordination of program plans within the basin.

The Department of Agriculture has been identified as the lead agency for agricultural nonpoint sources. The State Department of Forestry is the lead agency for state and private forest lands. Memorandums of Agreement between the DEQ and these Departments will describe appropriate program plans.

New tasks established by this rule will have to be assumed by existing staff. The added workload of this TMDL is significant. New tasks include development of interim allocations, program plan reviews, continuing proactive involvement with communities in the Bear Creek Basin, increased monitoring requirements and issuance of modified permits which incorporate compliance conditions, schedules and permit limitations based on wasteload allocations.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Summer limits of 100 micrograms per liter (ug/l) total phosphorus and 1000 ug/l of biochemical oxygen demand.

Achieving the 1000 ug/l biochemical oxygen demand limit would achieve the instream dissolved oxygen standard. The phosphorus limit is the Environmental Protection Agency's (EPA) guideline for the prevention of nuisance algal growths. This limit is above background and may not achieve the pH criteria at all flow conditions.

2. Phosphorus limits of 50 ug/l.

Achieving phosphorus criteria of 50 ug/l or less provides the greatest assurance of preventing pH violations at all flow conditions. Criteria sufficient to prevent pH violations at the low flow conditions appear to be below background concentrations. Under these conditions OAR 340-41-365(3) states that if numerical criteria are below background then background becomes the standard.

3. Phosphorus limits of 80 ug/l.

Estimates using the range of 60 - 80 ug/l total phosphorus criteria provide reasonable assurance of preventing pH violations at typical irrigation season flows in Bear Creek. During low flow conditions the expected pH values may exceed the standard of 8.5 but are expected to be below a pH of 9.0. The pH criteria of 9.0 is recommended by EPA to prevent toxicity to fish and aquatic life.

- 4) Nitrogen limitation criteria.

Nitrogen is currently the macronutrient in lowest proportion to algae uptake requirements in Bear Creek below Ashland. Nitrogen has been cited as being the limiting nutrient in some Western Oregon streams. However, nitrogen is the most mobile of the macronutrients. With high groundwater

nitrogen it is unlikely that nonpoint source control would be effective at controlling nitrogen to limiting levels in Bear Creek.

- 5) Oxygen Demand Criteria addressing both the ammonia and carbon demand components of biochemical oxygen demand. Separate limits are defined for winter and summer conditions.

Summer Irrigation and Low-Flow Conditions (Spring-Summer-Fall) Approximately April - November	Winter High Flow Conditions Approximately December - March
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(All units are in milligrams per liter)

Ammonia	0.25	1.0
*CBOD ₅	2.0	3.0
Instream BOD ₅	3.0	7.3

* Five day carbonaceous biochemical oxygen demand

These limits describe the maximum concentrations that could occur in Bear Creek and not exceed the dissolved oxygen criteria. The calculations involved simplifying assumptions described in the attached report. Allocations derived from these criteria could be dependent on these assumptions.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission adopt criteria described in Options 3 and 5.

Option 3 does not provide the assurance provided by Option 2 of preventing pH violations at all flow conditions. That assurance is impossible to provide. Criteria appear to be below background and would require nonpoint source controls to background levels. These controls may not be achievable.

Option 3 provides an achievable phosphorus criteria. Achieving this criteria will improve water quality and may obtain the pH standard under most flow conditions. Point source discharges under either option 2 or 3 would be required to treat to ambient levels. Option 3 provides an achievable criteria. Option 2, however, provides greater assurance of preventing pH violations.

Option 1 describes the observation that under current conditions there are times when no assimilative capacity exists at sampling locations above Ashland. Background and nonpoint source loads above the Ashland STP occasionally

utilize the entire assimilative capacity for oxygen. Option 5 describes the maximum assimilative capacity of Bear Creek for winter and summer conditions. Additional refinements are made to describe the components of oxygen demand. Option 5 allows both greater definition and flexibility in the allocation process.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rule is consistent with the approach for establishing TMDLs on water quality limited stream segments identified in EQC Agenda Item O, March 13, 1987.

The establishment of phosphorus and oxygen demand criteria are necessary to protect the recognized beneficial uses of Bear Creek.

The Federal Clean Water Act, under Section 303, requires that pollution limits termed Total Maximum Daily Loads be established in waters that do not meet standards, in either numerical or narrative form, even after technology based limitations have been applied.

In December 1986, the Northwest Environmental Defense Center filed suit in Federal District Court against the Environmental Protection Agency to ensure that total maximum daily loads would be established and implemented for waters in Oregon identified as being water quality limited. On June 3, 1987, Federal Judge James Burns signed a consent decree between NEDC and EPA describing a schedule for establishing TMDLs in Oregon. Bear Creek was one of the streams identified in the consent decree.

ISSUES FOR COMMISSION TO RESOLVE:

The final compliance date in the proposed rule is June 30, 1994. This proposed compliance date is consistent with the five year schedule proposed for other TMDLs. The City of Ashland has been cooperating with the Department throughout the project and has hired a consulting firm to prepare a program plan. A preliminary draft of this plan was provided to the Department for review. This program plan proposed a compliance date of 1995. In later conversations, the City of Ashland proposed a later compliance date of December 1996. The Department has not had the opportunity to review the program plans in detail. Preliminary review of the draft program plan by the Department did not suggest alternative compliance dates from the proposed schedule of 1994.

There are several issues that may be raised as the program plans are developed and reviewed. These issues include:

1. The proposed rule will require modifying the Ashland treatment plant operation. This modification will require that the treatment plant be upgraded to meet existing basin requirements as discussed in the staff report. The Commission may allow exemption of the dilution rule in the basin wide design criteria. The Commission may be asked to provide this exemption for Ashland. The staff does not view the establishment of a TMDL as superceding existing basin requirements. No technical or economical information has been presented which would justify exempting Ashland from this rule at this time. Staff suggests that program plans from Ashland address existing requirements as well as the WLAs as a way of identifying what needs to be done. The Department does not want to suggest that on the local issues such as toxicity that Ashland will have until 1994 to address them. In fact, the Department believes these issues should be addressed as quickly as practicable. The program plan will provide a means to schedule needed activities.
2. The mixing zone policy for the Rogue basin requires no acute toxicity within the mixing zone. Additionally, the mixing zone does not extend across a stream to allow for fish passage and migration. Ashland's mixing zone extends across and includes the lower quarter mile of Ashland Creek. Coho salmon are known to migrate into and spawn in Ashland Creek. The existing mixing zone may not be consistent with existing policy. The program plan from Ashland needs to provide information for all alternatives that allow the Department to evaluate the appropriateness of the mixing zone.
3. Existing receiving streams of log pond runoff are viewed as conduits for waste. These streams may not provide the fifty to one dilution required in general log pond permits. The Department does not view establishing a TMDL as superceding existing permit conditions. Program plans required from the industries need to address achieving all existing rules, permit conditions, as well as the requirements of the TMDL.

INTENDED FOLLOWUP ACTIONS:

File a hearing notice with the Secretary of State.

Notify local jurisdictions and interested citizens of public hearings and the 30-day comment period.

Meeting Date: April 14, 1989
Agenda Item: H
Page 9

Hold public hearing in Ashland.

Evaluate and respond to public comment.

Incorporate public input into the proposed rule based on the Department's evaluation.

Return to the Commission in July for final rule adoption.

Approved:

Section:

Paul J. Mullane

Division:

Wild & Wetlands

Director:

*Priscilla Taylor
for Fred Hansen*

Report Prepared By: Robert Baumgartner

Phone: 229-5877

Date Prepared: March 15, 1989

BB:crw
PM\WC4717
March 31, 1989

SPECIAL POLICIES AND GUIDELINES

340-41-385

1 In order to improve water quality within the Bear Creek subbasin to meet existing water quality standards for dissolved oxygen and pH, the following special rules for total maximum daily loads, waste load allocations, load allocations, and program plans are established.

(a) After the completion of wastewater control facilities and program plans approved by the Commission under this rule and no later than December 31, 1994, no activities shall be allowed and no wastewater shall be discharged to Bear Creek or its tributaries without the authorization of the Commission that cause the following parameters to be exceeded in Bear Creek:

Summer, Irrigation, and Low-Flow Seasons

Approximately

April 1 through November 30

<u>Ammonia Nitrogen</u> <u>Nitrogen as N (mg/l)</u>	<u>Instream Five Day</u> <u>Biochemical Oxygen</u> <u>Demand (mg/l)¹</u>	<u>Total Phosphorus</u> <u>as P (mg/l)</u>
<u>0.25</u>	<u>3.0</u>	<u>0.80</u>

Winter High Flow Season

Approximately

December 1 through March 31

<u>Ammonia Nitrogen</u> <u>Nitrogen as N (mg/l)</u>	<u>Instream Five Day</u> <u>Biochemical Oxygen</u> <u>Demand (mg/l)¹</u>
<u>1.0</u>	<u>7.0</u>

¹ For the purposes of waste load allocations, the biochemical oxygen demand is calculated as the ammonia concentration multiplied by 4.35 and added to the measured effluent biochemical oxygen demand.

* Precise dates for complying with this rule may be conditioned on physical conditions, such as flow and temperature, of the receiving stream and shall be specified in individual permits or memorandums of understanding issued by the Department.

- (b) The Department shall within 60 days of adoption of these rules distribute initial waste load and load allocations to point and nonpoint sources in the basin. These loads are interim and may be redistributed upon conclusion of the approved program plans.
- (c) Within 90 days of adoption of these rules, the City of Ashland shall submit to the Department a program plan and time schedule describing how and when they will modify their sewerage facility to comply with this rule and all other applicable rules regulating waste discharges.
- (d) Within 90 days of adoption of these rules the industries permitted for log pond discharge, Boise Cascade Corporation, Kogap Manufacturing Company, and Medford Corporation shall submit program plans to the Department describing how and when they will modify their operations to comply with this rule and all other applicable rules regulating waste discharges.
- (e) Within 18 months after the adoption of these rules Jackson County and the incorporated cities within the Bear Creek subbasin shall submit to the Department a program plan for controlling urban runoff within their respective jurisdictions to comply with these rules.
- (f) Memorandums of Agreement developed following adoption of this rule between the Departments of Forestry and Agriculture and the Department of Environmental Quality shall require that program plans for achieving specified load allocations of state and private forest lands and agricultural lands respectively be developed within 18 months of rule adoption.
- (g) Program plans shall be reviewed and approved by the Commission. All proposed final program plans shall be subject to public comment and hearing prior to consideration for approval by the Commission.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt and amend rules.

(1) Legal Authority

ORS 468.735 provides that the Commission by rule may establish standards of quality and purity for waters of the state in accordance with the public policy set forth in ORS 468.710. ORS 183.545 requires a review every three years of state agency Administrative Rules to minimize the economic effect these rules may have on businesses. ORS 183.550 requires, among other factors, that public comments be considered in the review and evaluation of these rules. The Clean Water Act (Public Law 92-500, as amended) requires the states to hold public hearings, at least once every three years, to review applicable water quality standards. Section 303 of the Act further requires that Total Maximum Daily Loads be established for water quality limited stream segments.

(2) Need for the Rule

The Environmental Quality Commission, at its meeting on March 13, 1987, approved the process identified by the Department for establishing Total Maximum Daily Loads (TMDLs), including the proposed schedule for completing Phase I of the process for ten stream segments and one lake. To start the process, the Commission concurred with the Department's intent to place the Tualatin River TMDLs on 30-day notice for public review and comment, thus initiating the entire TMDL/WLA (Waste Load Allocation) process for Bear Creek.

(3) Principal Documents Relied Upon in this Rulemaking

Clean Water Act as amended in 1977.

Quality Criteria for Water, 1986. EPA.

Code of Federal Regulations, 1987 (40 CFR) Part 130 - Water Quality Planning and Management.

State/EPA Agreement, July 1987. Program Document for FY 1988.

Fiscal and Economic Impact Statement

Overall Impact

Adoption and implementation of the proposed amendments to water quality standards for the Bear Creek subbasin will result in increased cost for wastewater treatment and control. These increased costs will be limited to Ashland, the only community which discharges effluent to Bear Creek. The City of Ashland will receive specified waste load allocations (WLAs), to the extent that these waste load allocations require substantial and expensive improvements to treatment capability, there will be significant fiscal impacts. Cost associated with achieving the specified WLAs may not however be greater than the costs incurred to achieve existing minimum design criteria for treatment and control of wastes for the Rouge Basin (OAR 340-41-375).

Specific WLAs will be assigned to three industries with permits to discharge log pond effluent to Bear Creek. To the extent that these allocations require significant changes in operation procedures, there may be significant fiscal impacts.

The proposed rules will lead to the establishment of nonpoint source load allocations. The load allocations require implementation of management practices, passive treatments, and nonpoint source controls in urban and agricultural areas in the Bear Creek subbasin. To the extent that these load allocations require additional management practices and controls, there may be significant fiscal impacts.

The actual fiscal impacts to the communities cannot be described at this time because the cost for alternative options are not available. The proposed rule establishes dates for the submittal of program plans. A component of the program plan will be to describe how and when various options and associated costs will be analyzed and described. When this information is available the cost effective alternatives can be described.

Although cost information is not available, it is possible to ascertain who may incur fiscal impacts, how they may be impacted, and where the impacts may occur. Local governments may be directly impacted. If capital investment is required, they will have to secure cash from bond sales or from loans. Operating expenses may increase to cover operation and maintenance of new facilities. Sewerage system users may indirectly be impacted. Local governments may have to increase user charges to pay off the bonds and/or loans; system users would have to pay the increased charges. These users include homeowners, small businesses, and large businesses. If business operating expenses increase, the public may be indirectly impacted through increased product prices. Property owners could also be indirectly impacted through property tax increases if operating expenses increase for public institutions such as schools. Table 1 presents a summary of possible fiscal and economic impacts which could result from waste load allocation to Bear

Creek Basin streams. Once cost information is available, these possible impacts will be evaluated.

TABLE 1

SUMMARY OF POSSIBLE FISCAL IMPACTS--BEAR CREEK BASIN

WHO IS IMPACTED?	HOW ARE THEY IMPACTED?	WHERE ARE THEY IMPACTED?
Local Government	Bond Sale or Loan-Direct Operating Expenses-Direct	Cash Outlay-1 time Cash Outlays-Ongoing
General Public	Rate Increases-Indirect Price Increases-Indirect Tax Increases-Indirect	Cash Outlays-Ongoing Cash Outlays-Ongoing Cash Outlays-Annual
Small Businesses	Rate Increases-Indirect Increased Operating Expenses-Indirect Tax Increases-Indirect	Cash Outlays-Ongoing Cash Outlays-Ongoing Cash Outlays-Annual
Large Businesses	Rate Increases-Indirect Increased Operating Expenses-Indirect Tax Increases-Indirect	Cash Outlays-Ongoing Cash Outlays-Ongoing Cash Outlays-Annual

Probable Community Impacts:

Ashland. The City of Ashland's sewage treatment plant is the major source of nutrients and biochemical oxygen demand to Bear Creek. The discharge from Ashland STP is far in excess of the available dilution and assimilation capacity of Bear Creek during low flow conditions. The WLAs to this facility will require substantial facility modifications. The City is now initiating studies to describe and evaluate potential alternatives. Possible alternatives to meet the WLAs include improved treatment, irrigation, discharge to irrigation canals, discharge to the Bear Creek Valley Sanitary Authority, and land disposal. Ashland would be eligible for low interest loans from the State Revolving Fund.

Urban Areas. Urban areas within the basin include Medford, Phoenix, Central Point, Jacksonville, Talent, Ashland and unincorporated areas of Jackson County. The proposed rule will require these communities develop appropriate nonpoint source controls to achieve their specified Load Allocations. The Rouge Valley Council of Governments currently has a water quality program in the Bear Creek Basin. Additional costs are expected to achieve the LAs.

Agriculture. Agricultural return flows provide a significant load of nutrients and oxygen demand to Bear Creek. The Department of Agriculture is the designated management agency for agriculture

nonpoint source control. Achieving the load allocations may require identifying and adopting alternative best management practices.

Industry. Log pond discharges provide large loads of oxygen demand to Bear Creek. Three industries hold permits for the discharge of log pond effluent during rainfall events. Modifications to existing practices may be required to achieve specified mass loadings for the permitted log ponds. Pollution Control tax credits may be available to industrial sources to offset costs of additional pollution control facilities.

(5) Land Use Consistency

The Department has concluded that the proposed rule conforms with the statewide planning goals and guidelines.

GOAL 6 (Air, Water, and Land Resource Quality):

This proposal is designed to improve and maintain water quality in the Bear Creek subbasin by reducing pollutant loadings.

GOAL 11 (Public Facilities):

Compliance with the proposed rules would require the City of Ashland to provide program plans describing strategies for achieving pollution limits. Additional sewerage facilities may be required.

The proposed rules do not appear to conflict with other goals.

Public comment on any land use involved is welcome and may be submitted in the same manner as indicated for testimony in this notice. It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their program affecting land use and with statewide planning goals within their expertise and jurisdiction.

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

BEAR CREEK TOTAL MAXIMUM DAILY LOADS (TMDLs)

Notice Issued:

Comments Due:

WHO IS THE APPLICANT:

All businesses, residents industries, and local governments within the Bear Creek drainage basin. All residents, recreationists, and individuals who use Bear Creek.

WHAT IS PROPOSED:

The Department proposes to add the attached language to describe special policies and guidelines in Oregon Administrative Rules for the Rouge Basin. The proposed language establishes instream criteria for phosphorus, ammonia, and biochemical oxygen demand for Bear Creek and defines the time period for when the criteria apply.

WHAT ARE THE HIGHLIGHTS:

The Federal Clean Water Act, under Section 303, requires that pollution limits known as total maximum daily loads be established on streams that are not achieving water quality standards in either narrative or numerical form.

The dissolved oxygen, and pH standard are routinely violated in Bear Creek below the Ashland Sewage Treatment Plant. The pH standard is violated due to excessive algal growth.

The Department believes that phosphorus is the key nutrient supporting algal growth. Ammonia and biochemical oxygen demand are key parameters leading to the dissolved oxygen standards violations. Criteria are described for phosphorus, ammonia, and biochemical oxygen demand.

The criteria form the basis for establishing the total maximum daily load, waste load allocations, and load allocations. The waste load allocation describes the maximum amount of each pollutant that can be discharged from a point source. Load allocations describe the amount of each pollutant allocated to nonpoint sources and background.

HOW TO COMMENT:

The Department will accept public comment on the proposed additions. Public hearings to receive comments on the proposed additions and amendments to OAR 340-41-385 will be conducted as follows:

The Department will accept written comments received by 5:00 p.m. on _____, 1989. Comments should be addressed to:

Mr. Robert Baumgartner
Department of Environmental Quality
811 SW 6th Ave.
Portland, OR 97204

(PM\WC4748)

D-1



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

SUPPLEMENTAL BACKGROUND INFORMATION

Problem Assessment

Introduction:

Bear Creek currently violates the dissolved oxygen and pH standards. These problems are the result of BOD loads and excessive algal blooms. Although phosphorus is not the only factor which stimulates algal growth, studies show it can have a major effect on the abundance and type of algae produced. The Department believes BOD and phosphorus to be critical parameters related to water quality in Bear Creek.

In November 1987, the Department proposed Total Maximum Daily Loads (TMDLs) for phosphorus and biochemical oxygen demand (BOD) in Bear Creek. These initial proposed TMDLs were based on instream concentrations of 0.10 mg/l of total phosphorus and 1.0 mg/l of BOD. Based on the comments received the Department decided to adhere to the proposed TMDLs until the intensive study period was completed.

Dissolved Oxygen:

Dissolved oxygen is essential for maintaining aquatic life. Its effect on aquatic organisms has been extensively studied. Under natural conditions streams will typically be near 100 percent of the DO saturation value. Water quality standards stated in OAR 340-41-325(2)(a)(A) for Bear Creek state:

DO concentrations shall not be less than 90 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes.

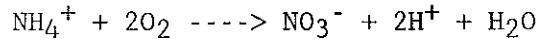
The Oregon Department of Fish and Wildlife stated that one or more of the life stages identified in OAR 340-41-325(2)(a)(A) occur throughout Bear Creek from October through May. Based on the assessment provided by the Oregon Department of Fish and Wildlife district biologist the 95% saturation dissolved oxygen criteria applies for the months of October through May.

Dissolved Oxygen (DO) in a stream is influenced by several factors. Carbonaceous oxidation, nitrogenous oxidation, algal respiration, and benthic demands remove oxygen from a stream. Reaeration, and photosynthesis add dissolved oxygen to a stream.

Violations of the DO standard have been observed at all sampling sites in Bear Creek. Violations are rare, except during the fall low flow conditions, at sites above the Ashland Sewage Treatment Plant. During the low flow conditions encountered from September through December 1988 40% of the samples fell below 95% saturation and 20% fell below 90% saturation. The DO violations above the Ashland STP indicate that little, or no assimilative capacity is available for the Ashland STP during the fall.

The lowest dissolved oxygen values are observed at the Valley View sampling site immediately below the Ashland Sewage Treatment Plant. These violations are the result of excessive BOD loads from the Ashland STP. Data indicates that ammonia nitrification is a key component of the oxygen demand at this site.

The stoichiometric relationship of oxygen to ammonia nitrogen in conversion to nitrate can be represented by:



The amount of nitrification can be measured by the decrease in ammonia concentration and the increase in nitrate concentration over time. One mg/l of ammonia is equivalent to 4.57 mg/l of BOD. It is expected that some variation in the strict relationship will be observed in biological communities due to carbon dioxide fixation or algae uptake. Observed instream ratios are usually near 4.3 to 4.4 mg/l of BOD for every mg/l of ammonia.

Dissolved oxygen standards violations occur routinely at all locations below the Ashland STP. The DO violations are often observed early in the morning and followed by supersaturation of oxygen throughout the day. Diurnal variation in dissolved oxygen are indicative of algal photosynthesis. Algal respiration is a component of the demand resulting in the observed early morning dissolved oxygen violations. The DO standard is routinely violated at Kirtland road during all months of the year.

Primary sources of oxygen demand are:

Ashland Sewage Treatment Plant,
Log Pond effluent, and
Urban Nonpoint sources.

OXYGEN DEMAND TMDL

Oregon administrative rules define the amount of dilution required to assimilate oxygen demand from a point source. This rule states that the effluent oxygen demand concentration divided by the dilution ratio shall not be greater than one. Total oxygen demand includes both the carbonaceous demands and the nitrogenous demands. The nitrogenous demands can be calculated as the effluent ammonia concentration (mg/l) multiplied by 4.35 (conversion factor).

The current Ashland STP permit allows a monthly average discharge for five day BOD (BOD₅) of 20 mg/l in the summer and 30 mg/l in the winter. Average permitted dry weather flow to the treatment plant is 3.1 mgd (4.8 cfs). There are no limits listed for ammonia. Based on the dilution rule, to assimilate permitted BOD₅ loads Bear Creek would have to have a monthly average of 96 cfs during the summer past Ashland. Flows measured during the summer have been below 5 cfs. Winter flows would have to be near 150 cfs.

The initial proposed TMDL for BOD was calculated on achieving an instream concentration of 1 mg/l of biochemical oxygen demand in Bear Creek during

the summer. By definition biochemical oxygen demand includes ammonia oxygen demands.

Data collected from the Department indicates that ammonia from the Ashland STP is the major source of oxygen demand resulting in DO violations immediately below the effluent discharge. The Department's data suggests that reaeration allows Bear Creek to assimilate some of the nitrogenous oxygen demand.

The assimilative capacity for oxygen demand in Bear Creek was assessed using site specific data collected in Bear Creek. Ammonia decay rates were calculated using observed decrease in instream concentrations of ammonia and increase in nitrate. Carbonaceous demands were determined using observed instream concentrations of BOD₅.

Stream flow and velocities were measured at several sites along Bear Creek under different flow conditions. Reaeration rates are dependent on flow and were estimated from observed oxygen saturation values measured along Bear Creek. Loads from the Ashland Sewage Treatment Plant and several tributaries were determined during the monthly and intensive sampling surveys.

Key equations, including ammonia decay, carbonaceous demand decay, and reaeration were programed into a LOTUS spreadsheet format. The oxygen saturation was estimated for different loads and flow conditions. The Streeter-Phelps dissolved oxygen sag model was used to verify the results. The Streeter-Phelps model allows the maximum load from point sources discharges which would prevent dissolved oxygen violations to be calculated for point source discharges.

For Oxygen Demand during the spring, summer and fall, April through November the assimilative capacity of Bear Creek was calculated as a maximum instream concentration of:

0.25 mg/l Ammonia
2.0 mg/l CBOD
3.0 mg/l total oxygen demand

These criteria allow greater loads from the Ashland Sewage treatment plant than those which would be calculated using the dilution rule. These criteria also assume that oxygen is available in Bear Creek for assimilating point source loads.

During the extreme low flow conditions which occur following the irrigation season the dissolved oxygen standard is violated above the STP. This finding indicates that very little assimilative capacity exists. Current nonpoint source and background loads exceed the assimilative capacity for Bear Creek during summer low flow conditions. Any potential summer WLAs for point sources must assume that nonpoint source controls will be effective, achieve a specified load allocations, and provide some allocable load for the point source.

A stream's ability for reaeration is dependent on physical factors such as velocity and depth. The rate at which oxygen is consumed is dependent on temperature and the oxygen demand loads. It is possible to describe different loads for different physical conditions.

Temperature in Bear Creek varies from near 8 degrees C in the winter to above 26 degrees in the summer. This variation in temperature influences the rate at which oxygen is consumed and therefore affects the assimilative capacity of Bear Creek. The loading capacity for oxygen demand in Bear Creek may be defined for both winter and summer conditions. Winter conditions, based on a temperature range of a median of 8 mg/l with 90% of measured temperatures below 10 degrees, occurs from December through March.

Stream gradient and velocity decreases as water travels downstream along Bear Creek. The ability for reaeration decreases as velocity decreases. Therefore the assimilative capacity and the TMDL is dependent on where oxygen demand loads are discharged into Bear Creek. The assimilative capacity at any location is also dependent on what occurs upstream of that location. The assimilative capacity for CBOD and NBOD will depend on the total oxygen demand capacity allocated for each parameters. For defining the assimilative capacity of Bear Creek the following simplifying assumptions were made:

The Ashland STP would continue to discharge when possible.

The Ashland STP will use the available assimilative capacity at the point of discharge.

During the winter months instream dissolved oxygen above the Ashland STP is at or near saturation

For oxygen demand in the winter, approximately December through March, the assimilative capacity of Bear Creek was calculated as a maximum instream concentration of:

1 mg/l Ammonia (NH₃-NH₄ as N)
3 mg/l CBOD
7.3 mg/l total oxygen demand

POINT SOURCE WLAs

ASHLAND STP:

Achieving water quality standards under the TMDL process will require modifying existing treatment facilities. The Ashland STP will therefore be required to achieve the minimum design requirements for the basin.

Implementation programs applicable to all basins is described in OAR 340-41-120. Part 2(c) of this rule states:

Wherever minimum design criteria for waste treatment and control facilities set forth in this plan are more stringent than applicable

federal standards and treatment levels currently being provided, upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities.

Minimum design requirements are described in OAR 340-41-375(1). Paragraph (a) of this rule states:

During period of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

The Ashland STP currently is designed for monthly average concentrations of 20 mg/l BOD and 20 mg/l SS.

Paragraph (c) of the minimum design rule states:

Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of the receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise approved by the EQC.

The dilution rule was a component of the 1975 basin management plan for the Rogue Basin, including Bear Creek. The intent of the Commission when adopting this rule is described in the basin plan.

The intent of this section [dilution rule] is to assure that following a high degree of treatment, effluents are adequately diluted to protect the public health, aesthetics, aquatic life and beneficial uses of the waterway. It is further intended that this section be one of the primary mechanisms to insure protection of water quality in headwater stream.

The intent is for the design criteria to be applied to the dilution of waste, not necessarily dissolved oxygen criteria. As a design criteria it is applied to design conditions of the treatment plant. For Ashland, with a design condition of 20 mg/l monthly average BOD and an average summer flow of 3.1 mgd, would require nearly 100 cfs for adequate dilution. Observed low flows past Ashland have been below 5 cfs.

The Environmental Protection Agency recommends that the seven day average low flow that occurs once every ten years (7Q10) be used for calculating waste loads based on available dilution. This 7Q10 for Bear Creek at Medford is 2 cfs. There is not a historical flow record for Bear Creek at Ashland and the 7Q10 can not be calculated. Minimum observed flows of 5 cfs provide a reasonable measurement of the critical low flow conditions. At low flow conditions of 5 cfs in Bear Creek the design effluent concentration from Ashland would have to be 1.0 mg/l BOD to achieve the dilution rule.

The Oregon dilution rule can be used to calculate WLAs for the Ashland Sewage Treatment Plant. Tables 1 and 2 present the proposed flow based Waste Load Allocation for the Ashland STP for the summer low flow and irrigation season, and the winter season high flow conditions.

Table 1
 Potential WLA for total BOD from the Ashland STP
 for the irrigation season and low flow conditions
 in Bear Creek

Stream Flow Past Ashland	Total Oxygen Demand From the Ashland STP (lbs/day)	Instream Concentration
Below 10 cfs (5 cfs)	27	no increase
10 - 30 cfs	54	1.7 mg/l BOD
30 - 60 cfs	160	2.1 mg/l BOD
Greater than 60 cfs	320	2.3 mg/l BOD

Table 2
 Potential WLA for total BOD from the Ashland STP
 for the Wet weather season conditions
 in Bear Creek

Stream Flow	Total Oxygen Demand From the Ashland STP (lbs/day)	Instream Concentration
Below 70 cfs (30 cfs)	160	2.1 mg/l BOD
70 - 150 cfs	375	2.3 mg/l BOD
150 - 300 cfs	800	2.4 mg/l BOD
Greater than 300 cfs	1610	2.5 mg/l BOD

These waste load allocations for the Ashland STP are based on existing Oregon Administrative Dilution Rules Minimum Design Criteria for Treatment for Control of Wastes OAR 340-41-375(1)(c). The load from the Ashland STP would increase instream BOD concentrations to 2.5 mg/l BOD. The proposed upstream load allocation is based on achieving an instream criteria of 1.5 mg/l BOD.

The Department's analysis indicates that the design requirements would achieve the instream water quality standards under most flow conditions.

At the design flow of 3.1 MGD and existing concentrations, the Ashland STP would discharge a median of nearly 1400 lbs/ of total oxygen demand (ammonia + carbonaceous). Current loads are much less than this ranging between 700 - 800 lbs/day. Existing total oxygen demand concentrations range from 3.2 - 7.7 mg/l at Valley View road below the STP discharge. Available information

suggests that adequate dilution will not be available for the Ashland STP for several months of the year.

During the irrigation season, Ashland STP provides 75 - 80 percent of the total oxygen demand at the point where Ashland STP effluent enters Bear Creek. During low flow conditions in the fall, the Ashland STP provides over 95% of the oxygen demand at the point where the effluent joins Bear Creek. Data indicates that nitrogenous demands are a key component of the observed oxygen depletion below Ashland. The Ashland STP provides nearly all of the nitrogenous oxygen demand.

Critical stream flows appear to occur following the irrigation season in the late fall through the winter. The Department has measured stream flows at the Ashland STP of near 5 cfs during 1988. These low flow conditions may persist for several months following the irrigation season. Low flow conditions are due to detention of water for irrigation and naturally occurring low flow. As a result, there is inadequate dilution for assimilating the effluent from the Ashland STP.

Table 3 translates the Department's site specific analysis into a potential flow based waste load allocation for the Ashland Sewage Treatment Plant. Of the total maximum daily load 1.5 mg/l total oxygen demand (Ammonia and CBOD demands) were allocated to upstream background and nonpoint sources.

Table 3
Potential WLA for Ashland STP

Stream flow Past Ashland	Total Oxygen Demand From Ashland STP (lbs/day)
Below 10 cfs (5 cfs)	39
10 - 30 cfs	90
30 - 60 cfs	294
Greater than 60 cfs	599

Table 4 calculates potential WLAs for ammonia and BOD₅ for the Ashland Sewage Treatment Plant for winter conditions based on the Departments site specific analysis.

Table 4
 Potential WLA for Ammonia and BOD₅ from the Ashland STP
 for the Winter Conditions
 in Bear Creek

Stream flow	Ammonia	Total BOD	Carbonaceous BOD ₅
Less than 30 cfs	80	450	102
30 - 70 cfs	155	900	225
70 - 150 cfs	360	2120	550
150 - 300 cfs	775	4500	1120

LOG POND EFFLUENT:

Log pond effluent provides a major source of oxygen demand to Bear Creek. Log pond effluent characteristically has high concentrations BOD, typically near 50 mg/l and high suspended solids. Three companies have either general or NPDES permits for discharging log pond/storage deck waste to Bear Creek or its tributaries.

KOGAP Manufacturing General Permit	Hansen Creek - Bear Creek RM 11
Medford Corporation General Permit	Bear Creek RM 8.0
Boise Cascade Corp. NPDES Permit	Jackson Cr. - Bear Creek RM 4.5
Timber Products Co.	Not Specified

The permits do not allow discharge from May 1 through October 31. General permits allow discharge when the amount of precipitation precludes holding and require 50:1 dilution in the receiving stream to discharge. The NPDES permit allows discharge during the wet season when rainfall exceeds evaporation.

Log pond discharges, either directly or via tributary, occur in a depositional section of Bear Creek. Much of the suspended solids load may settle out increasing the benthic oxygen demand. The lower slope and velocities observed in this section result in less assimilative capacity than in upper sections of Bear Creek.

The load from the log pond discharges, and the effect on Bear Creek has not been well documented by the Department. Grab samples have been collected to characterize the waste stream. On one occasion the Department determined the load from the MEDCO discharge to Bear Creek. Effluent from Medco was found to be low in dissolved oxygen concentration and high in both BOD and suspended solids. The results were similar to information provided to the

Department in a complaint by the Northwest Steelheaders. The Medco storm drain BOD load is estimated as 150 - 300 lbs per day when discharging.

Numerous investigations have demonstrated the harmful effects of wood fiber discharged to a stream (USEPA 1976). Several studies evaluating the effect of flow through log ponds and log storage on water quality were conducted in Oregon during the early 1970s. In summary, these studies found that log pond effluent had low dissolved oxygen, high BOD, and enough nutrients to support algal growth. Log pond effluent was found to negatively impact benthic macroinvertebrates in stream. Runoff from "wet decks" was found to have pollution characteristics equal to or greater than waters from flow through log ponds. Following their study, EPA recommended that runoff from wet decks should not be discharged directly to receiving water.

There is no summer allocation for log pond effluent. Although at least one log pond discharges routinely during the summer, this is not a permitted condition. The proposed WLA for log ponds is based on no log pond discharge during summer conditions.

During the winter, WLAs will be required for log pond effluent. Log pond effluent provides significant loads of carbonaceous oxygen demand to Bear Creek. Existing permits for log ponds require 50:1 dilution for discharge. Discharges now are permitted when rainfall conditions preclude holding. These conditions are not being met by all of the log ponds.

Of the permitted log ponds, two discharge to tributaries of Bear Creek. These tributaries are identified as the receiving waters for these permits. Log pond and log deck runoff does not achieve the required 50:1 dilution in these tributaries. The Medco Corporation discharges log pond effluent directly to Bear Creek. Discharge from Medco occurs when 50:1 dilution is not available in Bear Creek. Numerous complaints have been received by the Department and by the local Council of Government's water quality personnel. This apparently continuous discharge provides a significant oxygen demand load to Bear Creek.

The WLAs for the permitted log ponds are dependent on loads assigned to nonpoint sources and the Ashland STP. The potential allocations discussed are designed to achieve an instream concentration of 2.5 mg/l BOD as measured at Kirtland Road. This process addresses water quality impacts on Bear Creek but not the tributaries. Achieving these WLAs would not necessarily protect the beneficial uses of the tributary streams. The potential allocations would increase instream Carbonaceous BOD₅ by 0.75 mg/l. The remaining load under this potential strategy has been allocated to nonpoint sources and upstream inputs.

Stream Flow at Medford	Log Pond Effluent Waste Load Allocations BOD ₅
0 - 70 cfs	No Discharge
70 - 150 cfs	95 lbs/day
150 - 300 cfs	200 lbs/day
Greater than 300 cfs	400 lbs/day

NONPOINT SOURCE LAS

URBAN RUNOFFS:

Urban runoff is a significant source of oxygen demand load to Bear Creek. Runoff from forested land use areas, do not appear to provide excessive oxygen demand loads.

Nonpoint source load allocations were estimated based on general land use categories. Land use was tabulated for three subsections of Bear Creek. These subsections correspond to the natural drainage of Bear Creek. Loads and stream flow conditions were calculated using literature runoff coefficients for the land uses and observed BOD concentrations.

The following table describes an example of a potential load allocation for the entire urban area within the Bear Creek Basin for wet weather conditions.

Potential Urban BOD₅ Load Allocations
Wet Weather Conditions

Stream Flow at Medford	BOD ₅ lbs/day
Less than 70 cfs (35)	80
70 - 150 cfs	162
150 - 300 cfs	350
Greater than 300 cfs	700

PHOSPHORUS TMDL

There have been many studies of the response of lotic periphyton communities to nutrient additions but our ability to extrapolate from these findings and to predict quantitative algal responses to increased or decreased loadings of nutrients is limited.

There are three major nutrients, Phosphorus, Nitrogen, and Carbon. Carbon is readily available from air. Several species of periphyton can use atmospheric nitrogen, and it is therefore only partly controllable. Nitrogen is often more ubiquitous in nature making it less controllable than phosphorus. Phosphorus is usually limiting under natural conditions and is most readily controllable by human activities. Therefore, phosphorus is usually the nutrient selected for nutrient control strategies. However, several researchers suggested that nitrogen has been found to be the limiting nutrient in several streams.

Algal assays provide a quantitative measurement of the limiting nutrient. Two algal assays were conducted using aliquotes of water collected from Bear Creek. A portions of each sample was retained for chemical analysis. Both assays were conducted during the irrigation season. The algal assay growth potential was measured as dry weight and was closely correlated with both inorganic nitrogen and total phosphorus. The algal assay growth potential

was 2 to 3 times greater from sites below the Ashland STP compared to upstream sites. Nitrogen is currently the major nutrient in lowest proportion of algae requirements below the Ashland STP.

Three separate surveys were conducted using artificial substrate to measure initial colonization and growth of periphyton in Bear Creek and Little Butte Creek. Artificial substrate were used to provide a uniform substrate type, area of measurement, and orientation to the stream. Ash free dry weight was used to measure the biomass accumulated over the ten day incubation period (Standard Methods). Sites for substrate were selected that had similar flow velocities, light availability, and stream depth.

The first survey was primarily used to compare and select from several substrate types and sample area. Plastic tile plates were selected for substrate. The results of the following two surveys is presented below:

Location	Ash Free Dry Weight August 1988	Mg/Meter squared September 1988
[Bear Creek]		
Mountain Avenue	365	540
Above Ashland STP	550	900
Below Ashland STP	330	627
Phoenix	1200	2045
Central Point	3100	2920
[Little Butte]		
Brownsboro	690	340
Lake Creek	640	320

Multiple regression was used to evaluate the correlation of the median value for initial colonization and biomass to several variables including nutrient concentration, stream velocity, sample depth, and light availability (Welch et. al. 1986). Because of apparent toxicity, data from the site immediately below the Ashland STP was voided for this analysis. Effluent toxicity measured by the Department, and levels of chlorine from the Ashland STP above chronic toxicity levels may have reduced the periphyton colonization and growth in this section of Bear Creek.

In the August survey, over 96% of the variation in periphyton growth could be accounted for by variation in nutrient concentration, stream velocity, and depth. Similar to other studies the initial colonization and growth of periphyton was enhanced by slower velocities.

In the September surveys, over 95% of the variation in periphyton growth could be accounted for by variation in nutrient concentration. Both total phosphorus and inorganic nitrogen were closely correlated with periphyton increase. Inorganic nitrogen appeared to be the parameter best correlated with initial colonization and growth of periphyton on the artificial substrate over the ten day incubation period.

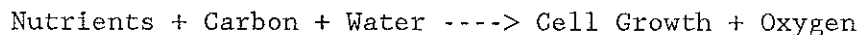
Primary productivity of periphyton in Bear Creek can be related to demand changes in dissolved oxygen. The dissolved oxygen changes are the integrated effects of photosynthesis that is carried out during the

photoperiod by the benthic periphyton and the suspended periphyton algae. Light and dark bottle test were used to correct for phytoplankton photosynthesis.

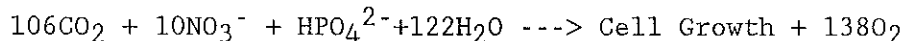
Daily fluctuations in photosynthesis are imposed on a relatively steady demand of respiratory activity. The rate of change in stream dissolved oxygen is represented by several rates, photosyntheses, respiration, and reaeration. The net result of these rates is measured as oxygen load throughout the day.

	August		October		November	
	Daily Change in DO (mg/l)	Net DO Produced MG/L-D	Daily Change in DO (mg/l)	Net DO Produced MG/L-D	Daily Change in DO (mg/l)	Net DO Produced MG/L-D
Mt Avenue	1.2	3.5	1.5	3.8	0.6	0.7
Eagle Mill	1.3	3.7	2.1	5.9	1.5	1.9
Valley View	1.3	4.1	1.2	----	1.6	0.2
Barnett Rd	4.8	17.5	5.1	14.3	2.7	10.0
Kirtland Rd.	6.9	26.5	4.6	14.4	3.1	11.3
[Little Butte]						
Lake Creek	1.6	8.0	0.9	2.3	1.1	1.5
Brownsboro	1.7	9.0	1.6	5.0	0.8	1.2

The increased oxygen production observed in the lower sections of Bear Creek is the result of increased photosynthesis. Photosynthesis is the process by which green plants use solar energy and nutrients to grow. The growth process can be described simply as:



A more detailed balance definition would be:



Increases in pH due to photosynthesis is primarily the result of the uptake of CO₂, a component of the carbonate alkalinity in water. In fresh water carbonate alkalinity provides most of the buffering capacity of water. As the buffering capacity is consumed pH changes occur. Carbonate alkalinity [ALK] can be defined as:

$$[\text{ALK}] = [\text{HCO}_3^-] + 2[\text{CO}_3^{2-}] + [\text{OH}^-] - [\text{H}^+]$$

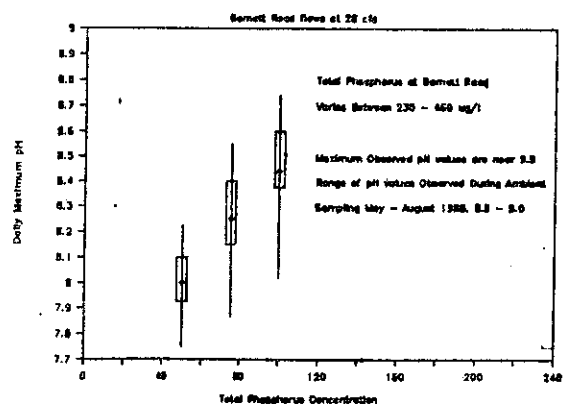
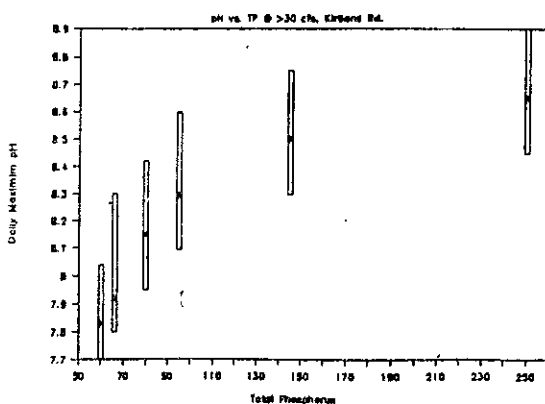
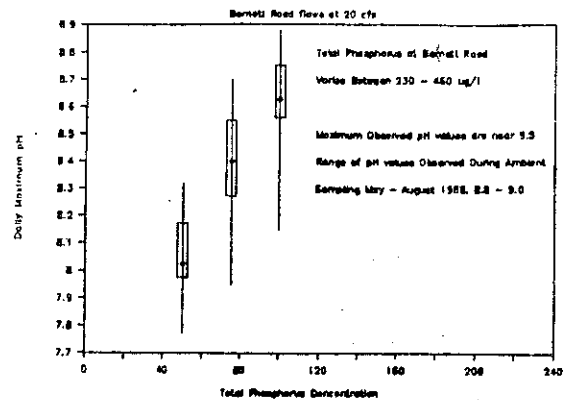
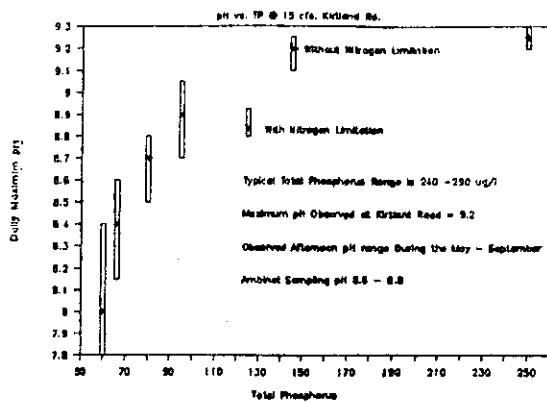
Consumption of CO₂ through photosynthesis does not change the alkalinity. Since the charge balance must be maintained, the loss of CO₂ must be accompanied by an equal loss of [H] and increase in [OH]. The loss of free hydrogen [H] ions in solution is measured as an increase in pH. This equations combined may be used to stoichiometrically explain the observed increases in pH.

Knowing the initial pH and total alkalinity in Bear Creek, the concentration of carbonate species can be calculated. By assuming the diurnal oxygen production is due to photosynthesis the pH change can be related directly to

algal growth. These relationships were used to evaluate the amount of periphyton growth reduction necessary to influence the pH.

These are several variables that influence this analysis. Alkalinity and initial pH values were measured at the Diurnal sampling points in Bear Creek. The observed ranges of these parameters was used for to evaluate the potential maximum pH under different algal growth conditions. Therefore, a range of potential maximum daily pH values is presented rather than a single estimate.

Stream flow also effects the relationship between pH and periphyton photosynthesis. The periphyton are fixed to the substrate and have a relatively constant area for growth. Increased volume of water provides a greater amount of CO₂ in the water column. Since there is more mass of buffering capacity at greater flow, relatively less variation in pH would be expected for an equal amount of algal growth.



Cursory examination of the available data shows that the amount of periphyton growth is increased below the Ashland STP. In sites below the Ashland STP, the pH is routinely violated, much higher colonization and accrual rates are observed on substrate below the STP than on substrate in Bear Creek above the STP.

Empirical analysis of the data suggests that nutrient concentration is directly related to the increased periphyton production. Under current conditions inorganic nitrogen appears to be the limiting nutrient below Ashland STP. These results are constant with the results of the USGS (1980) study which stated that " These nutrients [nitrogen and phosphorus], along with the particle size of the streambed material, are believed to control the biological productivity. This report also indicated nitrogen control "Larger diel DO and pH fluctuations appear to be associated with higher concentrations of nitrate".

Sources of Nutrients:

The Ashland Sewage Treatment Plant is the primary source of nutrients to Bear Creek. Other sources include log pond discharge, agriculture nonpoint source and irrigation return flows, and urban runoff.

At the point where Ashland STP effluent enters Bear Creek, between 90 and, during low flow conditions, over 95% of the total phosphorus in Bear Creek is provided by the STP. At the point of mixing, over 90% of the inorganic nitrogen is supplied from the Ashland STP.

There are several irrigation withdrawals from Bear Creek below the Ashland STP. These withdrawals will carry nutrients which originated from the Ashland STP through the irrigation system. A significant portion of the phosphorus and inorganic nitrogen in irrigation return flows, and the tributaries carrying return flows, may originate at the Ashland STP.

Another nonpoint source of nitrate is groundwater. The USGS (1980) report suggested that the high levels of nitrate observed during non-irrigation regimes were from groundwater recharge. Groundwater supplying the Bear Creek Basin has high levels of nitrate.

Log pond overflow is a source of phosphorus and inorganic nitrogen to Bear creek. USGS (1980) data for log pond overflow had an average of 250 ug/l Ortho Phosphorus and 270 ug/l inorganic nitrogen. At estimated flows of up to 75 gallons per minute these the log pond effluent provides 0.35 lbs/day of ortho phosphorus and 0.375 lbs/day of inorganic nitrogen. A grab sample collected by the Department resulted in effluent concentrations of 1.1 mg/l total phosphorus and a discharge of 0.75 cfs. This flow and concentration equal a load of 4.5 lbs/ day total phosphorus.

Urban runoff has not been well quantified for the Bear Creek basin. Typically, urban runoff has high levels of phosphorus and nitrogen. Phosphorus is usually in limiting proportion in urban runoff.

Phosphorus control provides greatest assurance of reducing excessive periphyton growth in Bear Creek. Inorganic nitrogen is in lowest proportion

below Ashland under current loadings. This is an expected result of overwhelming a stream with municipal effluent. The major source of both nitrogen and phosphorus is the Ashland STP. Point source control strategies may reduce the loads of both nutrients. However, phosphorus is the nutrient most controllable by human activities, especially for nonpoint source controls.

There are several concerns with nitrogen limitation as a control strategy. Nitrogen can be fixed from the atmosphere by several species of algae and plants. Groundwater in the Bear Creek basin contains high levels of inorganic nitrogen. Although the Ashland STP is the major source of inorganic nitrogen, the supply of inorganic nitrogen is only partially controllable by human activities.

The point source discharges are the major sources of phosphorus and controllable by human activities. The phosphorus loads from irrigation return flows can be regulated by minimizing returns, or by employing best management practices for phosphorus removal. Urban phosphorus loads can be reduced by eliminating discharges of nutrient rich waters, such as fruit processors, to storm drains, minimizing direct discharge to Bear Creek of urban storm water, and by employing urban BMPs for nutrient removal.

Nitrogen limitation offers the advantage of potentially having direct reductions in algal biomass for reductions in nutrient loads. Disadvantages of nitrogen limitation would be that nitrogen sources are not all controllable by human activities. Groundwater recharge may provide significant nitrogen loads. Nitrogen is usually not the limiting nutrient in nonpoint source runoff. Nonpoint source control plans would have to remove nitrogen. Since nitrate can move through the soil horizon, nonpoint source controls that act to maintain the water table may remove surface loads may increase groundwater contributions.

There is uncertainty in predicting the resultant daily maximum pH effected by a nutrient control program. The Federal Register (40 CFR, Part 130.7(c)(1)) states for every pollutant other than heat, WLAs/LAs/ and TMDLs shall be established at levels necessary to attain and maintain the applicable narrative and numerical WQS (water quality standards) with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

OAR 340-41-365(3) States that where natural quality parameters of waters of the Rouge Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard. This rule suggests that if background nutrient levels can be effective at reducing periphyton growth and pH, but may not achieve standard that background nutrient levels become the standard.

Based on the Department's analysis, nutrient reduction will lead to improved water quality. Under typical summer conditions a phosphorus concentration of 60 - 80 ug/l provides reasonable assurance of achieving the pH standard. During low flow conditions criteria to achieve standard may be below

background levels. Based on this assessment and the above guidance an instream criteria of 80 ug/l was used to define the LAs, and WLAs.

The pH violations due to periphyton growth is a seasonal water quality problem. During the winter cold temperatures, low sunlight availability, and high flows reduce the periphyton growth and pH variations. Nutrient limitations are required when physical factors will not limit algal growth. This period extends from April through October.

Nonpoint sources and background loads above the Ashland STP exceed the proposed criteria. Achieving the TMDL will require significant nutrient reductions from nonpoint sources as well as point sources. During low flow conditions point source discharges should not exceed proposed ambient concentrations. The WLA for the log ponds is zero. This allocation is based on the no-discharge requirements during low flow conditions stated in their existing permits. The load for the Ashland STP is calculated as:

$$\text{Ashland STP } Q(3.1 \text{ mgd}) * 80 \text{ ug/l} * K (0.0083) = 2.1 \text{ lbs/d}$$

Log pond effluent provides an existing point source of phosphorus to Bear Creek. Existing permits allow no discharge during the summer period. No WLAs are provided phosphorus discharged from log ponds.

Nonpoint source load allocations may be divided by land use type, sub-basin and political jurisdiction. However, during the irrigation season the flow in Bear Creek is controlled more by irrigation demands than ambient conditions. The proposed load allocations for urban areas will be a fixed value independent of flow. Allocations will be calculated on achieving 80 ug/l of total phosphorus under low flow conditions. Loads from irrigation return flows allocations will be allocated to agriculture. The Agriculture allocations will vary with flow. This method assumes most of the flow variation is due to irrigation demands.

SUMMARY OF CONCERNS

TOXICS:

Ammonia concentrations frequently exceed the chronic toxicity criteria at the Valley View sampling location. Similar findings were reported by the USGS in 1980. Ammonia reductions necessary to achieve oxygen demand loads will prevent ammonia toxicity.

Chlorine loads discharged from the Ashland STP were calculated to exceed acute toxicity levels in Bear Creek. Effluent bio-assays conducted by the Department on Ashland effluent resulted in acute toxicity at effluent concentration greater than 42% effluent. The no observable effect for chronic toxicity was found to be 5% effluent. The dilution requirement based on chronic toxicity is 20:1. There is some concern that the effluent bio-assay was influenced by chlorine toxicity. The Ashland STP program plan will require assessment of effluent toxicity and effective elimination of chlorine toxicity.

The number and diversity of macroinvertebrates, benthic bugs, provides a well accepted index of the biological health of a stream. In stream samples and artificial substrate samples were collected from three locations in Bear Creek. Results were consistent between sample types and similar to those reported by the USGS in 1977.

Reduced benthic populations were observed from upstream to downstream sites in Bear Creek. The Phoenix site showed slight impairment compared to the Mountain Avenue site. Excessive impairment was observed at Central Point compared to the upstream Mountain Avenue site. Because of similar results between sample type the impairment appears to be the result of a decline in water quality.

Two sediment sample were collected from Bear Creek near Medford as part of a toxic assessment. Although not listed as water quality limited due to toxics, Bear Creek sediment had elevated levels of DDT, DDD, DDE, Cu, Pb, Zn, and Phthalate. The source of these pollutants has not been identified.

Discharge Point of Ashland STP:

Ashland STP discharges to Ashland Creek which then flows to Bear Creek. Some assimilation, through reaeration, occurs in Ashland Creek. Due to low dilution in Ashland Creek the DO standard, chlorine toxicity, and ammonia toxicity standards would be expected to be violated. Ashland Creek and a portion of Bear Creek are identified as the mixing zone for the Ashland STP. Current mixing zone policy states that the mixing zone should not extend across a stream. The beneficial uses of Ashland Creek include spawning and rearing of salmonids.

Assimilation of Phosphorus:

Instream assimilation occurs in Bear Creek. Periphyton can drive instream levels of nutrients to very low levels. The amount of assimilation will depend on the biomass of periphyton. Available literature indicates that internal cycling within the benthic mats can provide much of the nutrient requirements for growth. Under existing conditions, variation in mass phosphorus discharges can explain the variation in observed phosphorus concentration at downstream sites. Instream assimilation has not been included in the proposed load allocations.

Effect on Local Communities:

The TMDL defines the assimilative capacity of Bear Creek and proportions the available load. Options have not been selected for achieving the WLAs and LAs. The TMDL will require program plans from point source dischargers, agricultural NPS including irrigation return flows, and urban NPS. These plans will address the potential options, potential costs, and implementation of potential options.

The Ashland STP has several overlapping concerns to address. There is inadequate dilution to assimilate the effluent from the STP for much of the Year. Nutrient reductions to, or near, ambient levels will be required from

early spring through the fall. These reductions include, and extend beyond the irrigation season.

Log pond point sources discharge untreated, high strength oxygen demanding waste into Bear Creek and its tributaries. The waste also supplies loads of nutrients. Permit conditions state that discharge may occur only during the wet weather months (November through April), when conditions preclude holding, and when dilution in the receiving water is 50:1. These conditions are not being met. Available information indicates that discharge from one, or more log ponds has continued routinely for the past 10 years. The TMDL will require that the seasonal discharge conditions be met. Additional load reductions may be necessary during the winter wet weather period.

There are several policy issues that will be decided as WLAs are defined, options reviewed, and compliance plans approved. These include the requirement for the Ashland STP to achieve basin design criteria unless otherwise specified by the Commission. Achieving basin requirements may be more expensive than achieving WLAs. Since the Commission has not specified alternative requirements for dilution at Ashland, the Department believes that program plans need to describe alternatives for achieving all existing basin requirements as well as the WLAs. Similarly, the Department believes that all existing permit conditions must be met unless otherwise modified by the Commission. Log pond discharges must meet the 50 to 1 dilution requirement as well as the TMDL requirements.

The defined mixing zone for the Ashland STP may not be appropriate. Conditions that may not be met in the mixing zone include the mixing zone should be less than the total stream width and be free of materials in concentrations that will cause acute toxicity. The Ashland STP will be required to provide the Department all information necessary to define the appropriate mixing zone as options are reviewed.

Agriculture NPS/Irrigation Return Flows:

The proposed rule will require the Department of Agriculture to develop a program plan for describing BMPs for nutrient control in the Bear Creek Basin. Options will include BMPs to minimize irrigation outflows, and passive treatment of the return flows. The USGS study (1980) concluded that the wetland area of Whetstone Creek acts to reduce nutrients, bacteria, and solids from return flows. The report suggests that ponds/settling basins and other existing BMPs could improve the quality of irrigation return waters. Agriculture in Bear Creek basin has a history of instituting BMPs.

Several BMPS are described in existing literature for nutrient control in agricultural areas. Requirements for achieving TMDLs is expected to be consistent with continuing agricultural NPS control plans in Bear Creek basin.

Urban NPS:

The TMDL will require the cities and county within the Bear Creek basin to develop an urban NPS program plan. The plan will describe options, time

schedule, and costs to achieve the LAs for nutrients and oxygen demand. The Rouge Valley Council of Governments (RVCOG) may act as a coordinating entity in developing a basin-wide urban NPS control plan. Requirements of achieving the TMDL will increase the storm water quality control requirements and costs in the basin. The requirements will be consistent with the RVCOG goal to improve water quality conditions in Bear Creek.

Fecal Coliform:

Fecal coliform violations are routine at all stations sampled in the Bear Creek Basin. The RVCOG has an on going long term program for reducing the fecal coliform concentrations in Bear Creek. The requirements of the NPS load allocations can be expected to assist the RVCOG program for fecal coliform reduction. At this time a fecal coliform TMDL is not proposed for Bear Creek.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: H
Division: Water Quality
Section: Planning/Monitoring

SUBJECT:

Hearing authorization to adopt rules which will establish instream criteria for total phosphorus, ammonia nitrogen, and biochemical oxygen demand in Bear Creek.

PURPOSE:

Water Quality standards are violated in Bear Creek basin for pH, dissolved oxygen, and ammonia toxicity standards. The criteria will provide the basis for developing and allocating the total maximum daily loads (TMDLs) for nutrients and biochemical oxygen demand in Bear Creek, a tributary to the Rogue River. The TMDLs are required to achieve dissolved oxygen, pH, and ammonia toxicity standards. Achieving water quality standards is required to protect the recognized beneficial uses of fish and aquatic life, salmonid spawning and rearing, anadromous fish passage, fishing, and aesthetic quality.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment C
 - Public Notice Attachment D

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 Proposed Order Attachment

- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: (specify) Attachment

DESCRIPTION OF REQUESTED ACTION:

The proposed rule would:

1. Identify the assimilative capacity of Bear Creek for nutrients and biochemical oxygen demand by season.
2. Define the time frame for the Department to publish interim waste load and load allocations based on the proposed criteria established in the rule. Interim allocations will be used to develop and review program plans.
3. Require the point sources which discharge to Bear Creek to develop and submit to the Department a program plan which describes strategies, options, and costs for achieving specified allocations.
4. Require that nonpoint source program plans which describe strategies and options for achieving load allocations be submitted to the Department by Jackson County and the incorporated cities within the Bear Creek basin.
5. Require that memorandums of agreement between DEQ and the Departments of Agriculture and Forestry include program plans for agricultural and forested nonpoint sources, respectively.

AUTHORITY/NEED FOR ACTION:

- Required by Statute: ORS 468.735 Attachment B
 Enactment Date: _____
- Statutory Authority: _____ Attachment
- Pursuant to Rule: _____ Attachment
- Pursuant to Federal Law/Rule: _____ Attachment

- Other: Implement Public Law 92-500 as amended, specifically Section 303. Attachment B

X Time Constraints:

The Department is required under a Federal District Court Consent Decree to establish TMDLs for identified water quality limited streams at the rate of 20% annually, but in no event less than two annually. Allocations must be established for Bear Creek to comply with the requirements stated in the consent decree. Oregon's failure to establish allocations will require the Environmental Protection Agency to notice in the Federal Register proposed action within 90 days after the deadline.

DEVELOPMENTAL BACKGROUND:

<u> </u> Advisory Committee Report/Recommendation	Attachment <u> </u>
<u> </u> Hearing Officer's Report/Recommendations	Attachment <u> </u>
<u> </u> Response to Testimony/Comments	Attachment <u> </u>
<u>X</u> Prior EQC Agenda Items: (list)	
March 13, 1987, Agenda Item O	Attachment <u> </u>
(Not Attached)	
<u> </u> Other Related Reports/Rules/Statutes:	Attachment <u> </u>
<u>X</u> Supplemental Background Information	Attachment <u> E </u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

1. The City of Ashland operates the Ashland Sewage Treatment Plant (STP). The Ashland STP is the major source of nutrients and biochemical oxygen demand to Bear Creek. Bear Creek does not have enough flow to assimilate the waste from the Ashland STP. Inadequate dilution is most apparent in the late summer - fall when flows are routinely below 15 cubic feet per second (cfs).

Effluent limitations based on Bear Creek's assimilative capacity would require significant load reductions from the Ashland STP during the summer and late fall. Load reductions could occur through alternative disposal or improved treatment. Either option would be expected to increase cost of treatment for the City of Ashland.

The proposed rule will define a final compliance date and require a program plan which describes strategies and time frames for achieving the waste load allocations (WLAs). Several additional localized water quality issues and concerns, such as chlorine toxicity, are discussed in this staff report including the attached problem statement (Attachment E). The Department expects these local issues to be addressed prior to the compliance date.

Achieving water quality standards will require modifying existing treatment facilities. The Ashland STP will be required to achieve the minimum design requirements already described in OAR 340-41-375(1) for the basin as well as waste load allocations. These include achieving minimum treatment standards as well as meeting instream dilution requirements unless otherwise specified by the Commission. Both the intent and potential effect of the basin requirements are discussed in the attached problem assessment (Attachment E).

2. Industries with log ponds currently have either general or National Pollution Discharge Elimination System (NPDES) permits. Very little monitoring information is required by these permits. The proposed TMDL would require that the existing permit conditions of no discharge during the summer be met. This permit requirement is not being met by the Medco log pond. Achieving proposed winter WLAs may require additional controls. Existing general permit conditions for log ponds require 50 to 1 dilution of log pond runoff. This condition is not always met and may not be possible at some of the identified receiving stream discharge locations. Industries with discharge permits for log pond effluent will be required to submit program plans to the Department describing strategies and time frames for achieving the WLAs.
3. Nonpoint source controls from urban and agricultural areas will be required to achieve the proposed TMDLs. Increased cost may be associated with achieving the load allocations (LAs). Program plans identifying strategies and options for achieving the nonpoint source load allocations will be required from designated agriculture and forestry management agencies, as well as Jackson County and the incorporated cities within the Bear Creek Basin. The Rogue Valley Council of Governments currently coordinates a water quality program and may provide assistance and coordination of program plans within the basin.

The Department of Agriculture has been identified as the lead agency for agricultural nonpoint sources. The State Department of Forestry is the lead agency for state and private forest lands. Memorandums of Agreement between the DEQ and these Departments will describe appropriate program plans.

New tasks established by this rule will have to be assumed by existing staff. The added workload of this TMDL is significant. New tasks include development of interim allocations, program plan reviews, continuing proactive involvement with communities in the Bear Creek Basin, increased monitoring requirements and issuance of modified permits which incorporate compliance conditions, schedules and permit limitations based on wasteload allocations.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Summer limits of 100 micrograms per liter (ug/l) total phosphorus and 1000 ug/l of biochemical oxygen demand.

Achieving the 1000 ug/l biochemical oxygen demand limit would achieve the instream dissolved oxygen standard. The phosphorus limit is the Environmental Protection Agency's (EPA) guideline for the prevention of nuisance algal growths. This limit is above background and may not achieve the pH criteria at all flow conditions.

2. Phosphorus limits of 50 ug/l.

Achieving phosphorus criteria of 50 ug/l or less provides the greatest assurance of preventing pH violations at all flow conditions. Criteria sufficient to prevent pH violations at the low flow conditions appear to be below background concentrations. Under these conditions OAR 340-41-365(3) states that if numerical criteria are below background then background becomes the standard.

3. Phosphorus limits of 80 ug/l.

Estimates using the range of 60 - 80 ug/l total phosphorus criteria provide reasonable assurance of preventing pH violations at typical irrigation season flows in Bear Creek. During low flow conditions the expected pH values may exceed the standard of 8.5 but are expected to be below a pH of 9.0. The pH criteria of 9.0 is recommended by EPA to prevent toxicity to fish and aquatic life.

- 4) Nitrogen limitation criteria.

Nitrogen is currently the macronutrient in lowest proportion to algae uptake requirements in Bear Creek below Ashland. Nitrogen has been cited as being the limiting nutrient in some Western Oregon streams. However, nitrogen is the most mobile of the macronutrients. With high groundwater

nitrogen it is unlikely that nonpoint source control would be effective at controlling nitrogen to limiting levels in Bear Creek.

- 5) Oxygen Demand Criteria addressing both the ammonia and carbon demand components of biochemical oxygen demand. Separate limits are defined for winter and summer conditions.

Summer Irrigation and Low-Flow Conditions (Spring-Summer-Fall) Approximately April - November	Winter High Flow Conditions Approximately December - March
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(All units are in milligrams per liter)

Ammonia	0.25	1.0
*CBOD ₅	2.0	3.0
Instream BOD ₅	3.0	7.3

* Five day carbonaceous biochemical oxygen demand

These limits describe the maximum concentrations that could occur in Bear Creek and not exceed the dissolved oxygen criteria. The calculations involved simplifying assumptions described in the attached report. Allocations derived from these criteria could be dependent on these assumptions.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission adopt criteria described in Options 3 and 5.

Option 3 does not provide the assurance provided by Option 2 of preventing pH violations at all flow conditions. That assurance is impossible to provide. Criteria appear to be below background and would require nonpoint source controls to background levels. These controls may not be achievable.

Option 3 provides an achievable phosphorus criteria. Achieving this criteria will improve water quality and may obtain the pH standard under most flow conditions. Point source discharges under either option 2 or 3 would be required to treat to ambient levels. Option 3 provides an achievable criteria. Option 2, however, provides greater assurance of preventing pH violations.

Option 1 describes the observation that under current conditions there are times when no assimilative capacity exists at sampling locations above Ashland. Background and nonpoint source loads above the Ashland STP occasionally

utilize the entire assimilative capacity for oxygen. Option 5 describes the maximum assimilative capacity of Bear Creek for winter and summer conditions. Additional refinements are made to describe the components of oxygen demand. Option 5 allows both greater definition and flexibility in the allocation process.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rule is consistent with the approach for establishing TMDLs on water quality limited stream segments identified in EQC Agenda Item O, March 13, 1987.

The establishment of phosphorus and oxygen demand criteria are necessary to protect the recognized beneficial uses of Bear Creek.

The Federal Clean Water Act, under Section 303, requires that pollution limits termed Total Maximum Daily Loads be established in waters that do not meet standards, in either numerical or narrative form, even after technology based limitations have been applied.

In December 1986, the Northwest Environmental Defense Center filed suit in Federal District Court against the Environmental Protection Agency to ensure that total maximum daily loads would be established and implemented for waters in Oregon identified as being water quality limited. On June 3, 1987, Federal Judge James Burns signed a consent decree between NEDC and EPA describing a schedule for establishing TMDLs in Oregon. Bear Creek was one of the streams identified in the consent decree.

ISSUES FOR COMMISSION TO RESOLVE:

The final compliance date in the proposed rule is June 30, 1994. This proposed compliance date is consistent with the five year schedule proposed for other TMDLs. The City of Ashland has been cooperating with the Department throughout the project and has hired a consulting firm to prepare a program plan. A preliminary draft of this plan was provided to the Department for review. This program plan proposed a compliance date of 1995. In later conversations, the City of Ashland proposed a later compliance date of December 1996. The Department has not had the opportunity to review the program plans in detail. Preliminary review of the draft program plan by the Department did not suggest alternative compliance dates from the proposed schedule of 1994.

There are several issues that may be raised as the program plans are developed and reviewed. These issues include:

1. The proposed rule will require modifying the Ashland treatment plant operation. This modification will require that the treatment plant be upgraded to meet existing basin requirements as discussed in the staff report. The Commission may allow exemption of the dilution rule in the basin wide design criteria. The Commission may be asked to provide this exemption for Ashland. The staff does not view the establishment of a TMDL as superceding existing basin requirements. No technical or economical information has been presented which would justify exempting Ashland from this rule at this time. Staff suggests that program plans from Ashland address existing requirements as well as the WLAs as a way of identifying what needs to be done. The Department does not want to suggest that on the local issues such as toxicity that Ashland will have until 1994 to address them. In fact, the Department believes these issues should be addressed as quickly as practicable. The program plan will provide a means to schedule needed activities.
2. The mixing zone policy for the Rogue basin requires no acute toxicity within the mixing zone. Additionally, the mixing zone does not extend across a stream to allow for fish passage and migration. Ashland's mixing zone extends across and includes the lower quarter mile of Ashland Creek. Coho salmon are known to migrate into and spawn in Ashland Creek. The existing mixing zone may not be consistent with existing policy. The program plan from Ashland needs to provide information for all alternatives that allow the Department to evaluate the appropriateness of the mixing zone.
3. Existing receiving streams of log pond runoff are viewed as conduits for waste. These streams may not provide the fifty to one dilution required in general log pond permits. The Department does not view establishing a TMDL as superceding existing permit conditions. Program plans required from the industries need to address achieving all existing rules, permit conditions, as well as the requirements of the TMDL.

INTENDED FOLLOWUP ACTIONS:

File a hearing notice with the Secretary of State.

Notify local jurisdictions and interested citizens of public hearings and the 30-day comment period.

Meeting Date: April 14, 1989
Agenda Item: H
Page 9

Hold public hearing in Ashland.

Evaluate and respond to public comment.

Incorporate public input into the proposed rule based on the Department's evaluation.

Return to the Commission in July for final rule adoption.

Approved:

Section:

Neil J. Mullone

Division:

Wild & Wetlands

Director:

*Regina Taylor
for Fred Hansen*

Report Prepared By: Robert Baumgartner

Phone: 229-5877

Date Prepared: March 15, 1989

BB:crw
PM\WC4717
March 31, 1989

SPECIAL POLICIES AND GUIDELINES

340-41-385

1 In order to improve water quality within the Bear Creek subbasin to meet existing water quality standards for dissolved oxygen and pH, the following special rules for total maximum daily loads, waste load allocations, load allocations, and program plans are established.

(a) After the completion of wastewater control facilities and program plans approved by the Commission under this rule and no later than December 31, 1994, no activities shall be allowed and no wastewater shall be discharged to Bear Creek or its tributaries without the authorization of the Commission that cause the following parameters to be exceeded in Bear Creek:

Summer, Irrigation, and Low-Flow SeasonsApproximatelyApril 1 through November 30

<u>Ammonia Nitrogen</u> <u>Nitrogen as N (mg/l)</u>	<u>Instream Five Day</u> <u>Biochemical Oxygen</u> <u>Demand (mg/l)¹</u>	<u>Total Phosphorus</u> <u>as P (mg/l)</u>
<u>0.25</u>	<u>3.0</u>	<u>0.80</u>

Winter High Flow SeasonApproximatelyDecember 1 through March 31

<u>Ammonia Nitrogen</u> <u>Nitrogen as N (mg/l)</u>	<u>Instream Five Day</u> <u>Biochemical Oxygen</u> <u>Demand (mg/l)¹</u>
<u>1.0</u>	<u>7.0</u>

1 For the purposes of waste load allocations, the biochemical oxygen demand is calculated as the ammonia concentration multiplied by 4.35 and added to the measured effluent biochemical oxygen demand.

* Precise dates for complying with this rule may be conditioned on physical conditions, such as flow and temperature, of the receiving stream and shall be specified in individual permits or memorandums of understanding issued by the Department.

- (b) The Department shall within 60 days of adoption of these rules distribute initial waste load and load allocations to point and nonpoint sources in the basin. These loads are interim and may be redistributed upon conclusion of the approved program plans.
- (c) Within 90 days of adoption of these rules, the City of Ashland shall submit to the Department a program plan and time schedule describing how and when they will modify their sewerage facility to comply with this rule and all other applicable rules regulating waste discharges.
- (d) Within 90 days of adoption of these rules the industries permitted for log pond discharge, Boise Cascade Corporation, Kogap Manufacturing Company, and Medford Corporation shall submit program plans to the Department describing how and when they will modify their operations to comply with this rule and all other applicable rules regulating waste discharges.
- (e) Within 18 months after the adoption of these rules Jackson County and the incorporated cities within the Bear Creek subbasin shall submit to the Department a program plan for controlling urban runoff within their respective jurisdictions to comply with these rules.
- (f) Memorandums of Agreement developed following adoption of this rule between the Departments of Forestry and Agriculture and the Department of Environmental Quality shall require that program plans for achieving specified load allocations of state and private forest lands and agricultural lands respectively be developed within 18 months of rule adoption.
- (g) Program plans shall be reviewed and approved by the Commission. All proposed final program plans shall be subject to public comment and hearing prior to consideration for approval by the Commission.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt and amend rules.

(1) Legal Authority

ORS 468.735 provides that the Commission by rule may establish standards of quality and purity for waters of the state in accordance with the public policy set forth in ORS 468.710. ORS 183.545 requires a review every three years of state agency Administrative Rules to minimize the economic effect these rules may have on businesses. ORS 183.550 requires, among other factors, that public comments be considered in the review and evaluation of these rules. The Clean Water Act (Public Law 92-500, as amended) requires the states to hold public hearings, at least once every three years, to review applicable water quality standards. Section 303 of the Act further requires that Total Maximum Daily Loads be established for water quality limited stream segments.

(2) Need for the Rule

The Environmental Quality Commission, at its meeting on March 13, 1987, approved the process identified by the Department for establishing Total Maximum Daily Loads (TMDLs), including the proposed schedule for completing Phase I of the process for ten stream segments and one lake. To start the process, the Commission concurred with the Department's intent to place the Tualatin River TMDLs on 30-day notice for public review and comment, thus initiating the entire TMDL/WLA (Waste Load Allocation) process for Bear Creek.

(3) Principal Documents Relied Upon in this Rulemaking

Clean Water Act as amended in 1977.

Quality Criteria for Water, 1986. EPA.

Code of Federal Regulations, 1987 (40 CFR) Part 130 - Water Quality Planning and Management.

State/EPA Agreement, July 1987. Program Document for FY 1988.

Fiscal and Economic Impact Statement

Overall Impact

Adoption and implementation of the proposed amendments to water quality standards for the Bear Creek subbasin will result in increased cost for wastewater treatment and control. These increased costs will be limited to Ashland, the only community which discharges effluent to Bear Creek. The City of Ashland will receive specified waste load allocations (WLAs), to the extent that these waste load allocations require substantial and expensive improvements to treatment capability, there will be significant fiscal impacts. Cost associated with achieving the specified WLAs may not however be greater than the costs incurred to achieve existing minimum design criteria for treatment and control of wastes for the Rouge Basin (OAR 340-41-375).

Specific WLAs will be assigned to three industries with permits to discharge log pond effluent to Bear Creek. To the extent that these allocations require significant changes in operation procedures, there may be significant fiscal impacts.

The proposed rules will lead to the establishment of nonpoint source load allocations. The load allocations require implementation of management practices, passive treatments, and nonpoint source controls in urban and agricultural areas in the Bear Creek subbasin. To the extent that these load allocations require additional management practices and controls, there may be significant fiscal impacts.

The actual fiscal impacts to the communities cannot be described at this time because the cost for alternative options are not available. The proposed rule establishes dates for the submittal of program plans. A component of the program plan will be to described how and when various options and associated costs will be analyzed and described. When this information is available the cost effective alternatives can be described.

Although cost information is not available, it is possible to ascertain who may incur fiscal impacts, how they may be impacted, and where the impacts may occur. Local governments may be directly impacted. If capital investment is require, they will have to secure cash from bond sales or from loans. Operating expenses may increase to cover operation and maintenance of new facilities. Sewerage system users may indirectly impacted. Local governments may have to increase user charges to pay off the bonds and/or loans; system users would have to pay the increased charges. These users include homeowners, small businesses, and large businesses. If business operating expenses increase, the public may be indirectly impacted through increased product prices. Property owners could also be indirectly impacted through property tax increases if operating expenses increase for public institutions such as schools. Table 1 presents a summary of possible fiscal and economic impacts which could result from waste load allocation to Bear

Creek Basin streams. Once cost information is available, these possible impacts will be evaluated.

TABLE 1

SUMMARY OF POSSIBLE FISCAL IMPACTS--BEAR CREEK BASIN

WHO IS IMPACTED?	HOW ARE THEY IMPACTED?	WHERE ARE THEY IMPACTED?
Local Government	Bond Sale or Loan-Direct Operating Expenses-Direct	Cash Outlay-1 time Cash Outlays-Ongoing
General Public	Rate Increases-Indirect Price Increases-Indirect Tax Increases-Indirect	Cash Outlays-Ongoing Cash Outlays-Ongoing Cash Outlays-Annual
Small Businesses	Rate Increases-Indirect Increased Operating Expenses-Indirect Tax Increases-Indirect	Cash Outlays-Ongoing Cash Outlays-Ongoing Cash Outlays-Annual
Large Businesses	Rate Increases-Indirect Increased Operating Expenses-Indirect Tax Increases-Indirect	Cash Outlays-Ongoing Cash Outlays-Ongoing Cash Outlays-Annual

Probable Community Impacts:

Ashland. The City of Ashland's sewage treatment plant is the major source of nutrients and biochemical oxygen demand to Bear Creek. The discharge from Ashland STP is far in excess of the available dilution and assimilation capacity of Bear Creek during low flow conditions. The WLAs to this facility will require substantial facility modifications. The City is now initiating studies to describe and evaluate potential alternatives. Possible alternatives to meet the WLAs include improved treatment, irrigation, discharge to irrigation canals, discharge to the Bear Creek Valley Sanitary Authority, and land disposal. Ashland would be eligible for low interest loans from the State Revolving Fund.

Urban Areas. Urban areas within the basin include Medford, Phoenix, Central Point, Jacksonville, Talent, Ashland and unincorporated areas of Jackson County. The proposed rule will require these communities develop appropriate nonpoint source controls to achieve their specified Load Allocations. The Rouge Valley Council of Governments currently has a water quality program in the Bear Creek Basin. Additional costs are expected to achieve the LAs.

Agriculture. Agricultural return flows provide a significant load of nutrients and oxygen demand to Bear Creek. The Department of Agriculture is the designated management agency for agriculture

nonpoint source control. Achieving the load allocations may require identifying and adopting alternative best management practices.

Industry. Log pond discharges provide large loads of oxygen demand to Bear Creek. Three industries hold permits for the discharge of log pond effluent during rainfall events. Modifications to existing practices may be required to achieve specified mass loadings for the permitted log ponds. Pollution Control tax credits may be available to industrial sources to offset costs of additional pollution control facilities.

(5) Land Use Consistency

The Department has concluded that the proposed rule conforms with the statewide planning goals and guidelines.

GOAL 6 (Air, Water, and Land Resource Quality):

This proposal is designed to improve and maintain water quality in the Bear Creek subbasin by reducing pollutant loadings.

GOAL 11 (Public Facilities):

Compliance with the proposed rules would require the City of Ashland to provide program plans describing strategies for achieving pollution limits. Additional sewerage facilities may be required.

The proposed rules do not appear to conflict with other goals.

Public comment on any land use involved is welcome and may be submitted in the same manner as indicated for testimony in this notice. It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their program affecting land use and with statewide planning goals within their expertise and jurisdiction.

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

BEAR CREEK TOTAL MAXIMUM DAILY LOADS (TMDLs)

Notice Issued:

Comments Due:

WHO IS THE APPLICANT:

All businesses, residents industries, and local governments within the Bear Creek drainage basin. All residents, recreationists, and individuals who use Bear Creek.

WHAT IS PROPOSED:

The Department proposes to add the attached language to describe special policies and guidelines in Oregon Administrative Rules for the Rouge Basin. The proposed language establishes instream criteria for phosphorus, ammonia, and biochemical oxygen demand for Bear Creek and defines the time period for when the criteria apply.

WHAT ARE THE HIGHLIGHTS:

The Federal Clean Water Act, under Section 303, requires that pollution limits known as total maximum daily loads be established on streams that are not achieving water quality standards in either narrative or numerical form.

The dissolved oxygen, and pH standard are routinely violated in Bear Creek below the Ashland Sewage Treatment Plant. The pH standard is violated due to excessive algal growth.

The Department believes that phosphorus is the key nutrient supporting algal growth. Ammonia and biochemical oxygen demand are key parameters leading to the dissolved oxygen standards violations. Criteria are described for phosphorus, ammonia, and biochemical oxygen demand.

The criteria form the basis for establishing the total maximum daily load, waste load allocations, and load allocations. The waste load allocation describes the maximum amount of each pollutant that can be discharged from a point source. Load allocations describe the amount of each pollutant allocated to nonpoint sources and background.

HOW TO COMMENT:

The Department will accept public comment on the proposed additions. Public hearings to receive comments on the proposed additions and amendments to OAR 340-41-385 will be conducted as follows:

The Department will accept written comments received by 5:00 p.m. on _____, 1989. Comments should be addressed to:

Mr. Robert Baumgartner
Department of Environmental Quality
811 SW 6th Ave.
Portland, OR 97204

(PM\WC4748)

D-1



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

SUPPLEMENTAL BACKGROUND INFORMATION

Problem Assessment

Introduction:

Bear Creek currently violates the dissolved oxygen and pH standards. These problems are the result of BOD loads and excessive algal blooms. Although phosphorus is not the only factor which stimulates algal growth, studies show it can have a major effect on the abundance and type of algae produced. The Department believes BOD and phosphorus to be critical parameters related to water quality in Bear Creek.

In November 1987, the Department proposed Total Maximum Daily Loads (TMDLs) for phosphorus and biochemical oxygen demand (BOD) in Bear Creek. These initial proposed TMDLs were based on instream concentrations of 0.10 mg/l of total phosphorus and 1.0 mg/l of BOD. Based on the comments received the Department decided to adhere to the proposed TMDLs until the intensive study period was completed.

Dissolved Oxygen:

Dissolved oxygen is essential for maintaining aquatic life. Its effect on aquatic organisms has been extensively studied. Under natural conditions streams will typically be near 100 percent of the DO saturation value. Water quality standards stated in OAR 340-41-325(2)(a)(A) for Bear Creek state:

DO concentrations shall not be less than 90 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes.

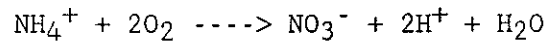
The Oregon Department of Fish and Wildlife stated that one or more of the life stages identified in OAR 340-41-325(2)(a)(A) occur throughout Bear Creek from October through May. Based on the assessment provided by the Oregon Department of Fish and Wildlife district biologist the 95% saturation dissolved oxygen criteria applies for the months of October through May.

Dissolved Oxygen (DO) in a stream is influenced by several factors. Carbonaceous oxidation, nitrogenous oxidation, algal respiration, and benthic demands remove oxygen from a stream. Reaeration, and photosynthesis add dissolved oxygen to a stream.

Violations of the DO standard have been observed at all sampling sites in Bear Creek. Violations are rare, except during the fall low flow conditions, at sites above the Ashland Sewage Treatment Plant. During the low flow conditions encountered from September through December 1988 40% of the samples fell below 95% saturation and 20% fell below 90% saturation. The DO violations above the Ashland STP indicate that little, or no assimilative capacity is available for the Ashland STP during the fall.

The lowest dissolved oxygen values are observed at the Valley View sampling site immediately below the Ashland Sewage Treatment Plant. These violations are the result of excessive BOD loads from the Ashland STP. Data indicates that ammonia nitrification is a key component of the oxygen demand at this site.

The stoichiometric relationship of oxygen to ammonia nitrogen in conversion to nitrate can be represented by:



The amount of nitrification can be measured by the decrease in ammonia concentration and the increase in nitrate concentration over time. One mg/l of ammonia is equivalent to 4.57 mg/l of BOD. It is expected that some variation in the strict relationship will be observed in biological communities due to carbon dioxide fixation or algae uptake. Observed instream ratios are usually near 4.3 to 4.4 mg/l of BOD for every mg/l of ammonia.

Dissolved oxygen standards violations occur routinely at all locations below the Ashland STP. The DO violations are often observed early in the morning and followed by supersaturation of oxygen throughout the day. Diurnal variation in dissolved oxygen are indicative of algal photosynthesis. Algal respiration is a component of the demand resulting in the observed early morning dissolved oxygen violations. The DO standard is routinely violated at Kirtland road during all months of the year.

Primary sources of oxygen demand are:

Ashland Sewage Treatment Plant,
Log Pond effluent, and
Urban Nonpoint sources.

OXYGEN DEMAND TMDL

Oregon administrative rules define the amount of dilution required to assimilate oxygen demand from a point source. This rule states that the effluent oxygen demand concentration divided by the dilution ratio shall not be greater than one. Total oxygen demand includes both the carbonaceous demands and the nitrogenous demands. The nitrogenous demands can be calculated as the effluent ammonia concentration (mg/l) multiplied by 4.35 (conversion factor).

The current Ashland STP permit allows a monthly average discharge for five day BOD (BOD₅) of 20 mg/l in the summer and 30 mg/l in the winter. Average permitted dry weather flow to the treatment plant is 3.1 mgd (4.8 cfs). There are no limits listed for ammonia. Based on the dilution rule, to assimilate permitted BOD₅ loads Bear Creek would have to have a monthly average of 96 cfs during the summer past Ashland. Flows measured during the summer have been below 5 cfs. Winter flows would have to be near 150 cfs.

The initial proposed TMDL for BOD was calculated on achieving an instream concentration of 1 mg/l of biochemical oxygen demand in Bear Creek during

the summer. By definition biochemical oxygen demand includes ammonia oxygen demands.

Data collected from the Department indicates that ammonia from the Ashland STP is the major source of oxygen demand resulting in DO violations immediately below the effluent discharge. The Department's data suggests that reaeration allows Bear Creek to assimilate some of the nitrogenous oxygen demand.

The assimilative capacity for oxygen demand in Bear Creek was assessed using site specific data collected in Bear Creek. Ammonia decay rates were calculated using observed decrease in instream concentrations of ammonia and increase in nitrate. Carbonaceous demands were determined using observed instream concentrations of BOD₅.

Stream flow and velocities were measured at several sites along Bear Creek under different flow conditions. Reaeration rates are dependent on flow and were estimated from observed oxygen saturation values measured along Bear Creek. Loads from the Ashland Sewage Treatment Plant and several tributaries were determined during the monthly and intensive sampling surveys.

Key equations, including ammonia decay, carbonaceous demand decay, and reaeration were programmed into a LOTUS spreadsheet format. The oxygen saturation was estimated for different loads and flow conditions. The Streeter-Phelps dissolved oxygen sag model was used to verify the results. The Streeter-Phelps model allows the maximum load from point sources discharges which would prevent dissolved oxygen violations to be calculated for point source discharges.

For Oxygen Demand during the spring, summer and fall, April through November the assimilative capacity of Bear Creek was calculated as a maximum instream concentration of:

0.25 mg/l Ammonia
2.0 mg/l CBOD
3.0 mg/l total oxygen demand

These criteria allow greater loads from the Ashland Sewage treatment plant than those which would be calculated using the dilution rule. These criteria also assume that oxygen is available in Bear Creek for assimilating point source loads.

During the extreme low flow conditions which occur following the irrigation season the dissolved oxygen standard is violated above the STP. This finding indicates that very little assimilative capacity exists. Current nonpoint source and background loads exceed the assimilative capacity for Bear Creek during summer low flow conditions. Any potential summer WLAs for point sources must assume that nonpoint source controls will be effective, achieve a specified load allocations, and provide some allocable load for the point source.

A stream's ability for reaeration is dependent on physical factors such as velocity and depth. The rate at which oxygen is consumed is dependent on temperature and the oxygen demand loads. It is possible to describe different loads for different physical conditions.

Temperature in Bear Creek varies from near 8 degrees C in the winter to above 26 degrees in the summer. This variation in temperature influences the rate at which oxygen is consumed and therefore affects the assimilative capacity of Bear Creek. The loading capacity for oxygen demand in Bear Creek may be defined for both winter and summer conditions. Winter conditions, based on a temperature range of a median of 8 mg/l with 90% of measured temperatures below 10 degrees, occurs from December through March.

Stream gradient and velocity decreases as water travels downstream along Bear Creek. The ability for reaeration decreases as velocity decreases. Therefore the assimilative capacity and the TMDL is dependent on where oxygen demand loads are discharged into Bear Creek. The assimilative capacity at any location is also dependent on what occurs upstream of that location. The assimilative capacity for CBOD and NBOD will depend on the total oxygen demand capacity allocated for each parameters. For defining the assimilative capacity of Bear Creek the following simplifying assumptions were made:

The Ashland STP would continue to discharge when possible.

The Ashland STP will use the available assimilative capacity at the point of discharge.

During the winter months instream dissolved oxygen above the Ashland STP is at or near saturation

For oxygen demand in the winter, approximately December through March, the assimilative capacity of Bear Creek was calculated as a maximum instream concentration of:

- 1 mg/l Ammonia (NH₃-NH₄ as N)
- 3 mg/l CBOD
- 7.3 mg/l total oxygen demand

POINT SOURCE WLAs

ASHLAND STP:

Achieving water quality standards under the TMDL process will require modifying existing treatment facilities. The Ashland STP will therefore be required to achieve the minimum design requirements for the basin.

Implementation programs applicable to all basins is described in OAR 340-41-120. Part 2(c) of this rule states:

Wherever minimum design criteria for waste treatment and control facilities set forth in this plan are more stringent than applicable

federal standards and treatment levels currently being provided, upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities.

Minimum design requirements are described in OAR 340-41-375(1). Paragraph (a) of this rule states:

During period of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

The Ashland STP currently is designed for monthly average concentrations of 20 mg/l BOD and 20 mg/l SS.

Paragraph (c) of the minimum design rule states:

Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of the receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise approved by the EQC.

The dilution rule was a component of the 1975 basin management plan for the Rogue Basin, including Bear Creek. The intent of the Commission when adopting this rule is described in the basin plan.

The intent of this section [dilution rule] is to assure that following a high degree of treatment, effluents are adequately diluted to protect the public health, aesthetics, aquatic life and beneficial uses of the waterway. It is further intended that this section be one of the primary mechanisms to insure protection of water quality in headwater stream.

The intent is for the design criteria to be applied to the dilution of waste, not necessarily dissolved oxygen criteria. As a design criteria it is applied to design conditions of the treatment plant. For Ashland, with a design condition of 20 mg/l monthly average BOD and an average summer flow of 3.1 mgd, would require nearly 100 cfs for adequate dilution. Observed low flows past Ashland have been below 5 cfs.

The Environmental Protection Agency recommends that the seven day average low flow that occurs once every ten years (7Q10) be used for calculating waste loads based on available dilution. This 7Q10 for Bear Creek at Medford is 2 cfs. There is not a historical flow record for Bear Creek at Ashland and the 7Q10 can not be calculated. Minimum observed flows of 5 cfs provide a reasonable measurement of the critical low flow conditions. At low flow conditions of 5 cfs in Bear Creek the design effluent concentration from Ashland would have to be 1.0 mg/l BOD to achieve the dilution rule.

The Oregon dilution rule can be used to calculate WLAs for the Ashland Sewage Treatment Plant. Tables 1 and 2 present the proposed flow based Waste Load Allocation for the Ashland STP for the summer low flow and irrigation season, and the winter season high flow conditions.

Table 1
 Potential WLA for total BOD from the Ashland STP
 for the irrigation season and low flow conditions
 in Bear Creek

Stream Flow Past Ashland	Total Oxygen Demand From the Ashland STP (lbs/day)	Instream Concentration
Below 10 cfs (5 cfs)	27	no increase
10 - 30 cfs	54	1.7 mg/l BOD
30 - 60 cfs	160	2.1 mg/l BOD
Greater than 60 cfs	320	2.3 mg/l BOD

Table 2
 Potential WLA for total BOD from the Ashland STP
 for the Wet weather season conditions
 in Bear Creek

Stream Flow	Total Oxygen Demand From the Ashland STP (lbs/day)	Instream Concentration
Below 70 cfs (30 cfs)	160	2.1 mg/l BOD
70 - 150 cfs	375	2.3 mg/l BOD
150 - 300 cfs	800	2.4 mg/l BOD
Greater than 300 cfs	1610	2.5 mg/l BOD

These waste load allocations for the Ashland STP are based on existing Oregon Administrative Dilution Rules Minimum Design Criteria for Treatment for Control of Wastes OAR 340-41-375(1)(c). The load from the Ashland STP would increase instream BOD concentrations to 2.5 mg/l BOD. The proposed upstream load allocation is based on achieving an instream criteria of 1.5 mg/l BOD.

The Department's analysis indicates that the design requirements would achieve the instream water quality standards under most flow conditions.

At the design flow of 3.1 MGD and existing concentrations, the Ashland STP would discharge a median of nearly 1400 lbs/ of total oxygen demand (ammonia + carbonaceous). Current loads are much less than this ranging between 700 - 800 lbs/day. Existing total oxygen demand concentrations range from 3.2 - 7.7 mg/l at Valley View road below the STP discharge. Available information

suggests that adequate dilution will not be available for the Ashland STP for several months of the year.

During the irrigation season, Ashland STP provides 75 - 80 percent of the total oxygen demand at the point where Ashland STP effluent enters Bear Creek. During low flow conditions in the fall, the Ashland STP provides over 95% of the oxygen demand at the point where the effluent joins Bear Creek. Data indicates that nitrogenous demands are a key component of the observed oxygen depletion below Ashland. The Ashland STP provides nearly all of the nitrogenous oxygen demand.

Critical stream flows appear to occur following the irrigation season in the late fall through the winter. The Department has measured stream flows at the Ashland STP of near 5 cfs during 1988. These low flow conditions may persist for several months following the irrigation season. Low flow conditions are due to detention of water for irrigation and naturally occurring low flow. As a result, there is inadequate dilution for assimilating the effluent from the Ashland STP.

Table 3 translates the Department's site specific analysis into a potential flow based waste load allocation for the Ashland Sewage Treatment Plant. Of the total maximum daily load 1.5 mg/l total oxygen demand (Ammonia and CBOD demands) were allocated to upstream background and nonpoint sources.

Table 3
Potential WLA for Ashland STP

Stream flow Past Ashland	Total Oxygen Demand From Ashland STP (lbs/day)
Below 10 cfs (5 cfs)	39
10 - 30 cfs	90
30 - 60 cfs	294
Greater than 60 cfs	599

Table 4 calculates potential WLAs for ammonia and BOD₅ for the Ashland Sewage Treatment Plant for winter conditions based on the Departments site specific analysis.

Table 4
 Potential WLA for Ammonia and BOD₅ from the Ashland STP
 for the Winter Conditions
 in Bear Creek

Stream flow	Ammonia	Total BOD	Carbonaceous BOD ₅
Less than 30 cfs	80	450	102
30 - 70 cfs	155	900	225
70 - 150 cfs	360	2120	550
150 - 300 cfs	775	4500	1120

LOG POND EFFLUENT:

Log pond effluent provides a major source of oxygen demand to Bear Creek. Log pond effluent characteristically has high concentrations BOD, typically near 50 mg/l and high suspended solids. Three companies have either general or NPDES permits for discharging log pond/storage deck waste to Bear Creek or its tributaries.

KOGAP Manufacturing General Permit	Hansen Creek - Bear Creek RM 11
Medford Corporation General Permit	Bear Creek RM 8.0
Boise Cascade Corp. NPDES Permit	Jackson Cr. - Bear Creek RM 4.5
Timber Products Co.	Not Specified

The permits do not allow discharge from May 1 through October 31. General permits allow discharge when the amount of precipitation precludes holding and require 50:1 dilution in the receiving stream to discharge. The NPDES permit allows discharge during the wet season when rainfall exceeds evaporation.

Log pond discharges, either directly or via tributary, occur in a depositional section of Bear Creek. Much of the suspended solids load may settle out increasing the benthic oxygen demand. The lower slope and velocities observed in this section result in less assimilative capacity than in upper sections of Bear Creek.

The load from the log pond discharges, and the effect on Bear Creek has not been well documented by the Department. Grab samples have been collected to characterize the waste stream. On one occasion the Department determined the load from the MEDCO discharge to Bear Creek. Effluent from Medco was found to be low in dissolved oxygen concentration and high in both BOD and suspended solids. The results were similar to information provided to the

Department in a complaint by the Northwest Steelheaders. The Medco storm drain BOD load is estimated as 150 - 300 lbs per day when discharging.

Numerous investigations have demonstrated the harmful effects of wood fiber discharged to a stream (USEPA 1976). Several studies evaluating the effect of flow through log ponds and log storage on water quality were conducted in Oregon during the early 1970s. In summary, these studies found that log pond effluent had low dissolved oxygen, high BOD, and enough nutrients to support algal growth. Log pond effluent was found to negatively impact benthic macroinvertebrates in stream. Runoff from "wet decks" was found to have pollution characteristics equal to or greater than waters from flow through log ponds. Following their study, EPA recommended that runoff from wet decks should not be discharged directly to receiving water.

There is no summer allocation for log pond effluent. Although at least one log pond discharges routinely during the summer, this is not a permitted condition. The proposed WLA for log ponds is based on no log pond discharge during summer conditions

During the winter, WLAs will be required for log pond effluent. Log pond effluent provides significant loads of carbonaceous oxygen demand to Bear Creek. Existing permits for log ponds require 50:1 dilution for discharge. Discharges now are permitted when rainfall conditions preclude holding. These conditions are not being met by all of the log ponds.

Of the permitted log ponds, two discharge to tributaries of Bear Creek. These tributaries are identified as the receiving waters for these permits. Log pond and log deck runoff does not achieve the required 50:1 dilution in these tributaries. The Medco Corporation discharges log pond effluent directly to Bear Creek. Discharge from Medco occurs when 50:1 dilution is not available in Bear Creek. Numerous complaints have been received by the Department and by the local Council of Government's water quality personnel. This apparently continuous discharge provides a significant oxygen demand load to Bear Creek.

The WLAs for the permitted log ponds are dependent on loads assigned to nonpoint sources and the Ashland STP. The potential allocations discussed are designed to achieve an instream concentration of 2.5 mg/l BOD as measured at Kirtland Road. This process addresses water quality impacts on Bear Creek but not the tributaries. Achieving these WLAs would not necessarily protect the beneficial uses of the tributary streams. The potential allocations would increase instream Carbonaceous BOD₅ by 0.75 mg/l. The remaining load under this potential strategy has been allocated to nonpoint sources and upstream inputs.

Stream Flow at Medford	Log Pond Effluent Waste Load Allocations BOD ₅
0 - 70 cfs	No Discharge
70 - 150 cfs	95 lbs/day
150 - 300 cfs	200 lbs/day
Greater than 300 cfs	400 lbs/day

NONPOINT SOURCE LAS

URBAN RUNOFFS:

Urban runoff is a significant source of oxygen demand load to Bear Creek. Runoff from forested land use areas, do not appear to provide excessive oxygen demand loads.

Nonpoint source load allocations were estimated based on general land use categories. Land use was tabulated for three subsections of Bear Creek. These subsections correspond to the natural drainage of Bear Creek. Loads and stream flow conditions were calculated using literature runoff coefficients for the land uses and observed BOD concentrations.

The following table describes an example of a potential load allocation for the entire urban area within the Bear Creek Basin for wet weather conditions.

Potential Urban BOD₅ Load Allocations
Wet Weather Conditions

Stream Flow at Medford	BOD ₅ lbs/day
Less than 70 cfs (35)	80
70 - 150 cfs	162
150 - 300 cfs	350
Greater than 300 cfs	700

PHOSPHORUS TMDL

There have been many studies of the response of lotic periphyton communities to nutrient additions but our ability to extrapolate from these findings and to predict quantitative algal responses to increased or decreased loadings of nutrients is limited.

There are three major nutrients, Phosphorus, Nitrogen, and Carbon. Carbon is readily available from air. Several species of periphyton can use atmospheric nitrogen, and it is therefore only partly controllable. Nitrogen is often more ubiquitous in nature making it less controllable than phosphorus. Phosphorus is usually limiting under natural conditions and is most readily controllable by human activities. Therefore, phosphorus is usually the nutrient selected for nutrient control strategies. However, several researchers suggested that nitrogen has been found to be the limiting nutrient in several streams.

Algal assays provide a quantitative measurement of the limiting nutrient. Two algal assays were conducted using aliquotes of water collected from Bear Creek. A portions of each sample was retained for chemical analysis. Both assays were conducted during the irrigation season. The algal assay growth potential was measured as dry weight and was closely correlated with both inorganic nitrogen and total phosphorus. The algal assay growth potential

was 2 to 3 times greater from sites below the Ashland STP compared to upstream sites. Nitrogen is currently the major nutrient in lowest proportion of algae requirements below the Ashland STP.

Three separate surveys were conducted using artificial substrate to measure initial colonization and growth of periphyton in Bear Creek and Little Butte Creek. Artificial substrate were used to provide a uniform substrate type, area of measurement, and orientation to the stream. Ash free dry weight was used to measure the biomass accumulated over the ten day incubation period (Standard Methods). Sites for substrate were selected that had similar flow velocities, light availability, and stream depth.

The first survey was primarily used to compare and select from several substrate types and sample area. Plastic tile plates were selected for substrate. The results of the following two surveys is presented below:

Location	Ash Free Dry Weight	Mg/Meter squared
	August 1988	September 1988
[Bear Creek]		
Mountain Avenue	365	540
Above Ashland STP	550	900
Below Ashland STP	330	627
Phoenix	1200	2045
Central Point	3100	2920
[Little Butte]		
Brownsboro	690	340
Lake Creek	640	320

Multiple regression was used to evaluate the correlation of the median value for initial colonization and biomass to several variables including nutrient concentration, stream velocity, sample depth, and light availability (Welch et. al. 1986). Because of apparent toxicity, data from the site immediately below the Ashland STP was voided for this analysis. Effluent toxicity measured by the Department, and levels of chlorine from the Ashland STP above chronic toxicity levels may have reduced the periphyton colonization and growth in this section of Bear Creek.

In the August survey, over 96% of the variation in periphyton growth could be accounted for by variation in nutrient concentration, stream velocity, and depth. Similar to other studies the initial colonization and growth of periphyton was enhanced by slower velocities.

In the September surveys, over 95% of the variation in periphyton growth could be accounted for by variation in nutrient concentration. Both total phosphorus and inorganic nitrogen were closely correlated with periphyton increase. Inorganic nitrogen appeared to be the parameter best correlated with initial colonization and growth of periphyton on the artificial substrate over the ten day incubation period.

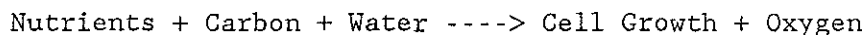
Primary productivity of periphyton in Bear Creek can be related to demand changes in dissolved oxygen. The dissolved oxygen changes are the integrated effects of photosynthesis that is carried out during the

photoperiod by the benthic periphyton and the suspended periphyton algae. Light and dark bottle test were used to correct for phytoplankton photosynthesis.

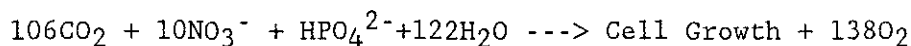
Daily fluctuations in photosynthesis are imposed on a relatively steady demand of respiratory activity. The rate of change in stream dissolved oxygen is represented by several rates, photosyntheses, respiration, and reaeration. The net result of these rates is measured as oxygen load throughout the day.

	August		October		November	
	Daily Change in DO (mg/l)	Net DO Produced MG/L-D	Daily Change in DO (mg/l)	Net DO Produced MG/L-D	Daily Change in DO (mg/l)	Net DO Produced MG/L-D
Mt Avenue	1.2	3.5	1.5	3.8	0.6	0.7
Eagle Mill	1.3	3.7	2.1	5.9	1.5	1.9
Valley View	1.3	4.1	1.2	----	1.6	0.2
Barnett Rd	4.8	17.5	5.1	14.3	2.7	10.0
Kirtland Rd.	6.9	26.5	4.6	14.4	3.1	11.3
[Little Butte]						
Lake Creek	1.6	8.0	0.9	2.3	1.1	1.5
Brownsboro	1.7	9.0	1.6	5.0	0.8	1.2

The increased oxygen production observed in the lower sections of Bear Creek is the result of increased photosynthesis. Photosynthesis is the process by which green plants use solar energy and nutrients to grow. The growth process can be described simply as:



A more detailed balance definition would be:



Increases in pH due to photosynthesis is primarily the result of the uptake of CO₂, a component of the carbonate alkalinity in water. In fresh water carbonate alkalinity provides most of the buffering capacity of water. As the buffering capacity is consumed pH changes occur. Carbonate alkalinity [ALK] can be defined as:

$$[\text{ALK}] = [\text{HCO}_3^-] + 2[\text{CO}_3^{2-}] + [\text{OH}^-] - [\text{H}^+]$$

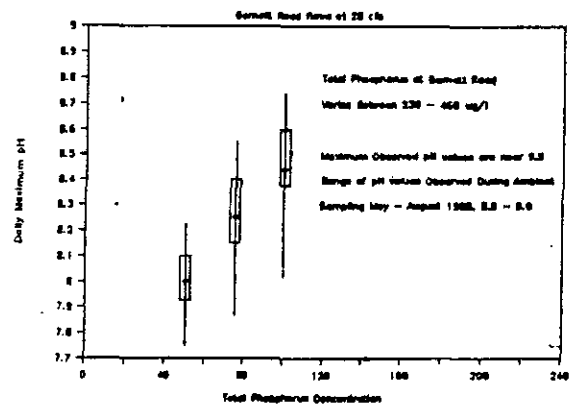
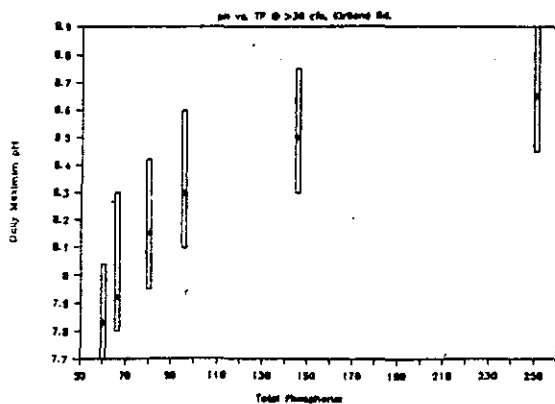
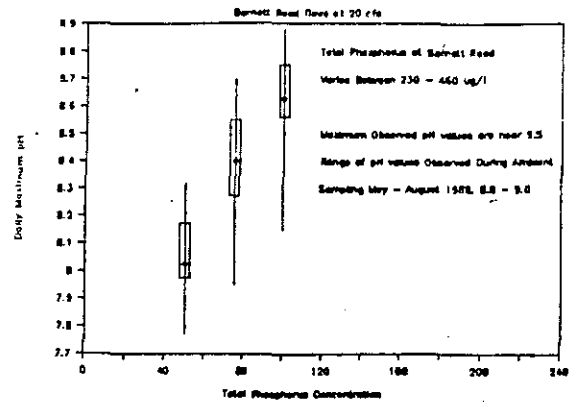
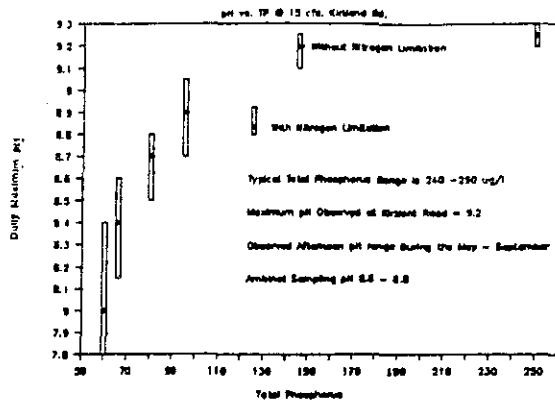
Consumption of CO₂ through photosynthesis does not change the alkalinity. Since the charge balance must be maintained, the loss of CO₂ must be accompanied by an equal loss of [H] and increase in [OH]. The loss of free hydrogen [H] ions in solution is measured as an increase in pH. This equations combined may be used to stoichiometrically explain the observed increases in pH.

Knowing the initial pH and total alkalinity in Bear Creek, the concentration of carbonate species can be calculated. By assuming the diurnal oxygen production is due to photosynthesis the pH change can be related directly to

algal growth. These relationships were used to evaluate the amount of periphyton growth reduction necessary to influence the pH.

These are several variables that influence this analysis. Alkalinity and initial pH values were measured at the Diurnal sampling points in Bear Creek. The observed ranges of these parameters was used for to evaluate the potential maximum pH under different algal growth conditions. Therefore, a range of potential maximum daily pH values is presented rather than a single estimate.

Stream flow also effects the relationship between pH and periphyton photosynthesis. The periphyton are fixed to the substrate and have a relatively constant area for growth. Increased volume of water provides a greater amount of CO₂ in the water column. Since there is more mass of buffering capacity at greater flow, relatively less variation in pH would be expected for an equal amount of algal growth.



Cursory examination of the available data shows that the amount of periphyton growth is increased below the Ashland STP. In sites below the Ashland STP, the pH is routinely violated, much higher colonization and accrual rates are observed on substrate below the STP than on substrate in Bear Creek above the STP.

Empirical analysis of the data suggests that nutrient concentration is directly related to the increased periphyton production. Under current conditions inorganic nitrogen appears to be the limiting nutrient below Ashland STP. These results are constant with the results of the USGS (1980) study which stated that " These nutrients [nitrogen and phosphorus], along with the particle size of the streambed material, are believed to control the biological productivity. This report also indicated nitrogen control "Larger diel DO and pH fluctuations appear to be associated with higher concentrations of nitrate".

Sources of Nutrients:

The Ashland Sewage Treatment Plant is the primary source of nutrients to Bear Creek. Other sources include log pond discharge, agriculture nonpoint source and irrigation return flows, and urban runoff.

At the point where Ashland STP effluent enters Bear Creek, between 90 and, during low flow conditions, over 95% of the total phosphorus in Bear Creek is provided by the STP. At the point of mixing, over 90% of the inorganic nitrogen is supplied from the Ashland STP.

There are several irrigation withdrawals from Bear Creek below the Ashland STP. These withdrawals will carry nutrients which originated from the Ashland STP through the irrigation system. A significant portion of the phosphorus and inorganic nitrogen in irrigation return flows, and the tributaries carrying return flows, may originate at the Ashland STP.

Another nonpoint source of nitrate is groundwater. The USGS (1980) report suggested that the high levels of nitrate observed during non-irrigation regimes were from groundwater recharge. Groundwater supplying the Bear Creek Basin has high levels of nitrate.

Log pond overflow is a source of phosphorus and inorganic nitrogen to Bear creek. USGS (1980) data for log pond overflow had an average of 250 ug/l Ortho Phosphorus and 270 ug/l inorganic nitrogen. At estimated flows of up to 75 gallons per minute these the log pond effluent provides 0.35 lbs/day of ortho phosphorus and 0.375 lbs/day of inorganic nitrogen. A grab sample collected by the Department resulted in effluent concentrations of 1.1 mg/l total phosphorus and a discharge of 0.75 cfs. This flow and concentration equal a load of 4.5 lbs/ day total phosphorus.

Urban runoff has not been well quantified for the Bear Creek basin. Typically, urban runoff has high levels of phosphorus and nitrogen. Phosphorus is usually in limiting proportion in urban runoff.

Phosphorus control provides greatest assurance of reducing excessive periphyton growth in Bear Creek. Inorganic nitrogen is in lowest proportion

below Ashland under current loadings. This is an expected result of overwhelming a stream with municipal effluent. The major source of both nitrogen and phosphorus is the Ashland STP. Point source control strategies may reduce the loads of both nutrients. However, phosphorus is the nutrient most controllable by human activities, especially for nonpoint source controls.

There are several concerns with nitrogen limitation as a control strategy. Nitrogen can be fixed from the atmosphere by several species of algae and plants. Groundwater in the Bear Creek basin contains high levels of inorganic nitrogen. Although the Ashland STP is the major source of inorganic nitrogen, the supply of inorganic nitrogen is only partially controllable by human activities.

The point source discharges are the major sources of phosphorus and controllable by human activities. The phosphorus loads from irrigation return flows can be regulated by minimizing returns, or by employing best management practices for phosphorus removal. Urban phosphorus loads can be reduced by eliminating discharges of nutrient rich waters, such as fruit processors, to storm drains, minimizing direct discharge to Bear Creek of urban storm water, and by employing urban BMPs for nutrient removal.

Nitrogen limitation offers the advantage of potentially having direct reductions in algal biomass for reductions in nutrient loads. Disadvantages of nitrogen limitation would be that nitrogen sources are not all controllable by human activities. Groundwater recharge may provide significant nitrogen loads. Nitrogen is usually not the limiting nutrient in nonpoint source runoff. Nonpoint source control plans would have to remove nitrogen. Since nitrate can move through the soil horizon, nonpoint source controls that act to maintain the water table may remove surface loads may increase groundwater contributions.

There is uncertainty in predicting the resultant daily maximum pH effected by a nutrient control program. The Federal Register (40 CFR, Part 130.7(c)(1)) states for every pollutant other than heat, WLAs/LAs/ and TMDLs shall be established at levels necessary to attain and maintain the applicable narrative and numerical WQS (water quality standards) with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

OAR 340-41-365(3) States that where natural quality parameters of waters of the Rouge Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard. This rule suggests that if background nutrient levels can be effective at reducing periphyton growth and pH, but may not achieve standard that background nutrient levels become the standard.

Based on the Department's analysis, nutrient reduction will lead to improved water quality. Under typical summer conditions a phosphorus concentration of 60 - 80 ug/l provides reasonable assurance of achieving the pH standard. During low flow conditions criteria to achieve standard may be below

background levels. Based on this assessment and the above guidance an instream criteria of 80 ug/l was used to define the IAs, and WLAs.

The pH violations due to periphyton growth is a seasonal water quality problem. During the winter cold temperatures, low sunlight availability, and high flows reduce the periphyton growth and pH variations. Nutrient limitations are required when physical factors will not limit algal growth. This period extends from April through October.

Nonpoint sources and background loads above the Ashland STP exceed the proposed criteria. Achieving the TMDL will require significant nutrient reductions from nonpoint sources as well as point sources. During low flow conditions point source discharges should not exceed proposed ambient concentrations. The WLA for the log ponds is zero. This allocation is based on the no-discharge requirements during low flow conditions stated in their existing permits. The load for the Ashland STP is calculated as:

$$\text{Ashland STP } Q(3.1 \text{ mgd}) * 80 \text{ ug/l} * K (0.0083) = 2.1 \text{ lbs/d}$$

Log pond effluent provides an existing point source of phosphorus to Bear Creek. Existing permits allow no discharge during the summer period. No WLAs are provided phosphorus discharged from log ponds.

Nonpoint source load allocations may be divided by land use type, sub-basin and political jurisdiction. However, during the irrigation season the flow in Bear Creek is controlled more by irrigation demands than ambient conditions. The proposed load allocations for urban areas will be a fixed value independent of flow. Allocations will be calculated on achieving 80 ug/l of total phosphorus under low flow conditions. Loads from irrigation return flows allocations will be allocated to agriculture. The Agriculture allocations will vary with flow. This method assumes most of the flow variation is due to irrigation demands.

SUMMARY OF CONCERNS

TOXICS:

Ammonia concentrations frequently exceed the chronic toxicity criteria at the Valley View sampling location. Similar findings were reported by the USGS in 1980. Ammonia reductions necessary to achieve oxygen demand loads will prevent ammonia toxicity.

Chlorine loads discharged from the Ashland STP were calculated to exceed acute toxicity levels in Bear Creek. Effluent bio-assays conducted by the Department on Ashland effluent resulted in acute toxicity at effluent concentration greater than 42% effluent. The no observable effect for chronic toxicity was found to be 5% effluent. The dilution requirement based on chronic toxicity is 20:1. There is some concern that the effluent bio-assay was influenced by chlorine toxicity. The Ashland STP program plan will require assessment of effluent toxicity and effective elimination of chlorine toxicity.

The number and diversity of macroinvertebrates, benthic bugs, provides a well accepted index of the biological health of a stream. In stream samples and artificial substrate samples were collected from three locations in Bear Creek. Results were consistent between sample types and similar to those reported by the USGS in 1977.

Reduced benthic populations were observed from upstream to downstream sites in Bear Creek. The Phoenix site showed slight impairment compared to the Mountain Avenue site. Excessive impairment was observed at Central Point compared to the upstream Mountain Avenue site. Because of similar results between sample type the impairment appears to be the result of a decline in water quality.

Two sediment sample were collected from Bear Creek near Medford as part of a toxic assessment. Although not listed as water quality limited due to toxics, Bear Creek sediment had elevated levels of DDT, DDD, DDE, Cu, Pb, Zn, and Phthalate. The source of these pollutants has not been identified.

Discharge Point of Ashland STP:

Ashland STP discharges to Ashland Creek which then flows to Bear Creek. Some assimilation, through reaeration, occurs in Ashland Creek. Due to low dilution in Ashland Creek the DO standard, chlorine toxicity, and ammonia toxicity standards would be expected to be violated. Ashland Creek and a portion of Bear Creek are identified as the mixing zone for the Ashland STP. Current mixing zone policy states that the mixing zone should not extend across a stream. The beneficial uses of Ashland Creek include spawning and rearing of salmonids.

Assimilation of Phosphorus:

Instream assimilation occurs in Bear Creek. Periphyton can drive instream levels of nutrients to very low levels. The amount of assimilation will depend on the biomass of periphyton. Available literature indicates that internal cycling within the benthic mats can provide much of the nutrient requirements for growth. Under existing conditions, variation in mass phosphorus discharges can explain the variation in observed phosphorus concentration at downstream sites. Instream assimilation has not been included in the proposed load allocations.

Effect on Local Communities:

The TMDL defines the assimilative capacity of Bear Creek and proportions the available load. Options have not been selected for achieving the WLAs and LAs. The TMDL will require program plans from point source dischargers, agricultural NPS including irrigation return flows, and urban NPS. These plans will address the potential options, potential costs, and implementation of potential options.

The Ashland STP has several overlapping concerns to address. There is inadequate dilution to assimilate the effluent from the STP for much of the Year. Nutrient reductions to, or near, ambient levels will be required from

early spring through the fall. These reductions include, and extend beyond the irrigation season.

Log pond point sources discharge untreated, high strength oxygen demanding waste into Bear Creek and its tributaries. The waste also supplies loads of nutrients. Permit conditions state that discharge may occur only during the wet weather months (November through April), when conditions preclude holding, and when dilution in the receiving water is 50:1. These conditions are not being met. Available information indicates that discharge from one, or more log ponds has continued routinely for the past 10 years. The TMDL will require that the seasonal discharge conditions be met. Additional load reductions may be necessary during the winter wet weather period.

There are several policy issues that will be decided as WLAs are defined, options reviewed, and compliance plans approved. These include the requirement for the Ashland STP to achieve basin design criteria unless otherwise specified by the Commission. Achieving basin requirements may be more expensive than achieving WLAs. Since the Commission has not specified alternative requirements for dilution at Ashland, the Department believes that program plans need to describe alternatives for achieving all existing basin requirements as well as the WLAs. Similarly, the Department believes that all existing permit conditions must be met unless otherwise modified by the Commission. Log pond discharges must meet the 50 to 1 dilution requirement as well as the TMDL requirements.

The defined mixing zone for the Ashland STP may not be appropriate. Conditions that may not be met in the mixing zone include the mixing zone should be less than the total stream width and be free of materials in concentrations that will cause acute toxicity. The Ashland STP will be required to provide the Department all information necessary to define the appropriate mixing zone as options are reviewed.

Agriculture NPS/Irrigation Return Flows:

The proposed rule will require the Department of Agriculture to develop a program plan for describing BMPs for nutrient control in the Bear Creek Basin. Options will include BMPs to minimize irrigation outflows, and passive treatment of the return flows. The USGS study (1980) concluded that the wetland area of Whetstone Creek acts to reduce nutrients, bacteria, and solids from return flows. The report suggests that ponds/settling basins and other existing BMPs could improve the quality of irrigation return waters. Agriculture in Bear Creek basin has a history of instituting BMPs.

Several BMPS are described in existing literature for nutrient control in agricultural areas. Requirements for achieving TMDLs is expected to be consistent with continuing agricultural NPS control plans in Bear Creek basin.

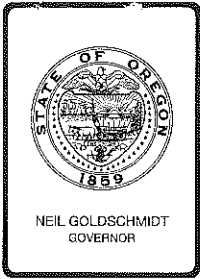
Urban NPS:

The TMDL will require the cities and county within the Bear Creek basin to develop an urban NPS program plan. The plan will describe options, time

schedule, and costs to achieve the LAs for nutrients and oxygen demand. The Rouge Valley Council of Governments (RVCOG) may act as a coordinating entity in developing a basin-wide urban NPS control plan. Requirements of achieving the TMDL will increase the storm water quality control requirements and costs in the basin. The requirements will be consistent with the RVCOG goal to improve water quality conditions in Bear Creek.

Fecal Coliform:

Fecal coliform violations are routine at all stations sampled in the Bear Creek Basin. The RVCOG has an on going long term program for reducing the fecal coliform concentrations in Bear Creek. The requirements of the NPS load allocations can be expected to assist the RVCOG program for fecal coliform reduction. At this time a fecal coliform TMDL is not proposed for Bear Creek.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989

Agenda Item: I

Division: Air Quality

Section: Program Planning

SUBJECT:

Proposed Adoption of New Industrial Rules for PM₁₀ Emission Control within the Klamath Falls Urban Growth Boundary (OAR 340 Division 20) which lowers the Emission Offsets Requirement For New or Modified Sources from 15 to 5 Tons Per Year.

PURPOSE:

To assure that industrial emission increases in Klamath Falls do not interfere with control strategies designed to attain and maintain compliance with the new federal PM₁₀ air quality standards.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment B
 - Public Notice Attachment C
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment
- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: (specify) Attachment

DESCRIPTION OF REQUESTED ACTION:

The proposed rule would:

Reduce the Significant Emission Rate that triggers emission offset requirements from 15 to 5 tons per year.

Apply retroactively to all new or modified sources within the Klamath Falls Urban Growth Boundary for which permits have not been issued prior to April 29, 1988.

Delete the provision contained in the originally proposed rule requiring application of Lowest Achievable Control Technology (LAER) at the 5 ton per year offset level. Retain the LAER requirement at the existing 15 ton per year offset level.

Designate the Klamath Falls Urban Growth Boundary as the PM₁₀ Nonattainment Area.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment	<input type="checkbox"/>
Enactment Date: _____		
<input type="checkbox"/> Statutory Authority: _____	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment	<input type="checkbox"/>
<input checked="" type="checkbox"/> Other: Rule Amendment (OAR 340 Division 20)	Attachment	<u>A</u>

Time Constraints: The Environmental Protection Agency, under the provisions of the Clean Air Act, has required the Department to adopt State Implementation Plan (SIP) revisions for the Klamath Falls PM₁₀ Nonattainment Area. The proposed rule is a key element of the Klamath Falls control strategy. The projected date for Commission authorization of public hearings on the SIP is July, 1989. Timely resolution of the rule is also important to at least one industry with a pending permit application.

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment	<input type="checkbox"/>
<input checked="" type="checkbox"/> Hearing Officer's Report	Attachment	<u>D</u>
<input checked="" type="checkbox"/> Response to Testimony/Comments	Attachment	<u>E</u>
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Supplemental Background Information	Attachment	<input type="checkbox"/>

Meeting Date: April 14, 1989
Agenda Item:
Page 3

Klamath Falls has a serious PM₁₀ air quality problem. Reductions of as much as 90% and 60 %, respectively, are needed in woodsmoke and fugitive dust emissions to attain federal 24-hour air quality standards. Additional reductions may be needed to achieve the annual standard. Because of the difficulty in achieving such high levels of control, every reasonable emission reduction strategy may need to be set in place to achieve healthful air quality. As the control strategies reduce woodsmoke and dust emissions to meet the PM₁₀ air quality standard, industrial contributions will increase from 4 to 20 % of worst-case day PM₁₀ levels. Addition of 15 tons per year of industrial emissions from a number of new or modified source would result in about a 1 µg/m³ airshed impact for each industry if emission offsets are not required. These additional impacts will significantly interfere with efforts to attain and maintain compliance with PM₁₀ air quality standards. Rule adoption is being requested now to resolve the issue for industries with pending permits and for new sources considering locating in the airshed.

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Testimony in support of the rule emphasized the need for restrictions on industrial emission increases within an airshed that exceeds the national health standard for PM₁₀ by a factor of four. Others cited the need for equitable reductions in industrial as well as residential wood heating emissions and the need for consistent offset requirements for sources in Klamath Falls and Medford.

Those opposed cited the high cost to industry relative to air quality benefits and impacts on local economic development.

A summary of key points of controversy follows. The comments and Department's detailed response are contained in Appendix E.

1. Industry emissions and impacts are a small percentage of the PM₁₀ problem. Rule adoption would result in little air quality improvement.

The Department believes that industrial emission will be a significant portion of the airshed emissions when woodstove emissions are reduced and that significant growth in industrial emissions may jeopardize efforts to achieve and maintain healthful air quality
(Page E-1).

2. The economic impacts on industry and the community are significantly underestimated.

The Department's estimated costs to obtain offsetting emissions are accurate and offsets are cost-effective but further analysis convinces the Department that LAER controls are not cost-effective (Page E-1).

3. Available emission offsets are so few that the rule would prohibit industrial growth.

The Department estimates that sufficient offsets are available to accommodate several new or expanded industrial sources. Replacement of woodstoves in low income, sole-source homes is the most likely source of external offsets (Page E-3).

4. Local voluntary solutions to industrial emission growth management are needed rather than state imposed rules.

The SIP must contain effective and enforceable measures to address growth in industrial emissions. In the absence of local ordinances, the Department bears responsibility for adopting an industrial emission growth management strategy (Page E-4).

5. The Urban Growth Boundary should not be adopted as the nonattainment area.

The boundary within which the control strategies apply must incorporate the area which currently exceeds or in the future may exceed air standards. It must also be a legally defined boundary for which population, housing and transportation growth forecasts are prepared. The Department believes that the Urban Growth Boundary best meets these criteria (Page E-5).

6. The rule should not be retroactive.

Because of the very high degree of emission reduction required to attain air quality standards in Klamath Falls, every reasonable measure must be taken to manage industrial

Meeting Date: April 14, 1989
Agenda Item:
Page 5

emission growth. The Department believes that the rule should be retroactive to insure that proposed industrial expansions do not interfere with attainment and maintenance of air quality standards if and when permits are issued. The rule also insures that efforts to gain public cooperation in reducing woodstove emissions are not undermined by public perception of inequities in allocating woodstove emission reduction gains to industry (Page E-6).

PROGRAM CONSIDERATIONS:

There will be some impact on the agency's budget associated with management of the emission offset program. There will be no impacts on other approvals required, or change in relationships with other agencies if the Commission were to adopt this rule. The Commission's action on this rule may affect Agenda Item P (Discharge of Additional Wastewater into a Lake Requiring Commission Approval) in the event that Jeld-Wen, Inc. decides to withdraw it's pending Air Contaminant Discharge Permit. The Department has committed considerable resources in seeking solutions to Klamath Falls' air quality problem. Adoption of the rule represents an important step in seeking solutions to this problem.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

In developing the alternatives, two issues were considered:

- (1) Do industrial emission increases need to be managed to insure attainment of air quality standards ?;
- (2) Should industrial emission increases be addressed at the time of adoption of the Klamath Falls State Implementation Plan or is action needed now ?

The Department believes that industrial emission growth allowed under the current 15 ton offset rule would significantly interfere with efforts to attain air quality standards. It is also the Department's opinion that timely action is needed to assure that emission increases from new and modified industrial sources now being planned are covered by the rule. Three options have been developed:

1. Retain current requirements for LAER control and offsets on industrial emission growth at 15 tons per year or greater emission increases.

This option represents no change from the current rules. It would allow each new industry within the UGB or modifications to existing industry to increase emissions by up to 15 tons per year per facility without offsets or LAER control, adding the equivalent in PM₁₀ emissions of 84 sole-source woodheating households to the airshed each time. This is equivalent to about 1 $\mu\text{g}/\text{m}^3$ daily impact increase. Such additional impacts on the airshed would significantly interfere with efforts to attain and maintain compliance with air quality standards. The equity of requiring up to a 90 % reduction in woodstove emissions while allowing significant increases in industrial emissions is of great concern to the Department.

2. Revision of the requirements for LAER control and offsets from 15 to 5 tons per year, applied retroactively to all new or modified sources within the Klamath Falls UGB for which permits have not been issued prior to April 29, 1988.

This option was brought before the Commission for public hearing authorization on November 4, 1988 (Agenda Item H). In initially proposing the rule before the Commission, the Department felt that stringent and consistent industrial control and offset rules should be adopted in Klamath Falls (as they have been for the Medford Nonattainment Area) because of the severe PM₁₀ air quality problems in the airshed. Also, the rule needs to be retroactive to mitigate emission increases in pending industrial permit applications.

3. Retain the current 15 ton per year requirement for LAER but for new or modified sources greater than 5 but less than 15 tons per year require either (a) emission offsets or (b) LAER control technology. The rule would apply retroactive to sources for which permits have not been issued prior to April 29, 1988.

After consideration of public comment, the Department concurs that application of LAER technology is probably not cost effective for Klamath Falls industrial sources because of their smaller size relative to those in Medford. The Department believes that the 5 ton per year emission offset requirement should be adopted because it is a cost-effective approach to managing industrial

emission growth. Industries that would be affected by the retroactive element of the rule would have the option of applying LAER technology (only) in lieu of offsets. Since emissions from low income, sole source woodheating households is the least costly source of offsets, industrial emissions will likely be offset by reductions in woodstove smoke from sources in the heart of the nonattainment area.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends adoption of Alternative 3.

This alternative provides for industrial emission growth management in a cost-effective manner through offsets. Most likely these offsets would come from replacement of woodstoves in low income, sole source woodheating households. Because woodheating emission reductions will be concentrated in the space heating season within the heart of the nonattainment area, a greater net air quality benefit as required by Department rule will result. The cost of offsets (about \$168,000 for 15 tons per year) to industry is much less than including LAER technology control equipment (\$350,000 per 15 tons per year minimum in capital equipment alone).

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The proposed rule is consistent with the Department's proposed strategy for controlling industrial PM₁₀ emissions in the Medford-Ashland, Grants Pass and Klamath Falls nonattainment areas as part of the State Implementation Plan for attaining and maintaining the National Ambient Air Quality Standards for particulate matter. The Department is not aware of conflicts involving this proposed rule with any agency or legislative policies.

ISSUES FOR COMMISSION TO RESOLVE:

1. Does the Commission support a tighter industrial PM₁₀ emission growth strategy for the Klamath Falls airshed? Should the rule be retroactive? Should the rule be adopted now or later as part of the overall control strategy?
2. Does the Commission concur that offsets are a cost-effective approach to managing industrial emission growth greater than 5 tons per year?

Meeting Date: April 14, 1989
Agenda Item:
Page 8

3. Does the Commission concur that LAER control technology is not cost-effective for smaller industrial sources and that emission increases of less than 15 tons per year within the Klamath Falls Urban Growth Boundary should not require LAER controls ?
4. Should the Urban Growth Boundary be adopted as the nonattainment area ?

INTENDED FOLLOWUP ACTIONS:

- A. File adopted rules with the Secretary of State and incorporate into the Klamath Falls PM₁₀ Nonattainment Area State Implementation Plan.

Approved:

Section: *John Kawalig*

Division: *Wick Dobb*

Director: *Rydia Taylor*

for Fred Hansen

Report Prepared By: John E. Core
Phone: 229-5380
Date Prepared: March 24, 1989

JC:k
PLANAK1501
March 28, 1989

Attachment A

PROPOSED RULE REVISIONS

Definitions

OAR 340-20-225(22) Table 1:

Note: * For the nonattainment portions of the Medford-Ashland Air Quality Maintenance Area and the Klamath Falls Urban Growth Area, the Significant Emission Rates for particulate matter and volatile organic compounds are defined in Table 2.

OAR 340-20-225(22) Table 2:

Significant Emission Rates for the Nonattainment Portions of the Medford-Ashland Air Quality Maintenance Area and the Klamath Falls Urban Growth Area.

<u>Air Contaminant</u>	<u>Emission Rate</u>					
	<u>Annual</u>		<u>Day</u>		<u>Hour</u>	
	<u>Kilograms</u>	<u>(tons)</u>	<u>Kilograms</u>	<u>(lbs)</u>	<u>Kilograms</u>	<u>(lbs)</u>
Particulate Matter** (TSP or PM ₁₀)	4,500	(5.0)	23	(50.0)	4.6	(10.0)

Note: ** For the Klamath Falls Urban Growth Area, the Significant Emission Rates for particulate matter apply to all new or modified sources for which permits have not been issued prior to April 29, 1988; particulate emission increases of 5.0 or more tons per year must be fully offset, but the application of lowest achievable emission rate (IAER) is not required unless the emission increase is 15 or more tons per year. At the option of sources with particulate emissions of 5.0 or more but less than 15 tons per year, IAER control technology may be applied in lieu of offsets.

RULEMAKING STATEMENTS
FOR
PROPOSED AMENDMENTS TO
NEW SOURCE REVIEW RULES
FOR THE KLAMATH FALLS AREA

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) Chapter 340, Division 20, Section 225(22), Tables 1 and 2. It is proposed pursuant to the authority of Oregon Revised Statutes (ORS) 468.020, 468.280, 468.295 and 468.305.

(2) Need for these Rules

The U.S. Environmental Protection Agency adopted revisions to the national ambient air quality standards effective July 31, 1988, which replaced the Total Suspended Particulate (TSP) standards with standards for particulate of 10 microns characteristic diameter and under (PM₁₀) per cubic meter ($\mu\text{g}/\text{m}^3$).

The states are required to assure attainment and maintenance of EPA's ambient standards. To that end, the states develop strategies for control of appropriate sources of the contaminants which are targeted by the ambient standards. These proposed rule revisions compose a part of the Department's strategy for controlling industrial PM₁₀ emissions in the Klamath Falls Area.

(3) Principal Documents Relied Upon

OAR 340, Division 20, New Source Review Significant Emission Rates for the Klamath Falls Area.

Informational Report: New Federal Ambient Air Quality Standard for Particulate Matter (PM₁₀) and its Effects on Oregon's Air Quality Program. (Presented as Agenda Item D, January 22, 1988 EQC Meeting)

LAND USE CONSISTENCY STATEMENT

The proposed rule changes appear to affect land use as defined in the Department's coordination program with LCDC, but appear to be consistent with the Statewide Planning Goals.

With regard to Goal 6, (air, water, and land resources quality), the proposed changes are designed to enhance and preserve air quality in the State and are considered consistent with the goal. The proposed rule changes do not appear to conflict with the other goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion as indicated for other testimony on these rules.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any appropriate conflicts brought to our attention by local, state, or federal authorities.

FISCAL AND ECONOMIC IMPACT STATEMENT

The adoption of the proposed rule would increase the pollution control costs for new or expanded industries within the Klamath Falls Urban Growth Boundary with particulate emission increases of five or more tons per year. The pollution control costs would vary depending on the type of new facility and the type of control technology appropriate for that facility.

Based on recent or proposed pollution control equipment for the wood products industries in the Medford area, the estimated increased capital costs of the proposed Klamath Falls rule change could range from \$5,000 to \$15,000 per ton of annual particulate emissions. The increased operation and maintenance costs could range from \$500 to \$1,000 per ton of particulate collected. The maximum cost impact of the proposed rules for new or expanded sources with potential particulate emissions of 15 or more tons per year could be increased capital costs of \$50,000 to \$150,000 and increase annual operation and maintenance costs of \$5,000 to \$10,000.

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON . . .

Proposed Amendment to New Source Review Rules for the Klamath Falls Area
NOTICE OF PUBLIC HEARING

Hearing Date: December 15, 1988
Comments Due: December 15, 1988

**WHO IS
AFFECTED:**

Residents and Industry of Klamath County

**WHAT IS
PROPOSED:**

The Department of Environmental Quality is proposing to amend OAR 340, Division 20, Significant Emission Rates for new or modified industrial sources in the Klamath Falls Urban Growth Area.

**WHAT ARE THE
HIGHLIGHTS:**

1. The amendments would reduce from 15 to 5 tons per year the Significant Emission Rate for particulate matter that triggers the need for emissions offsets in the Klamath Falls area.
2. Within the Klamath Falls Urban Growth Area, the amended Significant Emission Rates for particulate matter would apply to all new or modified sources for which permits have not been issued prior to April 29, 1988.

**HOW TO
COMMENT:**

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland (811 S.W. Sixth Avenue) or from the regional office nearest you. For further information, contact Sarah Armitage at (503) 229-5581.

A public hearing is scheduled for December 15, 1988, at 7:00 p.m. in the Commissioner's Hearing Room, Klamath County Courthouse Annex, 305 Main Street, Klamath Falls.

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than December 15, 1988.

**WHAT IS THE
NEXT STEP:**

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. If amendments are adopted they would be submitted to the U. S. Environmental Protection Agency as revisions to the Clean Air Act State Implementation Plan. The Commission's deliberation would come during a regularly scheduled meeting after the public hearing.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

AK1118 (11/88)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/88

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

ATTACHMENT C

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

NOTICE OF PUBLIC HEARING OAR 340-22-300

Hearing Date: April 17 and 19, 1989
Comments Due: April 21, 1989

WHY IS THIS BEING CONSIDERED: Refiners and distributors of gasoline are directly affected, and will need to modify the blends of gasoline sold during the summer months. Motorists and other users of gasoline will be indirectly affected by this proposal, because the refiner's costs will be passed through to the ultimate user. The price of gas could increase 1¢ per gallon.

WHAT IS BEING PROPOSED: The Department of Environmental Quality is proposing to adopt OAR 340-22-300 to establish a standard for automotive gasoline. The proposal would establish a maximum Reid Vapor Pressure for automotive gasoline of 10.5 psi during the period of May 15 through September 15. Because of the way gasoline is marketed, this would apply to all Oregon, west of 122° longitude (west of the Cascades). The effective date for 1989 would be June 15, 1989. Sampling procedures and civil penalty authority is included.

WHAT ARE THE BENEFITS: During the past 15 years, the volatility of gasoline, as measured by a test called Reid Vapor Pressure, has been increasing. Gasoline vapors from marketing and on vehicle evaporative losses are significant contributors to concentrations of ground level ozone in the Portland area. Reducing the volatility of gasoline to previously manufactured levels can be of significant benefit in state efforts to meet the federal ozone health standard.

A maximum Reid Vapor Pressure of 10.5 psi would be established. Refiners and distributors of automotive gasoline would need to supply and sell the reduced volatility gasoline during the summer months. This is estimated to provide a 5000 kg/day VOC emission reduction, and help insure compliance with the ozone standard.

Why would it cost more? The refinery cost increases, due to gasoline reformulation, would be expected to be passed through to gasoline users. Studies at the national level have indicated that this could result in about a 1¢ per gallon price increase. Some petroleum industry sources have indicated that the cost may be higher.

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland 811 S.W. Sixth Avenue or the regional office nearest you. For further information contact Bill Jasper at (503) 229-5081.

Public hearings will be held before a hearings officer at:

10:00 a.m.	7:00 p.m.
April 17, 1989	April 19, 1989
Portland Building Auditorium	Portland Building Auditorium
1120 SW Fifth	1120 SW Fifth
Portland, Oregon	Portland, Oregon

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than April 21, 1989.

WHAT IS THE NEXT STEP:

After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U. S. Environmental Protection Agency as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come in June 2, 1989, as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

AK1354 (2/89)

C-1

811 S.W. Sixth Avenue
Portland, OR 97204**FOR FURTHER INFORMATION:**

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

11/7/88

Attachment C
Agenda Item
April 14, 1989
EQC Meeting

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 10, 1989

TO: Environmental Quality Commission

FROM: Hearing Officer

SUBJECT: Hearing Report for Proposed Amendments to the New Source Review Rules for the Klamath Falls Area Held February 15, 1989.

Summary of Procedure

As announced in the public notice, a public hearing was held on Wednesday, February 15, 1988 at the Klamath County Courthouse Annex Commissioner's Hearing Room. The purpose of the hearing was to receive testimony on proposed amendments to the Department's New Source Review Rules (OAR 340-20-225(22), Tables 1 and 2 which define particulate matter (PM₁₀) significant emission rates for industrial sources in Klamath Falls. John Core of the Department's Air Quality Division served as hearings officer. Public notice appeared in the Klamath Falls Herald & News newspaper on November 8, 1988 announcing scheduling of the hearing on December 15, 1988. However because of requests from the Klamath County Board of Commissioners and the City of Klamath Falls, the hearing was rescheduled for February 15, 1989 to provide additional time for development of testimony.

The hearing lasted 2 hours from 7 PM to 9 PM. Oral and written testimony was presented by 18 persons. Additional written testimony was received by mail from 9 other persons. The attachment lists the name, affiliation, form of testimony, and position (in favor of or opposed to the rule).

Summary of Testimony

Testimony received on the proposed rule amendments can be categorized into two groups; those in favor of the rule amendments and those opposed:

Summary of Testimony in Favor of Rule Adoption

Eight members of the public testified in favor of rule adoption citing the need to reduce particulate emissions. Doss Decker, Lewis Furber, Joseph Fisher, Nancy Roeder and Dorothy Chiero testified that particulate emissions from industry need to be reduced and that industry can well afford to better control

emissions. They also commented on several issues related to residential woodstoves, the need to develop economic incentives to promote the use of fuel other than wood for space heating and concerns about particle fallout from industrial facilities. Mavis McCormic of Keno, Oregon provided written testimony in favor of the rule citing the need for tighter emission control to attain national ambient air quality standards.

Testimony from the US Environmental Protection Agency, American Lung Association, the Oregon Environmental Council and the League of Women Voters all supported the rule citing the need for consistent treatment of industrial sources in PM₁₀ Group 1 nonattainment areas; the need for equity in reducing emissions from all sources within the nonattainment area; the unhealthful nature of air quality in Klamath Falls and efforts that industries in the Medford-Grants Pass airsheds have made to reduce emissions. The Oregon Environmental Council comments stressed the need for a stricter offset program to allow economic development while improving air quality and the equity in adopting the same 5-ton emission offset rule as applies in Medford.

Testimony in Opposition to Rule Adoption

Fifteen persons spoke in opposition to rule adoption including 4 members of the public, representatives from the Klamath County Board of Commissioners, the City of Klamath Falls, the Klamath County Health Department, Klamath County Chamber of Commerce, the Wood Heating Alliance, Klamath Consulting Co., Weyerhaeuser Corporation, Modoc Lumber Co., Columbia Plywood Co. and Jeld-Wen.

Testimony of all of those in opposition noted the unique nature of the air quality problem in Klamath Falls and the need for tailor-made solutions for the Klamath Basin rather than adoption of uniform industrial regulations across Southern Oregon and the ineffectiveness of the proposed rule in solving the problem. Much testimony was given on issues related to residential woodsmoke control, the need of local residents to use woodheating and the need to develop local, cooperative solutions rather than mandatory regulations imposed by the Department or the Environmental Protection Agency. Many of those testifying questioned Department information on the magnitude of the PM₁₀ problem in Klamath Falls, the sources contributing to the problem and whether proposed solutions are appropriate. The Klamath County Chamber of Commerce, Columbia Plywood and the Klamath County Air Quality Management Plan question the logic of adopting the Urban Growth Boundary as the nonattainment boundary.

The principal points of testimony presented by those opposed to the rule are outlined below:

Industrial Emission Impacts are Minor

Those opposed to the rule cite Department data that industrial contributions to the PM₁₀ problem are very small and that most of the year air quality in Klamath Falls is good. Those opposed argue that even if industrial emissions were totally eliminated, little if any, air quality benefits would be seen. Many believe that industrial emission impacts are less than that estimated by the Department because the buoyancy of boiler plumes will be above the Basin's very shallow inversions. Stanley Meyers of Jeld-Wen estimates that the reduction in the emission offset from 15 to 5 tons would result in only a 0.2 to 0.3 % improvement in air quality at a substantial cost to industry.

Department Estimates of Economic Impact are Incorrect

Testimony provided by all of those opposed to the rule cite the inadequacy of the Department's economic analysis of the impact of the rule on the industries as well as the community. Weyerhaeuser Corp., Columbia Plywood Co, Klamath County Chamber of Commerce. feel that the capital investment costs required to meet the 5 ton offset limit would be nearly five times that estimated by the Department. Jeld-Wen estimates that the capital cost of their boiler plant expansion will be from \$350,000 to \$500,000 with annual operating costs of \$40,000 to \$50,000. These costs are several times that estimated by the Department. The Klamath County Chamber of Commerce, the Board of Commissioners and others expressed concern regarding the impact of the proposed rule on the economic development of the Klamath Basin, the potential loss of jobs, related taxes, lost property taxes and multiplier impacts on retail, tourism and service industries.

Availability of Offset Emissions

Stanley Meyers of Jeld-Wen provided written testimony expressing concern that the emission offsets needed for industry to comply with the rule may not exist. Those emissions that are now available as offsets are likely to be used up quickly, leaving smaller industries with no options to accommodate growth. Offsets will not be able to be purchased from others because of the lack of industry in the airshed. As a result, a 5 ton offset rule will limit expansion of new and existing industry to an unreasonable and unnecessary extent.

Development of Local Solutions to the Problem

Commissioner Lindow representing the Klamath County Board of Commissioners, Stanley Meyers of Jeld-Wen, Kurt Schmidt of Modoc Lumber, Jim Keller of City of Klamath Falls, Greg Williams of the Chamber of Commerce, John Monfore of Weyerhaeuser, Drew Honzel of Columbia Plywood and others supported adoption of local solutions to the Klamath Basin's PM₁₀ air quality problem. All testified that local governments and industries need time to develop an effective plan without Department imposed regulation. A copy of a draft plan (Klamath County Air Quality Management Plan) was submitted into the hearing record by Commissioner Lindow as a suggested alternative to offset rule adoption. The Plan outlines a number of concerns regarding the nature of magnitude of the Basin's PM₁₀ problem, provides a broad outline of potential industry and woodstove measures that may be helpful in improving air quality and describes a range of public education programs that may be helpful in reducing residential woodsmoke emissions. The Plan contains no specific governmental or industry endorsements nor does it provide commitments for emission reductions.

The Urban Growth Boundary Does Not Describe the Nonattainment Area

The Klamath County Air Quality Management Plan, the Klamath County Chamber of Commerce, Columbia Plywood and testimony from Bob Shaw (Public) questioned the Department's rationale in selecting the Urban Growth Boundary as the legal definition of the nonattainment area. They testified that the problem area is not as large as the UGB and that adoption of the Boundary would be unnecessarily restrictive.

The Proposed Rule Should Not Be Retroactive

Stanley Meyers (Jeld-Wen) testified that by applying the proposed rule retroactively, Jeld-Wen will incur major additional costs that were not foreseen at the time of permit submittal. The moving of the "goal posts" proposed by the retroactive element of the rule has caused Jeld-Wen expensive project delays. The retroactive element of the rule should be deleted. Kurt Schmidt (Modoc Lumber) also supported deletion of the retroactive element of the rule.

Other Issues

Kurt Schmidt (Modoc Lumber) and Stanley Meyers (Jeld-Wen) testified that reducing the offset from 15 to 5 tons would discourage industrial expansions that generate the tax dollars needed to implement other control strategies (County public

Memo to: Environmental Quality Commission
March 10, 1989
Page 5

education programs, street sweepers, etc). Joan Riker (Klamath Consulting) and Drew Honzel (Columbia Plywood) questioned the need for the rule given the minor impact of industry in the airshed. John Crouch of the Wood Heating Alliance testified that the proposed rule would be ineffective and would undercut the communities cooperative effort to reduce woodstove emissions.

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Attachment

Memo to: Environmental Quality Commission
 March 10, 1989
 Page 6

Klamath Falls Industrial Rule Hearing

NO.	NAME	AFFILIATION	ORAL	WRITTEN	POSITION
1	BILL ROBSON	PUBLIC	X	X	O
2	NANCY ROWLOTTAM	PUBLIC		X	F
3	STANLEY MEYERS	JELD-WEN	X	X	O
4	HAROLD NORTH	PUBLIC		X	F
5	PERRY RICKARD	KLAMATH CTY HEALTH		X	O
6	ANDREW GIGLER	PUBLIC	X	X	F
7	LEWIS FURBER	PUBLIC	X	X	F
8	KURT SCHMIDT	MODOR LUMBER CO.	X	X	O
9	GREG WILLIAMS	KLAMATH CTY C OF C	X	X	O
10	TED LINDOW	KLAMATH CTY COMMISS.	X	X	O
11	DREW HONZEL	COLUMBIA PLYWOOD CO.	X	X	O
12	JOHN MONFORE	WEYERHAUSER	X	X	O
13	SHARON LITTLE	LEAGUE WOMEN VOTERS		X	F
14	MARVIS McCORMIC	PUBLIC		X	F
15	JAMES KELLER	CITY, KLAMATH FALLS	X	X	O
16	JOHN CROUCH	WOOD HEAT ALLIANCE	X	X	O
17	JOAN RIKER	KLAMATH CONSULTING		X	O
18	JOE WELLER	AM. LUNG ASSN OF OR.		X	F
19	JOHN CHARLES	OR. ENV. COUNCIL		X	F
20	DAVID KIRCHER	US EPA REGION X		X	F
21	NANCY ROEDER	PUBLIC	X		F
22	ROBERT SHAW	PUBLIC	X		O
23	JIM KIMBIER	PUBLIC	X		O
24	DOSS DECKER	PUBLIC	X		F
25	JOSEPH FISHER	PUBLIC	X		O
26	DAN BROWN	DOUBLE DEE LUMBER	X		O
27	DOROTHY CHIERO	PUBLIC	X		F

Note: O means Opposed to Rule Adoption
 F means Favors Rule Adoption

JEC/jec
 John Core (229-5380)
 (March 16, 1989)

RESPONSE TO TESTIMONY RECEIVED AT THE KLAMATH FALLS
PUBLIC HEARING ON PROPOSED CHANGES TO INDUSTRIAL RULES

ISSUE NO. 1: Industry emissions and impacts are a small percentage of the PM₁₀ problem. Rule adoption would result in little air quality improvement.

RESPONSE: Presently industrial PM₁₀ emissions represent 4% and residential woodheating emissions represent 83% of the worst winter day Klamath Falls Urban Growth Boundary (UGB) air emissions. However, when the needed 85-90% reduction in woodheating emissions is achieved in order to attain compliance with the Federal daily PM₁₀ standard of 150 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), currently permitted industrial emissions will represent a very significant 20% of the UGB emissions. For every 15 tons/year increase in PM₁₀ that would be allowed for new or expanded industry under current rules without offsets an increase in industrial daily impacts of at least one microgram per cubic meter would be expected. Such an impact is classified by Department rules as a significant air quality impact and clearly such impacts could interfere with attaining and maintaining compliance with PM₁₀ air quality standards. In fact if only a few new or expanded industries were granted 15 tons/year PM₁₀ emission increases without offsets it could make attainment impossible because further control of woodheating or dust sources would be impractical to achieve. A remaining but still limited alternative would be to roll back all existing industrial source emissions through an areawide rule change that would require higher levels of emission control. Generally spreading the cost to locate a new industry or expand an existing one to all existing industry would not be considered an equitable requirement.

ISSUE NO. 2: The economic effects on industry and the community are significantly underestimated.

RESPONSE: The cost estimates identified by the Department were based on typical costs incurred by new facilities in order to provide the lowest achievable emission rate (LAER) and reduce particulate emissions by 10 tons per year (the difference between the current 15 tons per year emission rate that triggers LAER and offset requirements and the proposed 5 tons per year rate). These costs typically range from \$5,000 to \$15,000 per annual ton reduction, or \$50,000 to \$150,000 per annual 10 ton reduction.

For example, Medford Corporation in Medford estimated the cost of pollution control equipment at \$3,288,000 to meet LAER (equivalent to 0.015 grains per standard cubic foot) in its proposed new wood-fired power plant. This LAER pollution control equipment will reduce particulate emissions by about 654.5 annual tons compared

to a power plant of the same size just meeting the statewide standard for new boilers of 0.1 grains per standard cubic foot (115.5 annual tons versus 770 annual tons). This represents a cost of \$5,024 per annual ton reduction in order to meet LAER which is at the lower end of the \$5,000 to \$15,000 range identified by the Department.

The proposed Medford Corporation facility represents a very large power plant producing 480,000 pounds per hour of steam; as such, the cost per ton of emission control is lower than would otherwise be expected due to the economy of scale.

A more typical size new power plant would be one producing 50,000 pounds per hour of steam. JELD-WEN, an industry in the Klamath Falls area, estimated the cost of LAER pollution control equipment for this size of power plant at \$350,000 to \$500,000; the equipment vendor contacted by the Department estimated the total installed cost to be \$600,000 to \$800,000. The LAER pollution control equipment would reduce particulate emissions from 75 annual tons (at the 0.1 grains per standard cubic foot statewide limit) down to about 11 annual tons for a net reduction of 64 annual tons. This represents a cost of \$5,469 to \$7,813 per annual ton reduction (using the JELD-WEN estimates) or \$9,375 to \$12,500 per annual ton reduction (using the equipment vendor estimates); these costs per ton are all within the \$5,000 to \$15,000 range identified by the Department.

The discrepancy in the Department and industry cost estimates results from a specific case in which LAER would not be required under the current 15 annual ton LAER/offset criteria, but would be required under the 5 annual ton criteria, and the application of LAER results in greater than a 10 annual ton reduction. In this specific case involving JELD-WEN, internal offsets were available within the plant to reduce the net emission increase to less than 15 annual tons but not less than 5 annual tons. The application of LAER pollution control equipment would reduce particulate emissions by considerably more than needed to reduce the net increase to less than 5 annual tons. Thus the cost anticipated by JELD-WEN due to the proposed change in the LAER/offset criteria was the total cost of providing LAER (\$350,000 to \$500,000) so the 10 annual ton change in the LAER/offset criteria appears to represent \$35,000 to \$50,000 per annual ton.

This JELD-WEN example probably represents the worst case, or at least represents cases more typical of the smaller industries located in the Klamath Falls UGB.

A possible alternative to the 5 annual ton LAER/offset criteria, that would reduce the costs of cases like the JELD-WEN example and be more cost-effective, would be to keep the current 15 annual ton LAER criteria but require offsets at 5 or more annual tons. This would not require LAER for emission increases in the 5 to 15

annual ton range if external offsets (from residential woodstoves or other industries) were available to fully offset the increase.

ISSUE NO. 3: Available emission offsets are so few that the rule would prohibit industrial growth.

RESPONSE: About 150 to 300 tons per year of PM₁₀ emissions are available as potential offsets in the Klamath Falls area. This could accomodate 10 to 20 new or expanded industries with emissions of 15 tons per year.

The difference between actual 1986 PM₁₀ emissions and the PM₁₀-equivalent PSEs indicates that 47 tons per year are available for expansion of existing industries (or available for emission trading to new sources locating in the area). An additional 100 tons per year could be obtained by reducing existing emissions to the levels proposed in the Medford area. The proposed Medford wood-fired boilers limits are 0.03 grains per standard cubic foot compared to the existing Klamath Falls limits of 0.1-0.2 grains per standard cubic foot (70-85% lower). The proposed Medford veneer drier limits for Douglas fir veneer are 0.30-0.45 pounds per thousand square feet of veneer (3/8" basis) compared to the existing Klamath Falls limits of 0.52-1.5 pounds per thousand (42-70% lower).

It may be possible to also obtain emission offsets from the reduction of residential woodburning emissions.

The 1987 Klamath Falls woodheating survey indicated that the average fireplace household burned 2.6 cords per year and the average woodstove (or fireplace insert) household burned 4.2 cords per year. The average household burning wood as the main heat source burned 4.7 cords per year and the average household with wood as the sole source of heat burned 5.1 cords per year.

The woodstove particulate emission factor reported in the AP-42 Emission Factor Manual of the U.S. Environmental Protection Agency (EPA) is 21 grams per kilogram of wood burned (or 42 pounds per ton). About 95% of residential woodsmoke emissions are in the PM₁₀ size range. The average cord of firewood is estimated to weigh 3500 pounds. This results in a woodstove emission factor of about 70 pounds per cord (or 0.035 tons per cord).

The Housing Authority of Jackson County is implementing a program to replace existing woodstoves in low-income households with more efficient and cleaner burning units. The funding is from Community Development Block Grants and other sources. Replacement of a woodstove with a natural gas heater provides a 99.8% reduction in emissions at a cost of about \$2,000 per home; replacement with a pellet unit provides about a 90% reduction.

Replacement of woodstoves with gas heaters in the Klamath Falls area would reduce emissions by 294 pounds per year per household (average woodstove household) to 329 pounds per year (household using wood as main heat source) to 357 pounds per year (household with wood as sole heat source). Replacement with pellet units would reduce emissions by 90% of these amounts.

To offset 15 annual tons of PM₁₀ emissions, about 84 sole source woodstove households would need to be converted to gas heat. In order to not interfere with the effectiveness of the woodstove curtailment program, the homes targeted for conversion to gas should be those in the severe problem area who would have the most difficulty complying with the curtailment program or even be exempt from curtailment: Low-income households with wood as the sole source of heat. At \$2,000 per home, this would cost a total of about \$168,000, or \$11,200 per annual ton of PM₁₀ emission reduction. This is within the \$5,000 to \$15,000 per annual ton initial cost estimate, but slightly above the initial total cost estimate range of \$50,000 to \$150,000 since an external offset such as this would require that the entire 15 annual ton increase be offset, not just the 10 annual ton difference between the current and proposed LAER/offset criteria.

The emission reduction would provide a net air quality benefit (as required by Department rules) in correcting the PM₁₀ health problem since the reduction would be achieved in the problem area during the problem time of year.

The use of woodstoves as offsets must be carefully limited to insure that enough woodheating emission reductions will be achieved to reach attainment of the PM-10 air quality standard. At least an 85-90% reduction in woodheating emissions will be needed to attain standards. About 4% of the woodburning households are sole-source woodheated and likely a large portion of these would be exempted from curtailment. About half of this category (representing about 25 tons per year of PM₁₀) has lower incomes (less than \$20,000 household income) and would be a potential offset category. If a net air quality benefit can be shown (depending upon specific location of the new industrial emissions and compliance rate of the curtailment program) another 13% of the woodburning households representing lower income (less than \$20,000 household income) main-source woodheating homes might be eligible for use as offsets. This would represent an additional 150 or more tons per year of offsets.

ISSUE NO. 4: Local voluntary solutions to industrial emission growth management are needed rather than Department imposed rules.

RESPONSE: The success of any pollution control plan relies heavily on the cooperation of the residents and industries of a community. It is imperative, however, that the pollution control

plan is adequate to insure that health standards are met in a timely manner. The State Implementation Plan for PM₁₀ must contain effective and enforceable measures to address growth in industrial emissions. The emission offset requirements provide considerable flexibility for managing emissions and allowing economic development without interfering with progress toward meeting health standards.

ISSUE NO. 5: The Urban Growth Boundary should not be adopted as the nonattainment area.

RESPONSE: Designation of the boundary of the nonattainment area within which control strategies will be applied requires consideration of several issues:

1. The nonattainment boundary must include the geographical area within which national ambient air quality standards are currently being exceeded. Air Sampling studies completed in November, 1985, March, 1988 and January, 1989 have consistently show that minor day-to-day variations in the pattern of PM₁₀ levels exist depending on wind direction and the time of day of the survey. All surveys indicate a consistent pattern of maximum concentrations near Peterson School extending outward toward the downtown district, south toward Kingsley Field and westerly toward Green Springs Junction. The PM₁₀ levels appear to follow local topography with concentrations decreasing with increases in elevation. They also appear to follow the emission density of homes (woodstoves) in the area.

2. The nonattainment boundary must include the area within which air standards may be exceeded in the future. EPA requires that SIP control strategies consider future population, transportation, housing and industrial growth to assure that air standards will be attained and maintained. Development of a strategy to assure maintenance of air standards therefore requires that the nonattainment area boundary must be consistent with the regional planning boundary for which community growth projections are available.

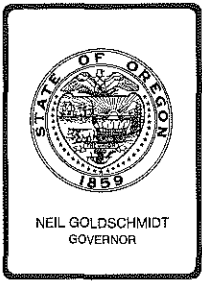
3. The nonattainment area must be a legally defined boundary recognized by local governments. Legal definition is required for rulemaking purposes. Additionally, some component of the control strategy may need to be implemented through county land use planning ordinances tied to the Urban Growth Boundary.

Adoption of the Urban Growth Boundary as the nonattainment area is the only legally defined boundary that meets all of the above criteria.

ISSUE NO 6: The Rule Should Not Be Retroactive.

RESPONSE: The Department is concerned that PM₁₀ emission increases from expanding industrial sources that have already filed permit applications (Jeld-Wen) will significantly interfere with efforts to attain and maintain compliance with air quality standards. The addition of 15 tons per year of industrial emissions from Jeld-Wen would result in about a 1 $\mu\text{g}/\text{m}^3$ airshed impact on worst-case winter days in 1992 if emission offsets are not required. Additional impacts from other expanding and/or new industries would further complicate air quality standard attainment. Because of the extremely high degree of emission reduction needed to bring the Klamath Falls airshed into compliance with air quality standards, any increase in emissions must be highly controlled and/or totally offset to attain standards. The Department is also concerned about the inequity of seeking public cooperation in extensive control of emissions from woodheating households while permitting major expansions in industrial emissions.

MLH:mlh
John Core (229-5380)
Merlyn Hough (229-6446)
(3/24/89)



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: J
Division: HSW
Section: Solid Waste

SUBJECT:

Permanent rule to prohibit disposal of out-of-state hazardous waste at Oregon solid waste sites.

PURPOSE:

Some wastes are considered hazardous in other states but non-hazardous in Oregon, providing an economic incentive to ship those wastes to Oregon solid waste disposal sites to avoid the higher costs of disposal at a hazardous waste disposal site. This rule makes permanent a 180-day temporary rule adopted by the Commission on November 4, 1988, with no changes in the rule. The temporary rule expires on May 4, 1989.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
 - Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment B
 - Public Notice Attachment C

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment

- Approve Department Recommendation
 - Variance Request Attachment

Meeting Date: April 14, 1989
Agenda Item: J
Page 2

Exception to Rule Attachment
 Informational Report Attachment
 Other: (specify) Attachment

DESCRIPTION OF REQUESTED ACTION:

Adoption of these rules will make permanent a temporary rule adopted by the Commission on November 4, 1988. This rule will prohibit wastes which are considered hazardous under the law in the state of origin from being managed at solid waste disposal sites when transported into Oregon. This rule will not prohibit out-of-state wastes from being disposed of in Oregon, but will require that they be managed as a hazardous waste if transported into this state.

AUTHORITY/NEED FOR ACTION:

Required by Statute: _____ Attachment
 Enactment Date: _____
 Statutory Authority: ORS 459.015, ORS 459.045 Attachment D
 Pursuant to Rule: _____ Attachment
 Pursuant to Federal Law/Rule: _____ Attachment
 Other: Attachment
 Time Constraints: (explain)

This proposed rule is to make permanent a temporary rule that expires as of May 4, 1989 (the end of the 180-day period).

DEVELOPMENTAL BACKGROUND:

Advisory Committee Report/Recommendation Attachment
 Hearing Officer's Report/Recommendations Attachment E
 Response to Testimony/Comments Attachment
 Prior EQC Agenda Items: (list) Attachment F
 Agenda Item Q, November 4, 1988
 Other Related Reports/Rules/Statutes: Attachment
 Supplemental Background Information Attachment

Meeting Date: April 14, 1989
Agenda Item: J
Page 3

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

This rule affects all solid waste disposal sites within the state of Oregon. It prohibits these sites from accepting wastes for disposal which are defined as hazardous in the state of origin. Currently, there are no known sites which accept such wastes. Prior to adoption of the temporary rule, one landfill in Jackson County was accepting shredded money from the Federal Reserve Bank in San Francisco. Shredded money is considered hazardous in California. Since the adoption of the temporary rule, shredded money is no longer coming to Oregon. A medical waste incinerator under construction in Klamath County will not be accepting medical waste from California, which is considered hazardous in that state, because the solid waste permit issued by DEQ to this facility prohibits that waste from being accepted, under the authority of the temporary rule.

PROGRAM CONSIDERATIONS:

This rule will require additional monitoring and/or enforcement for solid waste sites, particularly for sites near the Oregon border. However, program impact is expected to be minimal.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Let temporary rule expire; do not replace with permanent rule.
2. Revise temporary rule to amend hazardous waste rules instead of solid waste rules.
3. Make temporary rule permanent, with revisions.
4. Make temporary rule permanent, with no revisions.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends making the temporary rule permanent, with no revisions.

Federal regulations determine which wastes are to be managed as "hazardous wastes" nationwide. However, each state may classify additional wastes as hazardous. Thus, wastes which Oregon classifies as solid waste may be considered hazardous wastes in a neighboring state.

Meeting Date: April 14, 1989
Agenda Item: J
Page 4

In considering adoption of this rule, the first question to be answered is, should Oregon keep these wastes from being disposed of in solid waste disposal sites? Keeping these wastes out of solid waste disposal sites in Oregon supports the regulations of neighboring states by requiring waste management that is consistent with the regulations of the state of origin. It also reduces the environmental risk by reducing the proportion of higher risk wastes in Oregon solid waste disposal facilities.

The second question to be answered is how to keep these wastes out of Oregon solid waste disposal sites. The proposed rule would correct an artificial incentive for waste generators to transport wastes to Oregon, by requiring management of the wastes in a manner similar to that required by the state of origin.

An alternative to the proposed rule would be to amend the hazardous waste rules, rather than solid waste rules, and determine that such wastes should be classified as hazardous waste. However, this alternative does not appear to have any advantages over the proposed rule and has the disadvantage of being more difficult to administer because of the complexity of the hazardous waste laws and regulations. The Department sees the issue as one of how these wastes should be managed, rather than how they should be defined.

No changes to the temporary rule were proposed in the public testimony, and the temporary rule, as written, has appeared to work effectively. Therefore, no revisions to the temporary rule are proposed.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

This proposed rule is consistent with a policy of cooperation with neighboring states on the management of wastes. The environmental agency directors of Oregon, Washington, and Idaho agreed in 1988 that waste should be managed as hazardous if the waste is determined to be hazardous at the point of generation.

The rule is also consistent with the Department's proposed legislation this session (SB 424) to keep hazardous waste not regulated by hazardous waste laws out of solid waste landfills.

Meeting Date: April 14, 1989
Agenda Item: J
Page 5

This rule does not violate the Commerce Clause of the U.S. Constitution, because the rule does not prohibit disposal of this waste in Oregon. Rather, the rule would simply correct an artificial incentive for transport of the waste, by requiring management and disposal that is consistent with the policy of the state of origin.

ISSUES FOR COMMISSION TO RESOLVE:

Should Oregon prohibit all wastes considered hazardous at the point of origin from being disposed of in Oregon solid waste facilities, even if similar wastes generated in Oregon can be disposed of in solid waste facilities?

INTENDED FOLLOWUP ACTIONS:

Notify solid waste disposal sites, State of Washington, State of California.

Reevaluate and propose rules for proper disposal and management of certain wastes generated in Oregon, that are not required by Federal law to be disposed of in licensed RCRA hazardous waste facilities. Such wastes include: asbestos, medical wastes, contaminated soils, and conditionally exempt quantities of hazardous waste.

Approved:

Section: Steve Greenwood
Division: Stephanie Hellock
Director: Stephanie Taylor
for Fred Hansen

Report Prepared By: Steve Greenwood

Phone: 229-5782

Date Prepared: March 30, 1989

Steve Greenwood:b
SB8421 (SW)
March 30, 1989

General Rules Pertaining to Specified Wastes

340-61-060 (1) Agricultural Wastes. Residues from agricultural practices shall be recycled, utilized for productive purposes or disposed of in a manner not to cause vector creation or sustenance, air or water pollution, public health hazards, odors, or nuisance conditions.

(2) Hazardous Solid Wastes. No hazardous solid wastes shall be deposited at any disposal site without prior written approval of the Department or state or local health department having jurisdiction.

(3) Waste Vehicle Tires:

(a) Open Dumping. Disposal of loose waste tires by open dumping into ravines, canyons, gullies, and trenches, is prohibited;

(b) Tire Landfill. Bulk quantities of tires which are disposed by landfilling and which are not incorporated with other wastes in a general landfill, must be baled, chipped, split, stacked by hand ricking or otherwise handled in a manner provided for by an operational plan submitted to and approved by the Department;

(c) General Landfill. Bulk quantities of tires if incorporated in a general landfill with other wastes, shall be placed on the ground surface on the bottom of the fill and covered with earth before other wastes are placed over them.

(4) Waste Oils. Large quantities of waste oils, greases, oil sludges, or oil soaked wastes shall not be placed in any disposal site unless special provisions for handling and other special precautions are included in the approved plans and specifications and operational plan to prevent fires and pollution of surface or groundwaters.

(5) Demolition Materials. Due to the unusually combustible nature of demolition materials, demolition landfills or landfills incorporating large quantities of combustible materials shall be cross-sectioned into cells by earth dikes sufficient to prevent the spread of fire between cells, in accordance with engineering plans required by these rules. Equipment shall be provided of sufficient size and design to densely compact the material to be included in the landfill.

(6) Hazardous Wastes from Other States. Wastes which are hazardous under the law of the state of origin shall not be managed at a solid waste disposal site when transported to Oregon. Such wastes may be managed at a hazardous waste facility in Oregon if the facility is authorized to accept the wastes pursuant to ORS 466.005 et seq. and applicable regulations.

ZB7883II

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

IN THE MATTER OF AMENDING) STATEMENT OF NEED
OAR CHAPTER 340,) FOR RULEMAKING
DIVISION 61))

1. Statutory Authority

ORS 459.045(1)(a) provides the Environmental Quality Commission with the authority to establish rules governing the disposal of solid wastes to prevent pollution of surface or ground waters and hazards to service or disposal workers or to the public.

2. Statement of Need

Certain wastes are defined as "solid waste" in Oregon and "hazardous waste" in neighboring states, creating an artificial incentive for generators of those wastes in other states to transport them to Oregon for disposal at a much lower cost.

This artificial incentive creates an opportunity for some wastes to be disposed of in a manner inconsistent with the state's policy, while increasing risks to the public and the environment of Oregon. Shredded money from the Federal Reserve Bank, considered hazardous in California, was being sent to a solid waste landfill in Jackson County, Oregon prior to the adoption of this temporary rule. A proposal to accept medical wastes from California, considered hazardous in that state, was made by a recently permitted medical waste incinerator in Klamath County.

3. Principal Documents Relied Upon

- a. Oregon Revised Statutes, Chapter 459
- b. Oregon Administrative Rules, Chapter 340, Division 61

4. Fiscal and Economic Impact

The proposed rule would affect some solid waste disposal facilities in Oregon, by not allowing them to accept certain wastes from neighboring states, thus reducing their potential revenue. The potential amount of this lost revenue is uncertain.

The proposed rule may also have an indirect positive benefit to the Oregon ratepayers at solid waste disposal facilities because of the corresponding reduction in environmental risk at these facilities, due to not accepting wastes defined as hazardous in neighboring states.

The principal economic impact would be to generators of waste defined as hazardous in other states. For the Federal Reserve Bank in San Francisco, California, the difference in disposal costs between Oregon and Washington is \$3,000 per week, to dispose of the same material.

SB8395 (SW)

A CHANCE TO COMMENT ON...

Proposed Rule Prohibiting Disposal of Out-of-State Wastes Designated as "Hazardous" in Solid Waste Disposal Sites in Oregon

Hearing Dates: 3/1/89
3/2/89
3/6/89
Comments Due: 3/15/89

WHAT IS PROPOSED:

A permanent administrative rule prohibiting waste designated as "hazardous" in the state of origin from being disposed of at a solid waste disposal site in Oregon.

WHO IS AFFECTED:

Owners and operators of solid waste disposal sites in Oregon.

WHAT ARE THE HIGHLIGHTS:

In November 1988, the Environmental Quality Commission adopted a temporary rule prohibiting waste designated as "hazardous" in the state of origin from being disposed of in a solid waste landfill in Oregon. The temporary rule has been in affect for 180 days, during which time the Department has reviewed other options and is proposing a permanent rule.

This rule was proposed to prevent differences in regulatory requirements between Oregon and neighboring states from resulting in interstate transport of wastes, designated as "hazardous" in other states, to Oregon to avoid the regulatory requirements of those states.

PUBLIC HEARINGS:

Public Hearings on the proposed permanent rule are scheduled for:

Wednesday, March 1, 1989
2:00 PM
DEQ Portland Headquarters
Room 4, Fourth Floor
811 SW Sixth Avenue

Thursday, March 2, 1989
7:00 PM
Jackson County Courthouse Auditorium
10 S. Oakdale
Medford

(Over)

C - 1



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

PUBLIC HEARINGS: (Continued)

Monday, March 6, 1989
7:00 PM
Arlington Grade School
1400 Main
Arlington

HOW TO COMMENT: Written and/or oral comments may be presented at the hearings or mailed to: DEQ Solid Waste Section, ATTN: Steve Greenwood, 811 SW Sixth Avenue, Portland, OR 97204. Comments must be received by 5:00 PM, Wednesday, March 15, 1989.

WHAT IS THE NEXT STEP: The Environmental Quality Commission may adopt a new rule identical to the one proposed; adopt a modified rule as a result of testimony received; or decline to adopt the proposed rule. The Commission will consider the proposed rule and rule revisions at its meeting on April 14, 1989.

FY8185

SOLID WASTE CONTROL

459.045

(e) Promote research, surveys and demonstration projects to aid in developing more sanitary, efficient and economical methods of solid waste management.

(f) Provide advisory technical assistance and planning assistance to local government units and other affected persons in the planning, development and implementation of solid waste management programs.

(g) Develop, in coordination with federal, state and local agencies and other affected persons, long-range plans including regional approaches to promote reuse, to provide land reclamation in sparsely populated areas, and in urban areas necessary disposal facilities for resource recovery.

(h) Provide for the adoption and enforcement of minimum performance standards necessary for safe, economic and proper solid waste management.

(i) Provide authority for counties to establish a coordinated program for solid waste management, to regulate solid waste management and to license or franchise the providing of service in the field of solid waste management.

(j) Encourage utilization of the capabilities and expertise of private industry in accomplishing the purposes of ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.285.

(k) Promote means of preventing or reducing at the source, materials which otherwise would constitute solid waste.

(l) Promote application of resource recovery systems which preserve and enhance the quality of air, water and land resources. [1971 c.648 §1; 1975 c.239 §2; 1983 c.729 §15]

459.017 Relationship of state to local governments in solid waste management.

(1) The Legislative Assembly finds and declares that:

(a) The planning, location, acquisition, development and operation of landfill disposal sites is a matter of state-wide concern.

(b) Local government has the primary responsibility for planning for solid waste management.

(c) Where the solid waste management plan of a local government unit has identified a need for a landfill disposal site, the state has a responsibility to assist local government and private persons in establishing such a site.

(2) It is the intent of the Legislative Assembly that any action taken by the Environmental Quality Commission to establish a landfill dis-

posal site under ORS 459.049 be recognized as an extraordinary measure that should be exercised only in the closest cooperation with local government units that have jurisdiction over the area affected by the proposed establishment of a landfill disposal site. [1979 c.773 §2]

459.020 [1967 c.248 §1; repealed by 1971 c.648 §33]

(State Administration)

459.025 General powers and duties of department. Subject to policy direction by the commission, the department:

(1) Shall promote and coordinate research, studies and demonstration projects on improved methods and techniques in all phases of solid waste management.

(2) May apply to and receive funds from the Federal Government and from public and private agencies to carry out studies, research and demonstration projects in the field of solid waste management.

(3) May enter into agreements with the Federal Government, state agencies, local government units and private persons to carry out ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.285. [1971 c.648 §4; 1973 c.835 §136]

459.030 [1967 c.428 §3; 1969 c.593 §43; repealed by 1971 c.648 §33]

459.035 Assistance in development and implementation of solid waste management plans and practices and recycling programs. Consistent with ORS 459.015 (2)(c), the department shall provide to state agencies, local government units and persons providing solid waste collection service, advisory technical and planning assistance in development and implementation of effective solid waste management plans and practices, implementation of recycling programs under ORS 459.165 to 459.200 and 459.250, and assistance in training of personnel in solid waste management. The department shall report to the Legislative Assembly from time to time on further assistance that will be needed to develop, implement and administer effective solid waste management programs or recycling programs. The department shall assist in surveys to locate potential disposal sites. The department may request the assistance of other state agencies. [1971 c.648 §3; 1983 c.729 §16]

459.040 [1967 c.428 §4; 1969 c.593 §44; repealed by 1971 c.648 §33]

459.045 Rules. (1) The commission shall adopt reasonable and necessary solid waste management rules governing the:

(a) Accumulation, storage, collection, transportation and disposal of solid wastes to prevent motor production and sustenance, transmission of diseases to humans or animals, air pollution, pollution of surface or ground waters, and hazards to service or disposal workers or to the public.

(b) Location of disposal sites, giving consideration to the adaptability of each disposal site to the population served, topography and geology of the area and other characteristics as they affect protection of ground and surface waters and air pollution; minimum standards of design, management and operation of disposal sites; and open burning and salvage operations at disposal sites.

(c) Construction, loading and operation of vehicles used in performing solid waste collection service to prevent the contents thereof from dropping, sifting, leaking or escaping onto public highways.

(d) Definition of other "wastes" subject to regulation pursuant to ORS 459.005 to 459.105, 459.205 to 459.245, 459.255 to 459.285, 459.992 (1) and (2) and 466.995 (1).

(e) Closure and post-closure maintenance of land disposal sites.

(2) The commission may by rule:

(a) Exempt a class of land disposal sites from a requirement to provide financial assurance under ORS 459.270; or

(b) Establish criteria which an individual land disposal site must meet to be exempted from the requirement to provide financial assurance under ORS 459.270.

(3) The commission shall adopt rules on other subjects as necessary to carry out ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.285.

(4) The commission shall adopt rules which have modified or limited application in different geographic areas of the state when special conditions prevail in specified geographic areas. Special conditions that shall be considered include, but are not limited to, climatic conditions, zone classification of the area, population characteristics, methods and costs of solid waste management, solid waste management plans and other conditions in the area. Modifications or limitations shall not be unreasonable, arbitrary or inimical to the policy and purposes of ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.285.

(5) All rules adopted under this section shall be adopted after public hearing and in accordance with ORS 183.310 to 183.550.

(6) Unless a rule adopted under this section is adopted pursuant to the authority granted by ORS 183.335 (2), the commission shall mail copies of the proposed rules to all persons who have requested such copies. The copies shall be mailed at least 30 days prior to the hearing required by subsection (5) of this section. [1971 c.648 §5; 1973 c.835 §137; 1981 c.709 §2; 1983 c.766 §6]

459.047 Landfill assistance from department; landfill disposal site certificate; effect of issuance. Upon request by a city or county responsible for implementing a department approved solid waste management plan which identifies a need for a landfill disposal site, and subject to policy direction by the commission, the Department of Environmental Quality shall:

(1) Assist the local government unit in the establishment of the landfill including assisting in planning, location, acquisition, development and operation of the site.

(2) Site and issue a solid waste disposal permit pursuant to ORS 459.205 to 459.245, 459.255 and 459.265 for a landfill disposal site within the boundaries of the requesting local government unit. Subject to the conditions set forth therein, any permit for a landfill disposal site authorized by the Environmental Quality Commission under this subsection shall bind the state and all counties and cities and political subdivisions in this state as to the approval of the site and the construction and operation of the proposed facility. Affected state agencies, counties, cities and political subdivisions shall issue the appropriate permits, licenses and certificates necessary to construction and operation of the landfill disposal site, subject only to condition of the site certificate. Each state or local government agency that issues a permit, license or certificate shall continue to exercise enforcement authority over such permit, license or certificate. [1979 c.773 §3]

459.049 Mandated sites in certain counties; establishment by state. (1) Upon its own motion or upon the recommendation of the department, the Environmental Quality Commission may determine that a landfill disposal site within the counties of Marion, Polk, Clackamas, Washington or Multnomah must be established in order to protect the health, safety and welfare of the residents of an area for which a local government solid waste management plan has identified the need for a landfill disposal site. In making its determination on the need for a landfill disposal site or, where applicable, on the location of a landfill disposal site, the commission shall give due consideration to:

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 13, 1989

TO: Environmental Quality Commission

FROM: Steve Greenwood, Solid Waste Section

SUBJECT: Public Testimony: Proposed rule on Out-of-State Waste

The Department of Environmental Quality (DEQ) held three public hearings on the proposed permanent rule which prohibits waste designated as "hazardous" in the state of origin from being disposed of at a solid waste disposal site in Oregon. Times and locations of the hearings were:

March 1 - DEQ Headquarters office, Portland, 2:00 pm

March 2 - Jackson County Courthouse, Medford, 7:00 pm

March 6 - Arlington Grade School, Arlington, 7:00 pm

In addition, written testimony was received prior to March 15, 1989.

A total of five persons provided oral testimony on the rule: Rick Parrish (supporting the rule), Alice Weatherford-Harper (supporting), Rich Harper (supporting), Judge Laura Pryor (comments on interstate cooperation), and Gloria P. Davis (supporting). Judge Pryor commented at the Arlington hearing that the rule points out the need for more uniform coding of hazardous wastes across all states. Judge Pryor mentioned that she was aware of this need as a member of the Pacific Northwest Regional Council. She did not oppose the proposed rule.

Written testimony was received from three persons. Alice Weatherford-Harper supported the proposed rule, and emphasized her desire to prohibit medical wastes from California, classified there as hazardous, from being disposed of as solid waste in Oregon. Testimony was received from Robert Mikkelsen, Precision Equipment, Inc., supported the proposed rule and emphasized the need for waste minimization. Testimony from R. J. Hess, Manager of Environmental Sciences for Portland General Electric did not oppose the rule, but expressed concern that other states currently used for disposal by Oregon generators may retaliate and prohibit Oregon's hazardous waste from being disposed of there.

The hearing in Medford had only one person show up, and that person chose not to testify. Because of an error on the part of Jackson County the doors to the hearing room were locked, and the hearing was cancelled after one half hour of waiting.

Memo to: Environmental Quality Commission
March 13, 1989
Page 2

In response to the comment from R. J. Hess, the Department would emphasize that this proposed rule would not prohibit any hazardous waste from entering Oregon from another state, but would require that the waste be managed in a manner similar to that required in the state of origin.

REQUEST FOR COMMISSION ACTION

Agenda Item Q, November 4, 1988, EQC Meeting

Request for Adoption of a Temporary Rule Amending OAR 340-61-060 to Prohibit Wastes Which are Hazardous Under the Law of the State of Origin From Being Managed at Solid Waste Disposal Sites When Transported into Oregon.

ISSUE

Federal regulations define which wastes are hazardous nationwide. However, each state may opt to classify additional wastes as hazardous. Thus, a waste managed as hazardous (at state option) in one state may be managed as solid waste in a neighboring state. The unintended result of this allowed state flexibility can be interstate transport of waste to avoid legitimate regulatory requirements.

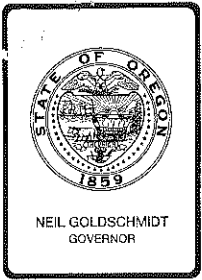
SUMMATION

- The Department is currently facing a proposal to build an infectious waste incinerator 3 miles from the California border in Klamath County. Infectious waste is managed as hazardous waste in California but not in Oregon or adjacent states.
- Washington, Idaho, Nevada, and Alaska agree on a policy of managing waste as hazardous if, according to state law, the waste is determined to be hazardous at the point of generation.
- Options for implementing a similar policy in Oregon have been explored. Amendment of the Solid Waste rules appears to be the best option for implementation.

DIRECTOR'S RECOMMENDATION

The Department recommends that the Commission adopt a 180 day temporary rule amending OAR 340-61-060 to prohibit wastes which are hazardous under the law of the state of origin from being managed at solid waste disposal sites when transported into Oregon.

The Department also recommends that the Commission authorize the Department to proceed to permanent rulemaking.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: 4/14/89
Agenda Item: K
Division: HSW
Section: SW/WTP

SUBJECT:

Adoption of revisions to waste tire administrative rules to include: 1) Methodology to determine when it is economically feasible to recycle waste tires. 2) Procedure to establish "block passes" in tire carrier program. 3) Housekeeping changes in waste tire storage site and carrier permitting rules.

PURPOSE:

1) The purpose of the economic feasibility methodology is to determine if recycling or reuse is more economically feasible than landfilling whole waste tires in solid waste disposal sites. This would allow an exemption to the ban on landfilling whole waste tires. The methodology is structured to encourage recycling rather than landfilling whole waste tires. 2) The purpose of the "block pass" procedure is to allow the holder of a combined waste tire carrier/storage site permit to hire an unpermitted common or private carrier to haul waste tires on a temporary basis. This procedure allows the permittee to take advantage of lower cost backhaul opportunities in remote areas of Oregon, and allows a common or private carrier, whose primary commodity is not waste tires, an opportunity to infrequently haul waste tires on a backhaul without having to acquire a waste tire carrier permit. A backhaul allows carriers to reduce their cost by returning to their point of origin with a load. Backhauling of waste tires cannot happen without the block pass. 3) The purpose of the housekeeping revisions is to add rule changes the Department has found necessary in administering the program.

Meeting Date: 4/14/89
Agenda Item: K
Page 2

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Program Strategy
 - Proposed Policy
 - Potential Rules
 - Other: (specify)

- Authorize Rulemaking Hearing
 - Proposed Rules (Draft) Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Draft Public Notice Attachment

- Adopt Rules
 - Proposed Rules (Final Recommendation) Attachment A
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment C
 - Public Notice Attachment D

- Issue Contested Case Decision/Order
 - Proposed Order Attachment

- Other: (specify)

DESCRIPTION OF REQUESTED ACTION:

1) ORS 459.710(2) provides four exceptions to the chipping requirement for landfill of tires in solid waste disposal sites which goes into effect on July 1, 1989. One of the exceptions allows burial of whole tires if recycling is not economically feasible. The proposed new rule determines that tire recycling is economically feasible if it costs less than:

- . The cost to dispose of waste tires at most Oregon landfills (as determined by a Department survey); or
- . The charge for tire disposal in the local landfill, if local costs are more than the above. (Page A 13 - 14)

The survey would be conducted at least once every two years. A Department survey of all landfills in April, 1988 found most charged \$1.00 per passenger tire, and \$2.00 for truck tires.

2) The statute defines a tire carrier as "any person engaged in picking up or transporting waste tires for the purpose of storage or disposal." It makes two exceptions, for garbage

Meeting Date: 4/14/89
Agenda Item: K
Page 3

haulers hauling fewer than 10 tires, and private persons hauling fewer than five tires. The "block pass" rule proposes a procedure and fee structure to allow persons holding combination carrier/storage site permits to use unpermitted common and private carriers to haul waste tires on a temporary basis (no longer than ten days, and no more than three hauls per quarter). The unpermitted carrier would be operating under the waste tire permit of the permittee. (Page A - 19)

3) Other revisions to existing rules contain the following elements:

- . Proposed permit modification and renewal fees for waste tire storage sites and carriers. (Pages A - 7 and A - 22)
- . Provision for Commission to grant variances to storage standards. (Page A - 12)
- . Various housekeeping measures.

AUTHORITY/NEED FOR ACTION:

<input checked="" type="checkbox"/> Required by Statute: <u>ORS 459.785</u>	Attachment <u> </u>
Enactment Date: <u>1987 (HB 2022)</u>	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 459.710</u>	Attachment <u> </u>
<input checked="" type="checkbox"/> Amendment of Existing Rule: <u>OAR 340-62</u>	Attachment <u>A</u>
<u> </u> Implement Delegated Federal Program:	Attachment <u> </u>
<u> </u> Other:	Attachment <u> </u>
<input checked="" type="checkbox"/> Time Constraints:	
Needs to be in place before the prohibition on landfilling whole tires goes into effect (7/1/89).	

DEVELOPMENTAL BACKGROUND:

<input checked="" type="checkbox"/> Advisory Committee Report/Recommendation	Attachment <u>F</u>
<input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u>E</u>
<input checked="" type="checkbox"/> Prior EQC Agenda Items:	
Agenda Item F, 1/20/89 EQC Meeting (Hearing Authorization)	
Agenda Item G, (Pages G-3 and G-7) 7/8/88 EQC Meeting - Permitting Requirement for Waste Tire Storage Sites and Waste Tire Carriers	
	Attachments <u>F,G</u>

Meeting Date: 4/14/89
Agenda Item: K
Page 4

___ Other Related Reports/Rules/Statutes:

___ Supplemental Background Information

Attachment ___

Attachment ___

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

1) The Waste Tire Task Force supports the proposed new rule on economic feasibility of tire recycling. However, testimony was received from some landfill operators and some members of the public (see Hearing Officers Report, Attachment E) that the "economic feasibility" standard should be based on the charge of disposal of whole waste tires at each local landfill, rather than on the statewide average cost plus a 10 percent premium for recycling (or, for truck tires, a 25 percent premium), as proposed by the Department. If local landfill disposal of whole tires is the most "economically feasible" way for people to dispose of their tires, the landfill operators commented that the Department should not preclude this as an option. To do so would only result in illegal dumping, not recycling.

The Department's existing chipping standard for landfill disposal was questioned. Several persons felt splitting a tire (cutting it in two) was sufficient to provide proper landfilling, and much less expensive than chipping. Others commented that splitting would meet the alternative test for landfilling (two-thirds reduction in bulk) and thus landfills could continue to accept split tires after July 1, 1989.

Members of the public are generally concerned that waste tire disposal options be available to them at reasonable cost.

2) The Task Force supported the "block pass" provision for holders of combination site/carrier permits to use unpermitted common carriers. The auto wrecker representative on the Task Force wanted, in addition, to extend this provision to cover unpermitted private carriers. The other Task Force members did not support including private carriers, for fear of abuses. The Department received no official testimony on this aspect of the rule, although one permitted carrier remarked informally that it would be unfair to those who spent the money to acquire a regular tire carrier permit.

3) The Task Force either supported or had no comments on the housekeeping revisions.

PROGRAM CONSIDERATIONS:

New tasks required by the proposed new rule and rule revisions can be handled by existing staff. Staffing and budgetary impacts are minimal, and are basically the same for all alternatives.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1) Economic Feasibility Rule:

A) Adopt the methodology as proposed: the cost of whole tire disposal to most people in the state, plus a 10 percent premium, being the standard.

B) Use the charge for tire disposal at the local landfill as the standard to determine whether waste tire recycling is economically feasible. If recycling costs more than landfilling, recycling would be deemed not economically feasible. This would allow any landfill where charges are low to receive an exemption to the ban on landfilling whole tires.

C) Develop "regional standards" rather than a statewide standard. (This was suggested by some respondents.) A regional standard could be based on an average cost of tire recycling for that region. The Department could deem that tire recycling had to cost no more than some arbitrary amount for it to be economically feasible, regardless of the charge at the local landfill.

D) Use the definition of "recyclable material" (OAR 340-60-010(19)) to determine when recycling of waste tires is economically feasible. This is based on the "net cost" of recycling compared to the "cost of collection and disposal." This is similar to C), but takes into account disposal costs. Waste Reduction staff has made this determination by "wasteshed" for other recyclables.

2) Block Pass Procedure

A) Adopt the "block pass" procedure as proposed, to apply to common and private carriers.

B) Exclude private carriers from the "block pass" procedure. Block passes would be available only to common carriers for backhaul situations. All private carriers hauling tires would have to obtain a waste tire carrier permit of their own.

Meeting Date: 4/14/89
Agenda Item: K
Page 6

C) Eliminate the "block pass" option. Continue to require any waste tire carrier not exempted by the statute or existing rule to obtain his or her own waste tire carrier permit.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Commission adopt the proposed rule with alternatives 1-A and 2-A.

Economic Feasibility

The Department believes that the best test of whether tire recycling is "economically feasible" is if it costs more than most landfills are charging to receive whole waste tires, as set out in Alternative 1-A. A statewide objective standard or base would be established against which to compare actual recycling costs in various areas of the state. This alternative has the support of the Task Force. It takes the Solid Waste hierarchy into account by giving an advantage to reuse over landfilling whole tires.

Adopting Alternative 1-B would base the standard on whether the cost of recycling is less than the charge at each local landfill. This alternative might be more "economically advantageous" to persons having to dispose of waste tires. An exception to the landfill ban on whole tires would be allowed even in areas where tire recycling was established, if the local landfill charged less than the cost of recycling. The Department believes that something can be "economically feasible" without necessarily being the most economically advantageous course of action.

Alternative 1-C would require the Department to establish "economic feasibility" standards, based on recycling costs, for various regions of the state. The Department expects new recycling options to be created from time to time, which would continually change the costs of tire recycling. The Department prefers to establish a statewide standard (as in Alternative 1-A) and allow local regions to demonstrate that recycling costs in their area exceed that standard.

Alternative 1-D would use a methodology that was developed for another purpose (to implement the opportunity to recycle act). Most recyclables the Act addresses typically have a market value, whereas waste tires do not. This is a more complicated calculation than in Alternative 1-A, and has never been used in practice. It relies on the landfill operator to provide costs of collection and disposal, rather

Meeting Date: 4/14/89
Agenda Item: K
Page 7

than use costs developed by a third party. The Department prefers the simpler process in Alternative 1-A.

Block Passes

The Department prefers Alternative 2-A because it both sets up a procedure which will offer the economic advantage of cheaper backhauls to tire processors, and will afford some relief to infrequent private haulers from a permitting requirement many of them find burdensome. The law does not provide exemptions for these groups. The Department would like to offer this regulatory relief.

Alternative 2-B would require private carriers to obtain a waste tire carrier permit even though they only haul their own waste tires a few times a year to a tire processor. The Department believes this requirement would be unnecessarily burdensome.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The rule would establish a methodology for applying the statutory exception to the whole tire disposal ban at solid waste disposal sites if recycling is not "economically feasible." The proposed rule gives recycling of passenger tires a 10% advantage over landfilling of whole tires, and thus is consistent with the Solid Waste hierarchy.

The "block pass" procedure should contribute to the Department's goal of keeping down the costs of transportation (and thus encourage the reuse) of waste tires.

ISSUES FOR COMMISSION TO RESOLVE:

Alternatives 1-A, 1-B, 1-C and 1-D: The structure of the proposed new economic feasibility rule is based on statewide landfill charges for tire disposal. It assumes that to be "economically feasible" waste tire recycling does not have to be "economically advantageous" for the person disposing of the tires. The charge for waste tire disposal at local landfills might be substantially less than the charge for waste tire recycling in a given community, and the recycling would still be "economically feasible" under the proposed rule because the recycling cost is less than the established

Meeting Date: 4/14/89
Agenda Item: K
Page 8

statewide disposal standard. Is this interpretation of "economic feasibility" of recycling the proper one? Is the statewide perspective used by this methodology the preferable one?

Alternatives 2-A through 2-C: No issues.

Housekeeping changes: No issues.

INTENDED FOLLOWUP ACTIONS:

File Final Revised Rule with Secretary of State (April 17 or 18).

Within three weeks notify solid waste disposal site operators of new economic feasibility methodology, with information on how to request an exemption to the landfill ban. Notify other interested parties of rule changes.

Approved:

Section:

Deanna Mueller-Crispin

Division:

Stephanie Hallock

Director:

*Lydia Taylor
for Fred Hansen*

Report Prepared By: Deanna Mueller-Crispin

Phone: 229-5808

Date Prepared: 3/29/89

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Meeting Date: 4/14/89
Agenda Item: K
Page 8

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OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
ADMINISTRATIVE RULES
DIVISION 62 - WASTE TIRES

WASTE TIRE STORAGE SITE AND WASTE TIRE CARRIER PERMITS

Proposed Amendments
March 29, 1989

New material underlined.
Deletions in [brackets].

Definitions

340-62-010 As used in these rules unless otherwise specified:

(1) "Abatement" -- the processing or removing to an approved storage site of waste tires which are creating a danger or nuisance, following a legal nuisance abatement procedure.

(2) [(1)] "Buffings" -- a product of mechanically scarifying a tire surface, removing all trace of the surface tread, to prepare the casing to be retreaded.

(3) [(2)] "Commission" -- the Environmental Quality Commission.

(4) "Common carrier" -- any person who transports persons or property for hire or who publicly purports to be willing to transport persons or property for hire by motor vehicle; or any person who leases, rents, or otherwise provides a motor vehicle to the public and who in connection therewith in the regular course of business provides, procures, or arranges for, directly, indirectly, or by course of dealing, a driver or operator therefor.

(5) [(3)] "Department" -- the Department of Environmental Quality.

(6) [(4)] "Director" -- the Director of the Department of Environmental Quality.

(7) [(5)] "Dispose" -- to deposit, dump, spill or place any waste tire on any land or into any water as defined by ORS 468.700.

(8) [(6)] "End user":

(a) For energy recovery: the person who utilizes the heat content or other forms of energy from the incineration or pyrolysis of waste tires, chips or similar materials.

(b) For other eligible uses of waste tires: the last person who uses the tires, chips, or similar materials to make a product with economic value. If the waste tire is processed by more than one person in becoming a product, the "end user" is the last person to use the tire as a tire, as

tire chips, or as similar materials. A person who produces tire chips or similar materials and gives or sells them to another person to use is not an end user.

(9) [(7)] "Energy recovery" -- recovery in which all or a part of the waste tire is processed to utilize the heat content, or other forms of energy, of or from the waste tire.

(10) [(8)] "Financial assurance" -- a performance bond, letter of credit, cash deposit, insurance policy or other instrument acceptable to the Department.

(11) [(9)] "Land disposal site" -- a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(12) [(10)] "Oversize waste tire" -- a waste tire exceeding a 24.5-inch rim diameter. [n 18-inch rim diameter, or a 35-inch outside diameter.]

(13) "Passenger tire" -- a tire with less than an 18-inch rim diameter.

(14) [(11)] "Person" -- the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(15) [(12)] "Private carrier" -- any person who operates a motor vehicle over the public highways of this state for the purpose of transporting persons or property when the transportation is incidental to a primary business enterprise, other than transportation, in which such person is engaged.

(16) [(13)] "PUC" -- the Public Utility Commission of Oregon.

(17) [(14)] "Retreader" -- a person engaged in the business of recapping tire casings to produce recapped tires for sale to the public.

(18) [(15)] "Rick" -- to horizontally stack tires securely by overlapping so that the center of a tire fits over the edge of the tire below it.

(19) [(16)] "Store" or "storage" -- the placing of waste tires in a manner that does not constitute disposal of the waste tires.

(20) [(17)] "Tire" -- a continuous solid or pneumatic rubber covering encircling the wheel of a vehicle in which a person or property is transported, or by which they may be drawn, on a highway. This does not include tires on the following:

- (a) A device moved only by human power.
- (b) A device used only upon fixed rails or tracks.
- (c) A motorcycle.

(d) An all-terrain vehicle, including but not limited to, three-wheel and four-wheel ATVs, dune buggies and other similar vehicles. All-terrain vehicles do not include jeeps, pick-ups and other four-wheel drive vehicles that may be registered, licensed and driven on public roads in Oregon.

(e) A device used only for farming, except a farm truck.

(21) [(18)] "Tire carrier" -- a person who picks up or transports waste tires for the purpose of storage or disposal. This does not include the following:

(a) Solid waste collectors operating under a license or franchise from a local government unit and who transport fewer than 10 tires at a time.

(b) Persons who transport fewer than five tires with their own solid waste for disposal.

(22) [(19)] "Tire processor" -- a person engaged in the processing of waste tires.

(23) [(20)] "Tire retailer" -- a person in the business of selling new replacement tires at retail, whose local business license or permit (if required) specifically allows such sale.

(24) [(21)] "Tire derived products" -- tire chips or other usable materials produced from the physical processing of a waste tire.

(25) "Truck tire" -- a tire with a rim diameter of between 18 and 24.5 inches.

(26) [(22)] "Waste tire" -- a tire that is no longer suitable for its original intended purpose because of wear, damage or defect, and is fit only for:

(a) Remanufacture into something else, including a recapped tire; or

(b) Some other use which differs substantially from its original use.

(27) [(23)] "Waste Tires Generated in Oregon" -- Oregon is the place at which the tire first becomes a waste tire. A tire casing imported into Oregon for potential recapping, but which proves unusable for that purpose, is not a waste tire generated in Oregon. Examples of waste tires generated in Oregon include but are not limited to:

(a) Tires accepted by an Oregon tire retailer in exchange for new replacement tires.

(b) Tires removed from a junked auto at an auto wrecking yard in Oregon.

Waste Tire Storage Permit Required

340-62-015 (1) After July 1, 1988, a person who stores more than 100 waste tires [at a site] in this state is required to have a waste tire storage permit [for that site] from the Department. The following are exempt from the permit requirement:

(a) A tire retailer who stores [with] not more than 1,500 waste tires [in storage] for each retail business location.

(b) A tire retreader who stores [with] not more than 3,000 waste tires [stored outside.] outside for each individual retread operation.

(2) Piles of tire derived products are not subject to regulation as waste tire storage sites if they have an economic value.

(3) If tire derived products have been stored for over six months, the Department shall assume they have no economic value, and the site operator must either:

(a) Apply for a waste tire storage site permit and comply with storage standards and other requirements of OAR 340-62-005 through 340-62-045; or

(b) Demonstrate to the Department's satisfaction that the tire derived products do have an economic value by presenting receipts, orders, or other documentation acceptable to the Department [etc.] for the tire derived products.

(4) After July 1, 1988, a permitted solid waste disposal site which stores more than 100 waste tires, is required to have a permit modification addressing the storage of tires from the Department.

(5) The Department may issue a waste tire storage permit in two stages to persons required to have such a permit by July 1, 1988. The two stages are a "first-stage" or limited duration permit, and a "second-stage" or regular permit.

(6) Owners or operators of existing sites not exempt from the waste tire storage site permit requirement shall apply to the Department by June 1, 1988 for a "first-stage" permit to store waste tires. A person who wants to establish a new waste tire storage site shall apply to the Department at least 90 days before the planned date of facility construction. A person applying for a waste tire storage [site] permit on or after September 1, 1988 shall apply for a "second-stage" or regular permit.

(7) The Department may grant an exemption to the requirement to obtain a waste tire storage [site] permit for whole waste tires if the applicant can demonstrate to the Department's satisfaction that:

(a) The applicant is using the tires for a permanent useful purpose with a documented economic value; and

(b) The waste tires used in this way will meet state and local government requirements for vector control, health, fire control, safety and other environmental concerns; and

(c) The use otherwise is not in conflict with local ordinances and state and Federal laws and administrative rules.

(8) Failure to conduct storage of waste tires according to the conditions, limitations, or terms of a permit or these rules, or failure to obtain a permit, is a violation of these rules and shall be subject to civil penalties as provided in OAR Chapter 340, Division 12 or to any other enforcement action provided by law. Each day that a violation occurs is a separate violation and may be the subject of separate penalties.

(9) After July 1, 1988 no person shall advertise or represent himself/herself as being in the business of accepting waste tires for storage without first obtaining a waste tire storage permit from the Department.

(10) Failure to apply for or to obtain a waste tire storage permit, or failure to meet the conditions of such permit constitutes a nuisance.

"Second-Stage" or Regular Permit

340-62-020 (1) An application for a "second-stage" or regular waste tire storage [site] permit shall:

(a) Include such information as shall be required by the Department, including but not limited to:

(A) A description of the need for the waste tire storage site;

(B) The zoning designation of the site, and a written statement of compatibility of the proposed waste tire storage site with the acknowledged local comprehensive plan and zoning requirements from the local government unit(s) having jurisdiction.

(C) A description of the land uses within a one-quarter mile radius of the facility, identifying any buildings and surface waters.

(D) A management program for operation of the site, which includes but is not limited to:

(i) Anticipated maximum number of tires to be stored at the site for any given one year period.

(ii) Present and proposed method of disposal, and timetable.

(iii) How the facility will meet the technical tire storage standards in OAR 340-62-035 for both tires currently stored on the site, and tires to be accepted.

(iv) How the applicant proposes to control mosquitoes and rodents, considering the likelihood of the site becoming a public nuisance or health hazard, proximity to residential areas, etc.

(E) A proposed contingency plan to minimize damage from fire or other accidental or intentional emergencies at the site. It shall include but not be limited to procedures to be followed by facility personnel, including measures to be taken to minimize the occurrence or spread of fires and explosions.

(F) The following maps:

(i) A site location map showing section, township, range and site boundaries.

(ii) A site layout drawing, showing size and location of all pertinent man-made and natural features of the site (including roads, fire lanes, ditches, berms, waste tire storage areas, structures, wetlands, floodways and surface waters).

(iii) A topographic map using a scale of no less than one inch equals 200 feet, with 40 foot intervals on 7.5 minute series.

(b) Submit proof that the applicant holds financial assurance acceptable to the Department in an amount determined by the Department to be necessary for waste tire removal processing, fire suppression or other measures to protect the environment and the health, safety and welfare, pursuant to OAR 340-62-025 and 340-62-035.

(c) Submit an application fee of \$250. Fifty dollars (\$50) of the application fee shall be non-refundable. The rest of the application fee may be refunded in whole or in part when submitted with an application if either of the following conditions exists:

(A) The Department determines that no permit will be required;

(B) The applicant withdraws the application before the Department has granted or denied the application.

(2) A "second-stage" permit may be issued for up to five years. [Permits] "Second-stage" storage permits and combined tire carrier/storage permits shall expire on January 1.

(3) The Department may waive any of the requirements in subsections (1)(a)(E) (contingency plan), (1)(a)(F) (maps) or (1)(b) (financial assurance) of this [section] rule for a waste tire storage site in existence on or before January 1, 1988, if it is determined by the Department that the site is not likely to create a public nuisance, health hazard, air or water pollution or other environmental problem. This waiver shall be considered for storage sites which are no longer receiving additional tires, and are under a closure schedule approved by the Department. The site must still meet operational standards in OAR 340-62-035.

(4) A permittee who wants to renew his/her "second-stage" storage permit or combined tire carrier/storage permit shall apply to the Department for permit renewal at least 90 days before the permit expiration date. The renewal shall include such information as required by the Department. It shall include a permit renewal fee of \$125.

(5) A permittee may request from the Department a permit modification to modify its operations as allowed in an unexpired permit. A permit modification initiated by the permittee shall include a permit modification fee of \$25.

Financial Assurance

340-62-022 (1) The Department shall determine for each applicant the amount of financial assurance required under ORS 459.720(c) and OAR 340-62-020 (1)(b). The Department shall base the amount on the estimated cost of cleanup for the maximum number of waste tires allowed by the permit to be stored at the storage site.

(2) The Department will accept as financial assurance only those instruments listed in and complying with requirements in OAR 340-61-034(3)(c)(A) through (G) or OAR 340-71-600(5)(a) through (c).

(3) The financial assurance shall be filed with the Department.

(4) The Department shall make any claim on the financial assurance within one year of any notice of proposed cancellation of the financial assurance.

Permittee Obligations

340-62-025 (1) Each person who is required by ORS 459.715 and 459.725, and OAR 340-62-015 and 340-62-055, to obtain a permit shall:

(a) Comply with these rules and any other pertinent Department requirements.

(b) Inform the Department in writing within 30 days of company changes that affect the permit, such as business name change, change from individual to partnership and change in ownership.

(c) Allow to the Department, after reasonable notice, necessary access to the site and to its records, including those required by other public agencies, in order for the monitoring, inspection and surveillance program developed by the Department to operate.

(2) Each person who is required by ORS 459.715 and OAR 340-62-015 to obtain a permit shall submit to the Department by February 1 of each year an annual compliance fee for the coming calendar year in the amount of \$250,

effective February 1, 1989. The permittee shall submit evidence of required financial assurance when the annual compliance fee is submitted.

(3) Each waste tire storage site permittee whose site accepts waste tires after the effective date of these rules shall also do the following as a condition to holding the permit:

(a) Maintain records on approximate numbers of waste tires received and shipped, and tire carriers transporting the tires so as to be able to fulfill the reporting requirements in subsection (3)[(b)] (c) of this rule. The permittee shall issue written receipts upon receiving loads of waste tires. Quantities may be measured by aggregate loads or cubic yards, if the permittee documents the approximate number of tires included in each. These records shall be maintained for a period of three years, and shall be available for inspection by the Department after reasonable notice.

(b) Maintain a record of the name (and the carrier permit number, if applicable) of the tire carriers not exempted by OAR 340-62-055(4) who deliver waste tires to the site and ship waste tires from the site, together with the quantity of waste tires shipped with those carriers.

(c) [(b)] Submit a report containing the following information annually by February 1 of 1990 and each year thereafter:

(A) Number of waste tires received at the site during the year covered by the report;

(B) Number of waste tires shipped from the site during the year covered by the report;

(C) A list [The name] (and tire carrier permit number, if applicable) of the tire carriers not exempted by OAR 340-62-055(4) delivering waste tires to the site and shipping waste tires from the site[, together with the quantity of waste tires shipped with those carriers].

(D) The number of waste tires located at the site at the time of the report.

(d) [(c)] Notify the Department within one working day [24 hours] of the name of any unpermitted tire carrier (who is not exempt under OAR 340-62-055(4) [(3)]) who delivers waste tires to the site after January 1, 1989.

(e) [(d)] If required by the Department, prepare for approval by the Department and then implement:

(A) A plan to remove some or all of the waste tires stored at the site. The plan shall follow standards for site closure pursuant to OAR 340-62-045. The plan may be phased in, with Department approval.

(B) A plan to process some or all of the waste tires stored at the site. The plan shall comply with ORS 459.705 through 459.790 and OAR 340-62-035.

(f) [(e)] Maintain the financial assurance required under OAR 340-62-020(1)(b) and 340-62-022.

(g) [(f)] Maintain any other plans and exhibits pertaining to the site and its operation as determined by the Department to be reasonably necessary to protect the public health, welfare or safety or the environment.

(4) The Department may waive any of the requirements of subsections (3)(a) through (3)(c) [(b)] (D) of this [section] rule for a waste tire storage site in existence on or before January 1, 1988. This waiver shall be considered for storage sites which are no longer receiving additional tires and are under a closure schedule approved by the Department.

Department Review of Applications for Waste Tire Storage Sites

340-62-030 (1) Applications for waste tire storage permits shall be processed in accordance with the Procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR Chapter 340, Division 14, except as otherwise provided in OAR Chapter 340, Division 62.

(2) Applications for permits shall be complete only if they:

(a) Are submitted on forms provided by the Department, accompanied by all required exhibits, and the forms are completed in full and are signed by the applicant and the property owner or person in control of the premises;

(b) Include plans and specifications as required by OAR 340-62-018 and 340-62-020;

(c) Include the appropriate application fee pursuant to OAR 340-62-020(1)(c).

(3) An application may be accepted as complete for processing if all required materials have been received with the exception of the financial assurance required under OAR 340-62-020(1)(b) and 340-62-022, and the written statement of compatibility of the proposed site with the acknowledged local comprehensive plan and zoning requirements from the local government unit(s) having jurisdiction. However, the Department shall not issue a "second-stage" waste tire storage permit unless required financial assurance and land use compatibility have been received.

(4) [(3)] Following the submittal of a complete waste tire storage [site] permit application, the Director shall cause notice to be given in the county where the proposed site is located in a manner reasonably calculated to notify interested and affected persons of the permit application.

(5) [(4)] The notice shall contain information regarding the location of the site and the type and amount of waste tires intended for storage at the site. In addition, the notice shall give any person substantially affected by the proposed site an opportunity to comment on the permit application.

(6) [(5)] The Department may conduct a public hearing in the county where a proposed waste tire storage site is located.

(7) [(6)] Upon receipt of a completed application, the Department may deny the permit if:

(a) The application contains false information.

(b) The application was wrongfully accepted by the Department.

(c) The proposed waste tire storage site would not comply with these rules or other applicable rules of the Department.

[(d) The proposed site does not have a written statement of compatibility with acknowledged local comprehensive land and zoning requirements from the local government unit(s) having jurisdiction; or]

(d) [(e)] There is no clearly demonstrated need for the proposed new, modified or expanded waste tire storage site.

(8) [(7)] Based on the Department's review of the waste tire storage site application, and any public comments received by the Department, the director shall issue or deny the permit. The director's decision shall be subject to appeal to the Commission and judicial review under ORS 183.310 to 183.550.

Standards for Waste Tire Storage Sites

340-62-035 (1) All permitted waste tire storage sites must comply with the technical and operational standards in this part.

(2) The holder of a "first-stage" waste tire storage permit shall comply with the technical and operational standards in this part if the site receives any waste tires after the effective date of these rules.

(3) A waste tire storage site shall not be constructed or operated in a wetland, waterway, floodway, 25-year floodplain, or any area where it may be subjected to submersion in water.

(4) Operation. A waste tire storage site shall be operated in compliance with the following standards:

(a) An outdoor waste tire pile shall have no greater than the following maximum dimensions:

(A) Width: 50 feet.

(B) Area: 15,000 square feet.

(C) Height: 6 feet.

(b) A 50-foot fire lane shall be placed around the perimeter of each waste tire pile. Access to the fire lane for emergency vehicles must be unobstructed at all times.

(c) Waste tires to be stored for one month or longer shall be ricked, unless the Department waives this requirement.

(d) The permittee shall operate and maintain the site in a manner which controls mosquitoes and rodents if the site is likely to become a public nuisance or health hazard and is close to residential areas.

(e) A sign shall be posted at the entrance of the storage site stating operating hours, cost of disposal and site rules if the site receives tires from persons other than the operator of the site.

(f) No operations involving the use of open flames or blow torches shall be conducted within 25 feet of a waste tire pile.

(g) An approach and access road to the waste tire storage site shall be maintained passable for any vehicle at all times. Access to the site shall be controlled through the use of fences, gates, or other means of controlling access.

(h) If required by the Department, the site shall be screened from public view.

(i) An attendant shall be present at all times the waste tire storage site is open for business, if the site receives tires from persons other than the operator of the site.

(j) The site shall be bermed or given other adequate protection if necessary to keep any liquid runoff from potential tire fires from entering waterways.

(k) If pyrolytic oil is released at the waste tire storage site, the permittee shall remove contaminated soil in accordance with applicable rules governing the removal, transportation and disposal of the material.

(5) Waste tires stored indoors shall be stored under conditions that meet those in The Standard for Storage of Rubber Tires, NFPA 231D-1986 edition, adopted by the National Fire Protection Association, San Diego, California.

(6) The Department may approve exceptions to the preceding technical and operational standards for a company processing waste tires if:

(a) The average time of storage for a waste tire on that site is one month or less; and

(b) The Department and the local fire authority are satisfied that the permittee has sufficient fire suppression equipment and/or materials on site to extinguish any potential tire fire within an acceptable length of time.

(7) Tire-derived products subject to regulation under OAR 340-62-015 (3) shall be subject to standards in this rule except that piles of such products may be up to 12 feet high if approved by local fire officials.

(8) A permittee may petition the Commission to grant a variance to the technical and operational standards in this part for a waste tire storage site in existence on or before January 1, 1988. The Commission may by specific written variance waive certain requirements of these technical and operational standards when circumstances of the waste tire storage site location, operating procedures, and fire control protection indicate that the purpose and intent of these rules can be achieved without strict adherence to all of the requirements.

Closure Procedures

340-62-045 (1) In closing the storage site, the permittee shall:

- (a) Close public access to the waste tire storage site for tire storage;
- (b) Post a notice indicating to the public that the site is closed and, if the site had accepted waste tires from the public, indicating the nearest site where waste tires can be deposited;
- (c) Notify the Department and local government of the closing of the site;
- (d) Remove all waste tires and tire-derived products to a waste tire storage site, solid waste disposal site authorized to accept waste tires, or other facility approved by the Department;
- (e) Remove any solid waste to a permitted solid waste disposal site; and
- (f) Notify the Department when the closure activities are completed.

(2) After receiving notification that site closure is complete, the Department may inspect the storage site. If all procedures have been correctly completed, the Department shall approve the closure in writing. Any financial assurance not needed for the closure or for other purposes under OAR 340-62-020(1)(b) shall be released to the permittee.

Chipping Standards for Solid Waste Disposal Sites

340-62-052 (1) After July 1, 1989, a person may not dispose of waste tires in a land disposal site permitted by the Department unless:

- (a) The waste tires are processed in accordance with the standards in [sub]section (2) of this rule[, and written notification has been submitted

to the Department verifying that alternatives to disposal have been investigated and are not economically feasible]; or

(b) The waste tires were located for disposal at that site before July 1, 1989; or

(c) The Commission finds that the reuse or recycling of waste tires is not economically feasible pursuant to OAR 340-62-053; or

(d) The waste tires are received from a person exempt from the requirement to obtain a waste tire carrier permit under OAR 340-62-055 (4) [(3)] (a) and (b).

(2) To be landfilled under subsection (1)(a) of this rule, waste tires must be processed to meet the following criteria:

(a) The volume [bulk] of 100 unprepared randomly selected whole tires in one continuous test period must be reduced by at least 65 percent of the original volume [bulk]. No single void space greater than 125 cubic inches may remain in the randomly placed processed tires; or

(b) The tires shall be reduced to an average chip size of no greater than 64 square inches in any randomly selected sample of 10 tires or more. No more than 40 percent of the chips may exceed 64 square inches.

(3) The test to comply with (2)(a) shall be as follows:

(a) Unprocessed whole tire volume [bulk] shall be calculated by multiplying the circular area, with a diameter equal to the outside diameter of the tire, by the maximum perpendicular width of the tire. The total test volume [bulk] shall be the sum of the individual, unprocessed tire volumes [bulks];

(b) Processed tire volume [bulk] shall be determined by randomly placing the processed tire test quantity in a rectangular container and leveling the surface. It shall be calculated by multiplying the depth of processed tires by the bottom area of the container.

[(4) Reuse or recycling of oversize waste tires is not now economically feasible, and they are thus exempt from the chipping requirement under [sub]section (2) of this rule until such time as their reuse becomes economically feasible.]

Economic Feasibility of Reuse or Recycling Waste Tires

340-62-053

(1) Reuse or recycling of oversize waste tires is not economically feasible, and they are thus exempt from the chipping requirement under OAR 340-62-052 (2).

(2) The standard for "economic feasibility" of tire reuse or recycling shall be based on the following:

(a) The Department shall conduct a survey at least once every biennium of the charges for accepting waste passenger and truck tires at each permitted land disposal site in the state.

(b) The Department shall use the survey results to determine the mean and modal charges for passenger and truck tire disposal in the state.

(c) Either the mean or the modal charge, whichever is greater, shall be used as the base for the standard.

(d) The standard for passenger tires shall be the base plus ten percent.

(e) The standard for truck tires shall be the base plus 25 percent.

(3) Reuse or recycling of a waste tire shall be deemed economically feasible if the cost to reuse or recycle the tire is not more than the standard.

(4) If the charge for waste tire disposal at the local land disposal site is more than the standard:

(a) The local per tire disposal charge shall be the standard used to determine whether the cost of reuse or recycling is economically feasible; and

(b) Reuse or recycling shall be deemed economically feasible if the cost to reuse or recycle the passenger or truck tire is equal to or less than the charge for tire disposal at the local land disposal site.

(5) The director shall determine whether it is economically feasible to reuse or recycle waste tires in the service area of a land disposal site permittee.

(6) Only a land disposal site permittee may apply to the director to make that determination. Such application may be made after the effective date of this rule. Application shall be made on a form provided by the Department.

(7) An applicant shall submit written documentation such as bids from contractors of the cost of at least two of the best available options to reuse or recycle waste tires in quantities which could reasonably be expected to be generated in the applicant's service area. Cost shall be determined for waste tires collected at the applicant's land disposal site. The applicant may also submit documentation for costs of reuse or recycling from one or more other locations within its service area where quantities of waste tires are generated.

(8) Reuse or recycling options whose costs should be considered include transporting the waste tires to:

(a) The nearest permitted waste tire storage site accepting waste tires.

(b) A waste tire processing site.

(9) If the Department knows of a reasonable alternative for reuse or recycling of waste tires that the applicant did not consider, it may require the applicant to document costs of that option.

(10) The Department may require any additional information necessary to act upon the application.

(11) If the Department requires additional information, the application shall not be considered complete until such information is received.

(12) The director shall approve or deny a complete application within 90 days of its receipt.

(13) Application for this exemption shall not be made more often than once a year.

(14) The Department may review biennially whether any exemption granted under this part should continue in force.

Waste Tire Carrier Permit Required

340-62-055 (1) After January 1, 1989, any person engaged in picking up or transporting waste tires for the purpose of storage or disposal is required to obtain a waste tire carrier permit from the Department.

(2) After January 1, 1989, no person shall haul waste tires or advertise or represent himself/herself as being in the business of a waste tire carrier without first obtaining a waste tire carrier permit from the Department.

(3) [(2)] After January 1, 1989, any person who contracts or arranges with another person to transport waste tires for storage or disposal shall only deal with a person holding a waste tire carrier permit from the Department, unless the person is exempted by (4) [(3)](a) or (b).

(4) [(3)] The following persons are exempt from the requirement to obtain a waste tire carrier permit:

(a) Solid waste collectors operating under a license or franchise from any local government unit and who transport fewer than 10 tires at any one time.

(b) Persons transporting fewer than five tires.

(c) Persons transporting tire-derived products to a market.

(d) Persons who use company-owned vehicles to transport tire casings for the purposes of retreading between company-owned or company-franchised retail tire outlets and company-owned or company-franchised retread facilities.

(e) Tire retailers or retreaders who transport used tires [back to] between their retail tire outlet or retread operation and their customers, after taking them from customers in exchange for other tires, or for repair or retreading.

(f) The United States, the State of Oregon, any county, city, town or municipality in this state, or any department of any of them except when vehicles they own or operate are used as a waste tire carrier for hire.

(5) [(4)] Persons exempt from the waste tire carrier permit requirement under subsection [(3)] (4)(d) of this [section] rule shall nevertheless notify the Department of this practice on a form provided by the Department.

(6) [(5)] A combined tire carrier/storage [site] permit may be applied for by tire carriers:

(a) Who are subject to the carrier permit requirement; and

(b) Whose business includes a site which is subject to the waste tire storage permit requirement.

(7) [(6)] The Department shall supply a combined tire carrier/storage [site] permit application to such persons. Persons applying for the combined tire carrier/storage [site] permit shall comply with all other regulations concerning storage sites and tire carriers established in these rules.

(8) [(7)] Persons who transport waste tires for the purpose of storage or disposal must apply to the Department for a waste tire carrier permit within 90 days of the effective date of this rule. Persons who want to begin transporting waste tires for the purpose of storage or disposal must apply to the Department for a waste tire carrier permit at least 90 days before beginning to transport the tires.

(9) [(8)] Applications shall be made on a form provided by the Department. The application shall include such information as required by the Department. It shall include but not be limited to:

(a) A description, license number and registered vehicle owner for each truck used for transporting waste tires.

(b) The FUC authority number under which each truck is registered.

(c) Where the waste tires will be stored or disposed of.

(d) Any additional information required by the Department.

(10) [(9)] A corporation which has more than one separate business location may submit one waste tire carrier permit application which includes all the locations. All the information required in [sub]section [(8)] (9) of this [section] rule shall be supplied by location for each individual location. The corporation shall be responsible for amending the corporate application whenever any of the required information changes at any of the covered locations.

(11) [(10)] An application for a tire carrier permit shall include a \$25 non-refundable application fee.

(12) [(11)] An application for a combined tire carrier/storage [site] permit shall include a \$250 application fee, \$50 of which shall be non-refundable. The rest of the application fee may be refunded in whole or in part when submitted with an application if either of the following conditions exists:

(a) The Department determines that no permit will be required;

(b) The applicant withdraws the application before the Department has granted or denied the application.

(13) [(12)] The application for a waste tire carrier permit shall also include a bond in the sum of \$5,000 in favor of the State of Oregon. In lieu of the bond, the applicant may submit financial assurance acceptable to the Department. The Department will accept as financial assurance only those instruments listed in and complying with requirements in OAR 340-61-034(3)(c)(A) through (G) and OAR 340-71-600(5)(a) through (c).

(14) [(13)] The bond or other financial assurance shall be filed with the Department and shall provide that:

(a) In performing services as a waste tire carrier, the applicant shall comply with the provisions of ORS 459.705 through 459.790 and of this rule; and

(b) Any person injured by the failure of the applicant to comply with the provisions of ORS 459.705 through 459.790 or this rule shall have a right of action on the bond or other financial assurance in the name of the person. Such right of action shall be made to the principal or the surety company within two years after the injury.

(15) [(14)] A waste tire carrier permit or combined tire carrier/storage [site] permit shall be valid for up to three years.

(16) Waste tire carrier permits shall expire on March 1. Waste tire carrier [P] permittees who want to renew their permit must apply to the Department for permit renewal by February 1 of the year the permit expires. The application for renewal shall include all information required by the Department, and a permit renewal fee.

(17) [(15)] A waste tire carrier permittee may add another vehicle to its permitted waste tire carrier fleet if it does the following before using the vehicle to transport waste tires:

(a) Submits to the Department:

(A) The information required in OAR 340-62-055 (9) [(8)]; and

(B) A fee of \$25 for each vehicle added.

(b) Displays on each additional vehicle [a] decals from the Department pursuant to OAR 340-62-063 (1) (b).

(18) [(16)] A waste tire carrier permittee may lease additional vehicles to use under its waste tire carrier permit without adding that vehicle to its fleet pursuant to [sub]section (17) [(15)] of this [section] rule, under the following conditions:

[(a) The leased vehicle is not operating under the provisions of ORS 767.145 or exempted under the provisions of ORS 767.005(17) and 767.425(7).]

(a) [(b)] The vehicle may not transport waste tires when under lease for a period of time exceeding 30 days ("short-term leased vehicles"). If the lease is for a longer period of time, the vehicle must be added to the permittee's permanent fleet pursuant to [sub]section (17) [(15)] of this [section] rule.

(b) [(c)] The permittee must give previous written notice to the Department that it will use short-term leased vehicles.

(c) [(d)] The permittee shall pay a \$25 annual compliance fee in advance to allow use of short-term leased vehicles, in addition to any other fees required by OAR 340-62-055 [(10), (11) and (15)] (11), (12) and (17), and 340-62-063 (7) and (9).

(e) Every permittee shall keep a daily record of all vehicles leased on short term, with beginning and ending dates used, license numbers, PUC authority, PUC temporary pass or PUC plate/marker, and person from whom the vehicles were leased. The daily record must be kept current at all times, subject to verification by the Department. The daily record shall be maintained at the principal Oregon office of the permittee. The daily record shall be submitted to the Department each year as part of the permittee's annual report required by OAR 340-62-063(5).

(f) The permittee's bond or other financial assurance required under OAR 340-62-055 (13) [(12)] must [have specific language ensuring that the bond will cover all actions committed by any vehicle leased by the permittee while operating under the permittee's waste tire carrier permit.] provide that, in performing services as a waste tire carrier, the operator of a vehicle leased by the permittee shall comply with the provisions of ORS 459.705 through 459.790 and of this rule.

(g) The permittee is responsible for ensuring that a leased vehicle complies with OAR 340-62-055 through 340-62-063, except that the leased vehicle does not have to obtain a separate waste tire carrier permit pursuant to OAR 340-62-055 (1) while operating under lease to the permittee.

(19) A holder of a combined tire carrier/storage permit may purchase special block passes from the Department. The block passes will allow the permittee to use a common carrier or private carrier which does not have a waste tire carrier permit. Use of a block pass will allow the unpermitted common carrier or private carrier to haul waste tires under the permittee's waste tire carrier permit.

(a) Special block passes shall be available in sets of at least five, for a fee of \$5 per block pass. Only a holder of a combined tire carrier/storage permit may purchase block passes. Any unused block passes shall be returned to the Department when the permittee's waste tire permit expires or is revoked.

(b) The permittee is responsible for ensuring that a common carrier or private carrier operating under a block pass from the permittee complies with OAR 340-62-055 through 340-62-063, except that the common carrier or private carrier does not have to obtain a separate waste tire carrier permit pursuant to OAR 340-62-055(1) while operating under the permittee's block pass.

(c) A block pass may be valid for a maximum of ten days and may only be used to haul waste tires between the origin(s) and destination(s) listed on the block pass.

(d) A separate block pass shall be used for each trip hauling waste tires made by the unpermitted common carrier or private carrier under the permittee's waste tire permit. (A "trip" begins when waste tires are picked up at an origin, and ends when they are delivered to a proper disposal site(s) pursuant to OAR 340-62-063(4).)

(e) The permittee shall fill in all information required on the block pass, including name of the common carrier or private carrier, license number, FUC authority if applicable, FUC temporary pass or FUC plate/marker if applicable, beginning and ending dates of the trip, address(es) of where the waste tires are to be picked up and where they are to be delivered, and approximate numbers of waste tires to be transported.

(f) Each block pass shall be in triplicate. The permittee shall send the original to the Department within five days of the pass's beginning date, one copy to the common carrier or private carrier which shall keep it in the cab during the trip, and shall keep one copy.

(g) The permittee shall be responsible for ensuring that any common carrier or private carrier hauling waste tires under the permittee's waste tire permit has a properly completed block pass.

(h) While transporting waste tires, the common carrier or private

carrier shall keep a block pass properly filled out for the current trip in the cab of the vehicle.

(i) An unpermitted common carrier or private carrier may operate as a waste tire carrier using a block pass no more than three times in any calendar quarter. Before a common carrier or private carrier may operate as a waste tire carrier more than three times a quarter, he or she must first apply for and obtain a waste tire carrier permit from the Department.

(20) [(17)] For the purposes of ORS 459.995(1), the transportation of waste tires under OAR 340-62-055 through 340-62-063 is deemed to be collection of solid waste, and violations of these rules are subject to a civil penalty under the Solid Waste Management Schedule of Civil Penalties, OAR 340-12-065.

Waste Tire Carrier Permittee Obligations

340-62-063 (1) Each person required to obtain a waste tire carrier permit shall:

(a) Comply with OAR 340-62-025(1).

(b) Display [a] current decals with [their] his or her waste tire carrier identification number issued by the Department when transporting waste tires. The decals shall be displayed on the sides of the front doors of each truck used to transport tires.

(c) Maintain the financial assurance required under ORS 459.730(2) (d).

(2) When a waste tire carrier permit expires or is revoked, the [applicant] former permittee shall immediately remove all waste tire permit decals from its vehicles.

(3) Leasing, loaning or renting of permits is prohibited. No permit holder shall engage in any conduct which falsely tends to create the appearance that services are being furnished by the holder when in fact they are not.

(4) A waste tire carrier shall leave waste tires for storage or dispose of them only in a permitted waste tire storage site, at a [solid waste] land disposal site permitted by the Department, or at another site approved by the Department.

(5) Waste tire carrier permittees shall record and maintain for three years the following information regarding their activities for each month of operation:

(a) The approximate quantity of waste tires collected. Quantities may be measured by aggregate loads or cubic yards, if the carrier documents the approximate number included in each load;

(b) Where or from whom the waste tires were collected;

(c) Where the waste tires were deposited. The waste tire carrier shall keep receipts or other written materials documenting where all tires were stored or disposed of.

(6) Waste tire carrier permittees shall submit to the Department an annual report that summarizes the information collected under [sub]section (5) of this [section] rule. The information shall be broken down by quarters. This report shall be submitted to the Department annually as a condition of holding a permit together with the annual compliance fee or permit renewal application.

(7) A holder of a waste tire carrier permit shall pay to the Department an annual fee in the following amount:

Annual compliance fee (per company or corporation)	\$175
Plus annual fee per vehicle used for hauling waste tires	25

(8) (a) A holder of a waste tire carrier permit who is a private carrier meeting requirements of subsection (8) (b) of this [section] rule shall, instead of the fees under [sub]section (7) of this [section] rule, pay to the Department an annual fee in the following amount:

Annual compliance fee	\$25
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(b) To qualify for the fee structure under subsection (8) (a) of this [section] rule, a private carrier must:

(A) Use a vehicle with a combined weight not exceeding 8,000 lbs;

(B) Transport only such waste tires as are generated incidentally to his business; and

(C) Use the vehicle to transport the waste tires to a proper disposal site.

(c) If a vehicle owned or operated by a private carrier is used for hire in hauling waste tires, the annual fee structure under [sub]section (7) of this [section] rule shall apply.

(9) A holder of a combined tire carrier/storage [site] permit shall pay to the Department by February 1 of each year an annual compliance fee for the coming calendar year in the following amount:

Annual compliance fee (per company or corporation)	\$250
Plus annual fee per vehicle used for hauling waste tires	\$ 25

[(10) The annual compliance fee for the coming year (March 1 through February 28) as required by [sub]sections (7) through (9) of this rule shall be paid by February 15 of each year.]

(10) A holder of a waste tire carrier permit shall pay to the Department by February 15 of each year an annual compliance fee for the coming year (March 1 through February 28) as required by sections (7) through (9) of this rule. The permittee shall provide evidence of required financial assurance when the annual compliance fee is submitted.

(11) The fee is \$10 for a decal to replace one that was lost or destroyed.

(12) The fee for a waste tire carrier permit renewal is \$25.

(13) The fee for a permit modification of an unexpired waste tire carrier permit, initiated by the permittee, is \$15. Adding a vehicle to the permittee's fleet pursuant to OAR 340-63-055 (17) does not constitute a permit modification.

(14) A waste tire carrier permittee should check with the PUC to ensure that he or she complies with all PUC regulations.

newruleg
3/29/89

RULEMAKING STATEMENTS
for
Proposed New Rule and Revisions to Existing Rules
Pertaining to Disposal, Storage and Hauling of Waste Tires

OAR Chapter 340, Division 62

Pursuant to ORS 183.335, these statements provide information on the intended action to adopt a rule.

STATEMENT OF NEED:

Legal Authority

The 1987 Oregon Legislature passed the Waste Tire Act regulating the disposal, storage and transportation of waste tires. ORS 459.785 requires the Commission to adopt rules and regulations necessary to carry out the provisions of ORS 459.705 to 459.790. The Commission is adopting a new rule and revisions to existing rules which are necessary to carry out the provisions of the Waste Tire Act.

Need for the Rule

Improper storage and disposal of waste tires represents a significant problem throughout the State. The Waste Tire Act establishes a comprehensive program to regulate the disposal, storage and transportation of waste tires. The new rule from the Commission is needed to set program procedures. The rule revisions are needed to make changes the Department has found necessary in administering this new program.

Principal Documents Relied Upon

- a. Oregon Revised Statutes, Chapter 459.
- b. Oregon Administrative Rules, Chapter 340, Division 62.

LAND USE CONSISTENCY STATEMENT:

The proposed rules appear to affect land use and appear to be consistent with Statewide Planning Goals and Guidelines.

With regard to Goal 6 (Air, Water and Land Resources Quality), the rules provide for the proper storage and disposal of waste tires. The law provides that tires disposed of in solid waste disposal sites after July 1, 1989 must be chipped. The chipping requirement ensures proper burial. The new rule provides an exemption to the chipping requirement. ORS 459.710(2)(c) allows this exemption if the Commission finds that reuse or recycling of waste tires is not economically feasible. The rule gives a slight advantage to recycling in making this determination.

With regard to Goal 11 (Public Facilities and Services), the new rule provides that solid waste disposal sites may request an exemption to the landfill chipping requirement for waste tires. This will provide an option for legal disposal of waste tires in remote areas without options for tire recycling, and where chipping the tires would be prohibitively expensive for the local solid waste disposal site.

The rules do not appear to conflict with other Goals.

Public comment on any land use issue involved is welcome and may be submitted in the manner described in the accompanying NOTICE OF PUBLIC HEARING.

It is requested that local, state and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts brought to our attention by local, state or federal authorities.

ecfsstm

FISCAL AND ECONOMIC IMPACT STATEMENT

I. Introduction

The rule establishes an exemption procedure to allow solid waste sites to continue to bury whole tires after July 1, 1989. ORS 459.710 requires tires landfilled after that date to be chipped to the Department's specifications. The exemption would be allowed if tire recycling is not economically feasible. The exemption will give remote solid waste disposal sites the option of continuing to accept tires for disposal without expensive chipping.

The rule also establishes a procedure (use of "block passes") to allow a holder of a combined tire carrier/storage site permit to use common carriers and private carriers to haul tires under their permit. This will create an option for a permittee to obtain an advantageous backhaul rate from a common carrier without a waste tire carrier permit, who otherwise could not haul waste tires. It will also offer regulatory relief to private carriers; they would be able to haul their tires to the permittee's site for disposal, without having to get a separate permit.

II. General Public

A. Landfill Exemption

The public in areas served by landfills receiving an exemption to the ban on burial of whole tires would have a more affordable legal disposal option for waste tires. Charges for landfill disposal of whole tires range from free (in unattended dumps) to \$4.25 per passenger tire. The average statewide charge was \$.94 in spring of 1988. Permitted waste tire storage sites, the main alternative to landfill disposal, charge around \$.50. But the cost of transporting the waste tire from where it is generated to a permitted storage site (in Portland or southwestern Oregon) can add significantly to that cost, perhaps doubling it in some cases. See also discussion under "Small Business" below.

Unless they obtain an exemption, solid waste disposal sites will be required to chip tires to Department specifications in order to landfill them after July 1, 1989. Or, they could modify their solid waste permit to allow storage of tires. The permit modification would have no cost, but the landfill would incur extra costs in handling the tires and arranging for their pickup and proper disposal from time to time. If the landfill chose to either acquire a chipping machine, or contract for chipping, the extra costs could be in the range of \$.30 per tire. For landfills with smaller volumes of waste tires the cost would be correspondingly higher. These extra costs would be passed on to the public. A rule of thumb might be that landfills would double

their existing charge if they decided to chip tires for landfill. Obtaining an exemption would presumably allow landfills to continue to accept tires at the current charge. The general public with tires to dispose of would benefit in that the current charge would not be increased.

B. "Block Passes"

The general public would only very indirectly be influence by the rule on block passes.

III. Small Business

A. Landfill Exemption

Some landfills qualify as small businesses (independently owned and operated by 50 or fewer employees). The exemption would allow them to continue business as usual, without additional costs for chipping tires for landfill. On the other hand, landfills are not required to accept tires. So they could independently of the rule decide not to do that. This would in turn create extra costs for the general public served by the landfill, in seeking alternative legal tire disposal options. The procedure for applying for an exemption is relatively straightforward, and should not require more than about two hours of administrative time on the part of the applicant.

On the other hand, if landfills obtain an exemption to continue burying whole tires, tire processing businesses (some of which are also small businesses) will be negatively impacted. They need a supply of waste tires to operate their business. A few processors now accept waste tires at no charge. They might have to start paying for them if landfills continue to accept waste tires at attractive charges. If a processor who needs 250,000 tires a year has to begin paying \$.10/tire to get them, it would cost him an addition \$25,000 annually.

B. "Block Passes"

Most private carriers are small businesses. There may be several hundred auto wreckers and retail tire dealers who want to continue hauling their own waste tires for disposal. Extending the block pass provision to private carriers would save each of them from \$25 to \$100 a year in direct waste tire carrier fees to the Department, an annual bond fee (\$50 - \$100), and the administrative costs of maintaining a waste tire carrier permit. The latter could amount to several hours per quarter in recordkeeping.

See also following section on Large Business.

IV. Large Business

A. Landfill Exemption

Some landfills may be large businesses. The rule would have the same impact on them as on landfills which are small businesses.

B. "Block Passes"

Common carriers who would be used by combination carrier/site permittees under the "block pass" provision, may be large businesses. This provision would cost them nothing, and afford them some additional business (perhaps \$1,000 or so a quarter) in backhauling waste tires. The combination carrier/site permittee might be either a large or small business; the permittee would incur the extra \$5 cost of the block pass each time it was used, plus perhaps 15 minutes to half an hour of administrative costs. The permittee would gain a more advantageous backhaul rate from the common carrier.

V. Local Governments

The landfill exception would have the same impact on those local governments which operate landfills as discussed under Small Business. The block pass provision would have no effect on local governments.

VI. Stage Agencies

The Department is the only agency impacted. This action will create two new tasks for Department Waste Tire Act staff: a periodic survey of landfill charges to accept waste passenger and truck tires; and a procedure to issue and track "block passes" to be used by waste tire carrier permittees. These tasks can be handled by existing staff assigned to implementing waste tire storage permits and carrier permits.

ecfsecim

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

**Proposed Rules Related to Regulating Landfilling,
Storing and Transporting of Waste Tires**

Hearing Dates: 2/16/89
2/17/89
Comments Due: 2/21/89

**WHO IS
AFFECTED:**

Permitted solid waste disposal site operators. Persons hauling waste tires. Owners and operators of sites where more than 100 waste tires are stored. The public who dispose of waste tires. Tire retailers. Tire retreaders. Local governments. Common carriers. Waste tire processors.

**WHAT IS
PROPOSED:**

The Department proposes to adopt a new administrative rule, OAR 340-62-053 to establish a procedure to determine when reuse or recycling of waste tires is economically feasible. The Department also proposes to revise existing administrative rules OAR 340-62-010, 340-62-015, 340-62-020, 340-62-022, 340-62-025, 340-62-030, 340-62-035, 340-62-045, 340-62-052, 340-62-055, and 340-62-063, which establish procedures and standards governing waste tire storage site permits and waste tire carrier permits.

**WHAT ARE THE
HIGHLIGHTS:**

The new rule would establish a procedure to determine when reuse or recycling of waste tires is economically feasible. If recycling is not economically feasible, a solid waste disposal site may apply for an exemption to the prohibition (effective July 1, 1989) against landfill burial of whole tires. The rule revisions would establish fees for renewal and modification for waste tire storage site permits and waste tire carrier permits. They would set up a procedure under which permitted waste tire carriers could use "block passes" allowing unpermitted common and private carriers to haul waste tires for the permittee. The rule revisions also make various housekeeping changes.

**PUBLIC
HEARINGS:**

Public hearings will be held before a hearings officer at:

4:00 - 7:00 p.m.
Thursday, February 16, 1989
Malheur Co. Library
388 S.W. 2nd
Ontario, OR

4:00 - 7:00 p.m.
Thursday, February 16, 1989
City Council Chambers
101 N.W. "A" Street
Grants Pass, OR

(over)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

**BLIC
HEARINGS: (cont'd)**

4:00 - 6:00 p.m.
Friday, February 17, 1989
Federal Building, Room 221
211 East 7th
Eugene, OR

**HOW TO
COMMENT:**

Written or oral comments may be presented at the hearings.
Written comments may also be sent to the Department of Environmental
Quality, Waste Tire Program, Hazardous and Solid Waste Division,
811 S.W. 6th Avenue, Portland, OR 97204, and must be received no later
than 5:00 p.m., Tuesday, February 21, 1989.

Copies of the complete proposed rule package may be obtained from the
DEQ Hazardous and Solid Waste Division. For further information,
contact Deanna Mueller-Crispin at 229-5808, or toll-free at
1-800-452-4011.

**WHAT IS THE
NEXT STEP:**

The Environmental Quality Commission may adopt new rules identical to
the ones proposed, adopt modified rules as a result of testimony
received, or may decline to adopt rules. The Commission will consider
the proposed new rule and rule revisions at its meeting on April 14,
1989.

SB8146

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: February 19, 1989

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Proposed Amendments to Waste Tire
Program Rules, Eugene, 4:00 p.m., 2/17/89

On February 17, 1989 a Public Hearing regarding a proposed new rule (OAR 340-62-053) and revisions to existing rules pertaining to waste tire disposal, storage and hauling (OAR 340-62) was held in Eugene, Oregon. Eight people attended, and four persons testified.

A summary of the testimony follows:

Tim Zwettler of Delta Sand and Gravel said there should be some way that Delta can receive an exemption to the chipping requirement for waste tire burial, taking effect on July 1, 1989. He suggested that the "economic feasibility" standard should be based on any one of the possible methods mentioned in the DEQ Staff Report (including using the charge at the local landfill), rather than using the state "mode" as the standard. He said recycling waste tires is not economically feasible compared to Delta's cost of disposal; they charge about \$.34 for whole tires, and about \$.27 for split tires. If they had to buy a chipper, their disposal costs would double. Delta is providing a public service in offering the most economically feasible waste tire disposal in the area. If this option is cut off, tires will be illegally dumped. Compared to other landfills, Delta is in a unique situation in that they dig out more space in their landfill as fast as it is filled in. Accepting waste tires is mutually beneficial for Delta and people who need to dispose of waste tires. Mr. Zwettler recommended using different standards for economic feasibility in different parts of the state.

George Staples of Delta Sand and Gravel wondered why the DEQ Staff Report stressed that the "economic feasibility" test would offer a disposal option to "remote" areas of the state. He felt that Eugene may be economically remote, in that no one is processing waste tires here.

James Hemenway, a property owner, was concerned about having affordable options for tire disposal. He had several thousand tires dumped on his property, and does not know how to handle them. He would be glad to give them away to anyone who wants them.

Memo to: Environmental Quality Commission
February 19, 1989
Page 2

Mike Saylor of Tire Recyclers in Winlock, Wash., said he has recycled tires for 20 years. He pointed out that the landfill disposal charge is what determines the price a tire recycler can get. If the local landfill is cheap, this reduces the amount of tires available for use in his business. Reusing tires creates jobs. He felt that landfilling whole tires should not be allowed. If tires are to be buried, they should be chipped, and buried in a way so that they can be retrieved later. He noted that a whole tire cannot be retrieved after it's buried; after a few years, it is deformed, dirty, etc.

cc: DEQ Willamette Valley Region
eugn.her

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: February 19, 1989

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Proposed Amendments to Waste Tire
Program Rules, Grants Pass, 4:00 p.m., 2/16/89

On February 16, 1989 a Public Hearing regarding a proposed new rule (OAR 340-62-053) and revisions to existing rules pertaining to waste tire disposal, storage and hauling (OAR 340-62) was held in Grants Pass, Oregon. Twelve people attended, and six persons testified.

A summary of the testimony follows:

Richard Busk, who has collected several thousand waste tires for use in intensive farming, requested an exemption from the waste tire storage site requirement for this use of tires. He also operates as a tire splitter and carrier under Lynden Levison's waste tire carrier permit; he proposed a \$0 fee for tire carriers. He asked about the proposed economic feasibility methodology. He wondered whether it would mean the Ashland landfill would no longer take split tires after July 1. He said his splitting operation could meet the DEQ two-thirds bulk reduction standard for landfilling waste tires. Mr. Busk also wondered whether some of the tires he had collected were "used" rather than "waste" tires, and thus not subject to regulation, since they still can hold air.

Carol Danz, an associate of Mr. Busk, recommended a separate category (of site permit) for people who want to use tires for farming, with no fee.

Jim Wood, a tire retailer, also testified that the carrier fee should be reduced. He recommended \$100/year. He wondered why people should have to pay so much for a permit to do what they have been doing anyhow. He also recommended that if DEQ was making people clean up tire piles, then DEQ should pay for it.

Leonard Williams agreed with Ms. Danz that there should be an exemption to the site permit requirement for organic gardeners using waste tires.

Bob Olds, an auto wrecker, wondered why retail tire dealers could store up to 1,500 waste tires before having to get a site permit, but auto wreckers could only store 100. Auto wreckers receive

Memo to: Environmental Quality Commission
February 19, 1989
Page 2

hundreds of waste tires a year, selling some of them as "used" tires. Could they just sell a few new tires a year and thus qualify for the 1,500 tire exemption? He felt the definition of "tire retailer" should be changed to either specify a minimum number of tires, and/or to include the sale of used tires. He suggested adding the following to the definition of tire retailer: "a person selling new or used replacement tires..." Mr. Olds was also concerned about having tire disposal options available. He commented that DEQ should try to work with people who have waste tires rather than following heavy-handed enforcement.

Susie Wood of Jims OK Tire Inc. commented that selling at "retail" was by definition selling new goods.

Les Albright of Albright's Tires asked why casings generated outside of Oregon were exempt from regulation. He said recappers were not accepting Oregon casings any more because of this. He also wondered why farm and "skidder" tires are exempt from the fee. He asked about the "private hauler" category under the tire carrier permit; he wondered why they were restricted to an 8,000 lb. vehicle after they had paid all their fees. Mr. Albright (and several others) wondered whether the dealers could legally let people take away waste tires after buying new ones if the purchasers wanted to keep the waste tires. He also noted that he sometimes cuts the bead out of waste tires, and then cuts across the tread, resulting in a flat strip of rubber. He asked whether he could haul tires cut up that way without a waste tire carrier permit.

cc: DEQ Southeastern Region
DEQ Roseburg Branch
grpas.her

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: February 19, 1989

TO: Environmental Quality Commission

FROM: Bradford D. Price,
Hearing Officer

SUBJECT: Public Hearing, Proposed Amendments to the Waste Tire
Program Rules.
Ontario, Oregon, 4:00 p.m., 2/16/89

On February 16, 1989 a Public Hearing regarding a proposed new rule (OAR 340-62-053) and revisions to existing rules pertaining to waste tire disposal, storage, and hauling (OAR 340-62) was held in Ontario, Oregon. Ten people attended. One person testified.

A summary of the testimony follows:

Jim Kimberling, Public Works Director of Malheur County, expressed his comments. Malheur County presently operates one major landfill, three remote landfills, and two transfer stations. They franchise or contract out the transportation of solid waste.

Jim felt that most tires that the county receives at their landfills were from persons exempt from having to have a carrier permit. They are garbage collectors who transport fewer than ten tires, persons who transport fewer than five waste tires, and government agencies. Tires from the first two groups are exempt from the chipping requirement and the economic feasibility analysis. His hope was that the county could continue to be exempt from the chipping requirement at the landfills.

Jim's concern was that the economic feasibility analysis which the solid waste landfill site must conduct to determine exemption from the chipping requirement may incorrectly conclude that recycling is economically feasible in Malheur County. He did not know the average state-wide disposal charge. Jim felt that frequently the state-wide numbers sometimes worked to the disadvantage of eastern Oregon counties. This was due to the large county size, remoteness, poor economy, and small populations. Perhaps regional averages would be more appropriate.

Jim is wary of regulations that if not carefully constructed may work to the disadvantage of Malheur County taxpayers, either through added costs without benefits or through encouraging illegal dumping. Until a recycling market develops in this region, Jim said there is a need for the county to have as many options as possible.

Jim expressed appreciation to DEQ for conducting a public hearing in Ontario, so far away from Portland, and that Malheur County supports waste tire reuse and recycling.

After this testimony, I concluded the public hearing and I requested that the tape recorder remain on so I could record the general discussion and questions. Since everyone was reluctant to talk with the recorder on I turned it off. The group discussed the waste tire program for over an hour.

The following are the main subjects of discussion:

- Waste Recovery had told Glen Dodson, Ontario tire dealer, that tire disposal was \$0.75 per tire whether the dealer hauled them to Waste Recovery or Waste Recovery picked them up. I explained that presently Waste Recovery was excepting tires on their site for \$0.50 per tire and if Glen was going to deliver any tires to Portland and was having any problems that he should call me.
- Why were governments exempt from the carrier permit? Governments were exempt because they were not in the business of hauling and that most transportation of waste tires would be due to illegal dumping on public lands. I mentioned there were quite a few governments that did become permitted waste tire storage sites.
- Comments on Ash Grove Cement. Why were they allowed to burn tires? I mentioned I did not know, and that they should contact Air Quality or the Eastern Region. What are some of the ground and air pollution concerns? I explained about pyrolytic oils, atmospheric hydrocarbons, and if they wanted a list of the specific compounds I would mail them a copy of Mike Downs' report.
- Expressed concerns, by the solid waste operators and tire dealers, that people in Malheur County did not enjoy the word mandatory, and that there have not been tipping fees at the landfill sites and people have never had to pay for the disposal of tires and garbage. These fees will deter people from using the landfills and they will use the public lands for tire disposal.
- Thanks from the group for DEQ coming this far out to conduct a public hearing. They felt that this part of the state is more often left out from being informed and included in decision making.
- Other aspects of the waste tire program.

The meeting was adjourned at 6:30PM.

Memo to: Environmental Quality Commission
February 19, 1989
Page 3

cc: Waste Tire File,
Bruce Hammon, Eastern Region
puhearg

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: February 19, 1989

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Written Comments, Proposed Waste Tire Program Permit Rule Revisions

In January, 1989 DEQ gave public notice soliciting comments on a new rule to determine the economic feasibility of recycling waste tires (OAR 340-62-053) and proposed revisions in the existing program rules (OAR 340-62). In response, the Department received six written comments, one of which (Malheur County) was also presented as testimony at the Ontario public hearing.

A summary of the written testimony follows:

Mike Doyle of the Les Schwab Warehouse Center commented that there is some confusion in the sections dealing with the number of years a combination site/carrier permit may be issued, and their expiration date (OAR 340-62-020(2) and 340-62-055(15)). He requested these sections be made more explicit.

Harvey Denison of Fat Harvey's Fuel Service commented that the bonding and permitting requirements for waste tire storage sites and waste tire carriers would be expensive. He felt that these requirements will defeat the purpose of regulating waste tires, and cause illegal dumping.

Howard Moss of the Public Works Dept. of the City of Milton-Freewater supports the new rule providing an exemption to the requirement to shred tires before landfilling. He commented that a shredder could cost over \$50,000; this is not economically feasible for their landfill which receives fewer than 100 tires a week.

Jim Kimberling, Public Works Director of Malheur County, commented on the proposed economic feasibility methodology. Malheur County would like to continue to accept tires and bury them whole to discourage illegal dumping. He believes most of these waste tires come from persons exempt from the tire carrier permit requirement, and thus are exempt by statute from the ban on landfilling whole tires. But he is concerned that some persons delivering tires to the dump will not be exempt. In order to accept tires from them, Malheur County would have to perform an "economic feasibility"

Memo to: Environmental Quality Commission
February 19, 1989
Page 2

analysis. He is further concerned that the proposed methodology for this analysis would find that tire recycling is economically feasible in Malheur County, but would still cost more than the local landfill disposal charge. He suggested that using regional averages (of cost to recycle) might be more appropriate. He would like to keep open the option of disposal of whole tires until waste tire recycling is economically feasible in Malheur County.

Bob Prohaska of Nehalem Valley Sanitary Service commented on the bond and permit requirement effective on January 1, 1989 for waste tire carriers. He currently collects waste tires on his route, and delivers them to Portland for recycling. These requirements will increase his costs, and penalize him for handling tires in a proper manner. He would either have to double his charges, or refuse to take tires any more. Either option will result in illegal dumping.

Thomas H. McKinney, Portland service station operator, was concerned about his costs to obtain a waste tire carrier permit. He hauls his own waste tires, and does not object to a small annual registration fee. He does, however, strongly object to the bond requirement, commenting that a bond is appropriate only if a crime has been committed. He feels the bond will force out small businesses. He suggested that DEQ should do the following in making rules: get the facts, inform those affected, get feedback, make changes, and then vote on the rules.

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STAFF REPORT

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item F, 1/20/89, EQC Meeting, EQC Meeting

Request for Authorization to Conduct Public Hearings on Proposed Rule OAR 340-62-053, "Economic Feasibility of Reuse or Recycling Waste Tires", and Revisions to Existing Rules OAR 340-62-010, 340-62-015, 340-62-020, 340-62-022, 340-62-025, 340-62-030, 340-62-035, 340-62-045, 340-62-055, and 340-62-063, Permit Procedures and Standards for Waste Tire Storage Sites and Waste Tire Carriers.

BACKGROUND

The 1987 Legislature passed HB 2022 (ORS 459.705 through 459.790) to address the waste tire disposal problem. The law included the following requirements:

1. Persons storing over 100 waste tires after July 1, 1988 must have a waste tire storage site permit from the Department.
2. Persons hauling waste tires after January 1, 1989 must obtain a waste tire carrier permit.
3. Waste tires may not be disposed of in solid waste disposal sites after July 1, 1989 unless they are chipped.

The statute allows the following four exceptions to the chipping requirement for landfill burial of waste tires (ORS 459.710 (2)):

1. If the tires were located for disposal before July 1, 1989, at the permitted landfill;
2. If "the Commission finds that the reuse or recycling of waste tires is not economically feasible."

3. If the "tires are received from a solid waste collector...who transports fewer than 10 tires at any one time."

4. If the "tires are received from a person transporting fewer than five tires in combination with the person's own solid waste for disposal."

The second exception leaves an "out" for remote areas where recycling or reuse options for tires are expensive or do not exist.

The Commission adopted rules (OAR 340-62-005 through 340-62-070) on July 8, 1988 governing permitting requirements and chipping standards for landfilling of tires. The rule did not specify how to determine whether recycling of waste tires is "economically feasible." The main purpose of the current rule is to adopt a methodology to do that.

Another significant proposed addition is a provision recommended by the Waste Tire Task Force. The Task Force recommends adding a procedure using "block passes" to allow permitted waste tire carriers to hire, under their permits, common carriers who do not have waste tire carrier permits. The proposed rule contains this "block pass" provision.

The Department is proposing certain other changes. The Department has issued 108 Stage I ("temporary") waste tire storage site permits. It is now issuing Stage II ("regular") storage site permits and waste tire carrier permits. In administering this new program, the Department has found certain parts of the permitting rules that needed change or elaboration.

ALTERNATIVES AND EVALUATION

1. Economic Feasibility Rule. As noted above, whole tires are banned from being landfilled after July 1, 1989, with four exceptions. The proposed economic feasibility rule defines the procedure to establish one exception, and assure that all sites requesting this exemption are evaluated on the same basis.

Economic feasibility of tire reuse should compare the cost of reuse with the cost of legal disposal. There are several ways that economic feasibility of tire recycling could be calculated:

a) It could be based on the amount that most people are paying for landfill disposal of tires;

b) It could be based on the charge at the local landfill;

c) It could use the definition of "recyclable material" from the Recycling and Waste Reduction rule (OAR 340-60-010 (19)), under which tires would be considered recyclable if they could "be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same material"; or

d) It could be based on the highest landfill charge in the state, since some persons are willing to pay that amount to legally dispose of tires.

The Department recommends the first option. Recycling or reuse of tires should be deemed "economically feasible" if the cost is below the cost of disposal at the disposal site, or below a figure based on the cost that most people in the State are paying for disposal, whichever is greater. The Department surveyed all public landfills in the State in April 1988 and found that most landfills charged \$1.00 per passenger tire, and \$2.00 per truck tire. (Therefore, \$1.00 is the state mode for passenger tires, and \$2.00 is the state mode for truck tires.)

The proposed rule would allow an exemption to the whole tire disposal ban if recycling or reuse in a given area costs more than 10 percent above the "mode" (as determined by a Department survey) of statewide landfill charges for passenger tires. The standard for truck tires would be the landfill charge "mode" plus 25 percent. Based on the Department's current survey, passenger tires could be landfilled if recycling cost over \$1.10 per tire. The standard would be \$2.50 for truck tires. However, if a landfill charges more than \$1.10 to dispose of passenger tires (or \$2.50 for truck tires), the actual landfill charge becomes the standard for economic feasibility of recycling. That is, recycling or reuse would be deemed economically feasible if the cost of recycling is equal to or less than the cost of landfill disposal of the tire.

The Task Force noted that costs of recycling will increase over time. To account for rising costs, they recommended that an annual inflation factor be built into the economic feasibility standard. Another possibility would be to conduct periodic surveys of landfill charges and increase the standard based on the new mode. Or, the standard could be left alone, since rising disposal charges at individual landfills will in effect cause the standard to rise over time. The Department recommends conducting a survey at least every biennium to update the modal landfill disposal charges. The draft rule would make that requirement.

A solid waste site would apply to the Director for this exemption. The burden of proof would be on the applicant to show the costs of tire recycling.

Recycling of "oversize" tires is deemed not to be economically feasible under the existing rule. The Task Force pointed out that truck tires can economically be chipped, and recommended that the definition of "oversize" tire be changed to exclude truck tires. Accordingly, the rule proposes to increase the existing definition of "oversize" tires to tires with a bead diameter of over 24.5 inches.

2. Block Passes for Unpermitted Carriers. A tire carrier is defined by statute as "any person engaged in picking up or transporting waste tires for the purpose of storage or disposal." The statute provides for two exemptions: solid waste collectors hauling fewer than 10 tires, and persons hauling fewer than 5 tires with their own garbage. Any other "tire carrier" needs a permit from the Department to haul waste tires after January 1, 1989. The existing rule includes a leasing provision for permitted carriers to temporarily add leased vehicles to their permitted fleet.

In implementing the carrier law, the Department has found some problems which need to be addressed. One problem involves the economics of backhauling waste tires, and concerns common carriers. Common carriers do not lease their vehicles out, but operate "for hire." Common carriers are generally larger trucking lines with a number of vehicles. Hauling waste tires would not generate enough business to warrant their getting a waste tire carrier permit. However, in some cases common carriers can offer a cheap backhaul option to bring waste tires to a tire processor. The Waste Tire Task Force felt it was important to keep this option available. The proposed procedure would allow the holder of a combined tire carrier/storage site permit to hire an unpermitted common carrier to haul waste tires on a temporary basis (no longer than 10 days). The common carrier would be operating under the waste tire permit of the permittee.

The permittee would buy from the Department a book of "block passes", at a cost of \$5 each. The permittee would be responsible for filling them out, and getting them to the common carrier. The permittee would also be responsible for ensuring that the common carrier followed waste tire program rules and statutes. The common carrier would be responsible for keeping the block pass in the cab during the time he operated as a tire carrier under the other's permit.

A common carrier would only be allowed to operate as a waste tire carrier under a block pass three times in any one quarter. If he was hauling tires more than that, he would have to become a permitted carrier on his own.

Another problem concerns private carriers (such as auto wreckers) who haul their own waste tires for disposal. If they haul five or more tires at a time, they are required by statute to get a waste tire carrier permit. This requirement has been a continuing source of contention among private carriers. The existing rule offers some relief by establishing a separate lower annual fee category for the PUC unregulated category of private carriers with a combined loaded weight of 8,000 lbs. But some private carriers have bigger vehicles and do not meet the weight limit.

A minority view on the Task Force recommended that the block pass option be available to private carriers as well as to common carriers. This would extend regulatory relief to those private carriers who could find a permitted carrier willing to offer the "umbrella" of their permit to the private carrier delivering tires to their site. The Department agrees with the minority view, and recommends that private carriers also be allowed to operate under block passes. The majority of the Task Force did not agree with this proposal; they were concerned that this would "open up" the carrier permit requirement too much. They felt one waste tire processor with a carrier permit could use block passes for all haulers using their site, and no one would bother getting an individual carrier permit. However, the Department believes this would probably not be abused. The permittee would be responsible for the actions of any carrier operating under a block pass under his permit; the permittee would thus want assurance that the private carrier was operating properly.

3. Other Changes.

- The rule would institute a provision for storage site permittees to petition the Commission for a variance to the waste tire storage standards for tires stored at their site before January 1, 1988. Fire concerns would still have to be met.
- The Department proposes adopting a definition the Department of Revenue (DOR) is adding to their waste tire rule, clarifying what constitutes all-terrain vehicle tires. This would ensure conformity between DOR's definition and the Department's.
- The rule would clarify that a tire retailer or retreader could store up to a total of 1,500 and 3,000 tires respectively for each retail business location without getting a waste tire

storage site permit. The statute and existing rule are unclear on this issue.

- The rule would clarify that if tire-derived products (tire chips) are subject to the storage permitting requirement, such chips would have to be stored following the storage standards for waste tires. However, it would allow tire chip piles to be higher than whole tire piles (12 feet rather than 6 feet) with approval by local fire authorities. The main purpose of the height restriction is to reduce risk of a large fire. A tire chip pile burns differently from a pile of whole tires. Chips burn on the surface. A chip fire is easier to put out with standard fire-fighting equipment. The Department believes the extra height is reasonable, if fire authorities do not object.

- The rule would add permit modification and permit renewal fees for waste tire storage site permits and waste tire carrier permits. The existing rule has no fee structure for these. Proposed fees:

	<u>Permit Modification</u>	<u>Permit Renewal</u>
Storage sites	\$25	\$125
Carrier	15	25

- The rule would allow the Department to process a waste tire storage site permit application, and draft a permit, before the land use compatibility statement and financial assurance are received. The permit itself could not be issued before these are received. Many applicants have had difficulties obtaining financial assurance. This would give the Department flexibility to proceed with permit processing while the applicant pursued getting financial assurance. A local jurisdiction considering a land use application might also find a draft permit useful in making their decision.

- The rule would allow the Department to waive the storage requirement for ricking. "Ricking" is stacking tires securely by overlapping. Ricking adds to the stability of the tire pile. However, truck tires cannot be easily ricked. Also, ricking does not make sense for tires being stored for short periods of time.

- The rule would specify that a claim on a storage site permittee's financial assurance must be made within one year of notice of cancellation of the financial assurance. Bonding companies have asked for this change in order to be willing to write these bonds. Otherwise they feel that their liability extends indefinitely into the future. The statute requires that claims on the tire carrier bond be made within two years. It is silent on claim time for financial assurance for sites. It is

reasonable to have a shorter claim time for site financial assurance than for carrier bonds, since third parties may submit claims on carrier bonds. Such claims are likely to take longer.

- An exemption in the existing rule allows tire retailers to carry waste tires from customers back to their store, in exchange for new tires, or for repair, without getting a waste tire carrier permit. The proposed rule would add retreaders to this exception, when transporting waste tires from customers to their retread operation to be recapped. This would give retreaders equitable treatment with tire retailers.

- A few additional housekeeping changes have been made to the existing rule.

DIRECTOR'S RECOMMENDATION

The new rule would establish a procedure to determine whether it is economically feasible to recycle tires. Solid waste disposal sites where such recycling is determined not to be economically feasible may be exempted from the whole tire burial ban. The proposed procedure is based on existing landfill disposal costs. It also takes the Solid Waste hierarchy into account, by giving a premium for recycling (over landfilling). This procedure was endorsed by the Waste Tire Task Force.

The proposed "block pass" system for use by permitted waste tire carriers would allow unpermitted common carriers and private carriers to haul tires for permitted waste tire carriers, under their permit. Unpermitted common carriers can in many cases provide cheap backhauls for tires. This system would also provide relief for some private carriers who haul their own tires infrequently.

Other proposed revisions would improve administration of the program.

It is recommended that the Commission authorize public hearings to take testimony on the proposed new rule on determining "economic feasibility" of tire recycling, and on revisions to the existing rule governing waste tire storage sites and waste tire carriers.

Fred Hansen

Agenda Item G
 July 8, 1988, EQC Meeting
 Page 3

its April 29, 1988, meeting. At that time the Department requested and received permission to hold public hearings on this proposed rule governing waste tire storage sites and carriers. Notice of the hearings was published in the May 15, 1988 Secretary of State's Bulletin. The following hearings were held:

Pendleton	May 31
Bend	June 1
Springfield	June 2
Medford	June 3
Oregon City	June 6

Statement of Need for Rulemaking is attached (Attachment I), as well as a copy of the notice of public hearing (Attachment II). The Commission is authorized to adopt rules pertaining to the waste tire program by ORS 459.710, 459.725, 459.730, 459.750 and 459.785.

ALTERNATIVES AND EVALUATION

Public Comment Process

At the five public hearings concerning the proposed rule, 18 people submitted oral testimony. In addition, ten people submitted written testimony. Several presenters were auto wreckers, and felt the rule did not take their concerns into account. They also complained that they had not been involved in the development of the proposed rule. Many auto wreckers have substantial amounts of waste tires. The auto wreckers felt that they should be allowed to store more than 100 waste tires before being required to get a waste tire storage site permit. They also wanted clarification on the definition of "waste tire", one suggestion being that if a tire was on a rim it should not be considered a waste tire.

Another frequent comment was that there need to be alternatives for disposal of waste tires which are not prohibitively expensive. A related comment was that the proposed chipping standard for tire disposal in landfills will be too expensive; purchase of a shredding machine to meet the standard could cost over \$100,000. The concern was that solid waste disposal sites are unlikely to make that investment, and will simply stop accepting tires after July 1, 1989. Several people recommended allowing splitting rather than chipping.

The law allows an exception to the chipping requirement if "The Commission finds that the reuse or recycling of waste tires is not economically feasible." (ORS 459.710 (1)(c)) Several presenters felt that in rural areas reuse of tires is not economically feasible, and wanted landfills in their area to be able to keep accepting whole tires. They asked what standard would be used for that finding, and who could apply for it. The proposed rule does not address this issue. The Department feels this should receive public scrutiny, and intends to draft a rule setting an economic

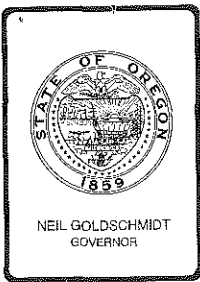
in financial assurance. The Department feels this must be determined on a case-by-case basis, depending on the number of tires stored. Several members of the public commented that the \$5,000 bond required by statute of tire carriers was unnecessary and/or burdensome. The statute does not allow a waiver of financial assurance for tire carriers.

7. Chipping Standards. The Commission is required to set standards to which tires must be "chipped" in order to be disposed of in solid waste disposal sites after July 1, 1989. As noted above, this standard will have an economic impact on landfill operators and indirectly on the public; machines will have to be purchased or services contracted for to chip the tires. Splitting (cutting the tires in two) would be cheaper than chipping to smaller pieces, and several landfills now are using splitters. Many on the Task Force felt that "splitting" is not "chipping". They feel that if the Legislature had intended to allow land disposal of split tires, it would have so specified. However it is difficult to identify any environmental advantage to landfilling chipped tires over landfilling split tires. The Department is not recommending changes to the chipping standard as proposed in the draft rule.

The statute provides for an exception to the chipping standard if the EQC "finds that the reuse or recycling of waste tires is not economically feasible". Several presenters felt that may be the case in the more rural parts of the state. The Department feels it would be premature to recommend that finding now, before the reimbursement for use of waste tires is in place. But DEQ intends to examine more closely the economic feasibility of tire recycling early in 1989 to see if it may be warranted in some areas.

The issue of applying the chipping standard to oversize tires arose in one public meeting. Such tires cannot be chipped, and in addition there is little demand for their reuse (aside from one manufacturer of discs for fishing nets). The Department is adding a recommendation to the draft rule that reuse or recycling of tires larger than 18 inches is not economically feasible. This would allow them to be landfilled whole.

8. Tire Carrier Standards. The main issues concerning tire carriers were how to treat tire dealers and retreaders who haul recappable casings in-house; retail tire dealers servicing commercial accounts and hauling replaced casings back to their store; and waste tire processors who need to lease or otherwise hire additional vehicles from large commercial fleets that are not, and have no interest in becoming, waste tire carriers. Several members of the public commented that persons (such as tire dealers) who now haul their own scrap tires to proper disposal sites should not have to become permitted tire carriers. Written



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: L
Division: Air Quality
Section: Program Operations

SUBJECT:

Proposed Adoption of Rule Amendment Which Delegates Authority of the EQC to the Director of The Department of Environmental Quality for the Issuance of an Order Prohibiting the Construction, Installation, or Establishment of an Air Contaminant Source.

PURPOSE:

To amend Oregon Administrative Rule (OAR) 340-20-030(4)(a) to be consistent with Oregon Revised Statute 468.325(6).

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment A
 - Rulemaking Statements Attachment B
 - Fiscal and Economic Impact Statement Attachment B
 - Public Notice Attachment C
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment ___
- Approve Department Recommendation
 - ___ Variance Request Attachment ___
 - ___ Exception to Rule Attachment ___
 - ___ Informational Report Attachment ___
 - ___ Other: (specify) Attachment ___

Meeting Date: April 14, 1989
Agenda Item:
Page 2

DESCRIPTION OF REQUESTED ACTION:

Amendment of OAR 340-20-030(4)(a), Notice of Construction Approval and Approval of Plans, would fully delegate authority to the Department of Environmental Quality (DEQ) by allowing the Director to issue orders prohibiting construction of new sources of air contamination.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 468.325(6)</u>	Attachment <u>D</u>
<input type="checkbox"/> Pursuant to Rule: _____	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment _____
<input type="checkbox"/> Other:	Attachment _____
<input type="checkbox"/> Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment _____
<input checked="" type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment <u>E</u>
<input type="checkbox"/> Response to Testimony/Comments	Attachment _____
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment _____
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment _____
<input type="checkbox"/> Supplemental Background Information	Attachment _____

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

Amendment of this rule will have no affect on the regulated community.

PROGRAM CONSIDERATIONS:

At present, only the Commission can issue orders prohibiting construction. Amendment of the rule would allow the Director to issue the orders.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. The Commission could fully delegate the air quality construction plan program to the Director by delegating the authority for issuing orders prohibiting construction.

This action would allow the Director to review plans, adopt plans and issue orders prohibiting construction. The existing statutes allow for appeals of the Director's decisions to be made to the Commission.

2. The Commission could decide to limit delegation to only review and approval of air quality construction plans.

This alternative would allow the Director to continue to review and approve plans and would continue to require Commission action for orders prohibiting construction and applicant appeals.

3. The Commission could decide not to delegate the authority for approval of air quality construction plans to the Director.

This alternative would result in the Commission delegating only plan review to the Director. The Commission would then accept recommendations to approve plans and issue orders prohibiting construction.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends the Commission implement Alternative No. 1 by adopting OAR 340-20-030(4)(a) as amended.

Actions taken by the Director can be appealed to the Commission. By delegating the authority for issuing orders prohibiting construction to the Director, the proposed rule would clearly separate the administrative authority and the appeals authority.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The Legislature amended the statute to allow the Commission to delegate to the Director the authority to review and approve air quality construction plans, and issue orders prohibiting construction. It gave the Commission authority to hear appeals.

Meeting Date: April 14, 1989
Agenda Item:
Page 4

ISSUES FOR COMMISSION TO RESOLVE:

1. Does the Commission wish to fully delegate the approval/disapproval authority to the Director (Department recommendation), leave the delegation only for review and approval with the Director and retain authority for disapproval and appeals, or reduce the Director's current authority and change the Director's authority to only review of plans.

INTENDED FOLLOWUP ACTIONS:

If the rule is amended as proposed, it will be filed with the Secretary of State's office.

Approved:

Section: Stacy Kostov

Division: Nick J. J. J.

Director: Rydia Taylor
for Fred Hansen

Report Prepared By: Terri Sylvester

Phone: 229-5057

Date Prepared: March 14, 1989

TS:x
AX662
3/15/89

ATTACHMENT A

AIR POLLUTION CONTROL

DIVISION 20

GENERAL

Highest and Best Practicable Treatment and Control Required

Procedure

340-20-030

- (1) Notice of Construction. Any person intending to construct, install, or establish a new source of air contaminant emissions of a class listed in section 340-20-025(1) shall notify the Department in writing on a form supplied by the Department.

- (2) Submission of Plans and Specifications. The Department may within 30 days of receipt of a Notice of Construction require the submission of plans and specifications for air pollution control equipment and facilities and their relationship to the production process. The following information may also be required:
 - (a) Name, address, and nature of business.

- (b) Name of local person responsible for compliance with these rules.
- (c) Name of person authorized to receive requests for data and information.
- (d) A description of the production processes and a related flow chart.
- (e) A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.
- (f) Type and quantity of fuels used.
- (g) Amount, nature and duration of air contaminant emissions.
- (h) Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.
- (i) Amount and method of refuse disposal.
- (j) The Department may require corrections and revisions to the plans and specifications to insure compliance with applicable rules, orders and statutes.

(3) Notice of Approval:

(a) The Department shall upon determining that the proposed construction is in the opinion of the Department in accordance with the provisions of applicable rules, order, and statutes, notify the person concerned that construction may proceed.

(b) A Notice of Approval to proceed with construction shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

(4) Order Prohibiting Construction:

(a) If within 60 days of receipt of the items set forth in section 340-20-030(2) the ~~[Environmental Quality Commission]~~ Director determines that the proposed construction is not in accordance with applicable statutes, rules, regulations and orders, ~~[it]~~ the Director shall issue an order prohibiting the construction, installation or establishment of the air contamination source. Said order is to be forwarded to the owner by certified mail.

(b) Failure to issue such order within the time prescribed herein shall be considered a determination that the proposed construction, installation, or establishment may proceed, provided that it is in accordance with plans, specifications, and any corrections or revisions thereto, or other information, if any, previously submitted, and provided further that it shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

(5) Hearing. Pursuant to law, a person against whom an order prohibiting construction is directed may within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, state the grounds for hearing, and be mailed to the Director of the Department of Environmental Quality. The hearing shall be conducted pursuant to the applicable provisions of ORS Chapter 183.

(6) Notice of Completion. Within thirty (30) days after any person has constructed an air contamination source as defined under section 340-20-010(1), he shall so report in writing on a form furnished by the Department, stating the date of completion of construction and the date the source was or will be put in operation.

Stat. Auth.: ORS Ch.

His.: DEQ 15.F.6-12-70.ef. 9-1-70

ATTACHMENT B

RULEMAKING STATEMENTS FOR PROPOSED AMENDMENT OF RULES DELEGATING AIR QUALITY CONSTRUCTION APPROVAL TO THE DEPARTMENT

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the intended action to amend a rule.

(1) Legal Authority

This proposal amends Oregon Administrative Rules (OAR) 340-20-030(4)(a). It is proposed under the authority of Oregon Revised Statutes (ORS) Chapter 468, including 468.015, 468.020, 468.280, and 468.325.

(2) Need for these Rules

This amendment is essentially housekeeping in nature. It would fully delegate the air quality construction plan approval authority to the Department of Environmental Quality (DEQ) by authorizing DEQ's Director to issue orders prohibiting construction of new sources of air contamination. Under existing OARs, the Director has regulatory authority to approve air quality construction plans, but only the Environmental Quality Commission (EQC) may issue orders prohibiting construction. There is statutory authority for delegation to the Director of both air quality construction plan approval and disapproval.

(3) Principal Documents Relied Upon

OAR 340, Division 20, Section 030 (4), Notice of Construction and Approval of Plans: Order Prohibiting Construction

ORS 468.325 (6)

All documents referenced may be inspected at the Department of Environmental Quality, 811 SW 6th Avenue, Portland, Oregon, during normal business hours.

LAND USE CONSISTENCY STATEMENT

The proposed rule change does not appear to affect land use and appears to be consistent with the Statewide Planning Goals.

FISCAL AND ECONOMIC IMPACT STATEMENT

The proposed rule change does not appear to have any fiscal or economic impacts.

*Oregon Department of Environmental Quality***A CHANCE TO COMMENT ON...**

Hearing Date: March 6, 1989

Comments Due: March 8, 1989

- WHO IS AFFECTED:** Residents and Industries in the State of Oregon
- WHAT IS PROPOSED:** The Department of Environmental Quality is proposing to amend OAR 340, Division 20, Section 030(4)(a), Notice of Construction and Approval of Plans.
- WHAT ARE THE HIGHLIGHTS:** This amendment is essentially house keeping in nature. It would fully delegate the air quality construction plan approval authority to the Department of Environmental Quality (DEQ) by authorizing DEQ's Director to issue orders prohibiting construction of new sources of air contamination.
- Under existing Oregon Administrative Rules (OARs), The Director has regulatory authority to approve air quality construction plans, but only the Environmental Quality Commission (EQC) may issue orders prohibiting construction. Oregon Revised Statute (ORS) 468.325(6) authorizes delegation to the Director of both air quality construction plan approval and disapproval.
- HOW TO COMMENT:** Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland (811 SW Sixth Avenue) or from the regional office nearest you. For further information, contact Terri Sylvester at (503) 229-5057.
- A public hearing is scheduled for March 6, 1989, at 2:30 p.m. in Room 7B at 811 SW 6th Avenue, Portland.
- Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ, but must be received by no later than March 8, 1989.
- WHAT IS THE NEXT STEP:** After public hearing the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. If amendments are adopted they would be submitted to the U. S. Environmental Protection Agency as revisions to the Clean Air Act State Implementation Plan. The Commission's deliberation would come during a regularly scheduled meeting on April 14, 1989.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

C-1

AD4466



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

OREGON REVISED STATUTES

(2) Within 30 days of receipt of such notice, the commission may require, as a condition precedent to approval of the construction, the submission of plans and specifications. After examination thereof, the commission may request corrections and revisions to the plans and specifications. The commission may also require any other information concerning air contaminant emissions as is necessary to determine whether the proposed construction is in accordance with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto.

(3) If the commission determines that the proposed construction is in accordance with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto, it shall enter an order approving such construction. If the commission determines that the construction does not comply with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto, it shall notify the applicant and enter an order prohibiting the construction.

(4) If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications or any other information required pursuant to this section, the commission fails to issue an order, the failure shall be considered a determination that the construction may proceed. The construction must comply with the plans, specifications and any corrections or revisions thereto or other information, if any, previously submitted.

(5) Any person against whom the order is directed may, within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, shall state the grounds for hearing and shall be mailed to the director of the department. The hearing shall be conducted pursuant to the applicable provisions of ORS 183.310 to 183.550.

(6) The commission may delegate its duties under subsections (2) to (4) of this section to the Director of the Department of Environmental Quality. If the commission delegates its duties under this section, any person against whom an order of the director is directed may demand a hearing before the commission as provided in subsection (5) of this section.

468.325 Notice prior to construction of new sources; order authorizing or prohibiting construction; effect of no order; appeal.
 (1) The commission may require notice prior to the construction of new air contamination sources specified by class or classes in its rules or standards relating to air pollution.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 14, 1989

TO: Environmental Quality Commission

FROM: Terri Sylvester, Air Quality Division

SUBJECT: Hearing Officer's Report

A hearing was held on March 6, 1989 at 2:30 p.m. in Room 7B to gather comments regarding Rules for Delegation of Air Quality Construction Approval to the Department. Specifically, to amend the rule to delegate the authority to the Department for orders prohibiting construction of projects.

No one attended the hearing and no written comments were received before or after the hearing.



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: M
Division: Water Quality
Section: Sewage Disposal

SUBJECT:

A Preliminary Plan, Specifications and Schedule for Sanitary Sewers to Serve a Health Hazard Annexation Area Known as Philomath Boulevard Area (Phase II), Contiguous to the City of Corvallis, Benton County and a request to revise a prior approved schedule for Phase I.

PURPOSE:

Environmental Quality Commission approval of the City of Corvallis' plan, specifications and schedule for Phase II will allow the mandatory health hazard annexation process to continue in accordance with Oregon Revised Statute (ORS) 222.840 and enable the City to provide sanitary sewers to alleviate a health hazard caused by inadequate on-site sewage disposal systems. Approval of the proposed revised schedule for providing sewers to Phase I will enable the City to pursue financing alternatives to reduce the cost to property owners required to be served.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment

Meeting Date: April 14, 1989
Agenda Item: M
Page 2

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
- Proposed Order Attachment F
- Approve Department Recommendation
- Variance Request Attachment
- Exception to Rule Attachment
- Informational Report Attachment
- Other: Approve Preliminary Plan,
Specifications, and Schedule Attachment A
Exhibits 1,2,3
- Sign EQC Certificate Attachment B

DESCRIPTION OF REQUESTED ACTION:

The Department requests the Commission approve the Preliminary Plan, Specifications and Schedule submitted by the City of Corvallis to alleviate the health hazard in the Philomath Boulevard Phase II area (Exhibits to Attachment A) and modify the schedule for the Phase I area.

The Department also requests the Chairman to sign a Certificate of Approval for the Department to send to the City so the annexation process in the Phase II area can continue (Attachment B).

The Department also requests the Commission to authorize the Stipulation and Final Order to recognize the missed schedule for Phase I and to assure implementation of the proposed schedule for both Phase I and II.

AUTHORITY/NEED FOR ACTION:

- Required by Statute: ORS 222.898 Attachment D
Enactment Date: 1983
- Statutory Authority: Attachment
- Pursuant to Rule: Attachment
- Pursuant to Federal Law/Rule: Attachment
- Other: Attachment

X Time Constraints:

The Commission has 60 days from receiving the Preliminary Plans, Specifications and Schedule for Phase II to determine them either adequate or inadequate to remove or alleviate the dangerous conditions and to certify same to the City. The City submitted the plan and specifications on December 21, 1988, in anticipation of a Health Division Order, and a revised schedule on March 28,

Meeting Date: April 14, 1989
Agenda Item: M
Page 3

1989. The City has not implemented the Commission approved schedule for Phase I (Attachment E). The City requests their revised schedule be approved.

DEVELOPMENTAL BACKGROUND:

<u> </u> Advisory Committee Report/Recommendation	Attachment <u> </u>
<u> </u> Hearing Officer's Report/Recommendations	Attachment <u> </u>
<u> </u> Response to Testimony/Comments	Attachment <u> </u>
<u> X</u> Prior EQC Agenda Items:	
EQC approved schedule for Phase I	Attachment <u> E</u>
<u> </u> Other Related Reports/Rules/Statutes:	Attachment <u> </u>
<u> X</u> Supplemental Background Information:	
A Staff Summary and Evaluation of the Plan, Specifications, Schedule and Exhibits	Attachment <u> A</u> Exhibits 1,2,3
Certified Copy of Findings and Order from the Oregon State Health Division	Attachment <u> C</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The Health Division issued an Order for Phase II to the City of Corvallis on February 3, 1989. Within the Order are Findings that a danger to public health exists in the Phase II area of Philomath Boulevard due to improper and inadequate installations for the disposal or treatment of sewage. Phase II is adjacent to a health hazard area Phase I which was annexed to the City in 1988. Both are now within the Urban Growth Boundary of the City of Corvallis.

Phase I area includes twenty-seven (27) properties with identified inadequate sewage disposal. Phase II area includes seven (7) properties with inadequate sewage disposal systems.

Within 90 days of receiving the Order, the statute requires the City to make a study, develop and submit preliminary plans, specifications and a schedule for facilities to remove or alleviate the health hazard conditions. ORS 222.898 designates the Commission as the reviewing authority where sewage facilities are deemed needed to alleviate a health hazard.

If the Commission considers the proposed facilities and time schedule adequate, their approval is to be certified to the City. Upon receipt of the EQC certification of approval, the City must adopt an ordinance in accordance with ORS 222.900 which includes annexation of the territory. The City is then

Meeting Date: April 14, 1989
Agenda Item: M
Page 4

required to "cause" the necessary facilities to be constructed.

If the Commission determines that the danger to public health in the area cannot be removed or alleviated by the facilities proposed to be provided by the City, the Commission shall terminate the proceedings upon the proposal and notify the City. The City must then submit an additional or revised proposal.

To accommodate providing sewers to Phase II, the City requests the Commission approve revisions to the schedule for Phase I. The schedule for both Phase I and Phase II would enable the City to pursue financial assistance to lower the cost of sewers to affected property owners (Attachment A, Exhibit 3). The City is agreeable to entering into a Stipulated and Final Order which enforces the schedule for providing sewers and connecting the 34 properties.

PROGRAM CONSIDERATIONS:

Included in Attachment A, Exhibit 3 are letters from the City dated March 23, 1989 and March 28, 1989 explaining the need for a schedule revision. The proposed schedule merges Phase I and II annexation areas into a single project schedule whereby the danger to public health will be alleviated in both areas by no later than February 1, 1991.

The schedule date of June 15, 1989 previously approved by the EQC for alleviating dangerous conditions in the Phase I area will not be met. To assure compliance with the new total project schedule, a Stipulation and Final Order is proposed.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

The Department considered whether the proposed sewers will alleviate the health hazard and whether the schedule prepared by the City is reasonable.

1. Staff concludes that construction of public sewers to the Phase II area will alleviate the danger to public health to a significant degree. Discharge of sewage onto the ground surface, into various ditches, across the property of others and around nearby wells will be eliminated. In addition to the proposed new sewers, the existing interceptor sewers, pump stations and the wastewater treatment plant to be relied upon have adequate capacity for the increase in sewage flow.

Although one of the lines is interconnected with a combined storm and sanitary sewer, which overflows during storm events, the City's NPDES permit includes a compliance schedule for elimination of combined sewer overflows (CSOs) to the Willamette River in the summer. A draft NPDES permit renewal addresses winter CSOs.

Some danger to public health in the area will continue to exist until a safe water supply is provided at all properties. According to the Benton County Sanitary Survey, the properties in the area are served by individual wells. Some of the wells have construction deficiencies. Surface runoff may contaminate these wells after sewage contaminants are removed.

A sanitary survey of the area in 1986, in which Department staff participated, shows that none of the 34 failed or failing systems in the Phase I and II area could be repaired with standard on-site systems. Only 9 of the 34 could be repaired with alternative on-site sewage systems.

2. Staff concludes that the proposed time schedule for completion of all work, including connection of the properties to the sewer, by February 1, 1991, is reasonable. The schedule includes time allowances for the City to pursue funding assistance to help defray design and construction costs that largely have to be borne by property owners in the area to be served. The City, however, must satisfy the federal requirements to receive grants or loans.

It may take up to 180 days to develop an approvable facilities plan. Upon completion of a facilities plan, design may take 90 days. Another 60 days may be needed to advertise for and evaluate construction bids. A minimum of 120 days may be needed to construct and test the sewer mains. There may be a period where no construction can occur during the wet weather season because of rain and saturated soil conditions. Property owners have a maximum of 90 days to complete all connection hookups following notice by the City that sewer service is available. Only when all hookups are complete will the health hazard conditions be alleviated.

3. The statute for the Health Hazard Abatement Law (ORS 222.840 - 222.915) implies urgency. Hence a schedule is required. ORS 222.900(4) requires the needed facilities to be provided in accordance with the time schedule.

Meeting Date: April 14, 1989
Agenda Item: M
Page 6

The statute requires that the Commission use its powers to insure that facilities are provided per this schedule. The City will miss an earlier schedule to provide facilities for the Phase I area. We propose the Stipulation and Final Order as a means to assure the proposed schedule for Phase II and revised schedule for Phase I are both met.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

1. The Department recommends Commission approval of the Preliminary Plan, Specifications and Schedule submitted by the City for the area. The proposed plan, specifications and time schedule are adequate to alleviate the health hazard.
2. The Department recommends the Commission authorize execution of the Stipulation and Final Order by the Director to acknowledge that the previously approved schedule for Phase I construction will not be met and to assure the construction schedule for the total project is met.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

This action is expected to be consistent with the strategic plan, agency policy and legislative policy.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should the schedule for design and construction of the sewers provide time allowances for the City to pursue funding assistance to help finance implementation of the project?
2. Is the proposal to execute a Stipulation and Final Order an appropriate mechanism to address the City's request for an extension of time to connect properties in the Phase I area?

INTENDED FOLLOWUP ACTIONS:

If the Commission approves the plan and schedule, the Department needs to forward the Chairman's certification of Commission action to the City as soon as possible so the annexation process can continue.

The Stipulation and Final Order needs to be executed if authorized.

The Department would work with the City to ensure that the City expeditiously prepares a facility plan and grant

Meeting Date: April 14, 1989
Agenda Item: M
Page 7

application for the project to be considered for grant or loan fund assistance.

Final plans and specifications would to be reviewed and approved by the Department.

Beyond this, the Department needs to monitor the City's progress in providing sewers in accordance with the schedule approved by the Commission.

Approved:

Section:

Division:

Director:

Mary M. Halliburton
Robert J. Halliburton
Suzanne Taylor

Report Prepared By: James L. Van Domelen

Phone: 229 - 5310

Date Prepared: March 30, 1989

JLV:crw
SD\MW\WC4711
April 3, 1989

Staff Summary and Evaluation of a Preliminary Plan,
Specifications, and Schedule for Sanitary Sewers
to Service Philomath Boulevard Area Phase II
and City's Request for Approval of a
Revised Schedule to Serve Phase I

The designated health hazard area is Phase II of a two phase health hazard annexation process proposed in an area within the urban growth boundary of the City of Corvallis. Plans, specifications and a schedule for sewerage Phase I were approved by the Commission on March 11, 1988.

Sanitary surveys of the Phase II area were conducted between 1986 and 1988. There are about twenty occupied properties in this area. Seven properties were found to have failing on-site sewage disposal systems. Sewage was found both in the ground surface and in the roadside ditches. Failures were attributed to the soil type and to the presence of high groundwater.

The Department participated in the 1986 sanitary survey. Benton County prepared a report of the survey findings. The report estimates that none of the 34 failed or failing systems in areas of Phase I and II could be repaired with a standard on-site sewage disposal system and that only 9 of the 34 could be repaired with more expensive alternative on-site sewage disposal systems. The report also concluded that both an off-site water supply and sewage collection and treatment are vital.

The City's plan proposes construction of an extension of a conventional gravity collection sewer from the Phase I area to serve the adjacent Phase II area. The seven properties referenced in the Health Division Order will be directly serviced by the proposed line and no extension of collector sewers will be needed. Other properties in the annexation area will need additional collection sewers to be served.

Sewage will be conveyed by the proposed gravity line to existing City interceptors and pump stations to the City's treatment plant. The existing systems have adequate capacity to convey and treat the additional flows.

The schedule initially submitted by the City to serve Phase II proposed construction of the sewer extension and connection of properties with failing sewage systems by October 1989. On March 6, 1989 the City learned from the Department that the project may qualify for EPA sewerage works construction grant funding.

A revised schedule from the City received March 28, 1989 includes additional time for the City to pursue grant funding to serve both the Phase I and Phase II area. The Commission approved schedule for Phase I would have to be extended. The original schedule for Phase I proposed connection of properties by June 15, 1989. To accommodate EPA grant requirements, the schedule would be extended until February 1, 1991. If the City receives a grant, the City estimates that costs to be borne by individual property

owners may be \$ 2,000 to \$ 74,000, depending upon the square foot assessment. This is 10 percent less than if funding assistance is not available.

The conditions that exist in the area have been present for several years according to Benton County. While the City is prepared to design and construct the sewers as soon as possible, the cost to individual property owners would be reduced substantially if the City is able to obtain financial assistance.

Allowing communities a "window of opportunity" to seek funding assistance to address public health hazards has been provided in the past. In similar situations schedules of over one year have been approved by the Commission for cities to construct facilities to alleviate health hazard as ordered by the Health Division.

The Health Division has not raised any objection to the schedule proposed by the City.

Exhibit 1 is a large folded drawing of the annexation area showing tax lots with failed systems, city limits, urban growth boundary, contours, structures, Phase I sewers to be constructed, and Phase II sewers to be constructed. It is the **Preliminary Plan**. It has been neither copied nor enclosed due to its size. It will be available at the Commission meeting for inspection and review.

Exhibit 2 is a looseleaf binder with updated standard specifications which the City's Public Works Department uses for construction of various works. It includes sanitary sewer construction standards which will be used to construct gravity sewers on the Philomath Boulevard project. These **Specifications** have not been copied and likewise will be available at Commission meeting.

Exhibit 3 is the Proposed **Schedule** submitted by the City of Corvallis. (pp. A4-A13) (Letters of December 22, 1988, March 15, 1989, March 23, 1989, and March 28, 1989)

Staff Summary and Evaluation of a Preliminary Plan,
Specifications, and Schedule for Sanitary Sewers
to Service Philomath Boulevard Area Phase II
and City's Request for Approval of a
Revised Schedule to Serve Phase I

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The Department participated in the 1986 sanitary survey. Benton County prepared a report of the survey findings. The report estimates that none of the 34 failed or failing systems in areas of Phase I and II could be repaired with a standard on-site sewage disposal system and that only 9 of the 34 could be repaired with more expensive alternative on-site sewage disposal systems. The report also concluded that both an off-site water supply and sewage collection and treatment are vital.

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owners may be \$ 2,000 to \$ 74,000, depending upon the square foot assessment. This is 10 percent less than if funding assistance is not available.

The conditions that exist in the area have been present for several years according to Benton County. While the City is prepared to design and construct the sewers as soon as possible, the cost to individual property owners would be reduced substantially if the City is able to obtain financial assistance.

Allowing communities a "window of opportunity" to seek funding assistance to address public health hazards has been provided in the past. In similar situations schedules of over one year have been approved by the Commission for cities to construct facilities to alleviate health hazard as ordered by the Health Division.

The Health Division has not raised any objection to the schedule proposed by the City.

ATTACHMENT A
Exhibits 1, 2, 3

Exhibit 1 is a large folded drawing of the annexation area showing tax lots with failed systems, city limits, urban growth boundary, contours, structures, Phase I sewers to be constructed, and Phase II sewers to be constructed. It is the **Preliminary Plan**. It has been neither copied nor enclosed due to its size. It will be available at the Commission meeting for inspection and review.

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Exhibit 3 is the Proposed Schedule submitted by the City of Corvallis. **PP A4-A13**
(Letters of December 22, 1988, March 15, 1989, March 23, 1989, and March 28, 1989)



RECEIVED
MAR 29 1989

March 28, 1989

Water Quality Division
Dept. of Environmental Quality

Community Development
Engineering Division
408 SW Monroe
P.O. Box 1083
Corvallis, Oregon 97339-1083
(503) 757-6941

Jim Van Domelen, P.E.
Department of Environmental Quality (DEQ)
Sewage Disposal Section
811 S.W. Sixth Avenue
Portland, Oregon 97204-1390

SUBJECT: West Philomath Boulevard Health Hazard, Phases 1 and 2
(Project #78339)

Dear Mr. Van Domelen:

This letter is provided as follow-up to our telephone conversation today concerning the City's request to amend the proposed schedule to extend sewer service to both phases of the West Philomath Boulevard Health Hazard Area. This letter supplements our letters of March 15 and March 23, 1989.

Specifically, you requested a date by which all properties with failing systems would be connected to sewers planned for construction during the period extending from May through October of 1990. Our Sewer Use Ordinance requires that connections to public sewers be made within 90 days of a notice to connect from the City. We anticipate that notices to property owners will be sent no later than the planned date for completion of construction, with all failing systems being connected by February 1, 1991.

To minimize the number of connections made during the winter, we plan to phase construction and approval of portions of the public sewer system. This phased approach should provide property owners with as great an opportunity as possible to make these connections during summer months.

If you have any questions or need additional information, please feel free to contact me at 757-6941.

Sincerely,

Chip Ullstad
Engineering Division

sh/E89287

c: Jim Clark, Engineering
Stephan Lashbrook, Planning
Lee March, Development Services



RECEIVED
MAR 27 1989

Water Quality Division
Dept. of Environmental Quality

Community Development
Engineering Division
408 SW Monroe
P.O. Box 1083
Corvallis, Oregon 97339-1083
(503) 757-6941

March 23, 1989

Department of Environmental Quality
Attention: Mary Halliburton
Sewage Disposal Section
Water Quality Division
811 SW Sixth Avenue
Portland, Oregon 97204-1390

SUBJECT: Request to Amend Construction Schedules for the West
Philomath Boulevard Health Hazard Area, Phases 1 and 2
(Project #78339)

Dear Ms. Halliburton:

This letter is provided as follow-up to your request for additional information concerning the City's petition to amend the construction schedule for the above referenced project. Our letter of March 15, 1989, requests the Environmental Quality Commission consider an amendment to the approved construction schedule for Phase 1 and a revision to the submitted construction schedule for Phase 2 at their April 14, 1989 meeting. The requested changes would consolidate the two schedules into one and postpone construction until the 1990 construction season.

As we discussed, you indicated that additional information concerning the basis for a change in the approved schedule for both phases would be helpful as the Commission considers approval of the schedule outlined in our letter of March 15, 1989. A brief background of the development of this project and discussion of the status of both phases is provided below.

BACKGROUND

As the West Philomath Boulevard Health Hazard Annexation process was initiated, it was decided to divide the area into two phases, with Phase 1 being that portion of the area within the City's Urban Growth Boundary and Phase 2 being an area outside of the Urban Growth Boundary, but within the City's ultimate service area.

Mary Halliburton
March 23, 1989
Page 2

The Health Hazard Annexation process was initiated for the Phase 1 area and postponed for the Phase 2 area until an amendment of the City's Urban Growth Boundary was completed. The Phase 1 area is now annexed to the City, and we anticipate that annexation of the Phase 2 area will be completed by May 1, 1989. As both phases will be annexed prior to construction, the phasing is no longer significant. Although the two phases have been treated separately up to this point, we anticipate that future actions concerning resolution of the health hazard will treat the two phases as one project. This includes the construction schedule, development of plans, specifications, and an assessment district; and is the basis for our request to consolidate what have been, up to this point, treated as two separate schedules.

PHASE 1

The approved construction schedule for Phase 1 was submitted for review and approval by the Environmental Quality Commission on February 11, 1988. This schedule was approved by the Commission in March, 1988, and indicated that construction would begin in October, 1988, and would be completed in March, 1989.

Construction to serve the Phase 1 area was not completed within the original time frame planned as a result of two factors following submission and approval of the original schedule.

As you may be aware, the City had submitted a grant application for the West Philomath Boulevard area. The letter class ranking for the project was Class "D", which placed the project sufficiently low on the Construction Grants Priority List that no grant funding was available. The City had requested that the ranking be reevaluated and ranked as a Class "B" project. In support of this request, the Benton County Health Department and the City prepared an amendment to the original sanitary survey of the area to better document the contamination of drinking water sources. This amendment was submitted on April 12, 1988. Although the initial response to this request was that the project's ranking remain as a Class "D" project, time was lost in the appeal process and while awaiting a final determination regarding the eligibility of the project for grant funding.

The second factor which postponed construction was a delay in the annexation process as a result of the Exclusions Hearings. These hearings delayed the effective date of the annexation for Phase 1 to June, 1988. Following the annexation, it would have been difficult to form an assessment district, design the project, and complete construction in the 1988 construction season. Although

Mary Halliburton
March 23, 1989
Page 3

the original schedule indicated winter construction for this project, we have had an opportunity to better evaluate the alignment and soil conditions in the area and believe that winter construction is not a practical approach.

The above factors led to a postponement of construction until the 1989 construction season. We were proceeding under the assumption that no grant funds would be available for the project and had scheduled the project for construction during the 1989 construction season. Neighborhood meetings with property owners had been held and a public hearing to form an assessment district completed when we were notified that our grant application had been reevaluated and reclassified as a Class "B" project, making the project eligible for grant funding.

Based on a preliminary meeting with Barbara Burton, Construction Grants Section, it appears that this project is eligible for approximately \$189,000 in grant funds to offset assessments to property owners. This funding will result in a net decrease in assessments of approximately ten percent.

The assessment district to extend service to the West Philomath Boulevard area is not routine or representative of typical districts in an urban setting. This area is a mixture of one-half to one acre of residential properties and large undeveloped lots. The anticipated assessments, although typical for a fully developed urban setting, represent a substantial burden to property owners in this area. There is a strong likelihood that some property owners will be unable to pay the assessments and may lose their property as a result of extending service to the area. We are, therefore, seeking every opportunity to take advantage of grant funding to offset their assessments.

To take advantage of grant funds available under the Construction Grants Program, construction will need to be postponed until the 1990 construction season to allow time for selection of a consultant, development and adoption of a facilities plan, project design, and preparation of a Step 3 grant application.

PHASE 2

The original schedule submitted for Phase 2 indicated that construction for this phase would be complete at the end of the 1989 construction season, immediately following construction of the Phase 1 project. Considering the availability of grant funding and the savings that would result in mobilization and administrative costs by combining Phases 1 and 2 into one project, we request the

Mary Halliburton
March 23, 1989
Page 4

original schedule be revised to reflect construction during the 1990 construction season, as outlined in our letter of March 15, 1989. Property owners in the Phase 2 area will experience assessments approximately ten percent below what would be expected without grant participation in the project.

We understand and share both your concerns and those of the Health Division in eliminating the health hazard in the West Philomath Boulevard area. Extending service to this area involves a major expense to the community and to property owners that will share in the cost of constructing these facilities.

We have an obligation to eliminate the health hazard at the least cost to these property owners and to the community as a whole. Consolidating schedules for Phases 1 and 2 and postponing construction until the 1990 construction season provides an opportunity to take advantage of grant funding and cost savings that can be expected as a result of combining the projects into one construction project.

I hope this information is helpful for you and the Commission as you consider our request to amend the schedules for Phases 1 and 2. If you have any questions or need additional information concerning our request, please feel free to call me at 757-6941.

Best Regards,



Chip Ullstad
Engineering Division

sh
E89282
c: Jim Clark, Engineering Division
Stephan Lashbrook, Planning Division



RECEIVED
MAR 17 1989

March 15, 1989

Water Quality Division
Dept. of Environmental Quality

Community Development
Engineering Division
408 SW Monroe
P.O. Box 1083
Corvallis, Oregon 97339-1083
(503) 757-6941

Jim Van Domelen, P.E.
Department of Environmental Quality (DEQ)
Sewage Disposal Section
811 S.W. Sixth Avenue
Portland, Oregon 97204

*KED -
logged in!*

SUBJECT: West Philomath Boulevard Health Hazard, Phases 1 and 2
(Project #78339)

Dear Mr. Van Domelen:

This letter is provided as follow-up to our telephone conversation of March 14, 1989, concerning the extension of sewer service to the West Philomath Boulevard Health Hazard Area.

As we discussed, our original schedule involved extending sewer service to Phases 1 and 2 during this coming construction season (July through November, 1989). At the time this schedule was developed, we had been notified by DEQ that the project was ranked relatively low on the State's priority list. Considering the ranking at that time, we were advised that there was little likelihood of any grant funding.

On March 3, 1989, however, we were informed that our application had been reconsidered. As a result of this new evaluation, the ranking or priority for the project was upgraded from a Class "D" to a Class "B" project. This new ranking placed the project well within the funding range for projects on the State's priority list. A letter from the Construction Grants Section explaining this change is enclosed for your reference.

We are currently working with the Barbara Burton in the Grants Section to determine what portion of the project would be considered eligible for grant funding and expect to make a decision concerning the use of grant funds over the course of the next several months.

As you are aware, if we elect to pursue grant funding, a facility plan will need to be developed and additional time allowed for

Jim Van Domelen, P. E.
March 15, 1989
Page 2

preparation and review of plans and specifications. If we elect to pursue the project independent of grant funding, we would not have sufficient time to prepare plans, specifications, and secure needed easements to build the project during the 1989 construction season.

We therefore request that the preliminary construction schedules for both Phases 1 and 2 be combined as one schedule and be delayed to the 1990 construction season. An amended schedule is presented below and will result in extension of sewer service to both phases of West Philomath Boulevard by November, 1990. We ask that the Environmental Quality Commission consider this revised schedule at the time your staff report is presented for the Phase 2 area.

AMENDED PROJECT SCHEDULE
WEST PHILOMATH BOULEVARD SANITARY SEWER EXTENSION
Phases 1 and 2

<u>DATE</u>	<u>ACTION</u>
May, 1989	Annex Phase 2 area
April - October, 1989	Project Development
November 1989, - April, 1990	Design
May - October, 1990	Construction <i>completion</i>
November, 1990 - February, 1990	Project Close-out

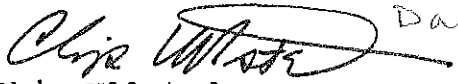
If you have any questions or need additional information in support of our request to consolidate and amend the schedules for Phases 1 and 2, please feel free to contact me at 757-6941. A map of the Phase 2 area is enclosed per your request.

Sincerely,

February 1, 1991

Date

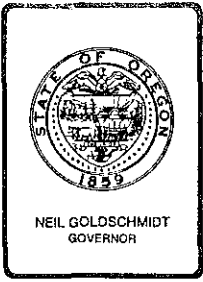
*All needed connections
and made*


Chip Ullstad
Engineering Division

sh

E89265

c: Jim Clark, Engineering
Stephan Lashbrook, Planning
Barbara Burton, DEQ
Ron Hall, State Health Division



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

March 6, 1989

RECEIVED
MAR 17 1989

Chip Ullstadt, City Engineer
City of Corvallis
P.O. Box 1083
Corvallis, Oregon 97339

Water Quality Division
Dept. of Environmental Quality

Re: Corvallis West project
Reranked on Mid-year Update of
Grant Priority List C-410668-01

Dear Mr. Ullstadt:

The Department has completed its mid-year update of the FY89 Construction Grants Priority List. The water quality problems associated with the Corvallis West interceptor project were reevaluated during this update. The Department has determined that the bacterial contamination of the area's drinking water wells was a result of the septic system failures.

In the past, the septic system failures were determined not to be affecting surface water quality and that the contamination of the area's drinking water wells was a result of poor well construction and not a water quality problem. However, after further review, the Department determined that sewage could be contaminating the groundwater by migrating down area wells and that this did constitute a water quality problem.

The project's Letter Class has been changed from a D to a B to indicate that beneficial uses are being impaired or may be damaged irreparably. The reevaluation gives the project a ranking of 2 on the updated FY89 priority list. This ranking will become effective after the comment period is over on March 31, 1989, unless a hearing is requested on the reranking of the list. When the reranking become official the project's rank would place it within grant funding range for the FY89 grant year ending September 30, 1989.

Sincerely,

Richard Kepler
Construction Grants Section
Water Quality Division

RJK:crw
WC4644
Enclosure - Update of FY89 Priority List

A-11



RECEIVED
DEC 21 1988

Water Quality Division
Dept. of Environmental Quality

Community Development
Engineering Division
408 SW Monroe
P.O. Box 1083
Corvallis, Oregon 97339-1083
(503) 757-6941

December 22, 1988

Jim VanDomelen
Department of Environmental Quality
811 SW 6th Street
Portland, OR 97204

KKD-logged

PROJECT NAME: West Philomath Boulevard Sanitary Sewer - Phase II

Attached for your review is a map that includes the Phase II area of the West Philomath Boulevard Sanitary Sewer. The map shows the proposed sanitary sewer alignment and size. Also enclosed for your review is a revised schedule for this project.

If you should need additional information, please contact either myself or Chip Ullstad at 757-6941.

Brian McGownd

Brian McGownd
Engineering Services

Enclosure

WEST PHILOMATH BOULEVARD SANITARY SEWER
PHASE II

Revised Project Schedule

February	1989	-	Plan
April	1989	-	Design
July	1989	-	Construct
October	1989	-	Connect

STATE OF OREGON

ENVIRONMENTAL QUALITY COMMISSION

In the Matter of Annexation)	
of Certain Territory in the)	
City of Corvallis, Oregon,)	
Pursuant to the Provisions of	)	CERTIFICATE
ORS 222.840 to 222.915 Due to)	
Conditions Causing a Danger to)	
Public Health)	

The Environmental Quality Commission of the State of Oregon on April 14, 1989 received preliminary plans and specifications together with a time schedule for the implementation of a plan to install sanitary sewers in certain territory commonly know and referred to as Philomath Boulevard Areas (Phase II) adjacent to the corporate limits of the City of Corvallis.

Pursuant to the Provisions of ORS 222.898, the Environmental Quality Commission reviewed and hereby approved said plans and specifications and the time schedule, copies of which are contained in Exhibit "A" attached hereto and made a part hereof and does hereby certify its approval to the City that it considers the sanitary sewers adequate to remove or alleviate the conditions causing a danger to public health existing within the area adjacent to the City of corvallis as aforesaid; to wit: inadequate installation for the disposal and treatment of sewage.

Dated this 14th day of April 1989.

 Chairman
 Environmental Quality Commission



Department of Human Resources
HEALTH DIVISION

1400 SW 5th AVENUE, PORTLAND, OREGON 97201

VOICE: 229-6302

February 7, 1989

TDD-NONVOICE: (503) 229-5497

Gerald Seals, City Manager
City of Corvallis
P.O. Box 1083
Corvallis, OR 97339

CERTIFIED MAIL # P-480 147 570
RETURN RECEIPT REQUESTED

Dear Mr. Seals:

RE: IN THE MATTER OF THE PROPOSED ANNEXATION OF A CERTAIN TERRITORY KNOWN AS THE PHILOMATH BOULEVARD PHASE II AREA TO THE CITY OF CORVALLIS, BENTON COUNTY, OREGON, PURSUANT TO THE PROVISIONS OF ORS 222.840 TO 222.915 DUE TO CONDITIONS CAUSING A DANGER TO PUBLIC HEALTH.

Please find enclosed a certified copy of Findings and an Order in the above stated matter.

I refer you to ORS 222.897 through 222.900 which direct procedures following these findings. If you have questions in this regard, please contact me at 229-6302.

Sincerely,

Ronald A. Hall, R.S.
Health Hazard Studies Program
Office of Environment and Health Systems

RECEIVED
FEB 08 1989

Water Quality Division
Dept. of Environmental Quality

RAH:sw

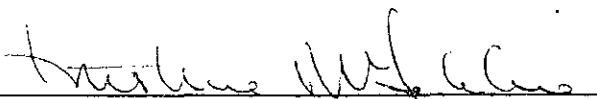
cc: William Hutchinson, EQC, CERTIFIED MAIL #P 480147571
David St. Louis, DEQ, Salem
Tom Bispham, DEQ, Portland
Fred Hansen, DEQ, Portland
Stephan Lashbrook, City of Corvallis
Michael Neuman, City of Corvallis
Tom Engle, Benton Co. Health Dept.
Benton Co. Commissioners

CERTIFICATE

I, Kristine Gebbie, Assistant Director for Health, Department of Human Resources, Administrator of the State Health Division and legal custodian of the records and files of said Division, DO HEREBY CERTIFY:

That the attached copy of the ASSISTANT DIRECTOR'S FINDINGS OF FACT, ULTIMATE FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER, in the matter of the Annexation of Certain Territory commonly known as Philomath Blvd., Phase II Area to the City of Corvallis, has been compared by me with the original thereof and said copy is a true, full and correct transcript from and of the whole of said original as the same appears in the records of the State Health Division in my custody.

In Testimony Whereof, I have hereunto
set my hand this 3 day of
February, 1989.



Kristine M. Gebbie
Assistant Director, Human Resources
Administrator, State Health Division

BEFORE THE STATE HEALTH DIVISION
 OF THE DEPARTMENT OF HUMAN RESOURCES
 OF THE STATE OF OREGON

<p>4 In the matter of the Proposed) Annexation of a Certain) Territory Commonly known as) Philomath Blvd. Phase II to) the City of Corvallis, Benton) County, Oregon, Pursuant to) the Provisions of ORS 222.840) to 222.915 Due to Conditions) Causing a Danger to Public) Health)</p>	<p>ASSISTANT DIRECTOR'S FINDINGS OF FACT, ULTIMATE FINDING OF FACT, CONCLUSION OF LAW AND ORDER</p>
--	--

A hearing in the above-entitled matter on the issue of a danger to public health was held on November 29, 1988, at the Church Building at the Benton County Fairgrounds, 110 S.W. 53rd Street, Corvallis, Oregon, a place near the territory proposed for annexation ("the territory"), before Samuel J. Nicholls, the hearings officer appointed by the Health Division. The hearings officer considered all the evidence presented by the Division and affected persons and made his FINDINGS OF FACT, CONCLUSIONS OF LAW and RECOMMENDATION. An opportunity for arguments and for presentation of petitions for exclusion of property was then given by publication of notice as prescribed by rules of the Division. No timely petitions for exclusion were received. No exceptions to the hearings officer's FINDINGS OF FACT, CONCLUSIONS OF LAW and RECOMMENDATION were received. The Assistant Director, having considered the FINDINGS OF FACT, CONCLUSIONS OF LAW and RECOMMENDATION of the hearings officer, now makes the following disposition of this matter.

1 FINDINGS OF FACT

2 1. The FINDINGS OF FACT, CONCLUSIONS OF LAW and
3 RECOMMENDATION of Hearings Officer are hereby adopted and approved;
4 they are attached as Exhibit A and are by this reference
5 incorporated in this Finding and Order.

6 2. The territory is legally described in Exhibit B to this
7 order, which is by this reference is incorporated herein, is
8 contiguous to the City of Corvallis, Oregon and is within the urban
9 growth boundary of that city.

10 ULTIMATE FINDING OF FACT

11 In the territory, the improper and inadequate installations
12 for the disposal or treatment of sewage or other contaminated or
13 putrefying wastes, as described in Finding #1 above, constitute
14 conditions which are conducive to the propagation of communicable
15 or contagious disease-producing organisms and which present a
16 reasonably clear possibility that the public generally is being
17 exposed to disease-caused physical suffering or illness.

18 CONCLUSION OF LAW

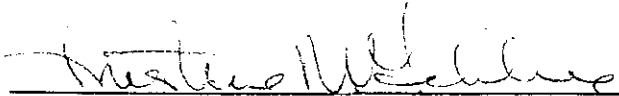
19 A danger to public health as defined in ORS 222.840 through
20 222.915 exists within the area. The territory is otherwise
21 eligible for annexation to the City of Corvallis, Oregon, in
22 accordance with ORS 222.111, and is within the urban growth
23 boundary of the City of Corvallis, Oregon.

24 ORDER

25 IT IS ORDERED that a certified copy of these findings and
26 conclusion be filed with the City of Corvallis, Oregon, and with

1 the Environmental Quality Commission; and that upon their receipt
2 of such findings and conclusion, the City of Corvallis and the
3 Environmental Quality Commission proceed in accordance with ORS
4 222.897, 222.900, and this order to annex the territory described
5 in Exhibit B.

6 DATED this 3 day of February, 1989.

7 
8 Kristine M. Gebbie
9 Oregon Health Division Administrator
10 Assistant Director,
11 Department of Human Resources

12 NOTICE: You are entitled to judicial review of this order;
13 Judicial review may be obtained by filing a petition for review
14 within 60 days from the service of this order. Judicial review is
15 pursuant to the provisions of ORS 183.482.

EXHIBIT "A"

1 BEFORE THE STATE HEALTH DIVISION
2 OF THE DEPARTMENT OF HUMAN RESOURCES
3 OF THE STATE OF OREGON

4 In the matter of the Proposed)
Annexation of a Certain)
5 Territory Commonly known as)
Philomath Blvd. Phase II to) FINDINGS OF FACT,
6 the City of Corvallis, Benton) CONCLUSIONS OF LAW AND
County, Oregon, Pursuant to) RECOMMENDATION OF
7 the Provisions of ORS 222.840) HEARINGS OFFICER
to 222.915 Due to Conditions)
8 Causing a Danger to Public)
Health)
9

10 TO: Kristine M. Gebbie
Assistant Director, Human Resources Administrator
11 Health Division

12 This matter came for hearing on November 29, 1988 at the
13 Church Building at the Benton County Fairgrounds, 110 S.W. 53rd
14 Street, Corvallis, Oregon, a place near the area proposed for
15 annexation. Samuel J. Nicholls served as the Hearings Officer.
16 Leonard J. Pearlman, Assistant Attorney General, appeared as
17 counsel for the Health Division. Members of the public attended
18 in person. The following persons presented testimony in favor of
19 annexation: Ronald Hall, Manager of the Health Hazard Studies
20 Program of the Health Division; Chip Ullstad, Project Manager,
21 Engineering Division, City of Corvallis; Robert Poole, registered
22 sanitarian, Benton County Health Department; Dr. Elizabeth Sazie,
23 Benton County Health Officer. No evidence or testimony in opposi-
24 tion to annexation was presented. The Hearings Officer, having
25 considered all the evidence presented, and being fully advised,

26 ///

1 makes the following Findings of Fact, Ultimate Finding of Fact,
2 Conclusion of Law and Recommendations.

3 FINDINGS OF FACT

4 1.

5 By order of the Oregon State Health Division dated October 26,
6 1988, a hearing was ordered in this matter for the following
7 purpose: to determine whether a danger to public health exists due
8 to conditions existing in the territory proposed to be annexed,
9 described in a resolution of the Board of Commissioners of Benton
10 County, acting as the Benton County Board of Health, dated October
11 19, 1988.

12 2.

13 Notice of said order and resolution was given by the Health
14 Division by publication once each week for two successive weeks in
15 the Corvallis Gazette-Times, a newspaper of general circulation
16 within the City of Corvallis, Oregon, and the territory proposed
17 to be annexed, and by posting copies of the order and resolution
18 in each of four public places within the territory proposed to be
19 annexed.

20 3.

21 No community collection system for the disposal of sewage
22 exists in the area proposed to be annexed.

23 4.

24 There are two primary components to a septic tank and
25 drainfield system. The first is the septic tank itself, which is
26 a water-tight box which serves as a settling basin to settle out

1 solids. The second component is a drainfield, which is a series
2 of underground pipes through which the sewage effluent passes into
3 the surrounding soil.

4 5.

5 Treatment of raw sewage occurs in the soil of the drainfield,
6 where micro-organisms, in the presence of oxygen, break down
7 pathogenic or disease causing organisms which may be present in
8 human sewage.

9 6.

10 Properly constructed and functioning sub-surface disposal
11 systems do not discharge sewage effluent onto the ground surface.
12 Sewage must be retained in the soil to be adequately treated
13 bacteriologically and to be rendered non-septic. Sewage effluents
14 rising or discharging onto the ground surface from a sub-surface
15 sewage disposal facility are inadequately treated and essentially
16 raw.

17 7.

18 Limiting factors to the effective use of a sub-surface
19 drainage system are the soil type of the drainfield and the level
20 of the water table. Both factors affect the amount of oxygen in
21 the soil, which is necessary for adequate bacteriological treatment
22 of the effluent. Presence of excess water in the drainfield limits
23 the amount of oxygen available to the microorganisms which break
24 down the pathogenic organisms in the sewage and render them non-
25 septic.

26 ///

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8.

Non-treated sewage being discharged onto the ground may be detected by a very strong characteristic odor and appearance. In addition, non-treated sewage rising to the surface may be detected by finding standing water on the surface of a drainfield which does not appear on adjacent areas, especially when combined with a lush green growth of grass over the drainfield area.

9.

One method used to detect an improperly functioning sub-surface sewage disposal system is to introduce a fluorescent tracer dye into the toilet of a particular system, flush water through the system, and watch to see if the hydraulic action of the system carries that dye to the surface of the ground. If the dye appears on the ground at all, the system is not functioning properly. If the dye appears on the surface within a short period of time, virtually no treatment is being provided to the sewage discharged into that particular system.

10.

Pathogens, or disease-causing agents, are found in the fecal material of mammals. Microbiological testing for the presence of the following organisms is performed to investigate the presence of inadequately treated sewage: fecal coliform and fecal streptococcus. These organisms are not themselves pathogens, but are indicators of the presence of fecal matter which may contain pathogens.

///

1 odor and appearance of sewage was present on the ground surface,
2 from where it discharged through a ditch located east of the house
3 to a roadside ditch along Philomath Boulevard. Green dye
4 introduced into the system at 10:00 a.m. on that date appeared in
5 the ditches within 15 minutes. Waste from the kitchen sink was
6 discharges from a pipe in the side of the house to the ground
7 surface on the west side of the property.

8 b. On February 24, 1986, on tax map 12-5-7A, tax lot 900,
9 (7075 S.W. Philomath Boulevard), liquid with the characteristic
10 odor and appearance of sewage was present on the ground surface
11 along a fence located on the east side of the property. Dye was
12 introduced into the system at 2:30 p.m. on that day, and was
13 present on the ground surface and in the roadside ditch along
14 Philomath Boulevard at 10:00 a.m. on the following day.

15 c. On February 25, 1986, on tax map 12-5-7A, tax lot 600,
16 (7185 Country Club Road), liquid with the characteristic odor and
17 appearance of sewage was discharging to the ground surface from a
18 tank located underneath the house. Dye introduced into the septic
19 system of the property at 1:00 p.m. on that day appeared on the
20 ground surface within 10 minutes.

21 d. On tax map 12-5-8BB, tax lot 602, (6945 S.W. Country Club
22 Road), liquid with the characteristic odor and appearance of sewage
23 discharges from the house to the ground surface on the west side
24 of the property, then flows to a roadside ditch along Country Club
25 Road. A bacteriological sample of the discharging effluent taken

26 ///

1 on March 3, 1986 showed the presence of 1,475,000 fecal coliform
2 and 5,545 fecal streptococcus colonies per 100 milliliters.

3 e. On February 25, 1986, on tax map 12-5-8BB, tax lot 8600,
4 (6915 Philomath Boulevard), liquid with the characteristic odor and
5 appearance of sewage was present on the ground surface at the
6 southeast corner of the drainfield area. A bacteriological sample
7 of the effluent taken on that date showed the presence of 88,000
8 fecal coliform and 18,000 fecal streptococcus colonies per 100
9 milliliters.

10 f. On February 25, 1986, on tax map 12-5-7A, tax lot 1000,
11 (7145 S.W. Philomath Boulevard), liquid with the characteristic
12 odor and appearance of sewage was present on the ground surface at
13 the base of the slope to the east of the house located on the
14 property. A natural spring is present in the drainfield area and
15 the soil in the drainfield area was saturated on that date. A
16 bacteriological sample of the effluent taken on that date showed
17 the presence of 1,300 fecal coliform and 909 fecal streptococcus
18 colonies per 100 milliliters.

19 g. On tax map 12-5-7A, tax lot 501, (7095 Country Club Road),
20 a pipe discharges effluent to the roadside ditch at the end of the
21 drainfield. A bacteriological sample of the effluent taken on
22 February 25, 1986 showed the presence of 400 fecal coliform
23 colonies per 100 milliliters. The plumbing fixtures of the
24 residence on that property drain slowly.

25 ///

26 ///

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13.

No permits to repair or construct subsurface sewage disposal systems were issued by Benton County for any property described in paragraph 12, between February 24, 1986 and November 29, 1988.

14.

The area proposed for annexation is drained by an unnamed creek which discharges into the Mary's River, a tributary of the Willamette River. The Mary's River and the Willamette River are used by the public for recreation, such as swimming, fishing and boating, and the Willamette is used as a source for domestic water supplies by downstream communities.

15.

In the area proposed for annexation, the possibility of contracting disease through direct or indirect contact with raw or inadequately treated sewage occurs due to:

- a. Normal daily activities carried on in and around the residential living units in the area.
- b. Children playing in the area are exposed to contaminated surface water.
- c. Domestic animals found in the subject area are possible vectors of pathogens to residents within and without the area.
- d. Other vectors, such as insects, rodents, or other pests, could transmit pathogens to persons within and outside the area.

16.

Persons living within the territory proposed for annexation who contract diseases as discussed above could, in turn, carry

1 diseases so contracted to persons living outside the subject
2 territory, either by direct personal contact or by contaminating
3 food to be consumed by persons outside the territory. In addition,
4 persons from outside the territory are exposed to the conditions
5 discussed above by virtue of the passage of contaminated water
6 through drainage ditches along the roads in the area.

7 17.

8 The area proposed for annexation are contiguous to the City
9 of Corvallis, Oregon, and are within the urban growth boundaries
10 of that city. Corvallis is an incorporated city.

11 ULTIMATE FINDING OF FACT

12 The improper and inadequate installations for the disposal or
13 treatment of sewage or other contaminated or putrefying wastes, as
14 described in paragraph 12, constitute conditions which are
15 conducive to the propagation of communicable or contagious disease-
16 producing organisms and which present a reasonably clear
17 possibility that the public generally is being exposed to disease-
18 caused physical suffering or illness.

19 CONCLUSION OF LAW

20 The conditions described above constitute a "danger to public
21 health" under ORS 222.840 through 222.915.

22 RECOMMENDATIONS

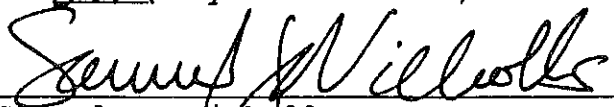
23 1. That the Administrator of the Health Division adopt the
24 Findings of Fact, Ultimate Finding of Fact, and Conclusion of Law
25 herein.

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2. That the Administrator of the Health Division order that the proposed area be annexed to the City of Corvallis.

Respectfully submitted this 6th day of December, 1988.



Samuel J. Nicholls
Hearings Officer

EXHIBIT "B"

BE IT FURTHER RESOLVED that pursuant to the provisions of ORS 222.905, the Benton County Board of Health of Benton County, Oregon, based upon its belief that a danger to public health exists, does hereby propose that the territory described as follows be annexed to the City of Corvallis in Benton County, Oregon, without vote or consent by authority of and in accordance with ORS 222.840 to 222.915:

Beginning at the northwest corner of the Silas Newcomb Donation Land Claim No. 50, Township 12 South, Range 5 West, Willamette Meridian, Benton County, Oregon; thence on the west line of said claim S 0° 04' E 739.79 feet, more or less, to a point on the south right of way of S.W. Philomath Boulevard; thence on said right of way N 76° 09' E, 372.50 feet, more or less, to Station 392 + 12.3 P.C.; thence continuing on said right of way along the arc of a 2904.79 foot radius curve to the left (the long chord of which bears N 71° 24' 30" E, 480.24 feet) 480.79 feet, more or less, to Station 396 + 86.4 P.T.; thence continuing on said right of way N 66° 36' E, 1199.97 feet, more or less, to the south line of a 20.00 foot strip of land deeded to Benton County; thence perpendicular to said highway right of way N 23° 26' W, 80.00 feet to the northerly right of way of said highway; thence along said northerly right of way N 66° 34' E, 250.07 feet, more or less, to the southwest corner of that tract of land described in Page 139, Book 194, Benton County Deed Records; thence leaving said right of way on the west line of said tract, North, 1174.64 feet, more or less, to the northwest corner of said tract; thence on the south line of that parcel described in Page 479, Book 79, Benton County Deed Records, S 86° 58' W, 960.76 feet more or less, to the southwest corner of said tract; thence N 88° 14' W, 630.43 feet, more or less, to the northeast corner of that parcel described in Page 252, Book 180, Benton County Deed Records; thence on the east line extended of said parcel, South, 1285.09 feet, more or less, to the southeast corner of that parcel described in M-2070-79, Benton County Deed Records, said corner being a point on the north line of said Silas Newcomb DLC; thence on said north claim line S 89° 56' W, 500.94 feet, more or less, to the point of beginning.

its charter, annexation by a city under this section shall be by ordinance or resolution subject to referendum, with or without the consent of any owner of property within the territory or resident in the territory. [Amended by 1963 c.444 §1; 1985 c.702 §16]

222.810 [Amended by 1953 c.562 §2; repealed by 1969 c.49 §1]

222.820 [Repealed by 1969 c.49 §1]

222.830 [Repealed by 1969 c.49 §1]

HEALTH HAZARD ABATEMENT

222.840 Short title. ORS 222.840 to 222.915 shall be known and may be cited as the Health Hazard Abatement Law. [1983 c.407 §2]

222.850 Definitions for ORS 222.840 to 222.915. As used in ORS 222.840 to 222.915, unless the context requires otherwise:

(1) "Affected territory" means an area within the urban growth boundary of a city and which is otherwise eligible for annexation to that city and in which there exists an actual or alleged danger to public health.

(2) "Assistant director" means the Assistant Director for Health.

(3) "City council" means the legislative body of a city.

(4) "Commission" means the Environmental Quality Commission.

(5) "Danger to public health" means a condition which is conducive to the propagation of communicable or contagious disease-producing organisms and which presents a reasonably clear possibility that the public generally is being exposed to disease-caused physical suffering or illness, including a condition such as:

(a) Impure or inadequate domestic water.

(b) Inadequate installations for the disposal or treatment of sewage, garbage or other contaminated or putrifying waste.

(c) Inadequate improvements for drainage of surface water and other fluid substances.

(6) "District" means any one of the following:

(a) A metropolitan service district formed under ORS chapter 268.

(b) A county service district formed under ORS chapter 451.

(c) A sanitary district formed under ORS 450.005 to 450.245.

(d) A sanitary or a water supply authority formed under ORS 450.675 to 450.989.

(e) A domestic water supply district formed under ORS chapter 264.

(7) "Division" means the Health Division of the Department of Human Resources. [1967 c.624 §1; 1973 c.637 §1; 1975 c.639 §1; 1983 c.407 §4]

222.855 Annexation to remove danger to public health. In addition to the procedures authorized in ORS 222.010 to 222.750, territory otherwise eligible for annexation in accordance with ORS 222.111 which is within the urban growth boundary of a city may be annexed by passage of an ordinance as provided in ORS 222.900 without any vote in such territory or any consent by the owners of land therein if it is found, as provided in ORS 222.840 to 222.915, that a danger to public health exists because of conditions within the territory and that such conditions can be removed or alleviated by sanitary, water or other facilities ordinarily provided by incorporated cities. [1967 c.624 §2; 1973 c.637 §2; 1975 c.639 §2; 1981 c.888 §7]

222.860 Proposal for annexation. (1) The city council of any city shall adopt a resolution containing a proposal for annexation without vote or consent in the affected territory. The proposal may contain terms of annexation as provided in ORS 222.111 and shall:

(a) Describe the boundaries of the affected territory; and

(b) Describe the conditions alleged to be causing a danger to public health.

(2) The governing body of any district having jurisdiction over the affected territory may adopt a resolution containing a proposal for annexation to the city without vote or consent in the affected territory. The proposal shall:

(a) Describe the boundaries of the affected territory; and

(b) Describe the conditions alleged to be causing a danger to public health.

(3) The local board of health having jurisdiction shall verify the conditions alleged in the proposal to be causing a danger to public health, based upon its knowledge of those conditions.

(4) The council or governing body shall cause a certified copy of the resolution together with verification by the local board of health having jurisdiction, to be forwarded to the division and request the division to ascertain whether conditions dangerous to public health exist in the affected territory. [1967 c.624 §3; 1973 c.637 §3; 1975 c.639 §3; 1981 c.888 §8; 1983 c.407 §5]

222.865 [1967 c.624 §4; 1973 c.637 §4; repealed by 1975 c.639 §18]

222.870 Hearing in affected territory; notice. (1) Upon receipt of the certified copy of the resolution, and verification by the local board of health having jurisdiction, the division shall review and investigate conditions in the affected territory. If it finds substantial evidence that a danger to public health exists in the territory, it shall issue an order for a hearing to be held within the affected territory, or at a place near the affected territory if there is no suitable place within that territory at which to hold the hearing, not sooner than 30 days from the date of the order.

(2) Upon issuance of an order for a hearing, the division shall immediately give notice of the resolution and order by publishing them in a newspaper of general circulation within the city and the affected territory once each week for two successive weeks and by posting copies of the order in four public places within the affected territory. [1973 c.624 §6; 1973 c.637 §5; 1975 c.639 §4; 1983 c.407 §6]

222.875 Purpose and conduct of hearing; written findings of fact. (1) The hearing shall be for the sole purpose of determining whether a danger to public health exists due to conditions in the affected territory. It may be conducted by one or more members of the division's staff to whom authority to conduct such a hearing is delegated. It shall proceed in accordance with rules which may be established by the division. Any person who may be affected by the finding, including residents of the city, may be heard. Within 60 days following the hearing, the person conducting the hearing shall prepare and submit to the division written findings of fact and recommendations based thereon. The division shall publish a notice of the issuance of such findings and recommendations in the newspaper utilized for the notice of hearing under ORS 222.870, advising of the opportunity for presentation of a petition under subsection (2) of this section.

(2) Within 15 days after the publication of notice of issuance of findings in accordance with subsection (1) of this section any person who may be affected by the findings, including residents of the city, or the affected city, may petition the assistant director according to rules of the division to present written or oral arguments on the proposal. If a petition is received the assistant director may set a time and place for receipt of argument. [1967 c.624 §7; 1973 c.637 §6; 1975 c.639 §5; 1983 c.407 §7]

222.880 Health Division order or finding; hearing upon petition; alteration of

boundaries. (1) Within 30 days following the final hearing of any arguments received by petition under the provisions of ORS 222.875 (2) the assistant director shall review the arguments and the findings and recommendations of the person conducting the hearing as provided in ORS 222.875 (2). If the assistant director finds no danger to public health exists because of conditions within the affected territory, the assistant director shall issue an order terminating the proceedings under ORS 222.840 to 222.915 with reference to the affected territory.

(2) If the assistant director finds that a danger to public health exists because of conditions within the affected territory, the assistant director shall file a certified copy of findings with the city and, except where the condition causing the danger to public health is impure or inadequate domestic water, with the commission.

(3) If the assistant director determines that a danger to public health exists because of conditions within only part of the affected territory, the assistant director may, upon petition and hearing, reduce the boundaries of the affected territory to that part of the territory that presents a danger if the area to be excluded would not be surrounded by the affected territory remaining to be annexed and would not be directly served by the sanitary, water or other facilities necessary to remove or alleviate the danger to public health existing within the affected territory remaining to be annexed. The findings shall describe the boundaries of the affected territory as reduced by the assistant director. The assistant director shall file a certified copy of findings with the city and, except where the condition causing the danger to public health is impure or inadequate domestic water, the commission.

(4) In determining whether to exclude any area the assistant director may consider whether or not such exclusion would unduly interfere with the removal or alleviation of the danger to public health in the affected territory remaining to be annexed and whether the exclusion would result in an illogical boundary for the extension of services normally provided by an incorporated city.

(5) The city shall, when requested, aid in the determinations made under subsections (3) and (4) of this section and, if necessary, cause a study to be made. [1967 c.624 §8; 1973 c.637 §7; 1975 c.639 §6; 1983 c.407 §8]

222.883 Suspension of proceedings by Health Division; purpose; limit. At any time after the assistant director under ORS 222.880 finds that conditions dangerous to public health

exist, the division may order further proceedings on the findings filed under ORS 222.880 halted in order to allow a city, district or persons affected by the findings to develop and propose an alternative plan to annexation for the removal or alleviation of the conditions dangerous to public health. Proceedings may be stayed under this section for not longer than 30 days. [1983 c.407 §3]

222.885 Alternative plan by petition or resolution; stay of proceedings. (1) Within 60 days after the assistant director under ORS 222.880 finds that conditions dangerous to public health exist, a petition, signed by not less than 51 percent of the electors registered in the affected territory, may be filed with the division. Such petition shall suggest an alternative plan to annexation to the city for removal or alleviation of the conditions dangerous to public health. The petition shall state the intent of the residents to seek annexation to an existing district authorized by law to provide facilities within the affected territory necessary to remove or alleviate the dangerous conditions or to seek, with the approval of the city or district, extraterritorial extension of a city's or district's sewer or water lines. The petition shall be accompanied by a proposed plan which shall state the type of facilities to be constructed, a proposed means of financing the facilities, and an estimate of the time required to construct such facilities and place them in operation.

(2) Within 30 days after the assistant director under ORS 222.880 finds that conditions dangerous to public health exist, a resolution adopted by the city council or the governing body of any district having jurisdiction over the affected territory may be filed with the division. The resolution shall suggest an alternative plan to annexation to the city for removal or alleviation of the conditions dangerous to public health. The resolution shall be accompanied by a proposed plan which shall state the type of facilities to be constructed, a proposed means of financing the facilities, and an estimate of the time required to construct such facilities and place them in operation.

(3) Upon receipt of such petition or resolution adopted by a district or city council, the division shall:

(a) Immediately forward copies of any petition or resolution to the city or district referred to in the petition or resolution, and, except where the condition causing the danger to public health is impure or inadequate domestic water, to the commission.

(b) Order further proceedings on the findings filed under ORS 222.880 stayed pending the

review permitted under ORS 222.890 and this section. [1967 c.624 §8a (1), (2); 1973 c.637 §8; 1975 c.639 §7; 1983 c.83 §26; 1983 c.407 §9]

222.890 Review of alternative plan.

(1) An alternative plan referred to in ORS 222.885 shall be reviewed by the division in cases where danger to public health is caused by impure or inadequate domestic water and in all other cases by the commission. The plan shall be approved or rejected by the appropriate authority. In reviewing the alternative plan contained in the petition, the authority shall consider whether, in its judgment, the plan contains a preferable alternative for the alleviation or removal of the conditions dangerous to public health. If it determines that annexation to the city provides the best and most expeditious method of removing or alleviating the dangerous conditions, the alternative plan shall be rejected and further proceedings on the finding filed under ORS 222.880 shall resume.

(2) If the reviewing authority finds that the alternative plan provides a preferable method of alleviating or removing the dangerous conditions, the petitioners or appropriate governing body shall have six months within which to present to such authority information showing:

(a) That the territory in which the conditions dangerous to public health exist has received approval for the extension of a city's or district's sewer or water lines within the territory or has annexed to a district authorized by law to provide facilities necessary to remove or alleviate the dangerous conditions, and that financing of the facilities for extension of such facilities to the territory has been assured.

(b) Detailed plans and specifications for the construction of such facilities.

(c) A time schedule for the construction of such facilities.

(d) That such facilities, if constructed, will remove or alleviate the conditions dangerous to public health in a manner as satisfactory and expeditious as would be accomplished by the proposed annexation to the city.

(3) The authority shall review the final plan presented to it by the petitioners, city or district and shall promptly certify whether the requirements of subsection (2) of this section have been met. If the requirements have been met, the division shall certify the alternative plan. Further annexation proceedings on the findings filed under ORS 222.880 shall be suspended and the city shall be so notified. If the requirements of subsection (2) of this section are not met by the

petitioners, city or district or whenever the reviewing authority determines that the requirements of the certified plan are not being satisfied, further proceedings on the findings filed under ORS 222.880 shall resume. [1967 c.624 §8a (3), (4), (5); 1973 c.637 §9; 1975 c.639 §8; 1983 c.407 §10]

222.895 [1967 c.624 §9; 1973 c.637 §10; repealed by 1975 c.639 §9 (222.896 enacted in lieu of 222.895)]

222.896 Judicial review. Judicial review of final orders under ORS 222.840 to 222.915 shall be as provided in ORS 183.480 to 183.500 for judicial review of contested cases. [1975 c.639 §10 (enacted in lieu of 222.895)]

222.897 Study and plan for alleviation of health danger by city; procedure if city fails to act. (1) Upon receipt of a certified copy of the division's findings under ORS 222.880, the city council shall cause a study to be made and preliminary plans and specifications developed for the sanitary, water or other facilities necessary to remove or alleviate the conditions causing a danger to public health. The council shall prepare a schedule setting out the steps necessary to put the plan into operation and the time required for each step in the implementation of the plan. A copy of the plans and specifications and the time schedule shall, in the case where the danger to public health is caused by impure or inadequate domestic water, be submitted to the division and in all other cases to the commission.

(2) If the city within 90 days, fails to complete the requirements in subsection (1) of this section, the division shall conduct the necessary studies and prepare plans and other documents required for the consideration of the proposal and the final determination of the proceedings. The expense of the study and preparation of the plans and other documents shall be paid by the city upon vouchers properly certified by the assistant director. [1975 c.639 §12]

222.898 Determination if health danger can be alleviated; approval of plans; notice to city. (1) Within 60 days of receipt of the preliminary plans and other documents submitted as required by ORS 222.897, the appropriate reviewing authority shall determine whether the conditions dangerous to public health within the territory proposed to be annexed can be removed or alleviated by the sanitary, water or other facilities proposed by the plans and specifications.

(2) If such authority considers the proposed facilities and the time schedule for installation of such facilities adequate to remove or alleviate the dangerous conditions, it shall approve the proposal and certify its approval to the city.

(3) If the authority considers the proposed facilities or time schedule inadequate, it shall disapprove the proposal and certify its disapproval to the city including the particular matters causing the disapproval. The city council shall then submit an additional or revised proposal.

(4) In the event the authority upon review of the plans and other documents submitted under subsection (1) of this section determines that the danger to public health in the area proposed to be annexed cannot be removed or alleviated by sanitary, water or other facilities ordinarily provided by incorporated cities it shall terminate the proceedings upon the proposal and notify the city. [1975 c.639 §13]

222.900 City to adopt ordinance. (1) Subject to subsection (2) of this section, upon receipt of the certified copy of the finding as provided in ORS 222.880 (2) or (3) and certification of approval of plans under ORS 222.898, the city council shall adopt an ordinance which shall:

(a) Contain the legal description of the territory annexed;

(b) Contain the terms of the annexation, if any, made under ORS 222.111;

(c) Adopt the plans, specifications and time schedule as approved by the division or commission; and

(d) Declare the territory annexed to the city in accordance with ORS 222.840 to 222.915.

(2) An ordinance shall not be enacted as provided in subsection (1) of this section until the expiration of the time for appeal under the provisions of ORS 222.896 and, in the event an appeal is filed, following the determination of that appeal.

(3) If the division makes its finding under ORS 222.880 (3), the city shall not annex a greater area than that described in the finding. The recorder, or other officer performing the duties of the recorder, shall transmit a transcript to the Secretary of State, including certified copies of the resolution required in ORS 222.860, the finding of the assistant director, and the ordinance proclaiming annexation of the territory.

(4) If the city council adopts the ordinance of annexation as provided in subsection (1) of this section, it shall within one year thereafter prepare plans and specifications for the sanitary, water or other facilities proposed to be provided in the annexed area, in compliance with ORS 448.115 to 448.285 or 468.742 and shall then proceed in accordance with the time schedule to construct or install these facilities. The commission shall use its powers of enforcement under

ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, and ORS chapter 468 to insure that the facilities are constructed or installed in conformance with the approved plans and schedule. The manner of financing the cost of the facilities shall be determined by the city council. [1967 c.624 §10; 1973 c.637 §11; 1975 c.639 §14; 1983 c.740 §57]

222.905 Application to initiate annexation. (1) The local board of health or the boundary commission having jurisdiction shall, if it believes a danger to public health exists within a territory otherwise eligible for annexation in accordance with ORS 222.111, proceed in the same manner as a city is authorized to proceed under ORS 222.860.

(2) Any 11 residents of territory otherwise eligible for annexation in accordance with ORS 222.111 who believe a danger to public health exists within such territory may apply to the local board of health to initiate proceedings to annex such territory as provided in subsection (1) of this section. The local board of health shall within a reasonable time, but not more than 90 days, investigate the matters alleged in the application and shall either initiate proceedings or certify to the petitioners that the investigation disclosed insufficient evidence to initiate proceedings. [1967 c.624 §11; 1973 c.637 §12; 1975 c.639 §15; 1981 c.888 §9]

222.910 [1967 c.624 §5; 1973 c.637 §13; repealed by 1975 c.639 §16 (222.911 enacted in lieu of 222.910)]

222.911 Participation of interested division assistant director, officer or employe prohibited. No officer or employe of the division who owns property or resides within affected territory that is subject to proceedings under the provisions of ORS 222.840 to 222.915 shall participate in an official capacity in any investigation, hearing or recommendation relating to such proceedings. If the assistant director is such a person, the assistant director shall so inform the Governor, who shall appoint another person to fulfill the duties of the assistant director in any investigation, hearing or recommendation relating to such proceeding. [1975 c.639 §17 (enacted in lieu of 222.910)]

222.915 Application of ORS 222.840 to 222.915. The provisions of ORS 222.840 to 222.915 do not apply to proceedings to annex territory to any city if the charter or ordinances of the city conflict with or are inconsistent with ORS 222.840 to 222.915. [1967 c.624 §12; 1971 c.673 §5]

PENALTIES

222.990 Penalties. Failure to comply with the provisions of ORS 222.010 subjects the city to a penalty of \$100 which may be recovered by an action in the name of the county in which the city is located.



ATTACHMENT E

RECEIVED
FEB 10 1988
Water Quality Division
Dept. of Environmental Quality

Utility, Transportation
and Development Services
408 SW Monroe Avenue
P.O. Box 1083
Corvallis, Oregon 97339-1083
(503) 757-6941

February 11, 1988

Department of Environmental Quality
Attention: Jim VanDomelen
P.O. Box 1760
Portland, OR 97207

Philomath Blvd. Health Hazard Annexation
Plans and Time Schedule Submittal (per ORS 222.850 to 222.915)

Please find attached our preliminary plans and time schedule for the above mentioned project.

The proposed sewer lines will provide gravity service from the Health Hazard Area to our existing sewer system and connect at four separate points. From these connection points, flows will collect into the 18 - 30" trunk line that serves the Country Club Service Area and flow to the Brooklane Pump Station. Once here, flows are lifted to our First Street Interceptor and gravity feed to the Wastewater Reclamation Plant. All system components have adequate capacity to transport and treat wastewater flows in accordance with our NPDES Permit.

Thank you for your assistance with this project. If you have any questions or comments, please contact me at 757-6941.

Al Mulcahy
Al Mulcahy
Facility Planning Services

enclosure

PHILOMATH BLVD. HEALTH HAZARD ANNEXATION
TIME SCHEDULE

DATE	ACTIVITIES
FEB. 15, 1988	DEQ PLAN REVIEW
APRIL 15, 1988	ANNEXATION, CONSULTANT SELECTION LOCATION SURVEY, EASMENT PROCUREMENT FINAL DESIGN, PREPARE PLANS & SPECIFICATIONS
AUG. 15, 1988	ADVERTISE FOR BIDS
SEPT. 15, 1988	AWARD CONTRACT
OCT. 1, 1988	START CONSTRUCTION
MARCH 15, 1989	COMPLETE CONSTRUCTION
JUNE 15, 1989	FINAL CONNECTIONS / ABANDON EXISTING SYSTEMS (FILL SEPTIC TANKS ETC.)

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
 OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY, OF THE STATE OF OREGON,	)	STIPULATION AND FINAL ORDER
	)	No. WQ-WVR-89-71
	)	BENTON COUNTY
Department,)	
)	
v.)	
)	
CITY OF CORVALLIS,)	
)	
Respondent.)	
)	

WHEREAS:

1. On March 11, 1988, the Environmental Quality Commission (Commission) approved a Preliminary Plan, Specifications, and Schedule submitted by the City of Corvallis (Respondent) for the construction of sanitary sewers in the Phase I portion of the Philomath Boulevard annexation area. The Schedule proposed alleviation of the conditions dangerous to public health, sewage at or on the ground, by June 15, 1989 by connection of properties with inadequate means of sewage disposal to a newly constructed sanitary sewer system. These actions were in conformance with Oregon Revised Statutes (ORS) 222.840 to 222.915

2. Since March 11, 1988, the Respondent has failed to commence construction of the sanitary sewers and will fail to alleviate the conditions dangerous to public health in the Phase I area by the scheduled date of June 15, 1989.

3. On April 14, 1989, the Commission approved a Preliminary Plan, Specifications and Schedule submitted by Respondent for the construction of sanitary sewers in the Phase II portion of the Philomath Boulevard

1 annexation area. The Schedule proposed alleviation of conditions dangerous
2 to public health for both Phase I and II areas by February 1, 1991.

3 4. The Department of Environmental Quality (Department) and the
4 Respondent recognize that until a new sanitary sewer system is constructed
5 and the property owners connect to the system, the conditions dangerous to
6 public health from sewage at or on the ground surface will remain
7 unchanged.

8 5. The Department and Respondent recognize that the Commission has
9 the power under ORS 222.900(4) to impose a civil penalty and to issue an
10 abatement order for violations of the approved Schedule. Therefore,
11 pursuant to ORS 183.415(5), the Department and Respondent wish to resolve
12 the unmet Schedule referred to in Paragraph 2 and to resolve Respondent's
13 failure to comply with the schedule referred to in Paragraph 3 in advance by
14 this Stipulation and Final Order.

15 6. This Stipulation and Final Order is not intended to limit, in any
16 way, the Department's right to proceed against Respondent in any forum for
17 any past or future violations not expressly settled herein.

18 NOW THEREFORE, it is stipulated and agreed that:

19 7. The Commission shall issue a final order:

20 A. Requiring Respondent to comply with the following schedule:

21 Construct sanitary sewers and assure the required
22 connection of all properties identified as having
23 inadequate sewage disposal systems in the Philomath
24 Boulevard annexation area (Phases I and II) by no later
25 than February 1, 1991.
26

1 B. Requiring Respondent to submit progress reports on or before
2 January 1, 1990, July 1, 1990 and January 1, 1991.

3 C. Requiring Respondent, upon receipt of a written notice from
4 the Department to pay a civil penalty of \$500 for each day of
5 each violation of this Stipulation and Final Order.

6 8. If any event occurs that is beyond Respondent's reasonable control
7 and that causes or may cause a delay or deviation in performance of the
8 requirements of this Stipulation and Final Order, Respondent shall
9 immediately notify the Department verbally of the cause of delay or
10 deviation and its anticipated duration, the measures that have been or will
11 be taken to prevent or minimize the delay or deviation, and the timetable by
12 which Respondent proposes to carry out such measures. Respondent shall
13 confirm in writing this information within five (5) working days of the
14 onset of the event. It is Respondent's responsibility in the written
15 notification to demonstrate to the Department's satisfaction that the delay
16 or deviation has been or will be caused by circumstances beyond the control
17 and despite due diligence of Respondent. If Respondent so demonstrates, the
18 Department shall extend times of performance of related activities under
19 the Stipulation and Final Order as appropriate. Circumstances or events
20 beyond Respondent's control include, but are not limited to, acts of nature,
21 unforeseen strikes, work stoppages, fires, explosion, riot, sabotage, or
22 war. Increased cost of performance or consultant's failure to provide
23 timely reports shall not be considered circumstances beyond Respondent's
24 control.

25 9. Regarding the violations set forth in Paragraph 2 above, which are
26 expressly settled herein without penalty, Respondent and the Department

1 hereby waive any and all of their rights to any and all notices, hearing,
2 judicial review, and to service of a copy of the final order herein. The
3 Department reserves the right to enforce this order through appropriate
4 administrative and judicial proceedings.

5 10. Regarding the schedule set forth in Paragraph 7.A. above,
6 Respondent acknowledges that Respondent is responsible for complying with
7 that schedule regardless of the availability of any federal or state grant
8 monies.

9 11. The terms of this Stipulation and Final Order may be amended by
10 the mutual agreement of the Department and Respondent.

11 12. Respondent acknowledges that it has actual notice of the contents
12 and requirements of the Stipulation and Final Order and that failure to
13 fulfill any of the requirements hereof would constitute a violation of this
14 stipulated final order. Therefore, should Respondent commit any violation
15 of the Stipulation and Final Order, Respondent hereby waives any rights it
16 might have to an ORS 468.125(1) advance notice prior to the assessment of
17 civil penalties. However, Respondent does not waive its rights to an ORS
18 468.135(1) notice of assessment of civil penalty.

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RESPONDENT

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23

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Date

(Name)

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(Title)

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DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

Fred Hansen, Director

FINAL ORDER

IT IS SO ORDERED:

ENVIRONMENTAL QUALITY COMMISSION

Date

Fred Hansen, Director
Department of Environmental Quality
Pursuant to OAR 340-11-136(1)



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: 0
Division: Water Quality
Section: Sewage Disposal

SUBJECT:

Unified Sewerage Agency (USA) Program Plan to meet total maximum daily loads (TMDL) for nutrients discharged to the Tualatin River.

PURPOSE:

Rules which establish total maximum daily loads (TMDLs) for nutrients in the Tualatin River require USA to submit a Program Plan. The Program Plan is to present preliminary alternatives for achieving waste load allocations (WLAs) by June 30, 1993. The Program Plan is also to contain provisions and a time schedule for developing and implementing an agreement with Lake Oswego Corporation for algae control.

The Commission must approve, modify or reject USA's Program Plan for addressing the TMDLs. The Commission also may reexamine the compliance date of June 30, 1993 in light of USA's Program Plan submittal. The purpose of having an "approved" Program Plan is to provide USA with direction and guidance as to acceptable courses of action in carrying out subsequent steps for achieving TMDLs.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment ___
 - Rulemaking Statements Attachment ___
 - Fiscal and Economic Impact Statement Attachment ___

Meeting Date: April 14, 1989
Agenda Item: 0
Page 2

Public Notice	Attachment	___
___ Issue a Contested Case Order		
___ Approve a Stipulated Order		
___ Enter an Order		
Proposed Order	Attachment	___
<u>X</u> Approve Department Recommendation		
___ Variance Request	Attachment	___
___ Exception to Rule	Attachment	___
___ Informational Report	Attachment	___
___ Other: (specify)	Attachment	___

DESCRIPTION OF REQUESTED ACTION:

The Department is requesting that the Commission approve staff recommendations. Our recommendation is for approval of the Plan but that specific items or issues addressed within the Plan be 1) denied or 2) given future reconsideration.

AUTHORITY/NEED FOR ACTION:

___ Required by Statute: _____	Attachment	___
Enactment Date: _____		
___ Statutory Authority: _____	Attachment	___
<u>X</u> Pursuant to Rule: <u>OAR 340-41-470</u>	Attachment	<u>E</u>
___ Pursuant to Federal Law/Rule: _____	Attachment	___
___ Other:	Attachment	___
<u>X</u> Time Constraints:		
USA submitted a Program Plan within 90 days of adoption of TMDL rules. Within 120 days of the Program Plan submittal and within 60 days of the public hearing, the EQC is to approve, reject, revise, or reconsider the plan and/or TMDLs.		

DEVELOPMENTAL BACKGROUND:

___ Advisory Committee Report/Recommendation	Attachment	___
<u>X</u> Hearing Officer's Report/Recommendations	Attachment	<u>C</u>
___ Response to Testimony/Comments	Attachment	___
<u>X</u> Prior EQC Agenda Items:		
EQC Staff Report on TMDLs, Sept. 1988	Attachment	<u>F</u>
<u>X</u> Other Related Reports/Rules/Statutes:		
DEQ Summary of the Program Plan	Attachment	<u>A</u>
DEQ Evaluation Report	Attachment	<u>B</u>
Written Testimony	Attachment	<u>D</u>
___ Supplemental Background Information	Attachment	___

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

USA reported that meeting the mid-1993 TMDL compliance date at all six waste treatment facilities is not reasonable.

They indicated the compliance date for achieving TMDLs at Rock Creek or Durham facilities may need to be extended to early 1996, depending on the alternative selected. USA indicated that if the use of costly advanced tertiary treatment is to be avoided at the Rock Creek facility then modifications to existing TMDLs and WLAs will be needed. USA reported that costs for complying with the new TMDL standards create a tremendous financial challenge.

The public commented that since the TMDLs and their associated target dates for implementation are already established for the Tualatin River, any changes in the existing rule is in violation of existing laws. The public is concerned that any change in the established TMDL criteria or time schedule is unwarranted. The public concerns include alternatives being considered by USA. Additional alternatives or more exhaustive study of existing options (such as wetlands) are recommended. Concern was expressed that transfer of treated effluent to the Willamette River may not solve pollution problems or be good use of public funds.

PROGRAM CONSIDERATIONS:

Department review of progress reports and facility plans is anticipated. If future USA studies (progress reports or facility plans) yield new information that could affect TMDL compliance, then it will be necessary for the Department to evaluate findings and make recommendations to the EQC.

The Department will need to evaluate remaining technical issues that may influence alternatives to achieve TMDLs. Both total dissolved solids (TDS) impacts on the Tualatin River and irrigation standards require further investigation and may require rule changes or approvals from the Commission. This may affect the ability of the Department to do other scheduled activities.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Approval of the entire Program Plan.

The Department's evaluation does not support approval of the entire Program Plan. Our support for approval of the entire plan is not given because several requests by USA are unnecessary, unjustified, or are premature. Examples of unnecessary or unjustified requests by USA are:

- a. A time extension for compliance with TMDLs at the Rock Creek facility;

- b. The transfer of phosphorus waste load allocation (WLA) to the Rock Creek facility from loads presently assigned to the Durham facility and held by the DEQ in reserve for future growth; and
- c. The issue raised by USA that increased sewer user cost for removing phosphorus is a basis for time extensions or granting other requests.

2. Rejection of the entire Program Plan.

The Department's evaluation does not support denying or rejecting the entire Program Plan. This is because several portions of the plan meet the objectives of the TMDL rule, and certain requests by USA may have merit but are premature and need additional investigation before a final decision can be made.

3. Approval of the Program Plan with denial or reconsideration of select items.

The Department's evaluation of the Program Plan and public comment support this alternative. The Program Plan is acceptable with the exception of certain requests or proposals by USA. The unacceptable items will be denied or rejected. Other requests in the Program Plan are premature and could be reconsidered by the Commission at a later date after additional information is available.

With this action, USA is provided with clear direction on alternatives that are either approved or rejected. After further investigation, issues that have not been fully developed and would otherwise be rejected based on limited information, can, if necessary, be resubmitted for reconsideration by the Commission after further investigation.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends that the Program Plan be accepted but that those items that are unacceptable be rejected. Future investigation by USA may warrant reconsideration of certain items by the EQC. In addition, the Department recommends authorization and direction to both DEQ and USA for items that require modification, submittal, or further study.

1. The following are recommended for approval:
 - a. USA's Approach: USA's two-part approach for conducting planning on both an interim and long-term basis will allow USA to focus on meeting the EQC June 30, 1993 deadline for achieving TMDLs and concurrently developing reuse and reclamation strategies that will serve their ultimate needs.
 - b. USA's Alternatives for Facility Planning: A number of alternatives have been proposed for further investigation and more detailed study by DEQ. Interim alternatives are those approaches that can be implemented by, or near, the June 30, 1993 compliance date. Interim alternatives to comply with TMDLs vary depending upon the facility but consist of: conventional tertiary treatment, reuse, export of effluent out-of-basin, advanced tertiary treatment, and membrane processes. Long-term alternatives will take longer to develop and include: effluent irrigation/ reuse, export of effluent out-of-basin, advanced wastewater treatment, wetland effluent polishing, flow management/ augmentation, influent nutrient load reduction, or various combinations of these alternatives.
 - c. Time to Achieve Compliance with TMDLs: At the Hillsboro-Westside, Banks, Gaston, and Forest Grove facilities compliance will be achieved by June 30, 1993.
 - d. Development of Agreement with Lake Oswego Corporation: Found in the plan are provisions to develop an agreement with the Lake Oswego Corporation including steps for improving water quality in Lake Oswego. The Program Plan includes a statement that this agreement shall be accomplished prior to 1991. This compliance date is consistent with the TMDL rule.
2. The following items requested by USA are recommended for rejection:
 - a. Time Extension for TMDL Compliance at the Rock Creek Facility: USA requests a time extension for compliance with TMDLs at Rock Creek from 1994 through 1996 depending upon the alternative finally selected. The Department's evaluation indicates existing technology and acceptable alternatives are available for meeting the already established June 30, 1993 deadline. The Department has located over twenty wastewater treatment facilities that remove phosphorus to concentrations required to be achieved by the Rock Creek plant. All twenty of these facilities utilize

conventional tertiary treatment technology that is already partially in place at USA's Rock Creek plant.

- b. Transfer of Phosphorus WLAs from both the Durham Facility and the Department Reserves: USA requests a transfer of phosphorus waste load allocation from the Durham facility (assuming its discharge is exported to the Willamette River) and loads held as future reserve by the Department.

The Department's evaluation indicates this transfer will have little impact on whether conventional tertiary or advanced tertiary treatment technology is needed to achieve the TMDLs. Shifting of phosphorus loads may also result in undesirable localized stresses on water quality. The requested transfers will also result in TMDL values being exceeded on a small section of the Tualatin River. More importantly, USA's effective management of river flow augmentation or increasing its reclamation capabilities could have a much greater effect on being able to achieve compliance with TMDLs than waste load transfers.

- c. Cost Considerations: USA contends that the high cost of removing phosphorus could result in an unreasonably high future total sewer user rate of \$30/equivalent dwelling unit (EDU). This and additional cost information is presented in their plan as justification for granting their requests.

The Department's evaluation indicates modifying the present TMDL ruling or associated time schedules because of cost considerations is not warranted. First, the Department finds that if USA implements their preferred alternatives to achieve compliance with the TMDLs, their estimated rate (\$30/EDU) would drop by \$4/EDU. Second, \$9/EDU of their estimated sewer user rate is associated with expansion to accommodate growth and development. Third, \$12/EDU of their estimated rate is existing debt. Fourth, approximately \$5 to \$9/EDU of USA's estimated total sewer use rate is associated with achieving TMDLs. Finally, a number of communities in Oregon and in the nation have similar or higher sewer use rates.

3. The following are recommended for reconsideration after further investigation and documentation in USA's Progress Reports to the Department:
- a. Time Extension for Compliance at the Durham Facility: USA requests that a time extension be given at the

Durham facility for complying with the TMDL rule. USA requests dates of late 1995 or early 1996, depending on the final alternative selected.

The Department's evaluation supports that issues affecting compliance at the Durham facility are more complex than those of the Rock Creek plant and may take longer to resolve. However, there is no firm evidence that the mid-1993 deadline cannot be met. This request should be deferred until further efforts are made to achieve the June 30, 1993 compliance date and a progress report for the Durham plant is submitted.

- b. Modification to TMDL Flow Regime: USA requests they not be required to meet TMDLs during low river flows (below 150 cubic feet per second (cfs)) if they are making good faith efforts to maintain or augment Tualatin River flows above 150 cfs. They would prefer to design the Rock Creek facility improvements to achieve a higher effluent phosphorus concentration than would be necessary if the plant was designed to meet TMDLs for lower river flows.

The Department concurs that this approach may have merit, especially if Tualatin River flows at or above 150 cfs can be maintained. However, further details are needed, including:

- (1) The mechanisms USA proposes to establish for maintaining flows at or above 150 cfs, and
- (2) The frequency and duration that stream flows below 150 cfs would likely occur.

Additionally, USA needs to complete facility planning which includes a comparison of the effluent quality resulting from both conventional tertiary and advanced tertiary treatment, and the associated cost for implementing each technology.

4. The following are recommended for authorization/direction:

- a. USA Submittals: For USA to achieve compliance with the TMDLs by June 30, 1993, the following need to be submitted by USA:

- (1) By December 31, 1990 -- An agreement with Lake Oswego Corporation for controlling algae in Lake Oswego.

- (2) By February 28, 1990 -- A progress report on facility planning efforts and a basis for reconsideration of any TMDL issue for the EQC.
 - (3) By June 30, 1990 -- Completed facility plans for Rock Creek and Durham facilities.
- b. DEQ Study and Report: Issues regarding total dissolved solids (TDS) limitations on the Tualatin and irrigation guidance by the Department have been raised as possible unresolved issues that may interfere with compliance by USA. The Department has already started a study of these issues and, if necessary, plans to submit an evaluation report and request action to the Commission by June 30, 1990. Failure to carry out the needed studies, recommendations and possible rule changes may result in eliminating or postponing implementation of certain alternatives USA has presented.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The recommendations by the Department are fully consistent with the requirements and intent of OAR 340-41-470, adopted by the Commission at their September 9, 1988 meeting.

ISSUES FOR COMMISSION TO RESOLVE:

1. Is USA's proposed two-part approach (interim and long-term) to planning appropriate?
2. Does USA's program plan identify and consider all reasonable alternatives for achieving the Tualatin River TMDLs?
3. Is USA's proposed June 30, 1993 compliance date to achieve TMDLs at Hillsboro-Westside, Banks, Gaston, and Forest Grove acceptable?
4. Has USA clearly identified plans to develop an agreement with the Lake Oswego Corporation?
5. Should USA receive a time extension at the Rock Creek facility for complying with TMDLs?
6. Should USA be granted the transfer of phosphorus WLAs to the Rock Creek facility from the Durham facility and the DEQ reserves?
7. Are increased costs in sewer rates for phosphorus removal justification for delaying compliance with TMDLs or for granting other requests by USA?

Meeting Date: April 14, 1989
Agenda Item: 0
Page 9

8. Should USA receive a time extension at the Durham facility for complying with TMDLs?
9. Should modifications be made to USA's TMDL flow regimes and USA not be required to comply with TMDLs during low river flows?
10. Are the dates and items listed for submittal by USA acceptable?
11. Can the DEQ begin the studies and evaluations necessary to address unresolved issues associated with USA's plans to achieve TMDLs?

INTENDED FOLLOWUP ACTIONS:

The following followup action is required by the Department:

1. Review, evaluate, determine findings, and make recommendations on USA's progress reports and facility plans. If requested by USA, prepare an EQC staff report on unresolved issues for: a) achieving TMDLs at Durham and b) modifying the implementation procedures for TMDLs.
2. Review and approve of USA's agreement with the Lake Oswego Corporation for helping to control algae in the lake.
3. Evaluate and report to the Commission on TDS and irrigation issues by June 30, 1990.

Approved:

Section: Mary M. Hallbauer

Division: ADH for Richard J. Michaels

Director: Regina Taylor
for Fred Hansen

Report Prepared By: John R. Harrison

Phone: 229-5371

Date Prepared: March 21, 1989

(JRH:kjc)
(SD\WJ1658)
April 7, 1989

DEQ SUMMARY
of USA's
FINAL DRAFT PROGRAM PLAN

At the Environmental Quality Commission (EQC) meeting on September 9, 1988, rules were adopted establishing total maximum daily loads (TMDLs) for control of nutrients being discharged to the Tualatin River. These rules required USA to submit a Program Plan as a first step to achieve TMDLs for the nutrients phosphorus and ammonia nitrogen. The program plan is to identify principal alternatives for compliance. Further development and implementation of final alternatives is to come through future analysis or action by USA.

The EQC is to receive periodic status reports and is to review and approve both the course and time schedule for meeting the TMDLs. The TMDL rule provides opportunity for the EQC to approve, modify, or reject the Program Plan. In addition, the EQC may reconsider and revise the compliance date of June 30, 1993 if information in the planning process demonstrates a need.

The following summarizes USA's "Final Draft Program Plan":

Background. USA has six waste treatment facilities that will require modifications or improvements to achieve the TMDLs. Compliance at USA's four smallest plants (Forest Grove, Hillsboro West, Gaston, and Banks) can be achieved by the June 30, 1993 compliance date. Forest Grove, Hillsboro West and Banks will achieve compliance through summer-time irrigation. The Gaston plant will be removed from service and flows will be treated at the Forest Grove plant.

Attaining compliance at the largest of USA's facilities, Rock Creek and Durham, is more complex. This is especially true at the Durham plant where USA has identified both difficult technical and political issues irrespective of the alternatives. USA's ultimate goal is to reuse all of its effluent but extensive time and effort is required to develop the reuse alternatives to their full potential.

Approach to Meeting TMDLs. USA has divided its plan into two parts: interim and long-term. The interim plan is designed to implement measures for compliance as quickly as possible (before or near mid-1993). The long-term plan focuses on potential solutions that require longer periods of development and for both 20 year and ultimate needs. Both plans will be implemented concurrently and intermesh to form USA's overall plan.

Durham. The Durham facility will have the most stringent standards of any comparable sized wastewater treatment plant in the United States. Reuse is currently practiced and is proposed to be expanded. For the interim plan, (1) export of effluent to the Willamette River or (2) advanced tertiary treatment are the only two viable alternatives. Complete effluent reuse,

wetlands, conventional tertiary treatment (versus "advanced") or membrane processes will not be ruled out for the long-term alternatives but are either incapable of meeting the stringent standards, are too expensive, or need extensive time for development which preclude achieving compliance by mid-1993.

USA suggests that export of Durham effluent to the Willamette River is the preferred alternative since it is lowest in cost, is more reliable, and is less complex than advanced tertiary treatment. Effluent export involves a number of issues that must be resolved to be feasible. These include: water quality issues, water rights, pipeline routing and potential political or legal questions. USA's plan for export of effluent to the Willamette River must address the potential need to remove phosphorus and ammonia prior to discharge. Advanced treatment for discharge to the Tualatin River is limited to one process and USA is uncertain whether the stringent nutrient limits can be met.

Rock Creek. TMDL effluent limitations at the Rock Creek facility are less stringent than at the Durham facility. USA identifies several alternatives including both conventional tertiary treatment (coupled with reuse) and advanced tertiary treatment (two-stage lime treatment). USA requests consideration of modifying the TMDLs or waste load allocations to increase the possibility of using conventional, rather than more expensive advanced tertiary treatment.

Use of conventional secondary treatment at Rock Creek would require: 1) establishing an additional flow regime or flow-step for calculating the TMDLs, 2) eliminating the application of TMDLs during rare low-flow occurrences, 3) reallocating Durham's waste load allocation to the Rock Creek facility, and 4) transferring all or part of DEQ's TMDL phosphorus reserves to Rock Creek.

Proposed Time Schedule for Compliance. USA's plan includes attaining compliance with the TMDLs for all USA facilities by June 30, 1993 except for the Rock Creek and Durham plants.

USA suggests that compliance at the Rock Creek facility can be achieved by mid-1994 if conventional treatment coupled with reuse is selected. If advanced treatment is required, then, according to USA, compliance could not be achieved until late 1995 or early 1996.

USA suggests that compliance by late 1995 may be feasible at the Durham facility if effluent export is possible. However, if advanced tertiary treatment is necessary, compliance would not be possible until early 1996.

Long-Term Planning. USA's long-term plan includes the use of a steering committee for directing studies of the following:

- o Reuse
- o Export
- o Advanced tertiary treatment, beyond high lime
- o Wetlands polishing
- o Flow management/augmentation

- o Phosphorus ban
- o Water Quality modeling
- o Combinations of the alternatives listed above
- o Other alternatives that have not yet been identified but may be discovered as possible solutions through further study.

USA proposes to conduct projects to confirm performance and develop design criteria for selected long-term alternatives.

Cost for Compliance. The new TMDL rules occur at a time when USA's major treatment facilities are approaching capacity and must be expanded. This combination creates a tremendous financial challenge as follows:

1. Complying with TMDLs will cost from \$60 to \$110 million and will cause user rates to rise by \$5 to \$9 per month.
2. USA must construct \$115 million in new facilities to accommodate growth that will result in user rates rising by \$9 per month.
3. The combined needs of accommodating growth and meeting TMDLs will cause user rates to rise from the existing \$12 per month to a future charge of \$30 per month.

DEQ EVALUATION REPORT
for USA's
FINAL DRAFT PROGRAM PLAN
Submitted on
February 14, 1989

As required by OAR 340-41-470(3)(f), the Unified Sewerage Agency (USA) of Washington County submitted a Program Plan and time schedule that describes both how and when USA will modify its sewerage facilities to comply with waste load allocations (WLA) for phosphorus and nitrogen discharges to the Tualatin River. The rule requires a plan that will achieve compliance by no later than June 30, 1993.

Areas of the program plan that require evaluation by the Department and/or consideration by the Environmental Quality Commission (EQC) have been separated into six principal items:

1. USA's approach for meeting Total Maximum Daily Load (TMDL) criteria.
2. Alternatives considered by USA to solve pollution problems.
3. Time schedules proposed by USA to achieve compliance with TMDLs.
4. USA's request to modify TMDLs.
5. USA's request to revise Waste Load Allocations (WLA).
6. USA's concerns regarding cost to comply.

Each of the six principal items are outlined and evaluated under subheadings as follows: 1) a description or overview, 2) public comment, 3) consideration of the issues, 4) discussion, 5) the Department's findings, and 6) recommendations.

1. USA's APPROACH FOR MEETING TMDLs

USA's Program Plan approach for achieving TMDLs is divided in two parts: interim and long-term. The interim plan is to further evaluate alternatives that will achieve compliance as soon as possible (on or near mid-1993). The long-term plan focuses on disposal and reclamation strategies that can serve USA's ultimate needs (20 years or greater).

Public Comment. A consultant representing USA described the goal of USA to reuse all of their treated effluent. However, there are several complex technical and political issues necessary to resolve before implementing a large-scale reclamation project. This requires that an interim approach be used so that compliance issues can be achieved as close as possible to the EQC mandated mid-1993 date. No objections were raised by the public to the basic interim/long-term approach although considerable objection was raised to USA plants not achieving the TMDLs by mid-1993. Concerns were voiced that the interim plan not conflict with the long-term plans to meet the TMDLs. USA's consultant

stated that the long-term plan would be carried out concurrently with the interim activities. Some commented that alternatives USA identified for "long-term" implementation, be implemented now.

Issues. USA's long-term goal of reusing all of its treated effluent should not conflict with interim facilities or tasks necessary to achieve compliance.

Discussion. Reuse programs that include interaction with other agencies, farmers, or users are likely to take a longer time than conventional technical approaches. Also, it may be necessary to conduct pilot projects or prove to the public the acceptability of reclamation practices. Added time may also be necessary to develop regulatory guidance and controls to assure public health and safety.

Findings. The Department concludes that compliance with the June 30, 1993 date for meeting new effluent standards will require a two-step process for USA to ultimately implement a large-scale reclamation project.

Recommendation. Approval of USA's interim and long-term approach to achieving compliance with the TMDLs is recommended.

2. ALTERNATIVES CONSIDERED BY USA

USA identifies interim approaches at the Rock Creek facility consisting of 1) conventional tertiary treatment coupled with reuse or 2) advanced tertiary treatment (two stage lime). USA suggests that the best interim and long-term solution for achieving TMDLs for Durham is export of treated effluent to the Willamette River. However, because of political or legal challenges in exporting treated effluent to the Willamette River, advanced tertiary treatment or membrane (reverse osmosis) processes may be required.

USA indicates that development of an agreement with the Lake Oswego Management has begun and may have a bearing on the feasibility of final alternatives. Also, the use of conventional treatment with alum may result in total dissolved solids (TDS) violations on the Tualatin River requiring evaluation and approvals by the DEQ. Finally, irrigation standards that consider the use of reclaimed water on crops consumed for human use will need to be considered by the DEQ.

USA considers long-term plans to be: effluent reuse, export of treated effluent out-of-basin, higher levels of treatment than accomplished in the interim plan, wetlands, augmentation of river flows or combination of these approaches. USA's short and long-term plan for Hillsboro-Westside, Forest Grove, Gaston, and Banks facilities includes continuation of summer effluent irrigation and with improved storage and expanding the existing irrigation facilities as required to achieve the TMDLs by mid-1993.

Flow management and augmentation of the Tualatin River will also be studied. Approaches such as constructing additional dams/storage,

diverting water from the Columbia, purchase of additional water from Hagg Lake, or raising Barney Reservoir will be studied as part of investigating long-term solutions.

Public Comment. Mr. Jack Churchill stated that the phosphorus removal technologies have been in existence for a number of years and are well known. USA's plan to conduct pilot studies for phosphorus removal is simply another delay tactic. Oscar Hagg stated that additional reservoirs or dams should be evaluated. Leonard Stark, Lewis Moller, and Ted Creedon stated that export of treated effluent was not an appropriate solution and would only shift pollution problems. Kenneth Wright testified that technology now existed for the clean-up to occur. Kenneth Fink stated that more reservoirs were needed on the Tualatin and that the discharge from Durham should not be shifted to the Willamette River. Brett Arvidson stated that the issues are complex and that advanced treatment technology is difficult to operate and may result in other (non-phosphorus) problems. He also testified that transfer of water from the Tualatin may drastically reduce existing flows. Several members of the public testified that wetlands application was not being properly considered and that variations in its testing is required to optimize the results.

Issues. Use of conventional tertiary treatment with alum could result in total dissolved solids (TDS) problems. Conventional tertiary treatment may not be capable of achieving low level phosphorus concentrations, especially at Durham. Exporting Durham's effluent to the Willamette River raises questions concerning a transfer of pollutants as described in the public comment. Also, alternatives involving effluent export must include evaluating both nitrogen and phosphorus impacts on the Willamette River. Effluent discharge to the Willamette River may require more stringent criteria than the current river basin criteria. Both political and legal issues must be resolved to implement long-term alternatives.

Discussion. The lengthy list of issues associated with the array of alternatives being considered is not unexpected. After all, the program plan lays out a number of alternatives for further study, not all of which may remain viable upon further evaluation. The objective of the program plan is to identify alternatives that can potentially achieve compliance within the specified time period and that do not conflict with the long-term water quality needs of USA.

USA has not discarded alternatives such as wetlands that are emerging technologies which involve piloting. In addition, the construction of reservoirs and dams for flow augmentation also is to be evaluated.

Findings. USA has identified a listing of potential alternatives for both long-term and interim compliance. Although not all alternatives are expected to remain feasible, the proposed list of alternatives provides an array of several alternatives that could achieve compliance within the scheduled time requirement. Sufficient options are available that will not conflict with the long-term needs of USA.

Recommendations. The Department recommends that the array of short-term alternatives be accepted for further evaluation in facility plans and that USA also proceed to continue evaluating the long-term alternatives. Public comments received in response to the program plan should be taken into consideration and evaluated in future detailed facility planning.

3. TIME SCHEDULES PROPOSED BY USA TO ACHIEVE COMPLIANCE

USA proposes to achieve compliance with TMDLs at the Banks, Hillsboro-Westside, Gaston, and Forest Grove facilities by June 30, 1993.

USA suggests that at Rock Creek, compliance may be achieved by mid-1994 if conventional tertiary treatment is employed. However, if advanced tertiary treatment is required, they request a compliance date of late 1995 or early 1996.

For Durham, where issues associated with the export of treated effluent or advanced tertiary treatment exist, USA requests a compliance date of late 1995 or early 1996.

USA also indicates that pilot testing of wetlands for effluent polishing will take up to three years to stabilize. USA also presents a time schedule for infiltration/inflow (I/I) control; basin studies (January 1988), flow monitoring programs (December 1988), elimination of select high I/I areas (June 1990), draft I/I ordinance (July 1990), complete evaluation of I/I program (December 1990), initiation of major I/I elimination (July 1991), and completion of major I/I elimination (July 1996).

Public Comment. A majority of those commenting at the public hearing expressed the opinion that USA must comply by the June 30, 1993 TMDL deadline. Some expressed disappointment that USA was placing its efforts on modifying rules rather than on complying. Others stated that USA was "foot-dragging". Comments were expressed that pilot testing was a delay tactic and that the most cost-effective approach for USA in meeting TMDLs is to delay compliance. Others stated that USA was challenging the EQC time requirements.

USA's consultant testified that an extremely tight schedule had been mandated by EQC considering the significant technical and implementation issues that must be resolved. For example, export of effluent to the Willamette River includes a number of water and land right issues that need addressing. If advanced tertiary treatment is required, then pilot testing must occur to determine if the stringent standards can be achieved.

USA's consultant stated that the limitations for the Durham are the most stringent standards in the nation for a plant of its size. If export of treated effluent to the Willamette cannot be accomplished, then pilot testing will be required to determine if advanced treatment technology can even achieve the desired limits. With the Rock Creek facility, USA's consultant stated that to use conventional tertiary

treatment, it will be necessary for minor modifications in the TMDL procedures and a reallocation of waste loads to the Rock Creek facility. Finally, if advanced treatment is required at Durham, the project costs are estimated at \$50 million. Because existing equipment and a limited construction site is available, it is estimated that a time extension will be necessary simply to accommodate the high amount of construction within the limited site boundaries.

Issues. The interested public does not want the compliance date for achieving TMDLs to be extended. Tradeoffs exist with minimizing uncertainties through additional testing and extending time deadlines, versus the possibility of funds being used unwisely to achieve compliance sooner. Information on inflow and infiltration removal necessary to establish design criteria to meet both TMDLs and achieve compliance with winter mass discharge load limitations is needed during facility planning.

Discussion. USA needed only three years to plan, design, construct, and start-up a major conversion and treatment plant expansion from pure oxygen to a new form of air activated sludge at their Rock Creek facility. Planned improvements to achieve TMDLs will be about same level of difficulty as the earlier construction since a combination of existing and some new facilities will be used. Based on USA's previous ability to construct facilities, five years to complete another major expansion is reasonable. Also pilot testing was conducted at the Rock Creek facility in 1986 so there is little additional testing required to make a final process selection. The secondary treatment portion of the Rock Creek facility was recently expanded in anticipation of TMDL requirements.

The Department has contacted approximately 20 wastewater treatment plants that utilize conventional tertiary treatment to achieve phosphorus concentration levels near or below those anticipated to be required at the Rock Creek facility. Based on this survey, the most likely scenario at the Rock Creek plant is upgrading of its existing conventional tertiary facility to comply with future TMDL standards. Unless unusual discoveries are made during the planned pilot testing during the spring and summer of 1989, it is unlikely that there should be a problem in meeting the compliance date of mid-1993 at the Rock Creek facility.

At the Durham facility, the secondary treatment facility has not been expanded or improved to meet new TMDL ammonia nitrogen requirements. Also, extensive pilot work has not been initiated at this facility. Therefore, a tight schedule exists for compliance at the Durham facility. There are uncertainties associated with the choice between advanced tertiary treatment and effluent export may add to the time necessary to comply. Even if export of treated effluent to the Willamette River is possible, it may be that both ammonia and phosphorus removal, or other limitations must be met.

USA has known for several years that stringent limits were forthcoming at their Durham plant. The Department questions why USA has not moved

forward at a faster rate for planning improvements at Durham? Perhaps pilot data at Rock Creek can be utilized in preliminary design for the Durham facility. Also, an aggressive pursuit of issues associated with the Durham facility may eliminate all but the obvious and most cost-effective alternative for implementation within the already specified time frame for achieving TMDLs.

USA does not propose a change in the compliance schedule for Hillsboro-Westside, Banks, Gaston, or Forest Grove facilities. USA has indicated that compliance can be achieved within the June 30, 1993 date at these facilities. However, facility planning must include not only direct discharge water quality concerns, but also: cost effective inflow and infiltration removal, and establishment of design criteria for properly sizing treatment systems, effluent storage and irrigation facilities.

Findings. For the Rock Creek facility, the Department finds there presently is no basis for a time extension to achieve compliance with TMDL criteria.

At the Durham facility, the issues are likely to be more complex but compliance may still be achievable with an aggressive approach by USA. Pilot data developed at Rock Creek will be useful in allowing initial design to proceed at the Durham facility in a timely manner. However, only after pilot testing can a clear determination of the need for time extension at the Durham facility be made. These tests must be conducted on a fast-track time frame.

USA concludes they will achieve the compliance date for achieving TMDLs at the Banks, Gaston, Hillsboro-Westside, and Forest Grove facilities.

Recommendations. The Department recommends the following:

- a. Approve: USA's plan to achieve the TMDL compliance date for the Banks, Gaston, Hillsboro-Westside, and Forest Grove facilities by no later than June 30, 1993 is consistent with OAR 340-41-470 and should be approved. USA should submit facility plans to the Department in ample time to achieve the June 30, 1993 compliance date but no later than January 31, 1991.
- b. Reconsider: Information is insufficient for proper evaluation of the need for a time extension for the Durham facility. The Department recommends that no time extension for TMDL compliance be given for Durham at present and that USA be required to fast-track planning efforts for this facility. The EQC may wish to reconsider TMDL compliance deadlines at the Durham facility after the pilot testing is complete and an updated progress report is available.
- c. Deny: Based on present information, the Department recommends that a time extension for compliance with TMDLs at the Rock Creek facility not be given.

4. USA's REQUEST TO MODIFY TOTAL MAXIMUM DAILY LOAD PROCEDURES

In their Program Plan, USA makes four requests concerning both total maximum daily loads (TMDLs) and waste load allocations (WLAs). In this section the Department evaluates two of USA's requests concerning the TMDLs. In the next section of this evaluation, USA's request for changes in the WLA are discussed. The latter requests are considered separately because of the subject matter is difficult to explain when combined. Consideration of any of USA's four (4) TMDL or WLA requests would require changes in the implementation procedures for achieving the instream nutrient concentrations. However, only the WLA requests would result in exceedance of the instream nutrient concentrations specified in OAR 340-41-070(3)(a) and (b), or require modification of the TMDL rule.

The Department utilized various instream flow ranges to define applicable nutrient limits directed at the relative amount of dilution water present in the Tualatin River. The needed effluent quality to meet the instream concentrations of phosphorus depends also on the amount of flow being discharged from USA's wastewater treatment facilities. Although a precise equation could have been used to calculate the allowable effluent concentrations under the TMDL rule, USA's phosphorus limit would vary greatly from day-to-day, depending upon the stream flow and volume of treated effluent. Figure 1 illustrates effluent phosphorus limits that would have been required during 1987. As shown by the upper graph, Tualatin River flows decreased as the summer proceeded ranging from about 300 to a low of 100 cfs. If a precise load equation is used to calculate the full amount of waste allowable under the TMDL rule, USA's phosphorus permit value would vary daily and would have been the concentrations shown by the single line curve in the lower graph of Figure 1.

To avoid the day-to-day variation in effluent limits to meet the instream concentration of phosphorus, the Department's TMDL rule is being implemented based on three river flows, 300, 200, and 120 cfs. If the river flows are between 200 and 120 cfs, then the lower of the flows is used in the calculation. The Department's approach in using three flows for TMDL calculations will result in actual USA permitted effluent values to occur as a series of steps, as illustrated in the lower portion of Figure 1. When the Tualatin River flows vary from above 300 to below 120 cfs (see points 1 - 5, Figure 1), the limits will "step" up or down, but would always be below an effluent concentration based on a precise formula.

USA's first request is to add an additional (new) flow step of effluent concentration limits to be applicable above 150 cfs in the Tualatin River. USA states that this change will result in limits that achieve a closer approximation of the allowable nutrient discharge under the TMDL rule.

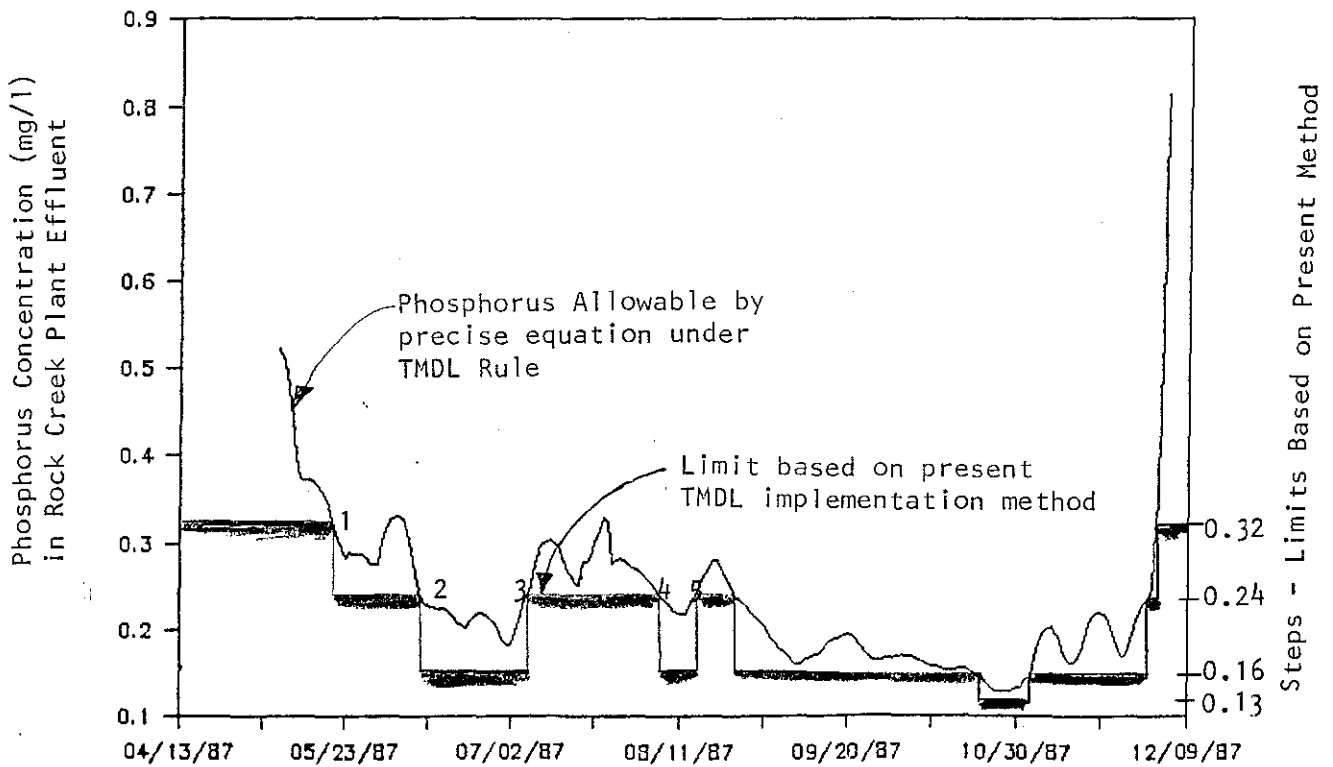
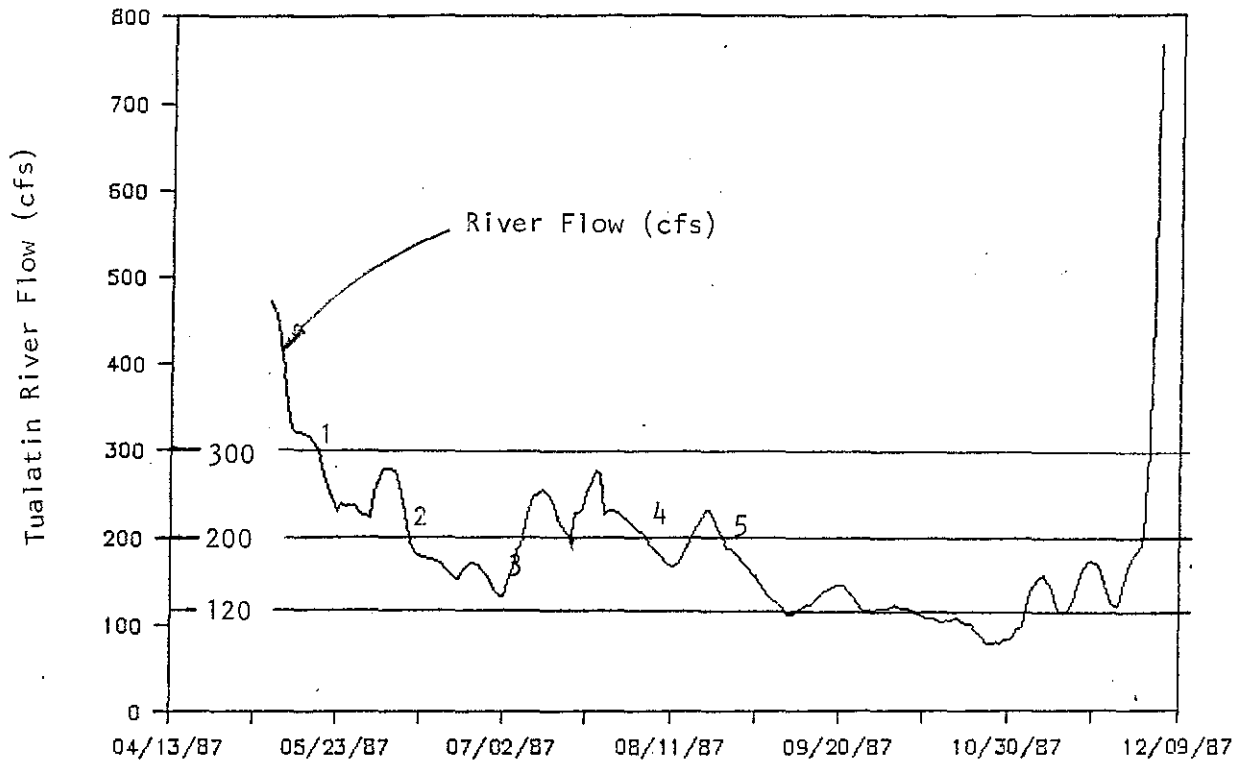


FIGURE 1

B-7a

USA also requests they be relieved of meeting target phosphorus (TMDL) requirement concentrations during rare low flow occurrences in the Tualatin River below 150 cfs. USA states that the Tualatin River's 30-day average flow has dropped below 150 cfs on only six occasions during the last ten years. In addition, USA states that if USA had optimized its release of water rights, they could have maintained the Tualatin River flows at Farmington above 150 cfs for every year except 1987. As a result, USA believes it can reliably maintain a minimum of 150 cfs and should be relieved of requirements for meeting target phosphorus concentrations in the river if they are making good faith efforts to augment river flows during these periods.

Public Comment. The spokesperson for Northwest Environmental Defense Center (NEDC) was disappointed that USA was trying to modify the TMDL rules rather than trying to comply. Speaking for the Riverkeepers, John Churchill stated that USA was in violation of existing CBOD limitations and was presently illegally discharging in excess of what state law would allow.

Issues. A change in the manner in which TMDLs are implemented could be considered by the Department. The use of an additional flow regime to pace river flow with allowable discharges would give a greater or improved approximation of the full waste load allocation to USA. USA would be allowed to discharge closer to their full allocation. USA's second request (to be relieved of meeting target phosphorus concentration during rare low flow occurrences) may be reasonable provided the frequency of flows below 150 cfs is established and USA can assure a minimum of 150 cfs can be achieved.

Discussion. USA's request for the Department to incorporate a 150 cfs flow regime when implementing TMDLs will not require modification of OAR 340-41-470. The additional flow regime will more closely approximate the full nutrient allocation available under the TMDL rule. Since this change is clearly within the intended TMDL rule (OAR 340-41-470), then the Department can act on the request without Commission approval.

USA's discharge limit using the present (Department) approach of defining TMDL's and the USA request are shown below.

Range of River Flow (cfs)	Rock Creek Phosphorus Limits (mg/l) at Current Plant Flow Rates	
	<u>Current</u>	<u>Requested</u>
Greater than 300	0.32	0.32
300 - 200	0.24	0.24
200 - 150	0.16	0.18
150 - 120	0.16	0.16
Less than 120	0.13	0.13

The request results in little difference in permitted phosphorus concentrations.

If DEQ entertains placing an intermediate step in the TMDL definition, it will also be a good time to entertain placing a "seasonal median" phosphorus concentration limit into the discharge standard. A seasonal median limit would have the advantage of requiring USA to utilize its phosphorus treatment technology to a high degree at all times, even when effluent discharge flows are not at or near effluent design flows. This would result in "seasonal" effluent phosphorus concentrations lower than those required in the present TMDL structure. The present or modified (150 cfs flow regime as USA proposes) TMDLs would still be in place, however, an additional seasonal phosphorus concentration based on the treatment technology capabilities to be installed would also be in place to assure maximum phosphorus removal during years when river flows are high or facilities are not at their design capacity.

USA's second request is to be relieved from having to design a facility to meet an effluent phosphorus concentration of 0.16 mg/l for current discharge flows and an effluent concentration of 0.10 mg/l at design year 2005. Instead, they would construct facilities capable of achieving an effluent concentration of 0.18 mg/l for current discharge flows and 0.13 mg/l phosphorus for the 2005 design year. The technology to treat to these effluent concentrations could differ in capital cost and in the amount of sludge that would be produced.

The Department is aware of nearly 1000 wastewater treatment plants in the United States that are required to remove phosphorus. Over twenty of these facilities have phosphorus limits of 0.18 to 0.2 mg/l. All of these facilities achieve their phosphorus limits utilizing conventional tertiary treatment technology. In fact, our preliminary analysis indicates that several of these facilities achieve actual phosphorus concentrations near 0.10 mg/l phosphorus with conventional tertiary treatment technology. It is also important to recognize that the phosphorus concentrations in the above paragraph (ranging from 0.10 to 0.18 mg/l) do not include the effects of irrigation reuse. With increased amounts of treated effluent being used for irrigation purposes, higher concentrations of phosphorus could be discharged to the Tualatin and still achieve the TMDLs. Further study is needed to determine if there are unusual waste characteristics or other factors that prevent this same performance from being accomplished at USA's facilities.

Another preliminary finding of the Department is that full scale phosphorus removal facilities often out perform or obtain better effluent quality than pilot testing indicate is possible. Perhaps this is because of the limitations of some pilots to model all of the aspects of full-scale treatment units working in conjunction with one another. All of the superintendents of these facilities indicated that phosphorus removal with conventional treatment technology is reliable. However, removing phosphorus to low (below 1.0 mg/l) levels results in added sludge being produced, lower pH, additional side-streams or other

factors that must be considered. Most of these superintendents consider phosphorus removal easy to accomplish compared with other treatment processes.

The Department's preliminary findings indicate that there are few (and perhaps only one) facilities that utilize advanced tertiary treatment (two-stage lime treatment). This facility is required to achieve 0.1 mg/l phosphorus and in actual performance normally achieves about 0.05 mg/l phosphorus.

Findings. The Department believes that USA's proposal to include a flow-stepped TMDL for 150 cfs may be reasonable. The Department also needs to evaluate a seasonal concentration limit for phosphorus based on the best practical use of phosphorus removal technology that USA may propose to install.

Regarding USA's requests to be removed of the burden (relieved) of meeting stringent phosphorus concentrations based on flows below 150 cfs in the river, this approach may be appropriate if they can show a clear capability of maintaining such flows. The question remaining is, why would there be a need for "relief" from the low river flow criteria if flows below 150 cfs rarely occur? It is the Department's view that both conventional tertiary and advanced tertiary treatment need to be evaluated further so a better comparison of effluent quality achievable by each technology can be made. Additionally, USA needs to establish the mechanism by which they can assure a minimum of 150 cfs flow in the Tualatin River and reasonably project the frequency that river flows below 150 cfs might be experienced.

Recommendations. The Department recommends that USA be allowed to pursue evaluation of treatment technology that addresses an intermediate flow regime of a 150 cfs. The Department also recommends that USA's request for achieving TMDLs only for flows at or above 150 cfs be reconsidered by the Commission upon receipt of sufficient facility planning information that demonstrates: 1) mechanisms USA will establish to ensure stream flows at or above 150 cfs, 2) the frequency that river flows below 150 cfs might occur, and 3) a comparison of phosphorus effluent concentrations achievable with both conventional tertiary and advanced tertiary treatment including associated costs to implement.

5. USA's REQUEST TO REVISE WASTE LOAD ALLOCATIONS

If USA is successful in exporting Durham effluent to the Willamette River, they first ask (WLA Request No. 1) that the phosphorus waste load allocation be transferred to the Rock Creek facility. In addition, to make conventional tertiary treatment more feasible, USA makes a second request (WLA Request No. 2) that the Department give a portion of its phosphorus reserves to the Rock Creek discharge allocation. To illustrate the results of granting USA's request, the effects from both of these shifts are presented in the following table:

WLA TRANSFER

<u>USA Request</u>	<u>Computation Basis (cfs)</u>	Rock Creek	
		<u>Phosphorus Concentration (mg/l)</u>	
		<u>Without Reuse</u>	
		<u>Current Year</u>	<u>Year 2005</u>
<u>TMDL Request</u>	150	0.18	0.12
<u>WLA Request</u>			
No. 1	150	0.22	0.15
No. 2	150	0.25	0.16

Note: Request No. 1 = Transfer of Durham's WLA to Rock Creek.
Request No. 2 = Transfer of both Durham's WLA and Department reserves to Rock Creek.

The above comparison is shown for a river flow of 150 cfs which corresponds to USA's TMDL request, discussed in the previous section.

At present sewage treatment plant flows, the shift in WLA would change allowable phosphorus discharge concentrations from 0.18 mg/l to values ranging from approximately 0.22 to 0.25 mg/l, depending upon how much load is shifted to Durham. Under effluent discharge flow regimes at design year 2005, the corresponding change in phosphorus concentration would be from 0.12 mg/l to values ranging from 0.15 to 0.16 mg/l. Stated differently, the requested load shifts would result in a difference of only 0.03 to 0.07 mg/l effluent phosphorus concentration under current conditions and only a difference of 0.03 to 0.04 mg/l effluent phosphorus concentration during estimated flows at year 2005.

Public Comment. No specific comments were made regarding the waste load allocation. However, some of the comments received regarding TMDL issues probably fall in the same category as the public's feeling regarding changes in waste load allocation. That is, a general feeling that USA is concentrating too much effort on changing the WLAs and not on complying with the new limits.

Issues. Shifting waste loads from Durham to Rock Creek would result in slight increases of phosphorus in the Tualatin River above the instream TMDL concentration requirements of 0.07 mg/l. Also, shifting the DEQ load reserves would eliminate the availability of future phosphorus loads for new sources.

Discussion. It is doubtful that the shift in WLAs will significantly result in a change in technology required. The requested shifts would result in relatively small changes in actual allowable effluent concentrations of phosphorus. Significant changes in effluent phosphorus concentrations to the Tualatin could be achieved only through either: 1) a reduction in effluent discharge flows to the

Tualatin River or 2) through increasing the Tualatin River flows (flow augmentation).

Since it is questionable that the effluent from Durham can be transferred to the Willamette River, it would be premature to consider shifting its load at this time.

Findings. Considering that WLA shifts would represent only a small increase in allowable effluent phosphorus concentrations yet result in the loss of future phosphorus reserves for new sources, and adversely affect water quality below the Rock Creek STP, a shift in waste load allocation is not justified.

Recommendations. The Department recommends that waste loads in its reserves for future use in the Tualatin and those possibly available from the transfer of Durham effluent out-of-basin not be reallocated to the Rock Creek facility.

6. USA's CONCERNS REGARDING COSTS TO COMPLY

USA reports that if the Rock Creek facility can achieve a TMDL standard using conventional tertiary treatment, then \$20 to \$30 million may be saved in capital construction costs. USA suggests that approximately \$25 million may be saved if exporting treated effluent rather than being required to install advanced tertiary treatment is possible at the Durham plant.

Approximately \$176 to \$226 million in capital improvements would be required for both growth related and TMDL related improvements at USA facilities in future years. This equates to increasing the present sewer user charge of \$12/month to nearly \$30/month. Approximately 29 percent (\$9/EDU) of the user rate increase would be associated with TMDL related improvements. Thirty (30) percent of the rate increase would be related to growth improvements and 41 percent to payback of already existing sewer charges.

Public Comment. USA's consultant stated that other capital construction projects must be undertaken and these coupled with TMDL requirements place a tremendous financial challenge on USA. USA's main concern is that they not pay for interim solutions that do not fit into a long-term solution. Jack Churchill stated that USA has confused the public by mixing the cost of growth with those of TMDL improvements. These costs should be clearly separated. Additionally, he indicated that USA's program appears to favor the more costly alternatives rather than possible lower cost options. Ted Creedon stated that USA has used costs as a scare tactic. Lewis Moller indicated that a \$30/EDU is not too much to pay for solving pollution problems or avoiding a connection moratorium.

Issues. To what extent should costs be considered in a water quality limited clean-up? Are expenditures for the interim plan being used wisely so as not to preclude or eliminate future long-term options that may be more desirable?

Discussion. The \$30/month sewer use charge is associated with the most expensive alternatives to achieve the TMDLs. If lower cost conventional tertiary treatment or export to the Willamette River are implemented, the rate would be about \$26/month. Only a small percentage of this \$26/month would be associated with achieving TMDLs. The remainder would be for past debt of services and growth accommodation. Although \$26 to \$30/month per EDU may be high in comparison to existing rates, there are a number of smaller communities in Oregon that pay similar charges for achieving conventional secondary treatment.

Findings. Although a potential ultimate costs of treatment (including phosphorus removal) will increase for Washington County residents, there are several lower income communities paying as a high or even higher rates at the present time. Alternatives should be evaluated to allow future (long-term) alternatives to be financed without excessive burden to the rate payers. However, the \$6 to \$9/EDU potential increase in sewer rate charges associated with phosphorus removal does not appear to be justification for halting or delaying clean-up of the Tualatin River.

Recommendations. Reject any delay of the Tualatin River clean-up because of cost considerations.

SUMMARY OF DEPARTMENT'S RECOMMENDATIONS

The following table summarizes recommended action for the EQC:

RECOMMENDATION SUMMARY EQC Action	
ACTION	ITEM
1. Approve	<ul style="list-style-type: none"> o Proposed interim and long-term approaches for evaluation to achieve compliance. o Alternatives planned to be considered by USA as shown in Table 1. o Time schedule for Hillsboro-Westside, Banks, Gaston, and Forest Grove compliance by June 30, 1993. o Provisions for developing an agreement with Lake Oswego Corporation prior to 1991.
2. Reject or deny	<ul style="list-style-type: none"> o Time extension for compliance at the Rock Creek facility. o WLA transfers from Durham and the DEQ reserve to the Rock Creek facility. o Consideration that the cost of phosphorus removal is too high and is a basis for granting requests.

3. Reconsider

- o Time extension for compliance at the Durham facility. This should only be reconsidered after USA conducts further studies and investigations. USA should be required to submit a progress report prior to facility planning. The Department would utilize information in the progress report to evaluate if further consideration of USA's request is necessary.
- o Modifications to procedures for implementing TMDLs. The progress report recommended above would serve as a means of evaluating USA's request.

4. Authorize/
Direct

- o USA Submittals: The majority of pilot testing and preliminary study by USA will be completed by early 1990. By February 28, 1990, USA must submit a progress report to the Department along with a basis for reconsideration of any TMDL issues for the EQC.

Unless otherwise authorized by the Commission, USA must, by June 30, 1990, submit facility plans for achieving TMDLs by June 30, 1993. USA must also develop and submit to the Department an agreement with Lake Oswego Corporation prior to December 31, 1990 for controlling algae in Lake Oswego.

- o DEQ Study and Report: Issues regarding total dissolved solids (TDS) limitations on the Tualatin and irrigation guidance by the Department have been raised as possible unresolved issues that may interfere with compliance by USA. The Department has already started a study of these issues. Our plans are to submit an evaluation report and request action to the Commission.

TABLE 1

PROGRAM PLAN ALTERNATIVE SUMMARY

<u>ALTERNATIVE</u>	<u>INTERIM</u>		<u>LONG-TERM</u>	
	<u>ROCK CREEK</u>	<u>DURHAM</u>	<u>ROCK CREEK</u>	<u>DURHAM</u>
Conventional Tertiary Treatment	+	-	⊙	-
Advanced Tertiary Treatment	⊙	⊙	⊙	⊙
Reuse/Irrigation	+	⊙	+	+
Export of Effluent	N/A	+	⊙	⊙
Membrane Processes	-	⊙	⊙	⊙
Wetlands Polishing	-	-	⊙	⊙
River Flow Augmentation	I/T	I/T	⊙	⊙
Reducing Influent Nutrients	I/T	I/T	⊙	⊙
Combinations of Above	I/T	I/T	⊙	⊙
Other Possible New Alternatives	I/T	I/T	⊙	⊙

NOTES: + = Preferred alternative
 ⊙ = Secondary choice to be evaluated
 - = Preliminary choice eliminated because of high costs or inability to achieve TMDL standards
 I/T = Insufficient time
 N/A = Not applicable

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HEARINGS OFFICER'S REPORT
and
WRITTEN TESTIMONY
for
Unified Sewerage Agency's
FINAL DRAFT PROGRAM PLAN

BACKGROUND.

The Unified Sewerage Agency (USA) submitted a Program Plan and time schedule describing how and when they will modify their sewerage facilities to achieve waste load (discharge) allocations for ammonia and phosphorus on the Tualatin River. The plan was submitted as a means of providing EQC review and approval to USA's alternatives and time frame for meeting new standards.

The plan is divided into two phases, interim and long-term. In the interim plan, USA proposes to study and/or implement tertiary treatment technologies or effluent export at the Rock Creek and Durham facilities. USA proposes that facilities necessary to achieve compliance with the TMDLs at both the Rock Creek and Durham facilities will be operational by the years 1995 and 1996, respectively. USA requests a time extension from the original mid-1993 compliance date now required by the EQC. USA's long-term plan will be implemented concurrently with the interim plan but may take up to 20 years or longer to develop. USA reports that long-term planning includes wastewater reuse and reclamation schemes that require an extensive period to develop.

USA further requests modifications in the Total Maximum Daily Loads (TMDLs). These modifications include changes in the manner and time frame the loads are applied. If Durham's treated effluent is exported to an alternative receiving stream, USA requests that Waste Load Allocations (WLA) from the Durham facility be shifted to the Rock Creek facility. USA also asks that phosphorus load reserves retained by DEQ be shifted to the Rock Creek facility. Finally, USA requests the DEQ evaluate total dissolved solids (TDS) standards applied to the Tualatin River and irrigation standards for crops used for human consumption be developed and adopted. USA considers these evaluations necessary to provide greater opportunity for reuse or reclamation of treated effluent from USA facilities.

PUBLIC NOTICE.

A notice for public hearing and fact sheet are attached in Exhibit A. Both were sent to over 400 interested parties in the Tualatin River clean-up.

PUBLIC HEARING.

On March 14, 1989 a public hearing was held to obtain both oral and written testimony. Mary Halliburton, manager of the Sewage Disposal Section of the Water Quality Division, was hearings officer. She was assisted by John Harrison, Municipal Facilities Coordinator of the Sewage Disposal Section.

The following are major points obtained by the ten individuals who testified. A list of attendees is provided in Exhibit B.

Cynthia MacKey, Northwest Environmental Defense Center (NEDC): Suggested that USA was delaying and confusing the technology issues. The NEDC is disappointed that USA is trying to modify TMDL rules rather than trying to comply. Also, NEDC finds it difficult to understand why USA can undertake a major expansion of their Rock Creek facility in three years while compliance with the TMDLs cannot be accomplished in five years. Finally, NEDC requests that DEQ require USA to comply with the Clean Water Act and Oregon laws. DEQ should require that the June 30, 1993 deadline for compliance be met.

Bruce Willey, CWC/HDR, representing Unified Sewerage Agency: The goal of USA is to maximize reuse opportunities of all treated effluent. However, to meet the stringent EQC time schedule, this difficult goal has been separated into both interim and long-term plans. The interim plan focuses on meeting compliance as soon as possible, while the long-term plan focuses on reclamation activities that will take extensive time to develop and implement.

The phosphorus standards being required are the most stringent of any plant in the nation. In addition, a number of water right issues must be resolved. For the Durham facility, either export of treated effluent to the Willamette River or advanced tertiary treatment are the only options available. Compliance at the Durham facility cannot be achieved with the extremely tight schedule mandated by EQC. Compliance by either late 1995 or early 1996 is the best that can be expected. If export of treated effluent to the Willamette River is selected then route selection, environmental impact statements, water right issues in addition to the normal design, construction and start-up will all require time. The stringent effluent limits at Durham may not be achievable even with advanced tertiary treatment. Therefore, pilot testing will be required to determine the feasibility and establish design criteria. Implementation of advanced treatment cannot be done prior to early 1996.

It may be possible to avoid the costly use of advanced tertiary treatment at the Rock Creek facility. Pilot testing is being conducted to determine if conventional treatment coupled with minor modifications to the TMDL structure and changes in reuse policy, can allow conventional treatment and reuse to be viable alternatives for the Rock Creek facility.

To allow conventional treatment a greater possibility of being feasible at the Rock Creek facility, DEQ should develop a new TMDL flow regime between 150 to 200 cfs. Also, if USA can show they can reliably maintain flows of 150 cfs to the Tualatin then they should be relieved of meeting rare low river flows that are likely to very seldom occur if ever.

Conventional treatment and reuse at the Rock Creek facility will be made even more feasible if waste load allocations presently assigned to Durham can be shifted to Rock Creek (assuming that Durham effluent is transferred out of the Tualatin Basin). Also, a portion of the DEQ phosphorus reserves should be shifted to the Rock Creek facility to allow additional discharges.

If conventional tertiary treatment can be utilized at the Rock Creek facility then compliance can be achieved by the irrigation season of 1994 (shortly after the EQC mid-1993 deadline). However, if advanced tertiary treatment is necessary then compliance may not be achieved until late 1995 or early 1996.

A tremendous financial challenge is being faced by USA. At a time, when they must make major improvements to accommodate growth, the EQC TMDL requirements add to the financial burden. The present sewer rate of \$12/EDU may escalate to \$30/EDU for Washington County residents. USA may be able to save from \$20 to \$25 million if conventional treatment can be utilized at the Rock Creek facility. However costs could range from \$60 to \$110 million for all USA facilities to meet the new nutrient standards on the Tualatin. USA is concerned that money spent for interim solutions that fit into their long-term planning strategy.

Kenneth E. Fink, Lower Tualatin Valley Homeowners Association: The Association feels that USA is unjustified in asking for a time extension from the June 30, 1993 compliance date. He expressed a need for more reservoirs on the Tualatin River rather than exporting treated effluent to the Willamette. Concern was expressed that transferring the pollution problems to the Willamette is not a long-term solution. Also, USA's approach of transferring water to the Willamette is not an alternative that future taxpayers would want to support.

John R. Churchill, Tualatin Riverkeepers: Concern was expressed that USA is using delay tactics. He believes USA has been using delays in compliance, as illustrated by the over 10,000 violations of effluent limits during the past five years. He expressed that USA's attempt to pilot phosphorus technology is another delay tactic.

Mr. Churchill stated that the alternatives offered by USA are not new and have been available throughout the full three year period the Riverkeepers have been working with USA. In addition, USA has been not seriously pursued cost effective alternatives such as upland wetlands that will remove more phosphorus than lowland wetlands. In addition, USA has mixed the costs of accommodating growth with that of meeting new TMDL requirements. He believes USA has favored more costly alternatives in an effort to confuse the public.

Oscar Hagg, Route 4, Box 524, Hillsboro, Oregon: Expressed that the present program plan will not be adequate. To accomplish the tasks, it is necessary that the Tualatin have more water. He referred to a report entitled the "TUALATIN PROJECT", that describes the feasibility of constructing a dam on the Tualatin River to augment flows during summer months.

Leonard G. Stark, 550 S.W. Childs Road, Lake Oswego, Oregon: Expressed that costs for clean-up should be borne by not only Washington County residents but others that might benefit from the project as a whole. Also, piping the discharge and transferring it to the Willamette should not be the way to spend the public's money. He prefers spending the money on sewage treatment plant improvements and retaining the treated effluent in the Tualatin Basin. The construction of several small dams might be an alternative to consider. Siphoning water in from other sources to augment the Tualatin flows could be another consideration. Wetlands, forestation, and nonpoint source control must also be considered. More than a few years may be necessary for the clean-up since construction includes a complicated sequence of planning, design, construction, and start-up.

Kenneth H. Wright, Lower Tualatin Valley Homeowners Association: Had to leave before giving oral testimony, written testimony presented in Exhibit C. He expressed objections regarding the possible extension of the June 30, 1993 compliance deadline.

Ted Creedon, Mayor, City of Rivergrove: Expressed opposition to giving USA a time extension. He indicated that USA had not proven its case. He suggested that industry (high tech) could be causing much of the pollution problem. Further, USA was using scare tactics on costs to influence the TMDL criteria. He suggested a complete reorganization of USA management and possible suspension of sewer hookups for a short period by DEQ. This would be done to provide USA a clear signal that action must be taken.

Lewis Moller, 4464 S.W. Lakeview Boulevard, Lake Oswego, Oregon: Expressed concern about the program plan. The effects of USA management in not taking affirmative action could result in sewer moratoriums that would have a detrimental effect on property owners. USA's policy of "foot-dragging" has escalated the cost of compliance. Export of treated effluent from the Durham facility to the Willamette will not be acceptable. He believed that rather than transferring the load, clean-up should occur and that \$30/month would not be unreasonable to prevent or avoid future pollution problems. He made a strong motion that USA move forward as fast as possible to solve the problems.

WRITTEN COMMENTS.

Written comments are summarized below. However, the full written testimony is presented in Exhibit C.

1. Rosalie Morrison, Member, DEQ Tualatin River Citizen Advisory Committee, letter received 3/7/89:
 - o The clean-up should not be postponed.
 - o Delay will result in both added damage and increased cost.
2. E.S. Mills, City Manager, City of Hillsboro, letter received 3/8/89:
 - o The City supports and is committed to the concepts in USA's Program Plan.

3. Jack Churchill, Tualatin Riverkeepers, letter received 3/14/89:
 - o Alternatives have not been clearly identified.
 - o Wetlands alternative is being tested in a manner that is not optimum.
 - o Delay tactics being used by the piloting and presenting cost issues as combined TMDL/growth.
 - o Delay is the most cost effective strategy for USA since there is no penalty for not complying.
4. Leonard Stark, Lake Oswego resident, letter received 3/14/89:
 - o Cost should be shared by everyone in drainage basin.
 - o Transfer of treated effluent is not a good use of public money.
 - o Consider use of dams, wetlands, forestation, and nonpoint sources.
5. Kenneth Wright, Lower Tualatin Valley Homeowner's Assoc., Inc., letter received 3/14/89:
 - o Inadequate justification for USA's time extension request.
 - o Technology now exists for clean-up.
6. Brett Arvidson, Portland resident, letter received 3/16/89:
 - o The plan should be adopted but issues are complex.
 - o Transfer of water from the Tualatin may drastically reduce existing flows.
 - o Advanced treatment technology is difficult to operate and may result in other (non-phosphorus) problems.
7. Annette McFarlane, City Recorder, City of Rivergrove, letter received 3/20/89:
 - o The City opposes a timeline extension and finds that USA has not adequately analyzed alternatives.
8. Glen Carter, Hillsboro resident, letter received 3/20/89:
 - o There is no sound factual basis for assuming lowering phosphorus discharges to the Tualatin will improve water quality.
 - o Algae control can only be partially achieved and then only through total waste source control (in addition to point discharges).
 - o Algae is likely to be prevalent even with the most stringent point source controls because background phosphorus levels are sufficient to cause algae blooms.
 - o Additional dams or reservoirs are likely to be another algae producing reactor, similar to Hagg Lake.
 - o Ammonia control should be a priority.
9. Steven L. Stolze, Mayor, City of Tualatin, letter received 3/20/89:
 - o The City supports the plan but is concerned about the cost of cleanup.

10. Stephen Zimmerman, Hillsboro resident, letter received 3/20/89:
 - o USA needs to stay on schedule and fines should be assessed for noncompliance, including submittal of an unacceptable plan.
 - o Transfer of treated effluent to the Willamette is not an answer.
11. Thomas C. McCue, Environmental Programs Manager, Tektronix, letter received 3/21/89:
 - o The TMDL rules are technically incompetent and result in a tremendous economic burden.
 - o Support is given for USA's proposal to export effluent to the Willamette River.
 - o Opposition is presented to USA's plant expansions and proposal to pass the costs off to existing rate payers.
 - o A review of the impact and effectiveness of the TMDLs should be done.
12. Cynthia MacKey, Vice President, Northwest Environmental Defense Center, letter received 3/21/89:
 - o USA delaying and stalling and this policy os USA will continue unless DEQ places penalties for violating water quality standards.
 - o TMDLs should not be modified since the technologies are available to meet the standards.
 - o Compliance should be required by June 30, 1989.
 - o There is agreement with USA's overall plan to remove effluent from the Tualatin but does not agree that out-of-basin export is an answer.
 - o Greater effort needs to be made to develop irrigation of treated effluent.
13. Gary Ott, Tigard Resident, letter received 3/21/89:
 - o Supports USA's Program Plan but comments:
 - \$30/month charge not too great but actual costs may be 2 to 3 times higher.
 - EPA manual says "wetlands . . . is not very effective . . . (for) . . phosphorus removal."
 - Export of Durham effluent is supported.
 - Extending the TMDL compliance date by 2 to 3 years is supported.
14. Gary F. Krammer, General Manager, Unified Sewerage Agency of Washington County, letter received 3/22/89:
 - o The Program Plan is a first step in achieving TMDLs with further analysis to follow.
 - o It is anticipated that the EQC receive periodic status reports and that review and approval will be exercised by the DEQ and the Commission.
 - o The June 30, 1993 compliance date was established without specific information on the time and tasks involved. Based on USA's

- evaluation of major alternatives, a revision of the TMDL time schedule is requested.
- o Any delay or denials of necessary approvals may affect project timing.
 - o Additional testimony includes:
 - Very complicated and expensive treatment is necessary to achieve the TMDLs.
 - Time extensions are needed for Rock Creek and Durham facilities.
 - TMDL modifications are requested:
 - 1) new flow regime, and
 - 2) no limits at rare low flows.
 - WLA modifications are requested: transfer
 - 1) Durham's phosphorus load allocation, and
 - 2) the Department's phosphorus reserves to the Rock Creek plant's discharge allocation.

15. Gerd Hoeren, Lake Oswego Corporation (LOC), letter received 3/22/89:

- o The LOC is pleased and supports the cleanup plan.
- o The 1989 LOC Water Quality Management Plan includes plans to:
 - Support of Tualatin cleanup and establish a joint agency cleanup process.
 - Negotiate a relationship with USA that results in the lowest possible phosphorus content for 30-days in March while the lake is being filled.
 - Treat Lakewood Bay with alum in late April to precipitate phosphates.
 - Obtain Tualatin River nutrient readings at the Oswego Lake headgate from USA.
 - Evaluate leasing some water rights to USA for augmenting flows in the Tualatin River.
- o Missing from the plan are specific tasks USA will perform to help water quality in the lake, these should be added.

16. Lolita Carter, Ph.D., Hillsboro resident, letter received 3/24/89:

- o The DEQ is more interested in enforcement and is disrespectful of the complexity of the problem.
- o A time extension should be allowed to prevent improper responses due to haste.
- o The TMDLs will not measurably affect algae growth in the Tualatin Basin and ignore natural background phosphorus. Winter phosphorus limits must take into account the effects of winter flooding.
- o Using water from the Columbia River for flow augmentation to the Tualatin should be considered.
- o Advanced tertiary treatment should be avoided because it will produce large amounts of sludge that will become a disposal problems.

EXHIBIT

- A. Notice for Public Hearing and Fact Sheet
- B. Attendance Record for Public Hearing
- C. Written Testimony (Referred to as Attachment D in Staff Report to the Environmental Quality Commission).

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

**A PROGRAM PLAN BY UNIFIED SEWERAGE AGENCY TO COMPLY WITH NEW
WATER QUALITY STANDARDS IN THE TUALATIN RIVER**

Notice Issued: 02/14/89
Public Hearing Scheduled: 03/14/89
Comments Due: 03/21/89

**WHO IS
AFFECTED:**

All businesses, residents, industries, and local governments within the Tualatin Drainage Basin, including Lake Oswego.

**WHAT IS
PROPOSED:**

The Unified Sewerage Agency (USA) has prepared a program plan and time schedule describing how and when they will modify their sewerage facilities to achieve waste load (discharge) allocations for ammonia and total phosphorus to the Tualatin River.

**PURPOSE OF
NOTICE:**

Public review and comment of USA's proposed program plan is requested. Public comments will be evaluated by the Department and submitted to the Environmental Quality Commission (EQC) in an evaluation report which will accompany the Director's recommendation for approval, rejection, or modification of the plan.

**WHAT ARE THE
HIGHLIGHTS:**

Presented by USA are both short- and long-term plans directed at compliance with new water quality standards in the Tualatin River for both ammonia and phosphorus. The short-term plan is directed at compliance with water quality standards through the evaluation, testing, design, construction, and operation of advanced treatment technologies such as: chemical addition, effluent reuse, effluent export, effluent filtration, and pH adjustment.

The project plan states that discharge standards for phosphorus on the Tualatin River will result in one of the most stringent standards for any comparable sized wastewater treatment plant in the United States. As a result, USA states the most attractive alternative for the Durham sewage treatment facility will be to export its effluent (if feasible). USA requests that phosphorus waste load allocations for Durham and a portion of other phosphorus load reserves be allocated (transferred) to Rock Creek. The project plan states this transfer must be approved to prevent the need for advanced (high cost) tertiary treatment at the Rock Creek sewage facility. Further, the project plan states the treatment technologies and other facility improvements could necessitate increasing their present \$12/month charge for sewer services to about \$30/month. Finally, USA requests an extension in time to plan, design, and construct new facilities at Rock Creek and Durham from the five years specified by the EQC to the end of 1995 or early 1996 (two-to-three year extension).



811 S.W. 6th Avenue
Portland, OR 97204

11/1/88

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

**WHAT ARE THE
HIGHLIGHTS
(Continued):**

The long-term plan proposed by USA includes an evaluation of effluent reuse or reclamation. The project plan states greater time is needed to evaluate the long-term alternatives because these are either new technologies, require extensive modeling, or involve agreements or contracts that cannot be implemented in a short time period. The long-term alternatives USA proposes to evaluate include: effluent irrigation/reuse, export of effluent out of the Tualatin Basin, additional advanced treatment, wetland effluent polishing, flow management/augmentation, and nutrient bans or source control.

**HOW TO OBTAIN
ADDITIONAL
INFORMATION:**

More details on the proposed program plan and a time schedule are on file at the Portland office of the Department of Environmental Quality. Additional information is also available at USA's office in Hillsboro, Oregon.

**HOW TO
COMMENT:**

Public Hearing:

Time: 9:30 a.m.

Date: March 14, 1989

Place: Oregon Department of Environmental Quality (DEQ)
4th Floor Conference Room
811 S.W. Sixth Avenue
Portland, Oregon 97204

Written comments should be sent to John Harrison by March 21, 1989 at DEQ's office in Portland.

**WHAT IS THE
NEXT STEP:**

After the hearing record and comments have been evaluated by the Department, the program plan along with a Department evaluation report (including hearing comments) will be presented for Commission evaluation on April 14, 1989. The Commission may take any of the following actions:

1. Approval or rejection of the plan.
2. Modification of the plan.
3. Revision of their original June 30, 1993 target date for complying with new water quality standards.
4. Insertion of significant components of the program plan into discharge permits or memorandums of agreement.

If the Commission determines that the program plan will not meet the new water quality limitations within a reasonable amount of time, they shall reject the plan, state the reasons for rejecting, and specify a compliance schedule for resubmittal. Should USA not make a good faith effort to provide an approvable program plan within a reasonable time, then enforcement action may be taken.

Transfer the phosphorus load reserved by DEQ to the Rock Creek plant.

LONG-TERM PLAN

The long-term plan will evaluate strategies to protect water quality in the Tualatin for the next 20 years. USA has identified the following alternatives and expects to add more after public involvement.

Irrigation/Reuse

Export treated wastewater out of the Tualatin River Basin

Advanced wastewater treatment beyond high-lime

Wetlands to polish effluents

Flow management and augmentation

Reduce phosphorus loads coming into the treatment plant

Water quality monitoring to evaluate the results

A combination of these and other options will be considered by USA.

HOW TO COMMENT

DEQ's public hearing will be in the fourth floor conference room, DEQ headquarters, 811 SW Sixth, Portland at 9:30 a.m. Verbal and written comments are accepted. You may also mail your comments, postmarked by 5 p.m. March 21, to John Harrison, DEQ, Water Quality, 811 SW Sixth Avenue, Portland, OR 97204.

FOR MORE INFORMATION

Copies of USA's program plan are available at DEQ's Portland office, 6th floor reception desk, or

at the Tigard and Tualatin Public Libraries. Call Shirley Kengla, 229-5766, if you have questions.

WHAT IS THE NEXT STEP?

After considering public comments, DEQ will present USA's plan to the Environmental Quality Commission. The EQC may approve, modify or reject the plan. If they reject the plan, the EQC will set up a new schedule for USA to resubmit a plan.

Tualatin River Fact Sheet #6



811 SW Sixth Ave. \ Portland, OR 97204

CLEANUP OF THE TUALATIN RIVER: A PLAN BY USA TO COMPLY

Pollutants that interfere with fishing and swimming in the Tualatin River must be controlled by 1993 to protect the river for beneficial uses. The Environmental Quality Commission adopted this cleanup goal for the Tualatin River Basin last year. Those who add to the water quality problems are developing plans on how to remove excessive nutrients from the slow-moving river when water levels are low.

The Unified Sewerage Agency (USA), which treats sewage for much of Washington County, is responsible for most of the excess nutrients entering the river during summer's low flows. Existing sewage treatment plant technology does not remove enough nutrients from treated wastewater. USA has submitted a plan to the Department of Environmental Quality (DEQ) for improving the river's water quality. The public may evaluate and comment on USA's plan at DEQ's March 14 public hearing.

WHAT MUST BE CLEANED UP?

Oregon's fastest-growing population in Washington County is producing more pollution than the river can handle. The river's water quality problems are low oxygen and excessive algae growth. Ammonia consumes oxygen and forces fish to find a better habitat. Excess levels of phosphorus feed algae in summer, giving the river a bright green color and floating algal mats.

In addition to phosphorus, algae also needs sunlight, warm temperatures and nitrogen to grow. But of these requirements, phosphorus is one of the few things we can control.

WHERE DOES THE NUTRIENTS COME FROM?

About 85% of the excess phosphorus in the summer comes from USA. The sewage treatment plants must deal with the waste we produce. Phosphorus is naturally present in household wastes, food, detergents, fertilizers and high-tech industrial wastes. Agricultural and urban runoff contributes a significant load of phosphorus when heavy rains wash nutrients into nearby streams. USA is primarily responsible for the excess ammonia and is constructing facilities at their Rock Creek plant to reduce the problem by 1989.

HOW WILL IT BE CLEANED UP?

DEQ has already set limits, the "total maximum daily loads", on how much phosphorus and ammonia the river can handle, based on two years of intensive studies. The total amount of allowable nutrients will be divided up into "loads" between the groups responsible for the problems. USA, the counties and cities in the basin, and agencies for forestry and agriculture must submit plans to control phosphorus.

USA has recently submitted plans for public review on how and when they will remove phosphorus. The residents of Washington and Clackamas Counties will pay for the changes in how the Tualatin River Basin is managed. The cleanup solution must not only be effective but also make the best use of the public's money.

WHAT IS USA'S PLAN?

USA has separated their plan into two parts. They plan to work on "interim" and "long-term" efforts at the same time. USA is proposing to remove their discharges from the Tualatin River as the best way to serve the 20-year needs of the basin. They do not believe the five-year deadline set by the EQC will give them time to investigate and develop the alternatives for eliminating wastewater discharges.

Because USA feels they can not eliminate discharges by 1993, the "interim" plan will allow them to meet the new phosphorus limits as soon as possible. The sewerage agency proposes to comply with the limits using existing facilities and irrigation or by expanding for advanced chemical treatment.

THE INTERIM PROGRAM

USA is proposing changes to the EQC rule which may allow the Rock Creek plant to meet water quality goals without costly expansion. With the changes, USA hopes to use current facilities to remove phosphorus through the addition of alum and filtration. Any amount of wastewater flow over 14 million gallons a day would be used for agricultural irrigation. If pilot tests show that conventional tertiary treatment will not remove enough phosphorus, USA will turn to the more costly advanced tertiary treatment. In advanced (high-lime) treatment, the sewer facilities will need to be extensively expanded, perhaps costing \$25 to 30 million.

The preferred approach for the Durham plant is to pipe treated sewage to the Willamette River. If this is not possible, then USA will turn to advanced tertiary treatment for this plant also. The small plants at Forest Grove, Hillsboro and Banks will continue summer irrigation of all wastewater.

USA estimates that costs for the interim program range between \$177 and \$226 million. Of this total, \$63 to \$112 million covers costs to meet the new phosphorus limits. The remaining costs apply to anticipated growth in Washington County. Monthly sewer rates could increase from a present value of \$12.15 to \$30 a month.

REQUESTED CHANGES TO THE RULES

The sewerage agency has requested several changes in the total maximum daily load rules recently adopted by the EQC. USA feels that these changes will make it possible to comply with the water quality goals at less expense. These changes include:

- Postpone the deadline for compliance until 1995 or 1996, to allow USA time to plan, design and construct facilities at Rock Creek and Durham sewage treatment plants.
- Set a permit condition to maintain the river's minimum flow above the level currently set by the rule. USA believes they own enough of Scoggins Reservoir to increase the river flow above the lowest levels observed by DEQ.
- Relieve USA from meeting target phosphorus concentrations during the rare low river flows, as long as USA acts in good faith.
- Transfer the phosphorus load from the Durham plant to Rock Creek if treated sewage from the Durham plant is diverted to the Willamette River.

SIGN-IN SHEET

USA
Program Plan

Check here to be placed on mailing list.

NAME	ADDRESS / CITY / ZIP CODE	TELEPHONE	
Ted Creedon	5740 SW Childs L.O. 97035	620 0492	
Ken Wright	TUALATIN OR 97062 22560 SW Stafford Rd	638-5428	
Pat Lee	Metro 97201 2000 SW 1st Ave Portland	221-1646	
Bonnie Garibay	Intel Corp. OR 97124 5200 NE Elam Young Hwy Hillsboro	696-3008	✓
STAN GERGER	SRI 11830 SW Ken Hwy L.O.	245-4068	
DAVID BALL	Portland. SUITE 1800 222 SW Columbia 97201-6618	226-1191	✓
Oscar Hagg	P.O. Box 524 Hillsboro	971 23	628-1637
DAN LEONARD	3125 SE RIVER RD HILLSBORO	681-7050	
DONALD SEAT	230 E Second ST McMinnk 97128	472-9371	✓
LEONARD G. STARK	5850 S.W. CHILDS ROAD LIKE OSWEGO, GIVE 97035	639-2807	
Bob Gantenbein	SJO Consulting Engineers 1500 SW 12th Ave. Portland, OR 97201	226-3921	✓

WRITTEN TESTIMONY

<u>Item</u>	<u>Page</u>
◆ List of Written Testimony	1
• Rosalie Morrison DEQ Tualatin River Citizen Advisory Committee	2
• E.S. Mills, City Manager, City of Hillsboro	3
• Jack Churchill, Tualatin Riverkeepers	4 - 7
• Leonard Stark, Lake Oswego resident	8 - 10
• Kenneth H. Wright Lower Tualatin Valley Homeowner's Association	11
• Brett Arvidson, Portland resident	12 - 13
• Annette McFarlane City Recorder, City of Rivergrove	14 - 15
• Glen Carter, Hillsboro resident	16 - 18
• Steven L. Stolze, Mayor, City of Tualatin	19
• Stephen Zimmerman, Hillsboro resident	20 - 21
• Thomas C. McCue Environmental Programs Manager, Tektronix	22 - 23
• Cynthia L. Mackey Vice President, Northwest Environmental Defense Center	24 - 27
• Gary Ott, Tigard resident	28 - 29
• Gary F. Krahmer General Manager, Unified Sewerage Agency	30 - 77
• Gerd Hoeren, Lake Oswego Corporation	78 - 86
• Lolita Carter, PhD, Hillsboro resident	87 - 88

RECEIVED
MAR 7 1989

March 3, 1989

Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

Water Quality Division
Dept. of Environmental Quality

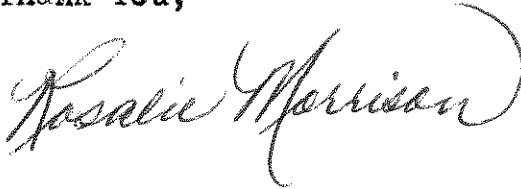
Tualatin River Cleanup : Compliance Schedule

The cleanup of the Tualatin River, it's tributaries and the treatment plants should not be postponed. The longer action is delayed both the damage and the cost will be escalated.

Years ago a moratorium was imposed to get action. That should not be necessary to get the needed pollution out of the Tualatin River. The people at the Unified Sewerage Agency appear to be well qualified and there is new technology available that was not available when the treatment plants were built.

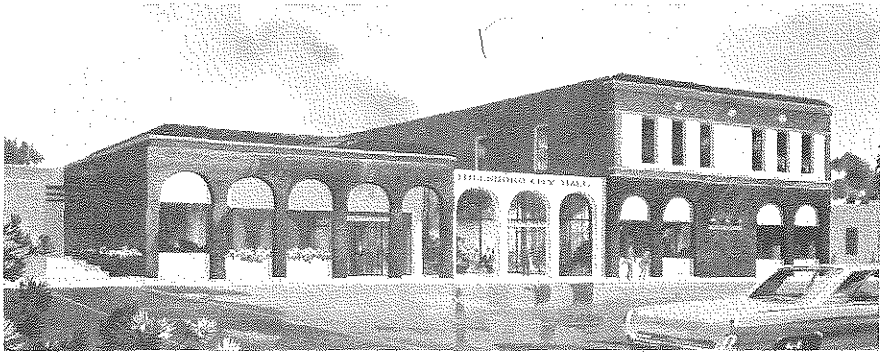
The compliance schedule adopted in 1988 should be enforced.

Thank You,



Rosalie Morrison
Tualatin Riverfront Resident
Member of Department of Environmental Quality's
Tualatin River Citizen Advisory Committee
6210 SW Childs Road
Lake Oswego, Oregon
97035

*Re Morrison
put with program files
testimony
RD*



City Of Hillsboro

205 S.E. Second Avenue
Hillsboro, Oregon 97123

(503) 681-6100 □ FAX (503) 681-6213

March 7, 1989

Department of Environmental Quality
811 S. W. 6th Avenue
Portland, Oregon 97204

*JRH -
maintain
public comment
record please*

RECEIVED
MAR 8 1989

Water Quality Division
Dept. of Environmental Quality

FOR PUBLIC HEARING - MARCH 14, 1989

RE: Unified Sewerage Agency of Washington County, Draft Plan -
Water Quality Criteria for the Tualatin River

This is to advise the Environmental Quality Commission that we have done a review of the "Final Draft Program Plan" dated February 14, 1989, for Unified Sewerage Agency of Washington County, said plan prepared by CWC-HDR, Inc. and CH₂M-Hill.

We wish to be placed on the record as being in support of those concepts as set forth in the program plan as identifying point source pollutants.

Please accept our position in support accordingly and be assured that we are committed to assisting the Agency in any adopted plan to comply with the actions of your Commission as applies to water quality criteria for the Tualatin River.

Respectfully submitted,

CITY OF HILLSBORO

By *E. S. Mills*
E. S. Mills
City Manager

ESM/gw

cc: Mayor Huffman
Chairman Bonnie Hays
Gary Krahmer, U. S. A.
Tim Erwert

①

COMMENTS OF JOHN R. CHURCHILL
 TUALATIN RIVER KEEPERS
 ON THE
 PROPOSAL OF THE UNITED SEWERAGE AGENCY FOR A PROGRAM PLAN TO
 MEET THE REQUIREMENTS OF OREGON ADMINISTRATIVE RULE 340-41-
 470.

General Comments :

*allowance
 High level of
 treatment*

1. This USA report is a substantial disappointment. One expected a serious technical approach and a political commitment to meet the clean up goals established by OAR 340-41-470, and the Federal and State statutory requirements as well as the requirements of the Federal Court. Instead one finds a glossed over retread of a master sewage plan update with some half thought out partial attempts to deal with the pollution of the USA System. Most important is a clear challenge to the time requirements for compliance with OAR 340-41-470 and to the authority of Oregon's Environmental Quality Commission.

2. This pattern of behavior by the USA of flouting Federal and state statutory, regulatory and permit requirements over the past decade must be faced by the Department and the EQC. The strategy of delay is documented in the Department files on infiltration and inflow, continuous sewage bypassing and dumping of raw sewage into the river, over 10,500 violations of their NPDES Permit during the past five years- many of these risked public health -, and violation of the land discharges of upstream plants. These illegal acts and the continuing to hell with the public use of the river posture raises serious questions as to the institutional capability USA and the Washington County Board of Commissioners to carryout the public trust responsibility of sewage management for Washington county residents. These past actions do not square with the recently developed and publicly relations oriented mission statement.

3. This is the third time in this process the public has been asked to respond to the essentially same types of incompetant but voluminous piles of written garbage supplied at great cost to the rate payers by prestigous engineering firms. The public is being abused. We are supposed to be commenting on a serious and workable set of alternative proposals that would accomplish the requirements of the TMDL's and waste load allocations and the other water quality criteria to restore and maintain the legal uses in the Tualatin within the time frames set by The Environmental Quality Commission.

SPECIFIC COMMENTS:

1. Can the Tualatin stand any more sewage in wet or dry weather?

Can the USA expand their present level of loadings. For example they propose to vastly increase the level of CBOD as plant capacity is increased to take care of future urban growth. The present level is illegally authorized by the Department in the permits for the five plants and even these illegal permit conditions are being violated. The Oregon policy has been stated time and time again by Sawyer and Nichols that *as growth in plant capacity is required the polluter will be required to increase the efficiency of his treatment and maintain the same level of pollutants discharged to the water environment. GROWTH IS TO BE MANAGED BY TECHNOLOGY EFFICIENCY NOT INCREASED DEGRADATION TO TO THE WATER ENVIRONEMNT.* Where in this report does the USA recognize this long standing policy? Pages 1-5. This goes directly to the question is USA at all committed to meet the ammonia nitrogen waste load allocations of OAR 340-41-470. The evidence they present says that because of growth they do not intend to meet these requirements. This position is clearly in defiance of the Commissions order.

2. USA fails to establish a clear set of alternatives.

It has been clear from the start of our law suits to clean up the Tualatin that USA has ~~three~~ basic options : (1) end of the line improvement within the known state of the art of the technology; (2) ground treatment through some combination of upland wetland and cropland irrigation to remove phosphates (3)Source reduction though detergent phosphate reduction legislation and pretreatment by industrial dischargers and (4) export of discharges to the Willamette or Columbia basins.

The USA has expressed interest and made statements regarding other options including increased storage for flow augmentation and use of low lying natural wetlands. Neither of which have any potential for solving problems of phosphate reduction and meeting waste load allocations. Yet USA continues to focus public attention on them as viable alternatives. Why? Such discussion can only confuse the public.

low flow augmentation required to meet permit wetlands

All four alternatives offer viable solutions. All have monetary and social costs and benefits and these should be be presented in a manner that the public could express a preference. The report fails to present the alternatives in any understandable format to allow comparison of costs and benefits. The report should present in a systems format appropriate sets of least cost combinations . DEQ is obligated to let USA know what discharge limits, if any, would be any less if the decision is to export the effluent to the Willamette from one or more plants.

3. USA continues to cry out in all forums that meeting water quality requirements will be enormously costly. Yet it does not develop costs of alternative strategies for problem solution. Further it continues to mix costs of growth- costs of treating more wastes from urban growth -with system change costs to meet the requirements of the Oregon and Federal statutes These should be clearly separated. Washington County rate payors are entitled to know how much they are paying for new hookups and how much they more must pay for their present sewage to meet water quality requirements. Rate payors are entitled to a competent analysis of the costs and benefits of realistic alternatives.

*Dubound
for improved
Parkland
2.5 to 4 or over
plus included
costs attached
to present
Dubound
waste treatment
51*

4. It would appear from reading the proposal that USA favors the most expensive technical fixes and has chosen consultants with capability in costly engineering solutions. On the other hand it appears that largely non structural options of land disposal are significantly more cost effective but are given little attention by USA both in their choice of consultants and in their recommendations.

5. USA has participated in Jackson Bottom wetland program with the intent of polishing sewage effluent. However there is no indication that there is a a needed for polishing. What there is a need for is phosphate removal and this will require the development of many acres of upland wetlands not bottomland wetlands whose soil profiles indicate little potential for phosphate removal. This low potential for phosphate removal is certainly the case with the soil profiles in the Jackson Bottom and most lowland wetlands in the Tualatin basin. Surely USA is aware of this and they are either attempting to dupe the public and show that wetlands are not a viable option or just have not reviewed current literature on the subject. *In any case an upland wetland phosphate treatment system is a viable option particularly when integrated with a cooperative water exchange for irrigation supply with Tualatin Valley Irrigation District.* Why is there not a joint operating agreement proposed for water exchange for sewage effluent between the two agencies as a serious alternative?

*Basis of
Statement
20,000,000
- 36,000,000
limit of
construction
If operate*

6.. Land disposal alternatives through upland wetlands management and irrigation on croplands needs careful planning to assure that waste water is treated sufficiently to remove toxics and heavy metals and that there is no threat to ground waters or consumers of food products. There is little in the history of USAs operations of their present facilities to give the public much confidence that this can be accomplished. Never the less USA should discuss this issue and show some awareness of the problems and solutions.

*Why no
investigation
take longer*

(A)

7. USA states that long used and industry accepted state of the art technical solutions need pilot project testing. It is our view that USAs strategy is one of delay. Most of the end of the line nutrient removal solutions described by USA have long been a part of sewage treatment plant technology. This is true of both engineering, chemical, and biological solutions for phosphate removal. Our perception is that this is a part of the continuing delay strategy of USA.

8. Delay is the most cost effective strategy for the USA under present regulatory arrangements. There is no penalty for not complying with either their current permit requirements or recent EQC orders. USA past jawboning delays have proved to them that continuing dialogue is a cheap alternative to installing and operating treatment facilities to meet permit and water quality requirements. The system rewards delay. Penalties must be established high enough to induce compliance.

①

MONDAY MARCH 13, 1989
LEONARD G. STARK
5050 S.W. CHILDS ROAD
LAKE OSWEGO OREGON
97035 (539-2807)

DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY - TULLAH RIVER
811 SOUTH WEST SIXTH AVENUE
PORTLAND, OREGON 97204-1590

DEAR COMMISSION:

FROM THE INFORMATION I HAVE
RECEIVED - TWO LETTERS FROM YOU 2/15/89
AND 3/11/89. LAKE OSWEGO 3/9/89 AND THE
OSWEGO 3/12/89 - AND MY PAST PARTICIPATIONS
IN ALL THE MEETINGS AND HEARINGS OF D.E.Q.
ON "TULLAH CLEAN UP" OTHER AGENCIES TOO;

= JUST A BRIEF INPUT =

① COST FRETON, URBAN WASHINGTON
COUNTY AND PORTIONS OF CLATSOP
HAVE BEEN MENTIONED. I SAY (AND I
WANT IT MADE CLEAR) I WILL BE INCLUDED
GET THE WHOLE WATER SHED OF
TULLAH INVOLVED. NOT JUST THE
TWO TO PAY THE "CARE" OF IMPROVING
MULTI-COUNTY HAS A LOT OF WATER
SHED, THE NORTH EAST PART OF THE
VALLEY (I KNOW THAT AREA WELL) CLEAN
UP THERE. I AM NOT SURE WHAT FUND
PARTICULARLY YAMHILL & CLATSOP COUNTIES.

② PIPING DISCHARGE AWAY ②

FROM TREATMENT PLANTS - DURHAM IS NOW MENTIONED. I DON'T BELIEVE IN DUMPING BUT UNWANTED DISCHARGE ON SOMEONE ELSE. BONNIE HAYS WILL BACK THAT UP. SPEND THAT MONEY TO UPGRADE OUR SEWAGE PLANTS. (THIS HAS BEEN MY INPUT ALL ALONG) WE NEED ALL THE WATER IN THE TREATMENT

③ ANOTHER OF MY THOUGHTS - BRING UP IN PLST - MORE WATER FOR AGRICULTURE WHEN WE NEED IT - LIKE BUILDING MORE (SEE ONE MENTIONED) SMALL DAMS WHERE THERE IS STEEP CANYONS - SO A LOT OF FARM LANDS WILL NOT BE TAKEN OUT OF PRODUCTION.

NOTE FORGET THE DAMS ON THE TREATMENT ABOUT CANTON - TOO BEAUTIFUL A VALLEY TO DESTROY, FARM LANDS TOO.

④ THERE AN INTERCOUNTRY WATER AGREEMENT POSSIBLE TO SIPHON FROM COASTAL SYSTEMS LIKE TRASK RIVER, MAYOR RIVER THE COLUMBIA.

WOULD BE CHEAPLY. BUT MONEY BATTEN SPENT THEN PIPING AWAY FROM RUDLEMAN

⑤ WETLANDS = CIVILIZATION CANNOT EXIST WITHOUT THEM = SAVE WHAT WE HAVE AND ON OPERATE MORE, WOULD CREATE A TAX INSTITUTE TO HELP

OUT THE PROPERTY OWNERS

6) CONTROL ON OWN TIMBER -
(WHAT IS LEFT) AND VEGETATION ON LOW LAND
THAT ARE BUSH - NOT ONLY DRINKS UP
WATER BUT ALSO PURIFIES OUR AIR,

7) THERE IS A "SUNRISE WATER
MANAGEMENT" STARTED - THAT CAN HANDLE
ANOTHER ONE OR TWO INPUTS OF THE
RUNOFF OF DEVELOPMENTS PHALING LOT
AND ROADWAYS

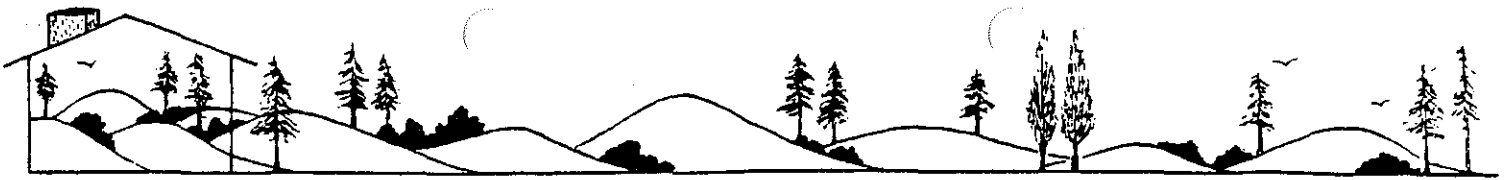
8) NON POINT SOURCES = THERE
HAS BEEN MUCH DEVELOPMENT ALONG
THE RIVER WITH OUT PROPER SEWAGE
SYSTEMS. THAT PALATE, DFC, HAS A
PRIORITY POINTS AT THAT - I BROUGHT THEM UP.

9) YOUR SEWER TREATMENT PLANT
I CAN UNDERSTAND THEIR PROBLEMS. THEY
HAVE TO ADDRESS THEIR PROBLEMS. THEN TO
DESIGN THE EQUIPMENT. THE ACQUIRING
LINA OF PERMITS, FINANCIAL, AND CONSTRUCTION
TAKES YEARS TO DO IT. ANOTHER YEAR OR TWO

10) FISH - TAKEN FROM RIVERBOURS
COMPREHENSIVE PLAN INVITORY SOME 20
KINDS OF FISH IN QUALITY, NOT SO BAD

IN CONCLUSION = TODAY = COSTLY BUT
NOT AN IMPOSSIBLE TASK IF WE ALL WORK
TOGETHER. I WILL THINK OF MONIE BEFORE
THE 21ST ON MARCH - GOD BLESS.

HAPPY EASTER TO ALL *Conrad G. Stah*



Lower Tualatin Valley Homeowner's Association, Inc.

A Non-profit Corporation

20401 Prindle Road

Tualatin, Oregon 97062

March 12, 1989

Mr. John Harrison
Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, OR 97204

RECEIVED
MAR 14 1989

Dear Mr. Harrison:

This letter is in response to the DEQ notice issued ^{Water Quality Division} 2/14/89 ^{Dept. of Environmental Quality} inviting comment on "A Program Plan to Comply with New Water Quality Standards in the Tualatin River."

The Board of Directors of Lower Tualatin Valley Homeowners Association, Inc. (LTVHO) discussed this matter at their meeting on February 21. By formal motion I, as President, was directed to respond to your 2/14 notice, as it concerns Unified Sewerage Agency's (USA) recently proposed plan. In summary fashion, the LTVHO position on the matter is as follows:

1. There is inadequate justification for USA's request for an extension of time from the deadline of June 30, 1993, as set last September by the State Environmental Quality Commission, to "the end of 1995 or early 1996".
2. Further moratorium on the cleanup, as mandated by EQC, will merely result in further procrastination by the dumpers of phosphorus materials into the river.
3. It has been amply demonstrated in testimony by professionals at several previous hearings that the technology now exists for meeting the EQC-mandated pollution reductions in the Tualatin River.

We expect to attend and further testify on the above points at the Public Hearing on March 14.

Sincerely,

Kenneth H. Wright

Kenneth H. Wright, President
LTVHO

cc: Clackamas Co. Board of Commissioners
Administrator, EPA, Region X, Seattle
Fred Hansen, Director, Oregon EQC

3/15/89

Brett Arvidson
12340 SW Faircrest
Portland, Ore 97225

RECEIVED
MAR 16 1989

Water Quality Division
Dept. of Environmental Quality

John Harrison
DEQ
811 SW Sixth Ave
Portland, Ore 97204

Subject: Comments On Program Plan for the Tualatin River

Dear John:

In reviewing the proposed USA program plan for the sewage treatment portion of the Tualatin cleanup, I feel the EQC should adopt the plan and give USA more time to comply with the standards. The USA program plan is start at improving the River. But any problem as complex as the Tualatin River cannot be changed in a day or even five years.

The program plan identified three basic methods of controlling phosphorus on the Tualatin River. The methods were treatment, transport, and water reuse. Each of these methods have considerable costs. None of these methods provide a clear cut solution to the problem.

Transport provides the clearest answer to the problem. Just transport the effluent to the Willamette and Columbia Rivers. I feel that these pipelines are the most pragmatic solutions, but the thought of dealing with the land use issues of this alternative makes me sick. This alternative will be in public hearing and court long past the five year deadline. Also the impact on the Willamette and Columbia is an open question. This alternative will also destroys the Tualatin as we know it today. USA effluent provides 60% of the river flow.

Water reuse such a irrigation, land application, and wetlands is a popular placebo. Unfortunately land application of effluent currently cannot be used on food crops. This fact severely limits the population willing to use the effluent. Also the effluent just doesn't disappear, it percolates into the soil and runs off into the receiving streams. This can lead to groundwater pollution and continued stream pollution. According to EPA sources such as the Design Manual for Constructed Wetlands and the Land Application Manual, such a system could only expect to remove 40-55% of phosphorus. This low level of phosphorus removal will not meet the instream standards required. It would be a waste to spend so much money and achieve so little.

Treatment offers some hope to solve this phosphorus issues. Some treatment schemes indicate that the .075 mg/l stream standard could be achieved though a treatment process such as two stage lime. These type of treatment processes should be approached with extreme caution. Many lime plants have been constructed, but only two remain in operation. These plants are mechanically intensive, use obnoxious chemicals, prove difficult to operate, and are extremely expensive. I feel it will be difficult to consistently maintain the stream standard with this treatment technology. These plants also produce huge amounts of solid waste which creates a different waste problem. This lime waste could be more toxic to the environment because it settles metals and viruses in the waste that should not be settled.

In light of the lack of clear cut solutions to the phosphorus problems, any attempt at eliminating the chemical should be attempted carefully. Attempting to implement the above alternatives without proper study and positive assurance of success will doom this program to failure.

For the Agency's program plan to succeed, requires the mobilization of technical skills, developing financial resources, administering a large construction program, and operating the final product work. I feel the Unified Sewerage Agency is the organization best suited to dealing with this issue. But the Agency is not doing this program for its own good. It is representing the interests of the citizens of Washington County. Give this program the time to properly evolve or else the people of Washington county will experience the failure. A program with this level of importance deserves the time to do the job right the first time.

Sincerely,

 Brett Arvidson



CITY OF RIVERGROVE
P.O. BOX 1104 • LAKE OSWEGO, OREGON 97034

RECEIVED
MAR 20 1989
March 15, 1989
Water Quality Division
Dept. of Environmental Quality

Mr. John Harrison
DEQ
811 SW 6th Avenue
Portland, OR 97204

Dear Mr. Harrson:

Attached, in response to DEQ's Public Hearing regarding USA's water quality standards for the Tualatin River, is a resolution adopted by the City Council of the City of Rivergrove.

Sincerely,

Annette McFarlane
City Recorder
City of Rivergrove

RESOLUTION NO.100-89

Before the City Council of the City of Rivergrove

WHEREAS, the City of Rivergrove is adjacent to the Tualatin River;
and

WHEREAS, the Tualatin River is recreational and natural resource
to the residents of the City; and

WHEREAS, the Tualatin River is stressed by pollutant loads contri-
buted in part by sewerage treatment plants of the Unified Sewerage
Agency (USA); and

WHEREAS, the EQC has adopted an order requiring significant reduction
in pollutant loads; and

WHEREAS, in response to that order, the USA has developed a plan
requesting a 3-5 year extension for implementation of a clean-up
plan;

NOW, THEREFORE, the City of Rivergrove resolves as follows:

The City opposes a timeline extension for the USA's river clean-up
and finds that the USA has not properly proven its case that a time
extension is necessary; in particular, that low-cost, simple tech-
nologies such as wetlands treatments have not been adequately anal-
yzed.

ADOPTED, by the City of Rivergrove at its City Council meeting on
March 13, 1989.


Ted Creedon, Mayor

Attested:


Annette McFarlane, City Recorder

Mr. John Harrison
Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, OR 97204

RECEIVED
March 16, 1989
MAR 20 1989

Water Quality Division
Dept. of Environmental Quality

Dear Mr. Harrison:

This letter is a response to the DEQ's public notice of February 14, 1989, which invited public comments regarding the Unified Sewerage Agency's program plan and time schedule describing modifications to their sewage facilities to achieve waste load allocations for discharges of ammonia and total phosphorus.

There is no question the lower Tualatin River fails substantially to satisfactorily assimilate presently discharged sewage treatment plant effluents and some other anthropogenic substances that find their way into it. However, to assume that the extremely costly removal of total phosphorus from the sewage effluents, and control of diffuse phosphorus sources from land use activities, will bring about better water quality and a perceptible reduction of algal production in the lower river is without sound factual basis.

Algae "blooms" are not necessarily proportional to the availability of total phosphorus in the water mass. Algal production is a function of a broad array of chemical and physical factors. Only in phosphorus deficient waters is it a limiting and critical environmental factor for algal production. Only minute amounts of phosphorus are required by algae to carry out their life functions. Phosphorus in excess of the minimum algal need is a harmless substance in the water. It is not toxic. It is an element necessary to most life. It is invisible in the water. Over long periods of geologic time phosphorus will be re-incorporated with other substances in the earth's crust---like the very common phosphorus nodules on the ocean floor.

In the case of the Tualatin River, water quality data show that natural background concentrations of available phosphorus can supply the needs of all algal blooms that could reasonably be expected to develop within the limits of other chemical and physical conditions of the drainage basin. The natural phosphorus is from the marine sediments that form the geologic basin. Thus, the additional phosphorus from human sources is a surplus item of little consequence.

In short, I bring to your attention that partial control of algae in the Tualatin River Basin can ideally be achieved only through the management of total wastes sources and land use. Phosphorus control and removal will provide little if any measureable benefit. Worse yet, the high cost of phosphorus removal from sewage treatment plant effluents in this case would constitute a gross waste of public funds.

(2)

The DEQ and EQC have inadvertently placed the State of Oregon in this untenable position on the Tualatin River by their earlier adoption of an unrealistic chlorophyll study trigger limit that has subsequently been applied as a chlorophyll/algae standard. Now the DEQ and EQC are attempting to enforce the chlorophyll/algae limit with a politically driven phosphorus standard. Out of all this Tualatin River ruckus, the DEQ and EQC need to regroup and adopt a scientifically based, realistic phosphorus standard.

Unfortunately, the DEQ will eventually discover after all of the scenerios for waste treatment, additional water storage projects, and land use controls are played out to a costly end that algal blooms will still proliferate in the lower Tualatin River Basin. Ever expanding impacts of human populations and activity in the drainage basin, coupled with the limited water supply, will quickly overcome costly improvements in water quality. Remember that it was only 10 or 12 years ago that the combination of Hagg Lake stored water releases and the regional Unified Sewerage Agency facilities were said to be a long range answer to the river's water quality problems..... much of this happened with U.S. Environmental Protection Agency urging and funding.

Some kind words of respect for the value of algae must also be brought to your attention. Algae, in any form or combination of varieties, is both nature's cleansing force and basic food chain item at work in the river system. Without it, the river would be in much worse condition with low dissolved oxygen levels.

We have heard from special public interest groups about the terrible algal conditions in Lake Oswego brought about by nutrient laden water entering from the Tualatin River. This is a half truth. The Tualatin River water does not improve water quality conditions in Lake Oswego. However, Lake Oswego was heavily laden with algae long before the Tualatin River drainage basin was filled with people and attendant sewage treatment plants. Lake Oswego was choked by algal blooms during summer even in the years when the middle Tualatin River was pumped dry for irrigation purposes.

A history of earlier algal proliferation problems in Lake Oswego may be found in the lake management corporation's records. Other significant factors of the immediate Lake Oswego drainage basin play into its algal conditions. The lake was originally created in a large part by damming and flooding swamp and bog lands having natural nutrient richness. During most of its earlier history, local septic tank drainages seeped into the lake. Now the urban drainage off extensive development surrounding the lake add nutrients. Thus, the shallow configuration of the lake basin, coupled with the historical and present drainages directly entering it, will continually support choking algae

Page 3, Carter

blooms...even if the Tualatin River waters were totally eliminated.

Something also needs to be said about the allusion that the construction of more water storage reservoirs in the upper Tualatin River Basin will greatly improve lower river water quality. While it would provide some dilution water, it is not likely to result in more than token improvement in lower river algae conditions. There is the added problem that a water storage basin is also another algal production basin. Algal production in Hagg Lake is verification of this fact.

The Unified Sewerage Agency's proposal to reduce ammonia concentrations in their waste effluents should be given very high environmental and economic priority. Ammonia, as discharged, is toxic to aquatic life above certain concentrations, it is a readily available algal nutrient, and its conversion to stable compounds demands large quantities of dissolved oxygen. These undesirable characteristics should be eliminated from the disposal area whether inside or outside the Tualatin River Basin. Ammonia is a very treatable parameter and the resulting environmental benefits are great.

If the Unified Sewerage Agency ultimately determines that the export of sewage treatment plant effluent out of the Tualatin River Basin is a viable option, the inclusion of hydroelectric power generation should also be evaluated as a way to help defray costs.

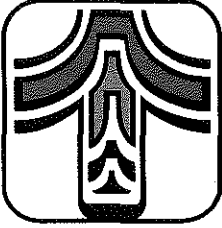
Sincerely,

Glen D. Carter

Glen D. Carter

cc: Environmental Quality Commission
Unified Sewerage Agency

*156 N.E. 9th Ave.
Hillsboro, OR 97124*



CITY OF TUALATIN
18880 SW MARTINAZZI AVE. PO BOX 369
TUALATIN, OREGON 97062-0369
(503) 692-2000

RECEIVED
MAR 20 1989

Water Quality Division
Dept. of Environmental Quality

March 17, 1989

John Harrison
Oregon Department of
Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

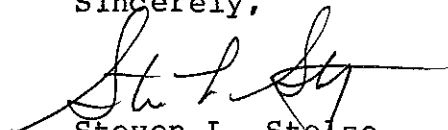
RE: Unified Sewerage Agency's Program Plan Submission

Dear Mr. Harrison:

The City of Tualatin appreciates the opportunity to comment on USA's program plan for meeting water quality standards in the Tualatin River Basin.

The City supports any activities which are designed to improve water quality in the Tualatin River Basin. However, because of the potential costs and impacts of these activities, the City feels that any decisions regarding implementation of these control measures needs to be properly analyzed and well thought out prior to taking any action. The City is very concerned that the benefits received by these actions relate to the costs of the cleanup action.

Sincerely,


Steven L. Stolze
Mayor

/gk
a:DEQ0317.1tr

JOHN HARRISON
811 SW SIXTH AVE
PORTLAND, OREGON 97204-1390

MAR 20 1989

March 18, 1989

Water Quality Division
Dept. of Environmental Quality

Dear Mr. Harrison

The USA report certainly covers a lot of possibilities. USA should be commended in imaginative thinking ranging from export of the problem to digesting it in place. I believe it is unfortunate that its "recommendations" only guarantees further stalling on cleanup.

It has a nice list of theoretical possibilities that need further study. None of which currently allows for the standards to be met. It requests time to study these possibilities and presumably adopt one of them. It leaves unspoken the consequence of finding none of the possibilities acceptable.

If they study each one and find that the cost is too expensive relative to the results they will have the same request as they do now. Its just too expensive to comply given the current knowledge.

DEQ/EPA needs to stay with the schedule adopted. Fine USA for being late with the study. Fine USA for not having a study that complies with the standards. The study in front of you requests changes to standards etc, it does not put forward compliance with the standard. Finning USA at below the cost of its threat to implement uneconomical solutions pressures USA into cleaning up as soon as possible by making it expensive not to do so, but also makes it cheaper for them to avoid uneconomical quick fixes.

I want to address the quick fix of exporting the discharge. That proposal is wholly inappropriate. With all the trouble of ocean pollution, river pollution, Willamette and Columbia, we cannot and must not dump our problem on someone/somewhere else.

Untreated sewage is the appropriate word here, if it needs to be treated in the Tualitin Basin it needs to be treated for all other basins as well. We created the problem we must fix it. Beggering our neighbors never has worked and should not work now. The Columbia and the Willamette are not open sewers for our discharge.

Referenced several times but not given enough emphasis is the contributing solution of increasing stream flow during dry periods. Rights to irrigation water only partly addresses this part of the solution. The pitiful reference to hindsight management of past years water to control flow is a far cry from managing that same water before the weather pattern has become a reality. However streamflow augmentation is the route to go, both in its cost as well as its ancillary benefits.

Numerous ponds, lakes and reservoirs can and should be built to collect winter water on the tributaries. Release of this water through the summer specifically cures much of the problem. Allowing for such waters specifically addresses the wider environment that in part should be your concern as well. Wildlife, mosquitoes excluded, will be enhanced, ground water will be enhanced and general water quality will be enhanced.

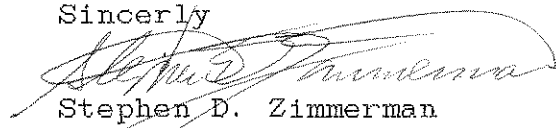
USA has called for cleaning the ditches and storm drains as part of

2.
their near term plan. This as a matter only if ceases the problem. By increasing the flow they are decreasing ground water absorption. Ground water levels for the dry period are reduced. This concept immediately bumps into a problem which at this point cannot be addressed by USA.

Let me remind you that you are addressing the Tualitin Basin and are not constrained by the limitations of the agency that the County appointed to deal with the issue. More specifically if there are "solutions" that must be part of the overall plan, that cannot be addressed by the Agency the County wants to speak for it, you must reject the plan. The plan must address the problem without being fettered by artificial boundaries. Building codes must be part of these considerations. Currently the building codes aggravate the problem, cause the problem and are exemplary of the problem. Sprawling buildings and parking lots cover over the absorption areas, increase run off flow which increases damage caused by run off. All these things are environmental concerns that cannot be excluded from the plan to protect the Tualitin Basin.

You cannot agree to plans that preclude implementation of more environmentally desirable solutions. That does not mean you have a predetermined solution but it does mean that certain solutions are undesirable.

Sincerely



Stephen D. Zimmerman
918 NE Sunrise Ln
Hillsboro, Oregon 97124



Tektronix, Inc.
Tektronix Industrial Park
P.O. Box 500
Beaverton, Oregon 97077

Phone: (503) 627-7111
TWX: 910-467-8708
Telex: 151754

March 21, 1989

Mr. John Harrison
Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

RECEIVED
MAR 21 1989
Water Quality Division
Dept. of Environmental Quality

RE: Tualatin River Program Plan

Dear Sir:

Tektronix, Inc. has opposed the passage of both the 15 ug/l chlorophyl "a" action level and the implementation schedule to comply with phosphorus and ammonia standards set for the Tualatin River. Tektronix, Inc. finds itself in an awkward position to be opposed to much of this process from the start, yet we are a supporter of clean water and good environmental programs. The rules adopted for the Tualatin River meet neither criteria.

First, the rules adopted for the Tualatin River are neither effective nor cost-effective. In our view, and in the view of the experts that we have consulted, the rules are technically incompetent and non-responsive to the issues. There is no proof they will work. Secondly, as we have stated before, the cost of compliance with standards that have never been technically achieved before anywhere in the country will likely result in tremendous economic disruption in the Tualatin Basin. These beliefs are coming true in the program plan proposed to you at the March 14, 1989 hearing. We offer the following comments on that plan;

The standards adopted by the Environmental Quality Commission for total phosphorus and ammonia in the Tualatin River are so stringent that we do not believe that they can be met without growth moratoriums in Washington County. Therefore, we support

Mr. John Harrison
Page 2
March 21, 1989

the USA proposal to export effluent from the Tualatin River to the Willamette River. We realize as we commented before, that this solution would not be popular with affected citizenry. We also want to point out that we have previously testified in favor of the wetlands proposal as a better solution to the Tualatin River problem. It is the tightness of the standards imposed by the Environmental Quality Commission that drive the solutions available today.

We strongly disagree with the proposal of USA to include facility expansion plans into the Tualatin River Plan. We oppose paying for the anticipated additional loads USA is forecasting through the year 2005. Total costs of meeting the TMDL standards are estimated by USA to be \$62-112 mil. These are the only costs which should be passed on to existing rate payers. The cost of new construction for expansion and new hook-ups are not the responsibility of existing customers but should be financed through the construction grants program or similar construction bonds which are repaid by hook-up charges assessed to new customers.

Lastly, a review of the impact and effectiveness of the adopted TMDL standards are in order. The review should consider the financial impact of the compliance plan submitted and the comments received at the public hearing in opposition to the loss of river flow due to the exportation of Tualatin River effluent. We suggest that the DEQ present a Tualatin River TMDL progress and impact report to the Environmental Quality Commission to insure the present rules, technology and compliance deadlines are realistic and will provide the desired results.

Thank-you for the opportunity to comment.

Respectfully,



Thomas C. McCue
Environmental Programs Manager



①
RECEIVED
MAR 21 1989

Water Quality Division
Department of Environmental Quality
Northwest Environmental Defense Center
10015 S.W. Terwilliger Blvd., Portland, Oregon 97219
(503) 244-1181 ext.707

March 21, 1989

Mary Halliburton
John Harrison
Department of Environmental Quality
Water Quality Control Division
811 SW Sixth Ave
Portland, Oregon 97204

Re: Unified Sewage Agency's Final Draft Program Plan

Dear Ms. Halliburton and Mr. Harrison:

Thank you for the opportunity to comment on the Unified Sewage Agency's ("USA") Final Draft Program Plan. The Northwest Environmental Defense Center ("NEDC") concurs with many of the DEQ's questions and comments which are attached to the USA Final Program Plan as Attachment B. As you know, most of these questions and comments remain unanswered in USA's Final Program Plan. NEDC encourages DEQ to push for responsive answers to the questions and comments posed by DEQ.

Like DEQ's comment number 2 and number 5, NEDC finds unpersuasive and similarly rejects USA's statement that "only one plant in the United States has limitations as stringent as those proposed by DEQ". NEDC also finds unpersuasive and similarly rejects USA's suggestions that phosphorus removal is a relatively new technology. The Plan asserts "considerable uncertainty" whether the treatment alternatives being evaluated can achieve the "extremely low" limits that have been established, while persistently ignoring that many other treatment plants have been successfully meeting similar or lower phosphorus levels for many years.

NEDC notes that DEQ's comment 12 points out the essential problem with USA's attitude toward Oregon's water quality requirements in that USA seems to be capable of completing a major expansion within three years, but seems to continually need more time to comply with water quality standards. NEDC believes that its time for USA to begin protecting the water quality of Tualatin River, particularly since this is apparently part of USA's mission statement.

As mentioned in DEQ comments number 7, 12 and 14, NEDC also questions why continual pilot testing is required, instead of actual implementation to achieve compliance.

In accord with DEQ's inquiry in comment 15, NEDC suggests that USA work more aggressively with the irrigation districts and with DEQ to reuse effluent for irrigation purposes in the Tualatin Valley. From the limited information presented in the USA Plan and elsewhere, it is increasingly clear that the most environmentally feasible, growth accommodating and cost effective option is to reuse USA effluent to replace much of the irrigation water presently being withdrawn from the river.

In accord with DEQ comment 17, NEDC questions why a time extension is needed.

Similarly, in accord with DEQ comment 18, NEDC believes that the short term and long term alternatives need to be integrated to achieve compliance by 1993 as required by EQC.

NEDC agrees with USA's conclusion that its overall program plan "must focus on removing the effluent from the Tualatin River as the ultimate, long-term solution." NEDC does not agree that this conclusion should infer export of effluent from the Tualatin Basin. The out-of-basin export option that has remained at the top of USA's agenda throughout the past two years is counter productive -economically and for water quality.

NEDC urges DEQ to mandate that USA comply with the laws of the United States and the State of Oregon. As you know the federal Clean Water Act states that

"the objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this chapter-

(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

...."

Page Three

33 USC § 1251(a). Since 1973, the Water Pollution Control law of the State of Oregon at ORS 468.715 has stated:

"Pollution of any of the waters of the state is declared to be not reasonable or natural use of such waters and to be contrary to the public policy of the State of Oregon, as set forth in ORS 468.71.0."

As you know, in an effort to begin implementing this policy, the EQC has adopted a process to begin establishing TMDLs and water quality management plans for Oregon's most severely polluted rivers, beginning with the Tualatin River Basin. On July 8, 1988, the EQC adopted rules establishing new water quality criteria for phosphorus and ammonia in the Tualatin River. On September 9, 1988, the EQC adopted a schedule that requires compliance with the revised Tualatin River water quality criteria by June 30, 1993.

We strongly urge DEQ/EQC to follow through with its commitment to begin to cleanup the Tualatin. The law must be enforced and this means that USA must be required to prepare a plan which achieves compliance by June 30, 1993. Similarly, DEQ/EQC must ensure that this plan is implemented by June 30, 1993.

In this regard, the USA Plan is very disappointing. Instead of creating a plan which will achieve compliance with the law, USA continues to try to modify and delay the water quality planning process established by EQC. Rather than proposing a program to meet EQC's regulatory program, the USA Plan repeatedly complains that more time will be needed and that the standards must be relaxed. For example, the first page of USA plan exemplifies USA's attitude by proposing modifications to EQC's permit structure and stating that the time required to "plan, design and construct" (not implement) will exceed the five years specified by EQC.

The USA Plan simply reflects a continuation of USA's persistent actions to frustrate and stall any water quality efforts at every opportunity and for as long as possible. NEDC disputes USA's self-serving description of how it "alerted" DEQ to a trend toward a dissolved oxygen deficiency in the river in early 1980. It is NEDC's recollection that USA's "alerting" was by way of a request that the water quality standard for dissolved oxygen in

Page Four

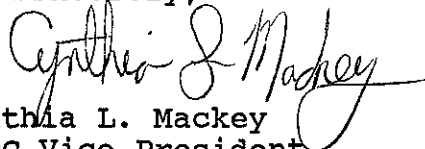
the Tualatin River be relaxed, in order that USA could continue dumping sewage into the river without more extensive treatment. In the same spirit, USA's first response to NEDC's notice of 10,000 violations of USA sewage discharge permits was to request DEQ to relax USA permit limits. If USA had put as much energy into compliance with the water quality standards as it has into avoidance of compliance, USA would not be just now beginning to study the excessive infiltration and inflow into its sewer systems. If water quality protection had been mandated and enforced, USA would have devoted the effort necessary to correct this problem years ago.

Unless DEQ does something different, it is more cost effective for USA to keep stalling. In order to render compliance the most cost effective alternative for USA, DEQ must impose penalties or initiate some other enforcement action. Until DEQ takes serious enforcement action, DEQ has a serious problem on its hands since USA has no motivation to comply with Oregon's water quality standards.

NEDC is very disappointed and frustrated with USA's failure to recognize the need to meet Oregon's water quality standards. NEDC urges DEQ to require USA to produce a program plan designed to achieve compliance with the schedule adopted by EQC, rather than USA's idea of "as soon as possible."

Thank you for the opportunity to comment on USA's Final Draft Program Plan. We look forward to aggressive action by DEQ and EQC which will begin the cleanup of the Tualatin River.

Sincerely,



Cynthia L. Mackey
NEDC Vice President

①

JOHN HARRISON
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
811 SW SIXTH AVE
PORTLAND OREGON 97204

DEAR MR HARRISON

FAX 326-3399

RE: TUALATIN RIVER
USA PROGRAM PLAN

I RESIDE AT 9055 SW EDGEWOOD STREET IN TIGARD OREGON IN THE
IMPACT AREA. MY COMMENTS ARE MY PERSONAL OPINIONS MADE ON
MY OWN TIME.

PLEASE INCLUDE MY COMMENTS ON THE PUBLIC HEARING AS FOLLOWS:

1. THE \$30/MONTH SEWER CHARGE DOES NOT APPEAR TO BE
SIGNIFICANT WHEN COMPARED WITH POTENTIAL BENEFIT TO THE
TUALATIN RIVER; HOWEVER THIS IS ONLY A PART OF THE COST.
THE STORMWATER SYSTEM COULD EASILY COST \$30/MONTH AND WITH
INFLATION, EXTRAS AND UNKNOWNNS, TOTAL COST COULD GROW TO
\$100/MONTH. DEQ HAS CONTINUALLY FAILED TO PROVIDE THE
PUBLIC WITH AN OVERALL COST. CONTRARY TO SOME, I FEEL THE
COST ESTIMATES COULD BE TOO LOW. *WHEN IS THE COST TOO HIGH?*

2. I SUPPORT THE USA PLAN TO EXPORT EFFLUENT TO THE
WILLAMETTE RIVER. PRIOR TO FORMATION OF USA, BEAVERTON AND
TIGARD OPERATED WASTEWATER TREATMENT PLANTS ON FANNO CREEK.
EVEN WITH THOSE PLANTS COMPLETELY OFF LINE TODAY, FANNO
CREEK REMAINS WATER QUALITY LIMITED AND PRODUCES ALGAE
GROWTH. EPA DESIGN MANUAL " CONSTRUCTED WETLANDS AND
AQUATIC PLANT SYSTEMS FOR MUNICIPAL WASTEWATER TREATMENT "
STATES THAT "PHOSPHOROUS TRMOVAL IN WETLANDS AND AQUATIC
PLANT SYSTEMS IS NOT VERY EFFECTIVE ...". PHYSICAL/CHEMICAL
TREATMENT HAS NOT PROVEN TO TREAT TO THE DEGREE REQUIRED.
IT IS QUITE CLEAR THAT USA COULD SPEND MILLIONS OF DOLLARS
ON PLANT FACILITIES AND NOT MEET PERMIT REQUIREMENTS OR
SIGNIFICANTLY REDUCE THE ALGAE GROWTH ON THE TUALATIN.
PRESSURE WOULD THEN BUILD TO TRY SOME OTHER COSTLY OPTION A
ADDITIONAL MILLIONS

GRAVITY?

FOR THE DURHAM PLANT
EXPORT PROVIDES THE MOST EFFECTIVE MEANS OF PHOSPHOROUS
REMOVAL FROM THE RIVER AND WOULD:

TRANSPORT TREATED WASTEWATER TO A WATER BODY THAT HAS
ASSIMULATIVE CAPACITY.

REDUCE ENERGY CONSUMPTION ON ADVANCED TREATMENT.

REDUCE SLUDGE GENERATION (WHO IS ADDRESSING THIS ISSUE) AND
DISPOSAL.

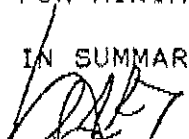
REDUCE THE POTENTIAL FOR UNLIMITED EXPENDITURES ON
NON-EFFECTIVE PROPOSALS.

2

3. USA'S TIMELINE SHOULD BE EXTENDED BY A MINIMUM OF 2-3 YEARS. DEQ HAS PRESENTED NO DATA TO SHOW THAT ANY ONE TECHNOLOGY CAN MEET THE DISCHARGE CRITERIA FOR PHOSPHOROUS. AGAIN THE EPA DESIGN MANUAL SHOWS WETLANDS TO BE INEFFECTIVE AT REMOVING PHOSPHOROUS (IE ARCATA CALIFORNIA TOTAL P OF 6.1 mg/l). IT APPEARS A COMBINATION OF TREATMENTS SYSTEMS WILL BE REQUIRED. TIME TO STUDY THE MOST EFFECTIVE COMBINATION MUST BE MADE AVAILABLE.

4. THEIR APPEARS TO BE AN ATTITUDE AT DEQ THAT COST IS NO OBJECT; HOWEVER COST DOES IN FACT RELATE TO ENERGY. WITH THE TREND IN GLOBAL WARMING IT IS OUTRAGES IN MY OPINION THAT DEQ BE PROPOSING, WITH NO STUDY, UNLIMITED ENERGY USE FOR MINIMAL BENEFIT.

IN SUMMARY, I SUPPORT THE PROPOSED USA PROGRAM PLAN.


GARRY OTT



UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY

RECEIVED
MAR 22 1989

Water Quality Division
Dept. of Environmental Quality

March 21, 1989

Mary Halliburton, Hearings Officer
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

Dear Ms. Halliburton:

SUBJECT: USA Final Draft Program Plan; Tualatin River TMDLs

Attached is the complete text of the oral testimony of Mr. Bruce Willey, regarding USA's final draft program plan. That document also contains all material presented as slides in the March 16, 1989 public hearing. In addition to that material, USA requests that this letter be included in the record of the hearing.

The Unified Sewerage Agency (USA) made timely submittals of the first draft and final draft program plans as directed by the Environmental Quality Commission (EQC) in its September 9, 1988 meeting, and as set forth in OAR 340-40-470. The intent of those rules was to require submittal of a Program Plan as the first step in implementing TMDL's for phosphate and ammonia for the Tualatin River. The rule gave a brief description of the major substantive elements of the program plan. It required a "plan for a plan," in other words, a description of the alternatives to meet the TMDL's, and a road map of tasks and schedules necessary to achieve the TMDL's. It was contemplated that the principal alternatives identified in the program would be subject to further analysis where necessary. The EQC is to receive periodic status reports, and is to review and decide upon the program plan. DEQ and EQC will have review and approval authority for the chosen alternatives for implementation.

In DEQ's staff evaluation of USA's first draft program plan, more detailed requests for information and evaluation were made. Based upon DEQ staff's written comments, USA substantially revised the Program Plan, resulting in the Final Draft Program Plan of February 14, 1989.

USA responded to most of DEQ staff's questions within the text of the Final Draft. We made no response to questions regarding the details of alternative methods of financing major capital expenditures. We believe this is more appropriately determined when an alternative is selected, and project cost and schedule are more certain. USA made no direct response to DEQ's comment regarding the relative costs and benefits of five-year vs. seven-year compliance. We did not believe a meaningful response was possible, when the preferred alternative is not yet known.

Mary Halliburton
March 21, 1989
Page 2

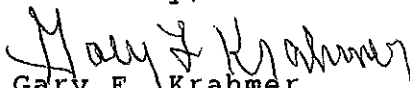
The Program Plan does reflect review of certain measures which could be implemented more rapidly, would involve substantial capital costs, would substantially reduce phosphate discharge, but would not meet the required loads. They were rejected as not meeting the TMDLs. Based upon testimony received at the March 16, 1989 public hearing, it appeared that USA had identified all alternatives that could meet the TMDLs.

It is important to note that the Program Plan would meet the originally proposed time line for four out of six treatment facilities. At the two largest treatment facilities, Durham and Rock Creek, USA proposes to meet a different time schedule. USA also has proposed that DEQ consider a somewhat revised approach to the waste load allocation for phosphate, in order to expand the alternatives available to meet that limit, and possibly to reduce the cost and time necessary to achieve the limit. Based upon DEQ's information as to method of calculating waste load allocations, USA believes that its proposed allocation would have no detrimental impact upon water quality in the river. In addition, this would enable USA to meet the phosphate load allocation at Rock Creek within six months of the 1993 target date.

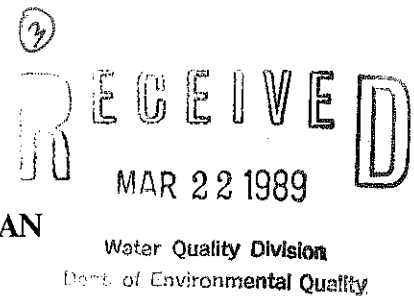
The June 30, 1993 date was established by the EQC without the benefit of any information as to the time needed to select and implement particular tasks at particular treatment facilities. In view of this, the Commission called for a reexamination of the schedule as part of the TMDL rule itself. It is in this context that USA proposed the revised schedule within the program plan based upon evaluation of the major alternatives and the probable tasks necessary to select and implement the preferred alternative. USA believes a note of caution is in order. The schedule in the Program Plan assumes rapid review and positive action on all necessary facilities, permits, and approvals at many levels. Any delay or denial of necessary approvals may affect the timing of construction or other compliance tasks.

USA appreciates the efforts of DEQ staff in providing constructive criticism to us in the review process. We share DEQ staff's concern that major facilities not be built, only to find that new developments would make them obsolete in a short time. USA believes that the Program Plan, as proposed, is a responsible, direct, and reasoned approach to the challenge presented by the EQC's September, 1988 rules for the Tualatin. We ask that the Program Plan be approved.

Sincerely,


Gary F. Krahmer
General Manager

**TESTIMONY OF BRUCE R. WILLEY
AT THE PUBLIC HEARING ON
THE UNIFIED SEWERAGE AGENCY'S PROGRAM PLAN
MARCH 14, 1989**



SLIDE NO. 1 - TITLE SLIDE

I am with the firm, CWC-HDR, and was a consultant to the Unified Sewerage Agency during the preparation of the Program Plan.

This morning, I will provide an overview of that plan.

I will try to keep my presentation as brief as possible; but we believe that it is important to discuss the plan in sufficient detail to:

- identify critical issues
- outline the actions the Agency proposes to undertake to comply with the new TMDL's
- outline the implementation schedule for those actions.
- and discuss the rationale behind the Agency's overall plan

SLIDE NO. 2 - THE CHALLENGE

Last summer, when EQC adopted the nutrient TMDL's, a tremendous challenge was set before USA--a challenge comprised of difficult technical, implementational and financial elements.

On the technical side are the effluent quality criteria themselves.

USA's existing treatment plants already provide a high level of treatment--better than more than 95 percent of the other treatment plants in the country. Despite this high level of treatment, water quality in the Tualatin River has deteriorated, prompting EQC to adopt stringent, new effluent limits for phosphorus and ammonia-nitrogen. As we shall demonstrate shortly, the phosphorus limits represent the most stringent effluent criteria in the nation.

EQC also mandated an extremely tight schedule for meeting the new limits. By the summer of 1993, 4-1/2 years from now, USA is required to have the necessary treatment facilities or alternative management practices in place and operating. But as we will show you, the compliance alternatives available to the Agency have significant technical and implementation issues that must be resolved; and a number of the alternatives involve large public works facilities that cannot be planned, designed and constructed overnight.

Finally, the new rules on effluent quality occur at a time when USA's major treatment facilities are approaching capacity and must be expanded; and at a time when the Agency must undertake a substantial sewer construction program. This combination of needs creates a tremendous financial challenge to the Agency.

SLIDE NO. 3 - TWO-PART PLAN

To address this challenge, the Agency has divided its overall plan into two parts:

- Interim Plan
- Long-Term Plan

The goal of the interim plan is to implement measures at each treatment plant that will achieve compliance with the nutrient criteria as quickly as possible.

By contrast, the long-term plan focuses on potential solutions that require longer periods for development and implementation. It focuses on strategies that can serve the needs of the Basin 20 years from now and ultimately.

It is important to recognize that these two plans will be implemented concurrently and that they intermesh to form USA's overall plan. An issue that the Agency is very concerned about is the possibility of incurring large expenditures on interim facilities that do not fit into the long-term solutions.

SLIDE NO. 4 - CONCEPT DRAWING

Before we get into the details of these plans, I would like to spend a couple of moments outlining the basic concepts behind USA's overall plan.

Ideally, USA would like to reuse all of the effluent from its plants by using those approaches identified on the right side of this slide, such as:

- Irrigation of landscaping and crops
- Upland wetlands systems

Unfortunately, the current demand for reclaimed water is not sufficient to allow reuse to serve as the primary disposal method for the Agency's larger plants.

Right now, USA could make available 16,000 acre-feet for reuse; by the year 2005, that volume is projected to increase to 34,000 acre-feet. That equates to 8,000 to 17,000 acres of irrigable land. The upper end of that range is roughly 1/4 the size of the current urban area in Washington County.

Reuse is made further difficult by the fact that:

- 1) TVID satisfies most of the Basin's demand for agricultural water.
- 2) There are no regulations or guidelines which allow use of reclaimed water on consumable crops or in "dual pipe" systems for landscape irrigation.

Because of these constraints, the Agency must also develop alternative disposal methods such as treatment and discharge to the Tualatin River or treatment and discharge to other receiving streams.

Nonetheless, in concert with whatever disposal methods are selected, the Agency will continue to pursue opportunities to maximize the amount of effluent that can be reused.

SLIDE NO. 5 - INTERIM PLAN

An interim plan has been developed for each treatment plant.

In evaluating alternative approaches for each plant, two criteria were used:

- Can the approach achieve the TMDL's?
- Can the approach be implemented in a short time frame, recognizing EQC's five-year schedule?

These criteria effectively limit the number of feasible alternatives at each plant to one or two. However, even some of these alternatives have constraints or uncertainties associated with them that may prevent their implementation.

During the next few minutes, I will review each plant--starting with the simplest cases and moving to the more complex.

Obviously, the most simple plant is Gaston, which will be removed from service.

SLIDE NO. 6 - FOREST GROVE, HILLSBORO WEST AND BANKS

At the Forest Grove, Hillsboro West and Banks treatment plants, USA irrigates all effluent during the summer; consequently, no effluent is discharged to the Tualatin during critical water quality periods.

USA intends to continue this practice and to upgrade and expand its facilities. A key focus of the upgrade will be the prevention of any flows from storage or irrigation practices from reaching the river.

When the irrigation systems were installed, the irrigation system extended from June 1 to October 30. The season has subsequently been expanded by 45 days. This change substantially effects storage facilities for irrigation water because the longer season often overlaps periods of higher flows in the river when there is no demand for irrigation water. USA requests that DEQ modify the definition of the summer season to take river flow into consideration. This could reduce costs without any apparent impact on water quality.

All of the activities identified for these plants can be implemented within EQC's schedule.

SLIDE NO. 7 - DURHAM AWTP

From an effluent quality standpoint, the most severe impacts of the new nutrient criteria occur at the Durham Plant.

During low river flows, the effluent limits for ammonia-nitrogen range from 1.5 to 3 mg/L, depending on the plant flow rate. The lower end of this range may be difficult to achieve with the treatment process typically used for this nutrient--biological nitrification.

The effluent phosphorus concentration that must be achieved is 80 to 100 mg/L, depending on both river flow and plant flow.

SLIDE NO. 8 - NATIONAL SURVEY OF PLANTS WITH PHOSPHORUS LIMITATIONS

To put that limit into perspective, we need to look at the phosphorus limits that other plants in the country must meet.

- Out of 10,000 wastewater treatment plants; fewer than 700 must meet phosphorus limits.
- Of those plants, none have a limit less than 100 ug/L.

Consequently, Durham will have the most stringent effluent criteria in the nation for this nutrient.

SLIDE NO. 9 - ALTERNATIVES FOR DURHAM

At the Durham Plant, a number of alternatives were initially considered for the interim plan.

Reuse is currently practiced at Durham, using a portion of the plant effluent. This program will be expanded, but for the reasons previously described, this approach is not feasible as the primary disposal method.

Wetlands cannot meet the very stringent effluent limits for phosphorus. The phosphorus removal requirement at Durham is about 99 percent. The removal capability of wetlands is typically about 65 percent.

Conventional tertiary treatment using alum coagulation cannot reliably produce the low effluent phosphorus concentrations required.

Membrane processes are technically feasible, but are prohibitively expensive.

This leaves USA with two viable alternatives: export of Durham effluent to the Willamette River, or advanced tertiary treatment.

(5)

SLIDE NO. 10 - EXPORT TO WILLAMETTE

Export of Durham effluent to the Willamette River is the preferred alternative because:

- It has a lower cost
- It would be more reliable from a treatment standpoint
- It results in a less complex system to operate

However, this alternative involves a number of major issues that must be resolved.

The first of these relate to water quality and water rights issues. This alternative will remove flow from the lower Tualatin River unless a water rights exchange is worked out between USA and the Lake Oswego Corporation. In this scenario, USA would exchange effluent for power generation in return for a reduced diversion of flow from the river to Lake Oswego. However, regardless of the implementation approach adopted, there are a number of water rights and water quality issues that must be identified and resolved.

With respect to Lake Oswego, the export approach has the most favorable water quality impacts because it reduces nutrient discharges on a year-round basis. Other options such as reuse or advanced treatment only reduce nutrients 6 months each year.

The change relative to the Willamette river is essentially a change in the discharge location for the Durham effluent. Currently, this enters the Willamette at the mouth of the Tualatin River at West Linn. Potential alternative discharge locations range from Wilsonville to Lake Oswego. To evaluate whether this alternative is feasible or cost-effective, DEQ must identify the effluent quality that will be required for discharge to the Willamette. Hopefully, this will be established shortly as a result of DEQ's current studies.

Evaluation and implementation of this alternative also requires a detailed study to determine the best location for the pipeline and outfall. This process will involve an Environmental Impact Statement and a number of public hearings.

With all of these constraints, implementation of this alternative will not be simple and straight forward.

SLIDE NO. 11 - ADVANCED TERTIARY TREATMENT

If export cannot be implemented, USA must turn to advanced tertiary treatment at the Durham Plant. From a technological and cost standpoint, the only feasible treatment alternative available is biological nitrification followed by two-stage lime treatment. However, there is uncertainty whether this treatment approach can consistently achieve the very stringent nutrient limits prescribed. Performance results using these processes have been mixed. Therefore, pilot testing is needed at the Durham Plant to:

- 1) See if the process will work
- 2) Determine design criteria for a cost-effective facility

Advanced tertiary treatment is much less desirable than the export system because it has high capital and operational costs. Furthermore, high-lime plants are renowned for their operational difficulties.

SLIDE NO. 12 - EVALUATION PHASE SCHEDULE

The schedule for Durham has been divided into evaluation and implementation phases.

The evaluation phase, which is underway, will require 18 months to conduct the necessary preliminary route studies, address water quality issues, and conduct pilot studies. This phase will also include development of a management agreement with the Lake Oswego Corporation.

At the conclusion of these studies, three months have been allotted to select the best alternative. This process will involve DEQ, Lake Oswego Corporation, and other interested parties. Finally, another three months has been allotted for DEQ/EQC approval. These selection and approval steps may be shorter or longer, depending on the ability to resolve key implementation issues and to reach agreement on a plan.

SLIDE NO. 13 - IMPLEMENTATION SCHEDULE FOR EXPORT

If export to the Willamette is selected for implementation, a myriad of activities must take place including:

- Final route selection
- Environmental Impact Statement
- Resolving water rights issues

Detailed planning is expected to take 9 months--some planning activities will coincide with predesign and design.

We estimate that the following time requirements will be necessary:

- Predesign, 6 months
- Design, 12 months
- Bidding and Award, 4 months
- Construction, 2 years

Therefore, an optimistic completion date is late 1995. This assumes no major opposition to the project and no major implementation problems.

SLIDE NO. 14 - ADVANCED TREATMENT SCHEDULE

If advanced treatment is selected, the following time-frames are anticipated for implementation:

- Predesign, 6 months
- Design, 12 months
- Bidding and Award, 4 months
- Construction and Startup, 3 years

Completion of an AWT expansion would be expected in early 1996.

At first glance, the construction period may seem long, but this alternative involves constructing a \$50 million project in and around an operating treatment plant. This level of construction activity, about \$15 to \$20 million/year, is all that the Durham site can bear.

SLIDE NO. 15 - ROCK CREEK AWTP

For the Rock Creek Plant, the Agency also believes that the best long-term solution is to remove its effluent from the Tualatin River, either through export, reuse, or a combination of these approaches. Unfortunately, none of these options are implementable in a time frame that approaches the deadline mandated by EQC. Also, there is concern about the cost-effectiveness of the export option. Therefore, the Agency is left with alternatives which rely primarily on discharge of effluent to the Tualatin.

The feasible alternatives that are available depend on the way that the TMDL permit is structured. To understand these options, we must first review how the TMDL's are determined.

SLIDE NO. 16 - PHOSPHORUS TMDL's

The critical TMDL is the one for phosphorus. The primary goal of this approach is to limit the concentration of phosphorus in the river to 70 ug/L in the critical, slow-moving, lower stretches of the river. By so doing, it is hoped that algae growth will be controlled.

To accomplish this, the permit establishes target concentrations for phosphorus along the river and then uses a mass balance approach to allocate discharge loadings among entities that contribute flow to the river. These allocations are distributed among point sources, non-point sources, and a category called the Department's Reserve. These latter allocations may be distributed at the discretion of DEQ.

A critical component of the TMDL's is something that I have termed the "hydrologic permit regimes." Essentially, these consist of flow ranges in the river that trigger which mass balance equation is used. The lower the river flow, the more restrictive the equation in terms of discharge allocations.

DEQ has established the following permit regimes based on river flows at the Farmington metering station:

- Less than 120 cfs
- 120 to 200 cfs
- 200 to 300 cfs
- Greater than 300 cfs

The mass balance equation is based on the lowest flow in the permit regime; i.e., if the river flow is 199 cfs, the discharge allocation is based on an assumed river flow of 120 cfs.

SLIDE NO. 17 - EFFLUENT PHOSPHORUS LIMITATIONS UNDER CURRENT TMDL STRUCTURE

Using this permit structure, one can calculate the required plant effluent quality for various combinations of river flows and plant effluent flow rates.

This slide shows that, as the Rock Creek flow rate increases from its current value to the flow rate projected for the year 2005, the plant must reduce the phosphorus concentration to approximately 100 to 150 ug/L.

This limit is not quite as strict as for the Durham plant, but it is still among the toughest effluent criteria for phosphorus in the country; and, essentially, it limits the available treatment options to advanced tertiary treatment.

SLIDE 18 - PROPOSED TMDL MODIFICATIONS

In reviewing the TMDL permit structure, the Agency has identified several slight modifications which may substantially reduce the cost of compliance while achieving water quality goals. These modifications may be divided into two categories:

- Flow issues
- TMDL allocations

SLIDE 19 - FLOW ISSUES

With respect to flow issues, there are two proposed modifications. The first relates to where the cut-off points for permit regimes are established.

This slide shows the river flows recorded at the Farmington metering station over the past 11 years. What is interesting, is that while river flows were often below 200 cfs, they were seldom below 150 cfs--however, at any flow within that permit regime (120 to 200 cfs), USA would have to treat to a discharge criteria based on a 120 cfs flow rate--which is more restrictive than actual river flows would warrant. Therefore, the Agency requests that an additional permit regime be established in the 150 to 200 cfs range.

The second modification relates to flow augmentation capabilities. USA owns water rights in Scoggins Reservoir and can use those rights to augment river flow.

In our evaluation of river flow data over the past 11 years, we found that if USA had optimized release of its water rights, it could have easily maintained the river flow at Farmington above 150 cfs for the entire dry season for every year except 1987. As described in the Program Plan, 1987 was an unusual year because of altered water release practices.

As a result of this analysis, the Agency believes that it can reliably maintain flows above 150 cfs. If it can, the second modification that is requested is a stipulation in the permit that USA be relieved of the requirement for meeting target phosphorus concentrations in the river during rare occurrences of low river flows if the Agency is making a good faith effort to augment river flows during those periods.

This is an important request because it may dramatically affect the nature and cost of treatment facilities that must be installed.

SLIDE NO. 20 - CURRENT TMDL STRUCTURE

The second area of permit modifications relates to TMDL allocations.

This slide presents a hypothetical profile of river phosphorus concentrations as we move down the river. It is a rough approximation of how the discharge allocations and effluent phosphorus concentrations are related.

As discussed earlier, the goal of the TMDL's is to keep the river phosphorus concentration at or below 70 ug/L in the critical, slow-moving stretch of the river below Elsner.

The modifications the Agency is requesting involve re-allocation of phosphorus loadings associated with the river's assimilation capacity between the Rock Creek and Durham plants. The first of these relates to the phosphorus loading assigned to the Durham plant. If effluent from this plant is sent to the Willamette River, USA requests that the Durham allocation be transferred to Rock Creek. Also, USA requests that all or part of the "Department's Reserve" allocation in this stretch of the river be transferred to Rock Creek.

SLIDE NO. 21 - PROPOSED TMDL STRUCTURE

These modifications would result in the approximate phosphorus profile shown in this slide.

The 70 ug/L ceiling would be slightly exceeded at Farmington, but in the critical, lower stretches of the river, the phosphorus concentration would drop below the target level. Therefore, the critical water quality goal would still be achieved.

SLIDE NO. 22 - REVISED EFFLUENT PHOSPHORUS REQUIREMENTS

The proposed modifications would result in a revised set of effluent quality requirements. At current plant effluent flow rates, a phosphorus concentration of 250 ug/L would be required. This is a concentration which may be achievable with much less expensive conventional tertiary treatment.

SLIDE NO. 23 - ROCK CREEK ALTERNATIVES

These modifications open the door for a much less expensive management approach that combines treatment and disposal with an expanded reuse program.

SLIDE NO. 24 - CONVENTIONAL TREATMENT WITH REUSE

This concept involves treating up to 14 mgd using nitrification and alum clarification and discharging that flow to the Tualatin. All flow above 14 mgd would be irrigated or sent to upland wetlands.

There are several advantages to this approach.

- The existing treatment plant can be upgraded with only a limited amount of new facilities which reduces both the cost and time for implementation.
- The approach more fully achieves USA's goals for reuse.
- It is more compatible with USA's efforts in surface water treatment.

However, there are a number of implementation issues that must be resolved.

- The TMDL modifications must be approved
- The ability to meet a 250 ug/L effluent criteria must be determined
- The ability to augment flows must be demonstrated
- The ability to irrigate or implement wetlands programs for all flow above 14 mgd must be determined
- The approach results in a secondary water quality issue associated with total dissolved solids (TDS). By adding the doses of alum needed to achieve the phosphorus limits, the river standard for TDS will be exceeded.

SLIDE NO. 25 - ROCK CREEK EVALUATION PHASE SCHEDULE

The implementation schedule for Rock Creek will be a two-phased approach similar to that described for Durham.

The evaluation phase will address the issues just described. It will also assess whether irrigation or wetlands programs can be implemented without detrimental secondary effects on groundwater quality.

SLIDE NO. 26 - CONVENTIONAL TERTIARY TREATMENT WITH REUSE SCHEDULE

Implementation of conventional treatment with reuse would take place along two parallel paths. It is anticipated that the treatment plant improvements could be implemented by EQC's deadline of June, 1993.

Development of irrigation facilities could take somewhat longer. If no major obstacles are encountered while acquiring land or obtaining permits, these facilities could be operational by the 1994 irrigation season.

SLIDE NO. 27 - ADVANCED TERTIARY TREATMENT SCHEDULE

If advanced AWT is selected, its implementation schedule would be almost identical to that described for Durham. This facility could be on-line by late 1995--early 1996.

SLIDE NO. 28 - LONG-TERM PLAN

While the interim plan sets forth a course of action for each plant, the long-term plan is more concerned with basin-wide, broader scope alternatives and focuses on what is the best comprehensive approach to meeting water quality goals. We want to avoid finding ourselves 20 years down the road having chosen the wrong path.

A number of the alternatives which will be pursued in this plan are identified on this slide. Many of these will be implemented in addition to or as part of interim solutions.

SLIDE NO. 29 - LONG TERM PLANNING PROCESS

The planning process for the long-term plan will be more along the lines of conventional facility planning.

At the outset of the process, there will be a brainstorming session open to all interested parties. We want to ensure that no feasible alternative is overlooked.

The process will be guided by a Steering Committee which will include individuals outside of the Agency to bring a fresh outlook to the options. This Committee will be responsible for developing the evaluation and decision criteria.

The long-term plan will include a comprehensive planning element which provides an opportunity to mesh this plan with planning for non-point sources and for growth in Washington County.

For promising alternatives, demonstration projects and pilot studies will be conducted.

SLIDE NO. 30 - COSTS

What is all this going to cost the Agency?

Depending on alternatives implemented, complying with the nutrient TMDL's is estimated to cost \$60 to \$110 million.

At the same time, USA must construct an estimated \$115 million in new facilities to accommodate growth.

These needs, coupled with the projected cost of the sewer system program will cause rates to rise from \$12 to \$30 per month.

SLIDE NO. 31 - SUMMARY

In summary, the Agency has proposed an ambitious program to comply with the TMDL's.

The success of this program will require the cooperation of a wide range of agencies and individuals.

In developing this plan, we have tried to achieve the Agency's goals of maximizing reuse opportunities while recognizing the need for reliable, long-term disposal alternatives.

15

PROGRAM PLAN
FOR
COMPLIANCE WITH NUTRIENT TMDLs

Unified Sewerage Agency
of Washington County

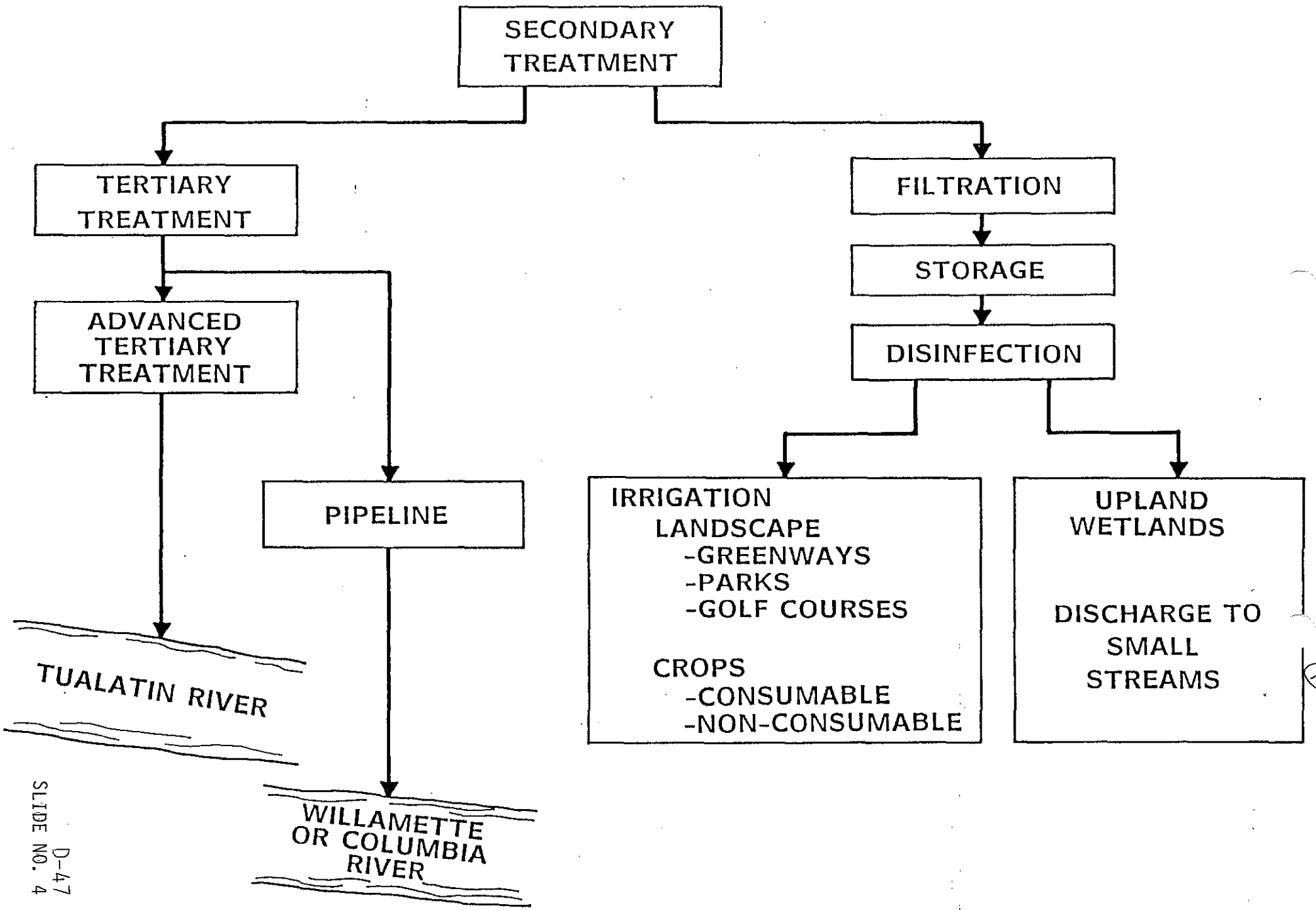
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THE CHALLENGE

- STRINGENT NUTRIENT CRITERIA
- TIGHT SCHEDULE
- FINANCIAL IMPACT

TWO PART PLAN

- INTERIM PLAN
- LONG-TERM PLAN



INTERIM PLAN

- DURHAM
- ROCK CREEK
- FOREST GROVE
- HILLSBORO WEST
- BANKS
- GASTON

(29)

FOREST GROVE, HILLSBORO WEST AND BANKS

- CONTINUE SUMMER-TIME IRRIGATION
- IMPROVE MANAGEMENT PRACTICES
- IRRIGATION SEASON BASED ON RIVER FLOW
- IMPLEMENTABLE WITHIN EQC TIME LIMIT

() (2)

DURHAM AWTP

- PHOSPHORUS LIMIT - 80 TO 100 ug/L
- AMMONIA-NITROGEN LIMIT - 1500 TO 3000 ug/L

22

NATIONAL SURVEY OF PLANTS
WITH
PHOSPHORUS LIMITATIONS

<u>Monthly Average Phosphorus Limit ug/L</u>	<u>Number of Treatment Plants</u>
5000	7
2000	28
1000	601
500	7
300	4
200	21
100	2
Less Than 100	0

ALTERNATIVES FOR DURHAM

- WETLANDS
- REUSE
- CONVENTIONAL TERTIARY TREATMENT
- ADVANCED TERTIARY TREATMENT
- MEMBRANE PROCESSES
- EXPORT EFFLUENT TO WILLAMETTE

(2)

EXPORT TO WILLAMETTE

- WATER QUALITY ISSUES
 - TUALATIN RIVER
 - LAKE OSWEGO
 - WILLAMETTE RIVER
- WATER RIGHTS
- PIPELINE ROUTE SELECTION/EIS
- POTENTIAL FOR POLITICAL OR LEGAL CHALLENGES
- \$25 TO \$40 MILLION

ADVANCED TERTIARY TREATMENT

- NITRIFICATION FOLLOWED BY HIGH LIME
- PROCESS/PILOT STUDIES
- \$51 MILLION

TASK NAME	1991	1992	1993	1994	1995	1996
DETAILED ROUTE STUDY	██████████					
EIS	██████████					
PUBLIC HEARINGS	▲	▲				
DEQ/EQC REVIEW		██████████				
CONDUCT MIXING STUDY		██████████				
OBTAIN NPDES PERMITS		██████████				
AMEND FACILITY PLAN		██████████				
PREDESIGN EXPORT SYSTEM		██████████				
OBTAIN PERMITS AND EASEMENTS		██████████				
DESIGN EXPORT SYSTEM		██████████				
DEQ/EQC REVIEW			██████████			
BIDDING AND AWARD			██████████			
CONSTRUCTION				██████████	██████████	
START-UP						██████████

DURHAM - IMPLEMENTATION SCHEDULE FOR EXPORT TO WILLAMETTE RIVER

28

TASK NAME	1991	1992	1993	1994	1995	1996
AMEND FACILITY PLAN	██████████					
PREDESIGN AWT UPGRADE	██████████					
DESIGN AWT UPGRADE		██████████				
DEQ/EQC REVIEW		██████████				
REVISE NPDES PERMIT		██████████				
BIDDING AND AWARD			██████████			
CONSTRUCTION			██████████	██████████	██████████	
START-UP						██████████

DURHAM - IMPLEMENTATION SCHEDULE FOR ADVANCED TERTIARY TREATMENT

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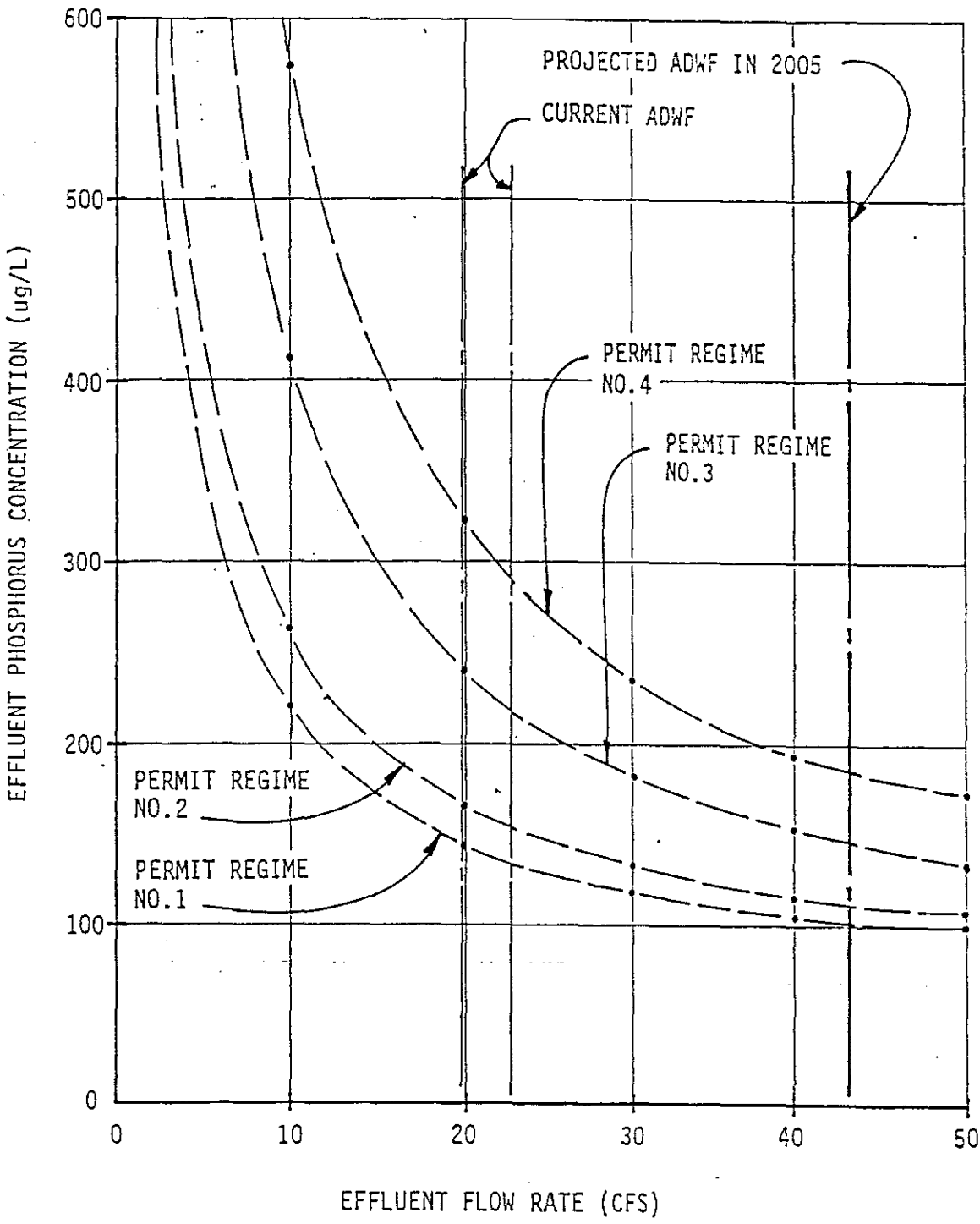
ROCK CREEK AWWTP

- REMOVE EFFLUENT FROM RIVER
 - MOST DESIRABLE SOLUTION
 - NOT IMPLEMENTABLE WITHIN SHORT TIME LIMIT
- FEASIBLE ALTERNATIVES ARE DEPENDENT ON TMDLs

28

PHOSPHORUS TMDLs

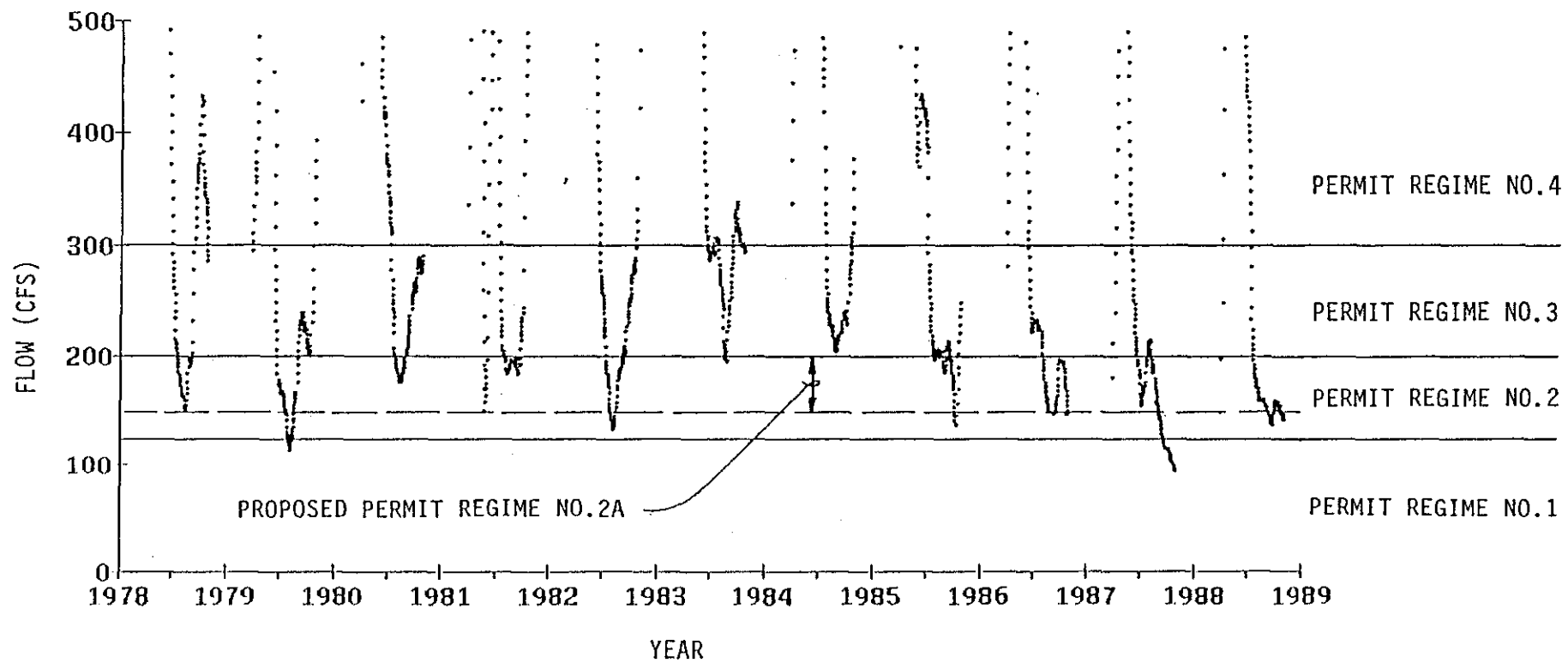
- TARGET CONCENTRATIONS IN RIVER
- MASS BALANCE ALLOCATION
- HYDROLOGIC "PERMIT REGIMES"



EFFLUENT PHOSPHORUS CONCENTRATIONS REQUIRED AT ROCK CREEK TO ACHIEVE RIVER CONCENTRATION OF 70 ug/L AT FARMINGTON

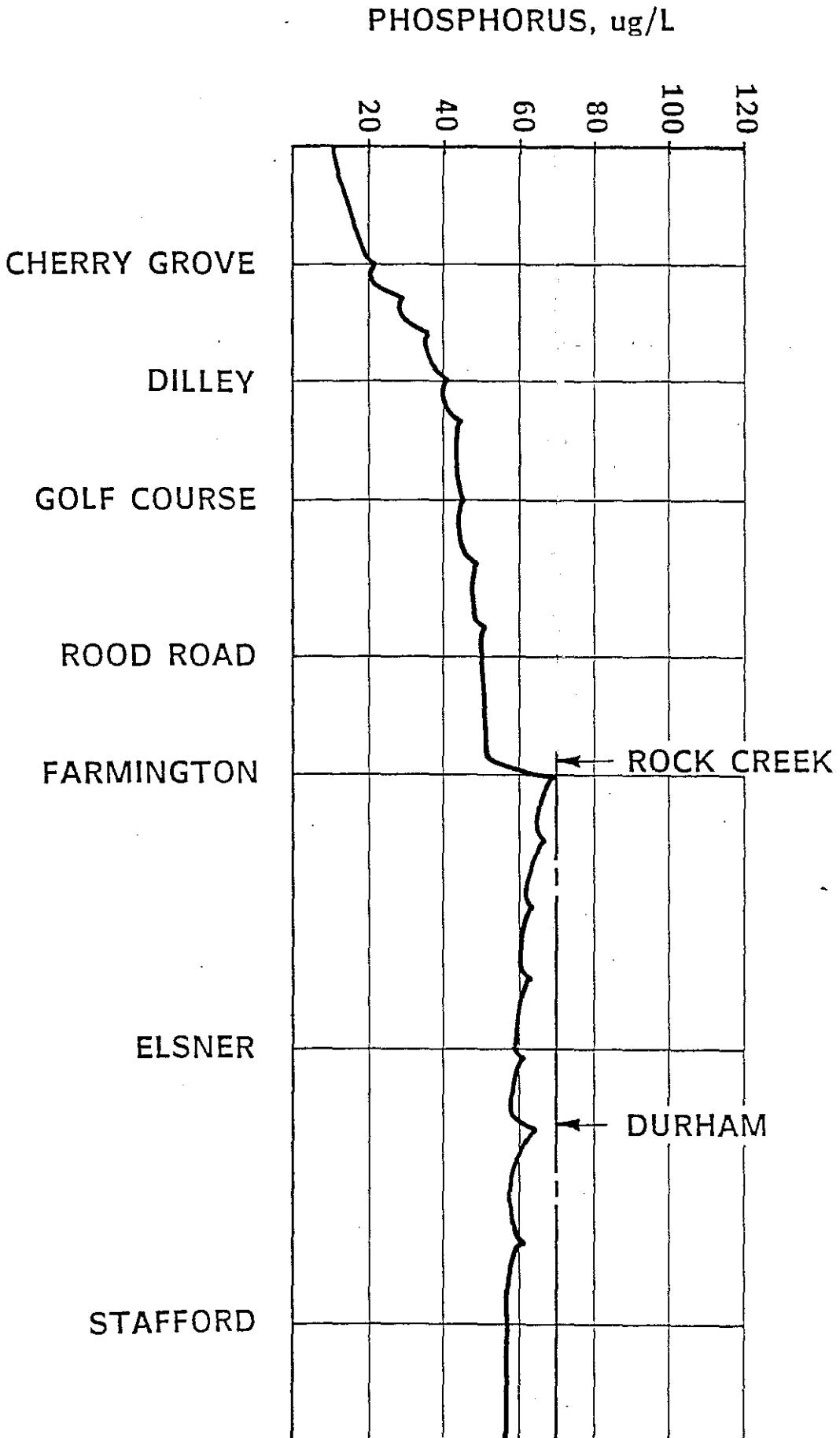
PROPOSED TMDL MODIFICATIONS

- FLOW ISSUES
- TMDL ALLOCATIONS



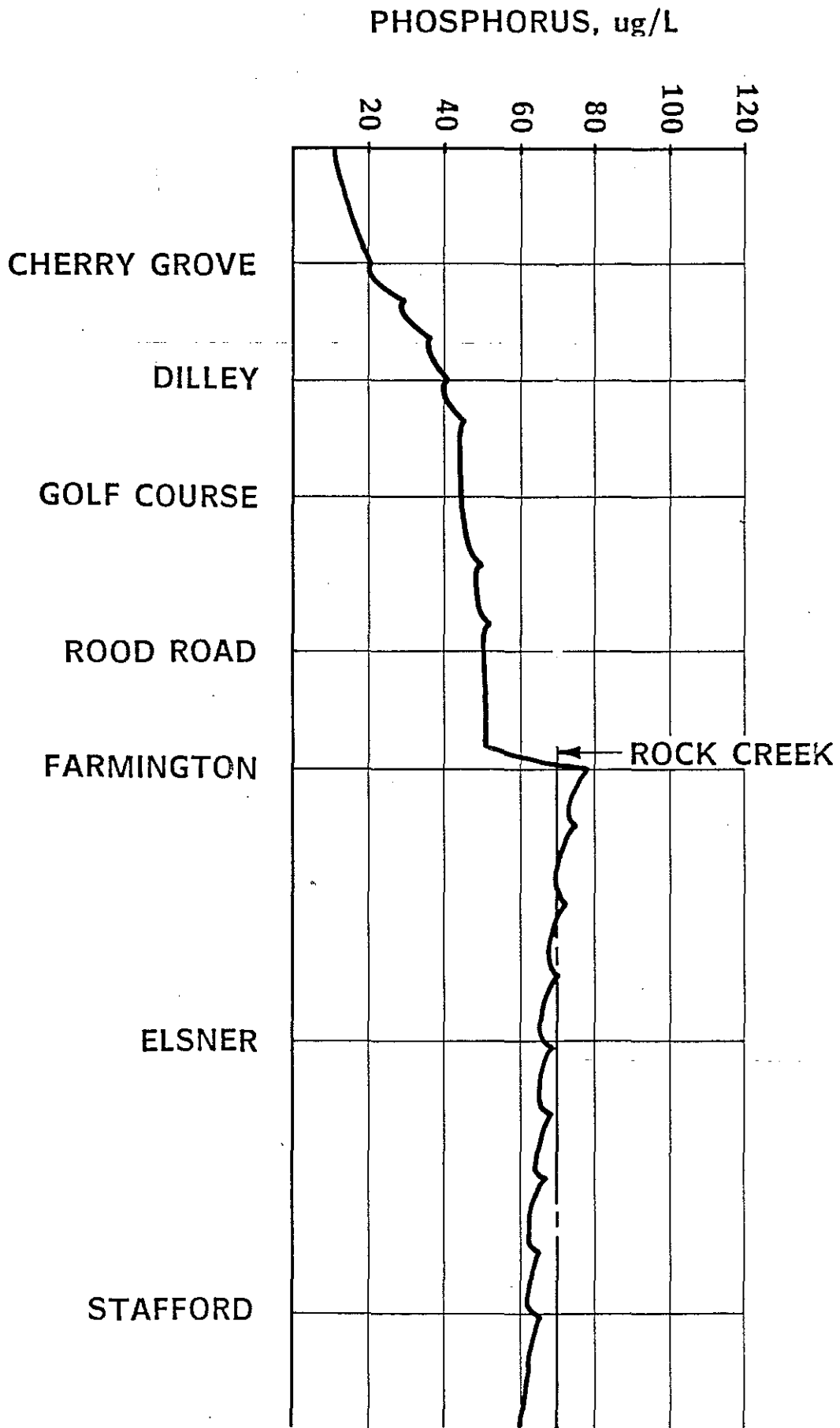
TUALATIN RIVER FLOW AT FARMINGTON - 30 DAY MOVING AVERAGE

CURRENT TMDL STRUCTURE

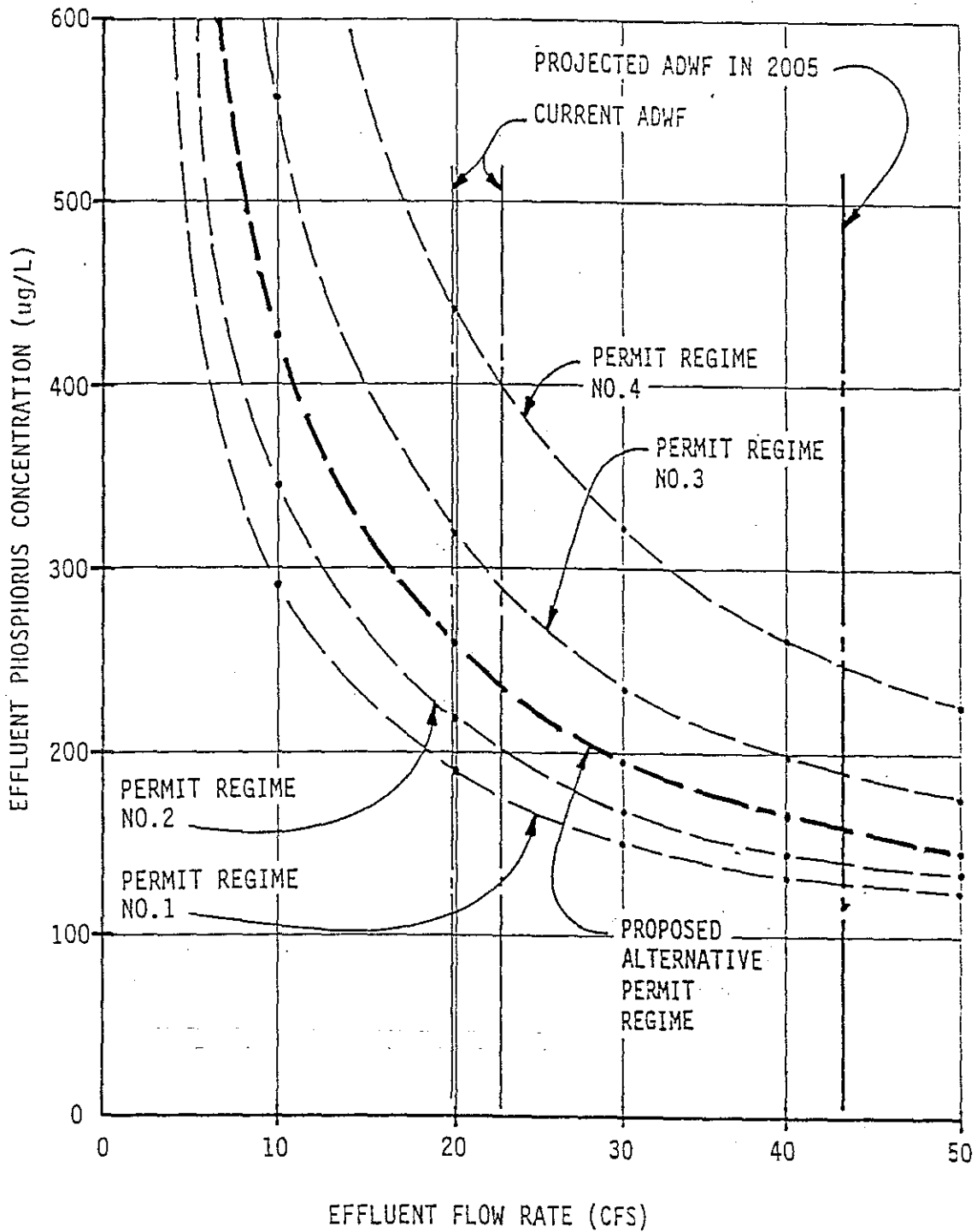


(72)

PROPOSED TMDL STRUCTURE



25



**EFFLUENT PHOSPHORUS CONCENTRATIONS
RESULTING FROM TMDL MODIFICATIONS**

37

ROCK CREEK ALTERNATIVES

- **ADVANCED TERTIARY TREATMENT**
 - **\$55 MILLION**
- **CONVENTIONAL TERTIARY TREATMENT WITH REUSE**
 - **\$30 TO \$37 MILLION**

CONVENTIONAL TERTIARY TREATMENT WITH REUSE

■ CONCEPT

- TREAT AND DISCHARGE UP TO 14 MGD
- IRRIGATE REMAINING FLOW

■ ISSUES

- TMDL MODIFICATIONS
- PROCESS CAPABILITIES
- FLOW AUGMENTATION
- ABILITY TO IRRIGATE
- TDS

TASK NAME	1989	1990	1991
EVALUATE AND PILOT AWT	[Task duration: 1989-01 to 1990-01]		
EVALUATE IRRIGATION	[Task duration: 1989-01 to 1990-01]		
EVALUATE FLOW AUGMENTATION	[Task duration: 1989-01 to 1990-01]		
PUBLIC HEARING		[Task duration: 1989-12 to 1990-01]	
SELECT ALTERNATIVE TO IMPLEMENT			[Task duration: 1990-01 to 1990-03]
PUBLIC HEARING		[Task duration: 1990-01 to 1990-03]	
DEQ/EQC REVIEW			[Task duration: 1990-03 to 1990-06]

ROCK CREEK - EVALUATION PHASE SCHEDULE

28

TASK NAME	1990	1991	1992	1993	1994
AMEND FACILITY PLAN		■			
PREDESIGN AWT UPGRADE		■			
DESIGN AWT UPGRADE		■			
DEQ/EQC REVIEW		■			
REVISE NPDES PERMIT		■			
BIDDING AND AWARD FOR AWT			■		
CONSTRUCTION FOR AWT			■	■	
START-UP FOR AWT				■	
PURCHASE IRRIGATION LAND		■			
OBTAIN PERMITS		■			
PREDESIGN IRRIGATION		■			
DESIGN IRRIGATION		■			
BIDDING AND AWARD IRRIGATION			■		
CONSTRUCT IRRIGATION			■	■	
START-UP IRRIGATION					■

ROCK CREEK - IMPLEMENTATION SCHEDULE FOR CONDITIONAL TERTIARY TREATMENT WITH REUSE

(58)

TASK NAME	1991	1992	1993	1994	1995	1996
AMEND FACILITY PLAN	██████████					
PREDESIGN AWT UPGRADE	██████████					
DESIGN AWT UPGRADE		██████████				
DEQ/EQC REVIEW		██████████				
REVISE NPDES PERMIT		██████████				
BIDDING AND AWARD			██████████			
CONSTRUCTION				██████████	██████████	
START-UP						██████████

ROCK CREEK - IMPLEMENTATION SCHEDULE FOR ADVANCED TERTIARY TREATMENT

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LONG-TERM PLAN

- REUSE
- EXPORT
- AWT BEYOND HIGH-LIME
- WETLANDS POLISHING
- FLOW MANAGEMENT/AUGMENTATION
- PHOSPHORUS BAN
- WATER QUALITY MODELING
- COMBINATIONS
- OTHERS

(2)

PLANNING PROCESS

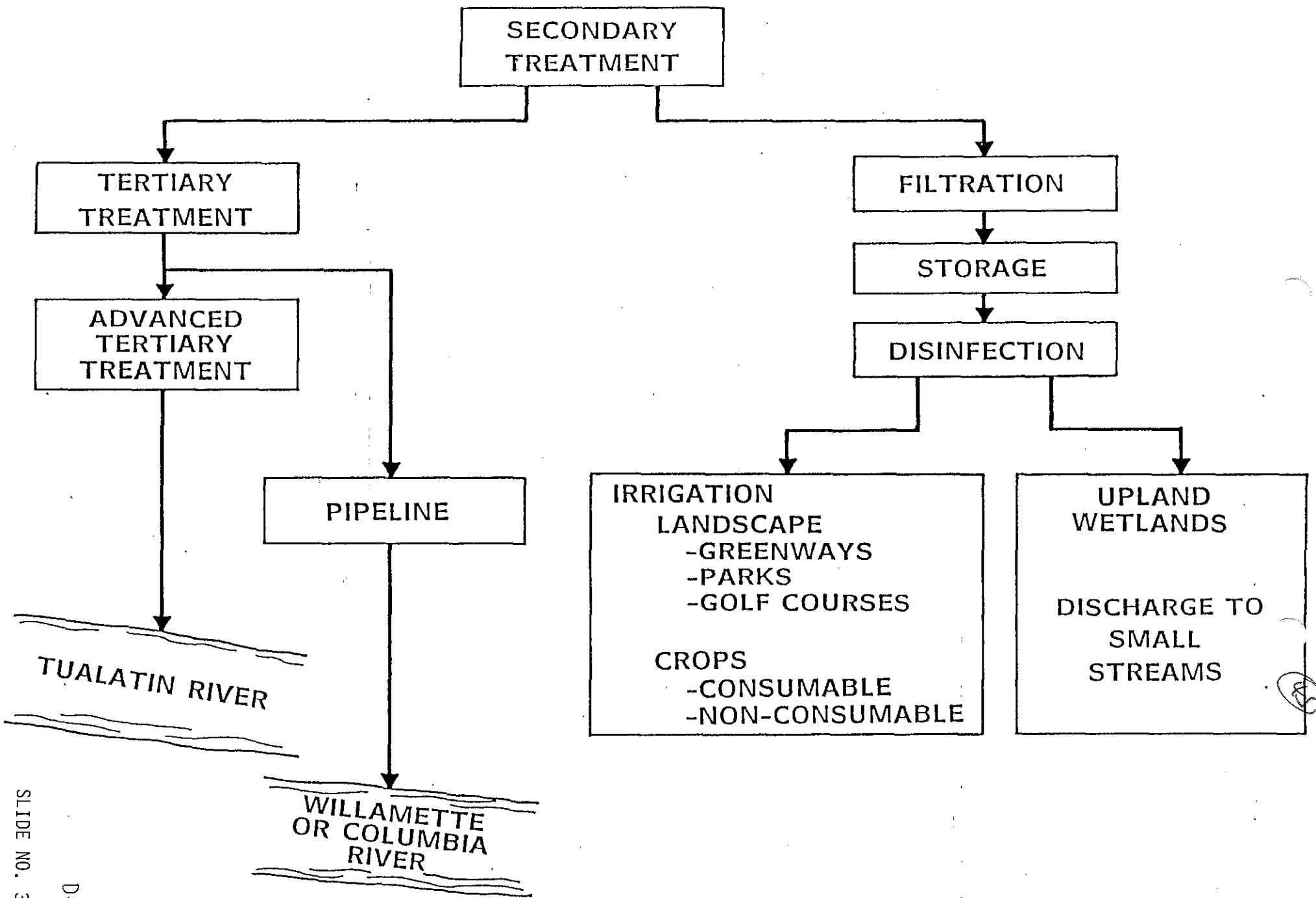
- CONVENTIONAL FACILITIES PLAN
- BRAINSTORMING SESSION
- STEERING COMMITTEE
- COMPREHENSIVE PLAN
- DECISION MATRIX
- DEMONSTRATION PROJECTS/PILOT STUDIES
- EVALUATION OF INTERIM PLAN

(44)

**SUMMARY OF CAPITAL IMPROVEMENTS
FOR WASTEWATER TREATMENT AND DISPOSAL***

	<u>Capital Improvement Costs (\$, Millions)</u>		
	<u>Growth-Related Improvements</u>	<u>TMDL-Related Improvements</u>	<u>Total Improvements</u>
Rock Creek	53	31-55	84-108
Durham	51	25-51	76-102
Forest Grove	8	3	12
Other Plants	2	1	2
Program Plan	<u>--</u>	<u>2</u>	<u>2</u>
TOTAL	114	62-112	176-226

* These costs do not include infiltration/inflow correction, construction of new sewers, repair of existing sewers, stormwater management costs or any allowance for inflation.



EQC HEARING ON USA PLAN
MEETING NOTES

March 14, 1989
Gordon L. Culp

RECEIVED
MAR 22 1989

Water Quality Division
Dept. of Environmental Quality

Mary Halburton

WQC - April 14 meeting on USA Plan
March 21 -cutoff for written testimony
Report to Commission - first week of April by staff
Not sure if testimony will be received at April 14 meeting.

John Harrison

Nutrient loads-timetable of 1993 summarized
Facility plans to follow program plan

Public Comment - Cindy Mackie -

NEDC rejects claim only one plant with more stringent standards, also rejects phosphorus removal is new technology.
Commends DEQ analysis of draft plan.
Questions pilot need -- should implement solutions.
Questions need for time extension.
Integrate long and short term plans.
Wants compliance by 6/30/93--plan is disappointing in this regard.

Bruce Willey

Summarized plan.

Ken Fink-Stafford? CPO

Opposes pipeline to Willamette. Do plans take growth into consideration? Will Willamette be polluted? USA is proposing diluting Tualatin with Willamette. Add more reservoirs on

(4)

Tualatin. Transport to Willamette is not a long term solution. Should evaluate more reservoirs in Tualatin. Haven't done good job of cleaning up surface drainage. Encourages wetlands. Doesn't think pipeline is solution.

John Churchill

Report is a disappointment (written testimony). Not a clear set of alternatives. End of line treatment, land application, source control, export are 4 alternatives. Flow augmentation not viable alternative. DEQ should establish effluent limits for Willamette. Should separate costs for growth & TMDLs. Land disposal deserves more attention. Need upland wetlands, not bottomland wetlands. Soil profiles for P removal better in uplands wetlands. For land disposal, must meet NPDES permit for water applied to land. Tired of written garbage from USA.

Oscar Haig

Dam on Tualatin below Scoggins Creek has been studied--\$145 million estimated in 1983- feasibility studies done. Was Phase II of Tualatin project. 1983 report presents several letters of support. Even with higher treatment, need more flow in river. Supports building dam on Tualatin.

Leonard Stark

Lives in Lake Oswego. Cost factor is important. Everyone in Tualatin basin should participate in costs. Opposed to pipeline to Willamette. Siphon water from Columbia to increase flow in Tualatin. Build more small dams in Tualatin is another alternative. Preserve wetlands and create more wetlands. Not going to clean up river in a few years. Understands why construction is going to be difficult to achieve by 1993.

Ted Creden

River Grove mayor, engineer, lives on Tualatin. Resolution from River Grove. Opposes extension of time. Wetlands not analyzed. Reject current plan. Scare tactics on cost. Didn't analyze wetlands. USA doesn't intend to clean up river. Assess industries for cost of cleanup. Replace USA management with executives from industry. DEQ should

(48)

suspend hookups for 30 days and extend if management not changed. DEQ should ask for USA to be placed in bankruptcy.

Louis Maller

Owens condos on Willamette and Tualatin. Limiting phosphorus needs to be part of USA policy. USA foot dragging has escalated costs. Opposed to transfer to Willamette. Likes long term plan. Interim plan falls short. Moratorium should be imposed on Washington County. Opposed to transfer of loads from one plant to another. Could finance through Tax Anticipation Bonds. Fact standards are highest in country is irrelevant.



LAKE OSWEGO CORPORATION

P.O. Box 203 Lake Oswego, Oregon 97034

RECEIVED
MAR 22 1989

Water Quality Division
Dept. of Environmental Quality

March 17, 1989

Mr. John Harrison
Department of Environmental Quality
Water Quality Division
811 SW Sixth
Portland, Oregon 97204

Dear Mr. Harrison:

This letter is in response to the Unified Sewerage Agency's plan to improve the water quality of the Tualatin River basin. The Lake Oswego Corporation is pleased that USA has submitted a well thought out plan in a timely manner.

However, missing from this plan is a section describing the water quality plan for Oswego Lake and the specific tasks that USA will perform to help improve the water quality of the lake. Please recall that your OAR 340-41-470 paragraph #3 requires USA to negotiate and include a water quality management plan for Oswego Lake in the cleanup plan.

Attached, please find a copy of the *Lake Oswego Corporation Water Quality Management Plan* which was submitted to USA in November of 1988. As you can see from the plan, the Lake Oswego Corporation is committed to significantly improving the water quality of the lake. I have highlighted those sections of the plan for which USA should include specific responses to in their cleanup plan.

Two other aspects were commented on by members of our Board of Directors. First, the plan did not include evaluation of land irrigation alternatives at the Durham plant. Secondly, our expectations were for a five year compliance and we were disappointed that the plan now anticipates several years delay. In the interim, we hope that existing and experimental technologies will be aggressively applied to immediately see a visible improvement in the river.

*Hydro-electric Generation • Police and Water Safety Patrols
Construction and Environmental Permits • Boat and Operator Licenses
Marine Services – Gas and Oil*

Lake Corporation Headquarters 700 S.W. McVey Avenue Lake Oswego, Oregon

D-78

2

Again, the Lake Oswego Corporation strongly supports the Tualatin River basin cleanup plan. We urge that an updated cleanup plan address USA's response to the lake's water quality management plan.

Sincerely,



Gerd Hoeren
Chairman of the Water Quality Committee

cc: Gary Kraemer — Unified Sewerage Agency

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MAR 22 1989

Water Quality Division
Dept. of Environmental Quality

Lake Oswego Corporation
Water Quality Management Plan
for
1989

Lake Oswego Corporation
Water Quality Committee
Gerd Hoeren
George Benson
Don Burdick
Art Fewel

November 2, 1988

Objective

The purpose of this plan is to establish a set of short and long range goals aimed at improving the water quality of Oswego Lake. The primary concerns are nutrient levels and siltation.

This plan addresses the water quality aspects of the lake in a context that is consistent with the Lake Oswego Corporation's objectives for water safety, protection of water rights, land use planning and protecting the beneficial uses of the lake.

The Corporation Board of Directors continues its commitment to restoring the water quality to the highest possible levels.

Overview of Water Quality Problems

The water quality problems of Oswego Lake include the following areas of concern:

1. Excessive nutrients
2. Excessive sedimentation
3. Rooted Aquatic Plants
4. Fecal Coliform Bacteria
5. Debris Pollution

Each of the above problems is extensively defined and analyzed in the *Lake Oswego Lake and Watershed Assessment 1986 - 1987 (Diagnostic and Restoration Analysis)* final report conducted by Scientific Resources, Inc. This plan selects the report's recommendations deemed to be the most effective expansion of the rigorous management objectives which have existed on the lake for many years.

The board supports the Tualatin River cleanup order of the Environmental Quality Commission and applauds the cooperation of the Unified Sewerage Agency (USA) and the City of Lake Oswego which will greatly facilitate the achievement of this Oswego Lake Management Plan. Any appreciable cleanup of the lake is not possible without substantial improvement of the Tualatin River water quality. However, Oswego Lake has additional management challenges which are unique to its status as a lake.

To achieve these objectives a cooperative but prompt implementation process will be established with Unified Sewerage Agency, the City of Lake Oswego and the Department of Environmental Quality.

Short and Long Range Management Plan

This section divides the management of the lake into the five problem areas described above. Each section then lists both short and long term objectives for dealing with the problem. The short term objectives are those that are expected to commence immediately or as soon as reasonably possible and to be completed in the 1989 water year.

In general, the short term action items are expected to be continued or expanded in future years. Results of the 1989 objectives will be carefully evaluated in the fall of 1989 and may create changes in both short and long range management plans for future years.

Excessive Nutrients: The excessive nutrients in the water of Oswego Lake cause the following chain of events:

1. Excessive nutrients in the water lead to high algal densities.
2. High algal densities result in low water transparency.
3. Excessive copper concentrations are required to maintain water clarity.

It is the Corporation's goal to achieve water clarity that exceeds a two meter (six foot) Secchi disk depth. With water contact recreation as a primary beneficial use this two meter goal is a minimum standard for safety reasons.

To solve the water clarity problem, the corporation must substantially reduce the phosphorous entering the lake. Tualatin River nutrient concentrations will be reduced substantially with compliance of the adopted DEQ rules. Our plan anticipates the worst case, that is that the average river water nutrient concentrations will not be reduced until 1992. However, we assume USA will cooperate in reducing discharges during our spring filling of the lake. We also assume the spirit of the cleanup order compels USA to work diligently to reduce water nutrient concentrations before 1992, and as soon as reasonably possible in any event.

Management objectives for 1989:

1. Lower the lake six feet beginning January 15th 1989. The lake will be refilled starting March 1st because the average Tualatin River phosphorous levels are at their lowest during March and April. If the lake needs to be lowered beyond six feet, the drawdown should occur earlier in January so that filling can begin in March.
2. Negotiate a relationship with USA that results in water being delivered to the lake which contains the lowest possible phosphorous content for the 30 days in March while the lake is being filled.
3. Once the lake has been filled, reduce the flow of Oswego Canal on an experimental basis to below 10cfs for remainder of March, all of April and May to reduce the nutrient intake from the Tualatin River. (Note: This program may need to be changed or terminated if it results in unacceptably shallow water depths in Oswego Canal.)
4. Continue using copper sulfate from May through September to limit algae growth. Try to minimize copper usage as per SRI's recommendation to permit algae predators (zooplankton) to grow).
5. Treat Lakewood Bay with alum in late April to precipitate phosphates. Measure the secchi disk depth of the bay weekly from April thru September to evaluate the results of this experiment.
6. Improve communications with the City of Lake Oswego to identify in-basin nutrient sources.
7. Educate shareholders and major fertilizer applicators in our basin regarding the effects of high phosphorous in fertilizers. Identify brands of fertilizers that are low in phosphorous in the Corporation's spring newsletter.
8. Establish an in-house program to monitor lake nutrient levels. Obtain Tualatin River nutrient

(6)

readings at the Oswego Lake headgate from USA.

9. Investigate possible ramifications to the Corporation's PGE contract and Corporation revenue resulting from any reduction in power generation.
10. Evaluate the possibility of leasing a portion of our water rights to USA for purposes of augmenting in-stream Tualatin River flows.
11. Encourage the Country Club to lower its water intake pipe to 25 feet below the surface. This helps the lake by removing nutrients from the lower layer of the water which causes algal blooms in the fall. This cooler water may also be an advantage to the Country Club

Long term objectives:

1. Water safety and protection of the Corporation's water rights remain the highest priority at all times. This management plan must function within that context.
2. Improve the lake's water quality to attain a two meter secci disk depth.
3. Work with the City of Lake Oswego to sewer the area to the west of Oswego Canal to prevent pollution of ground water that enters the Canal.

Excessive Sedimentation: Extremely high sedimentation volumes enter the lake from the Tualatin River and in-basin surface water runoff. Each year more than 700 truck loads of sediment enters the lake from the Tualatin River.

Management objectives for 1989:

1. Reduce Tualatin River water intake during the latter part of March, April and May on an experimental basis as described above.
2. Survey storm drains entering the lake during lake drawdown to identify siltation sources and appropriate control measures. Photograph as appropriate. Measure and document the size of the Blue Heron, Springbrook and Lost Dog Creek deltas.
3. Support strict erosion control measures for new developments and enforcement of such measures for existing developments. Work to establish additional measures as needed.
4. Restore and protect erodible stream corridors. Particularly in Blue Heron and Springbrook Creeks.
5. Support expansion of the City's surface water management program, including the installation of additional sedimentation basins and appropriate servicing of existing basins. Encourage existing settling basins (at Boones Ferry Road) to be cleaned out.
6. Initiate an annual program to survey and map the rooted aquatic plant and siltation activity.

7

Long term objectives:

1. Reduce the amount of silt entering the lake by 50%. Evaluate the possibility of installing sediment basins for Oswego Canal in Bryant Woods Nature Park.
2. Find better and more cost effective ways to remove silt from the lake.
3. Support the City's budget process to promote additional funding of surface water management programs.

Rooted Aquatic Plants: This problem is the growth of nuisance rooted aquatic plants at shallow depths. The board recognizes that rooted aquatic plant growth is likely to accelerate as water clarity improves. Rooted plants may become a major long term problem.

Management objectives for 1989:

1. Measure and document areas of aquatic plant activity through visual underwater surveys in April through August.
2. Continue application of copper sulfate to upper portion of main canal to control Aquatic Plants. Applications will begin in the latter part of April when plants are six inches tall. Daily copper concentrations of 0.030 - 0.050 should be maintained for two weeks then monitor plants for the following two weeks. Repeat this pattern through the summer as needed.
3. Experiment with the application of *Aqua Screen* in designated areas of the main canal and at the deltas of Lost Dog and Springbrook Creeks.

Long term objectives:

1. Initiate an annual program to survey and map the rooted aquatic plant and siltation activity.
2. Consider covering all affected portions of the lake bed with *Aqua Screen* depending on results of 1989 experiments.



Bacteria: Fecal coliform levels from water fowl concentrations exceed state standards at times.

Management objectives for 1989:

1. Continue existing bacteria monitoring program. Begin monitoring fecal coliform levels from Indian Springs area.
2. Continue education of the community relative to health hazards of water fowl concentrations.
3. Initiate water fowl census during contact recreation season.
4. Identify and separate livestock activity from stream corridors.

Long term objectives:

1. Encourage efforts to sewer the septic tank area of Indian Springs. Until sewers are installed, work with the City to modify the Bryant Nature Park to work as a wetland biofilter for the nutrients and bacteria for the groundwater from this area.

Debris Pollution: This problem deals with various floating debris which is a safety concern for boating and water contact recreation. In some cases, it is also a visual nuisance.

Management objectives for 1989:

1. In the summer newsletter encourage all lake users to pick up floating debris. Remind homeowners to be careful to keep lawnmower clippings out of the water.
2. Inspect all waterfront structures in early spring and enforce corrective actions on structures which pose a safety and debris pollution hazard.
3. Continue the practice of having both the Lake Patrol and LOC work crews collect floating debris. This sets a good example for other boaters.
3. Establish a debris deposit station at the west end of the lake.

Long term objectives:

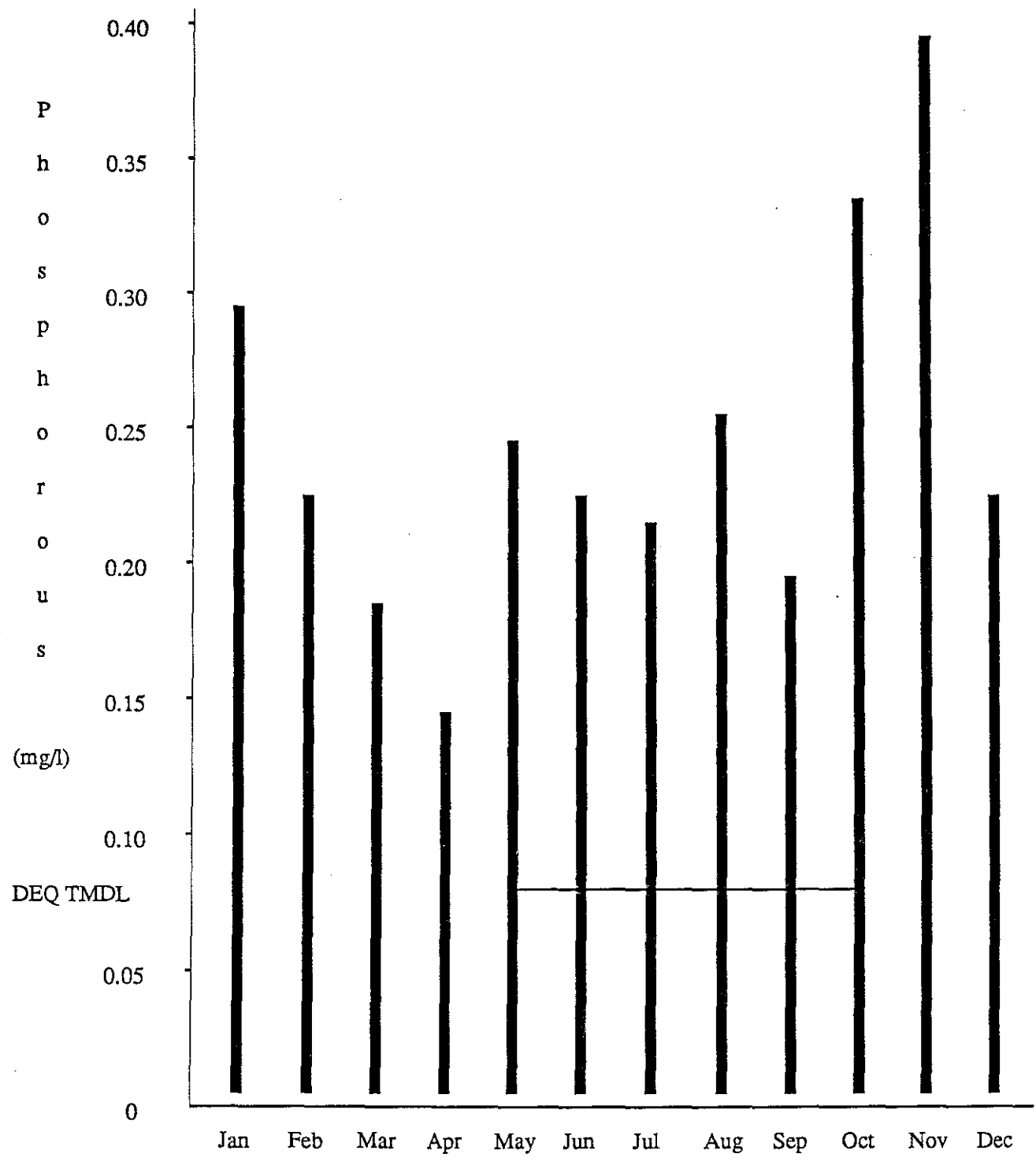
1. Investigate ways to reduce the amount of floating debris from the Tualatin River.

Implementation

Water quality policies and objectives will be initiated by the Water Quality committee of the Lake Oswego Corporation. The plan will be carried out by LOC staff and board members.

Phosphorous at Oswego Lake Headgate
(10 year average)

9



Source: Lake Oswego Lake Watershed Assessment 1986-1987

RECEIVED
MAR 24 1989

Water Quality Division
Dept. of Environmental Quality

156 NE Ninth Ave
Hillsboro, Oregon 97124
March 19, 1989

Mr. John Harrison
Oregon Department of Environmental Quality
811 SW Sixth Ave
Portland Oregon 97204

Dear Mr. Harrison:

In reference to the final draft of the proposed program plan and time schedule of the Unified Sewerage Agency to meet waste load allocations for the Tualatin River, I have the following comments:

1. The letter from the DEQ in the appendices appears to be hindering the process. In the letter the DEQ appears to be more interested in enforcement than in helping to solve a problem. The writer is capriciously disrespectful of the complexity of the social and economic aspects of the possible solutions to the "phosphorus problem". This is significant because the DEQ, itself, initiated and fostered the sewage problems in the Tualatin Basin by their past actions regarding regulations and permits.
2. The DEQ should assist USA in providing for long-term solutions to the sewage treatment and not require economically wasteful short-term solutions in a time span which is unreasonable. It is easy for the DEQ and EQC to arm-chair time lines, it quite another problem to try to implement programs as large and diverse as required of USA. The EQC should allow an extension to the time schedule to prevent improper responses and waste due to haste to meet an unrealistic and politically derived schedule.
3. It is not nice to fool Mother Nature..yet often man tries to fool her, manipulate her, abuse her. The "phosphorus problem" is not scientifically based. Mother Nature has been ignored. The politically driven regulations are trying to use Man's Laws to control Mother Nature who works within scientific laws. If the DEQ wants to provide political standards which have no scientific basis, they should be honest with the people and not create expectations. The TMDLs as set will not measurably affect algal growth in the Tualatin Basin. Mother Nature can provide enough naturally to prevent man from reducing the loading to making phosphorus a limiting factor. The problems the TMDLs have created are those of the DEQ regulations, and thus the DEQ has a responsibility to be part of the solution, not judge and jury. The use of a chlomyll "study action level" as a "standard" to limit phosphorus is unfair as well as improper. Additionally, by setting the chlomyll trigger level so low, the DEQ is denying the value of the algae in

the river in providing much needed oxygen in the aquatic ecosystem. This problem is not limited to the Tualatin Basin but will occur throughout Oregon as the DEQ attempts to deal with the "algae problem".

- 4. Flooding in the Tualatin Basin in winter is important to recharging the groundwaters of the area. By retaining the flood waters on land for an extended period of time, the percolation into the ground waters is increased over fast removal by storm water runoff. Before the DEQ requires winter "phosphorus" limitations, it must weigh the value of the flood waters to the basin as next summer's groundwater supply. The winter "phosphorus" loading is not part of the summer algal problem. December's runoff is gone by the time May comes around.
- 5. In considering long-term solutions to the basin water management, both sewage and water supply, the concept of a double pipeline to the Columbia River should be considered, even if it is initially more costly. During the summers, the second pipeline could bring cleaner Columbia water to the basin for flow augmentation. During the winter urban storm waters could be transported to the Columbia. The primary pipeline can carry sewage to a river with sufficient volume to assimilate its loading. Sewage treatment can occur at either end of the pipeline depending on need. In fact with a little thought, it may serve other districts as well as USA.
- 6. Lastly, I object to a solution to the sewage problems in the Tualatin Basin such as high-lime treatment which will create greater amounts of solid wastes. It is not valid for the the DEQ to propose actions in one media which increase the wastes in another media. It would be much better to seek new technologies such as ones which treat sewage so that the carbon becomes a fuel similar to oil which can become a resource not a waste. The DEQ proposes waste minimization, here is a chance to minimize waste, not create more.

Sincerely,

Lolita Carter

Lolita Carter, Ph. D.

cc Unified Sewage Agency
Environmental Quality Commission

SPECIAL POLICIES AND GUIDELINES

ATTACHMENT E

340-41-470

- (1) In order to preserve the existing high quality water for municipal water supplies and recreation, it is the policy of the EQC to prohibit any further waste discharges to the waters of:
 - (a) The Clackamas River Subbasin;
 - (b) The McKenzie River Subbasin above the Hayden Bridge (river mile 15);
 - (c) The North Santiam River Subbasin.
- (2) The Environmental Quality Commission shall investigate, together with any other affected state agencies, the means of maintaining at least existing minimum flow during the summer low flow period.
- (3) In order to improve water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level stated in OAR 340-41-150, the following special rules for total maximum daily loads, waste load allocations, load allocations, and implementation plans are established.

(a) After completion of wastewater control facilities and implementation of management plans approved by the Commission under this rule and no later than June 30, 1993, no activities shall be allowed and no wastewater shall be discharged to the Tualatin River or its tributaries without the specific authorization of the Commission that cause the monthly median concentration of total phosphorus at the mouths of the tributaries listed below and the specified points along the mainstem of the Tualatin River, as measured during the low flow period between May 1 and October 31*, of each year, unless otherwise specified by the Department, to exceed the following criteria:

Mainstem (RM)	ug/l	Tributaries	ug/l
Cherry Grove (67.8)	20	Scoggins Cr.	60
Dilley (58.8)	40	Gales Cr.	45
Golf Course Rd. (52.8)	45	Dairy Cr.	45
Rood Rd. (38.5)	50	McKay Cr.	45
Farmington (33.3)	70	Rock Cr.	70
Elsner (16.2)	70	Fanno Cr.	70
Stafford (5.4)	70	Chicken Cr.	70

(b) After completion of wastewater control facilities and implementation of management plans required approved by the Commission under this rule and no later than June 30, 1993, no activities shall be allowed and no wastewater shall be discharged

[discharge of wastewater] to the Tualatin River or its tributaries without the specific authorization of the Commission [shall-be-allowed] that cause[s] the monthly median concentration of ammonia-nitrogen at the mouths of the tributaries listed below and the specified points along the mainstem of the Tualatin River, as measured between May 1 and November 15th of each year, unless otherwise specified by the Department, to exceed the following target concentrations:

Mainstem (RM)	ug/l	Tributaries	ug/l
Cherry Grove (67.8)	30	Scoggins Cr.	30
Dilley (58.8)	30	Gales Cr.	40
Golf Course Rd. (52.8)	40	Dairy Cr.	40
Rood Rd. (38.5)	50	McKay Cr.	40
Farmington (33.3)	1000	Rock Cr.	100
Elsner (16.2)	850	Fanno Cr.	100
Stafford (5.4)	850	Chicken Cr.	100

- (c) The sum of tributary load allocations and waste load allocations for total phosphorus and ammonia-nitrogen can be converted to pounds per day by multiplying the instream criteria by flow in the tributary in cfs and by the conversion factor 0.00539. The sum of load allocations waste load allocations for existing or future nonpoint sources and point source discharges to the mainstem Tualatin River not allocated in a tributary load allocation or waste load allocation may be calculated as the difference between

the mass (criteria multiplied by flow) leaving a segment minus the mass entering the segment (criteria multiplied by flow) from all sources plus instream assimilation.

(d) The waste load allocation (WLA) for total phosphorus and ammonia-nitrogen for Unified Sewerage Agency of Washington County is determined by subtracting the sum of the calculated load at Rood Road and Rock Creek from the calculated load at Farmington.

(e) Subject to the approval of the Environmental Quality Commission, the Director may modify existing waste discharge permits for the Unified Sewerage Agency of Washington County and allow temporary additional waste discharges to the Tualatin River provided the Director finds that facilities allowed by the modified permit are not inconsistent and will not impede compliance with the June 30, 1993 date for final compliance and the Unified Sewerage Agency is in compliance with the Commission approved program plan.

[(e) The Director may issue new waste discharge permits containing additional waste load allocations and approve nonpoint source activities containing additional load allocations for total phosphorus and ammonia-nitrogen provided the Director finds that the concentrations specified in sections (a) and (b) will not be exceeded.]

(f) Within 90 days of the adoption of these rules, the Unified Sewerage Agency of Washington County shall submit a program** plan

and time schedule to the Department describing how and when the Agency will modify its sewerage facilities to comply with this rule. The program plan shall include provisions and time schedule for developing and implementing a management plan under an agreement with the Lake Oswego Corporation for addressing nuisance algal growths in Lake Oswego.

- (g) Within 18 months after the adoption of these rules, Washington, Clackamas, Multnomah Counties and all incorporated cities within the Tualatin River and Oswego Lake subbasins shall submit to the Department a program plan** for controlling the quality of urban storm runoff within their respective jurisdictions to comply with the requirements of sections (a) and (b) of this rule.
- (h) After July 1, 1989, Memorandums of Agreements between the Departments of Forestry and Agriculture and the Department of Environmental Quality shall include a time schedule for submitting a program plan** for achieving the requirements of sections (a) and (b) of this rule. The program plans shall be submitted to the Department within 18 months of the adoption of this rule.
- (i) Within one hundred twenty (120) days of submittal of the program plan** and within sixty (60) days of the public hearing, the Environmental Quality Commission shall either approve or reject the plan. If the Commission rejects the plan, it shall specify a compliance schedule for resubmittal for approval and shall specify

the reasons for the rejection. If the Commission determines that an agency has not made a good faith effort to provide an approvable plan within a reasonable time, the Commission may invoke appropriate enforcement action as allowed under law. The Commission shall reject the plan if it determines that the plan will not meet the requirements of this rule within a reasonable amount of time. Before approving a final program plan, the Commission shall reconsider and may revise the June 30, 1993 date stated in sections (a), (b), and (e) of this rule. Significant components of the program plans shall be inserted into permits or memorandums of agreement as appropriate.

(j) For the purpose of assisting local governments in achieving the requirements of this rule, the Department shall:

(A) Within 90 days of the adoption of these rules, distribute initial waste load allocations and load allocations among the point source and nonpoint source management agencies in the basin. These allocations shall be considered interim and may be redistributed based upon the conclusions of the approved program plans.

(B) Within 120 days of the adoption of these rules, develop guidance to nonpoint source management agencies as to the specific content of the programs plans.

(C) Within 180 days of the adoption of these rules, propose additional rules for permits issued to local jurisdictions to address the control of storm water from new development within the Tualatin and Oswego Lake subbasins. The rules shall consider the following factors:

(i) Alternative control systems capable of complying with sections (a) and (b) of this rule;

(ii) Maintenance and operation of the control systems.

(iii) Assurance of erosion control during as well as after construction.

(D) In cooperation with the Department of Agriculture, within 180 days of the adoption of this rule develop a control strategy for addressing the runoff from container nurseries.

*Precise dates for complying with this rule may be conditioned on physical conditions (i.e., flow, temperature) of the receiving water and shall be specified in individual permits or memorandums of understanding issued by the Department. The Department shall consider system design flows, river travel times, and other relevant information when establishing the specific conditions to be inserted in the permits or memorandums of understanding. Conditions shall be consistent with Commission-approved program plans** and the intent of this rule.

**For the purpose of this section of the rules, program plan is defined as the first level plan for developing a waste water management system and describes the present physical and institutional infrastructure and the proposed strategy for changes including alternatives. A program plan should also include intergovernmental agreements and approvals, as appropriate, time schedules for accomplishing goals, including interim objectives, and a financing plan.

Stat. Auth.: ORS Ch. 468
Hist: DEQ 128, f. & ef. 1-21-77



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director *Hydro Taylor*

Subject: Agenda Item No. R, September 9, 1988, EQC meeting

Proposed Adoption of Rules Establishing Plan Requirements and Implementation Compliance Schedules for Achieving the Phosphorus and Ammonia Criteria for the Tualatin Basin Established in OAR 340-41-470(3) Special Policies and Guidelines.

Background

On July 8, 1988 the Environmental Quality Commission adopted rules establishing special policies and guidelines for the Tualatin River basin. The new rules set ammonia-nitrogen and total phosphate criteria for the Tualatin River. These criteria are used to set the total maximum daily load (TMDLs), waste load allocations (WLAs), and load allocations (LAs) for phosphorus and ammonia-nitrogen. These two constituents have been determined to be the primary cause of the water quality standards violations in the Tualatin River.

In addition to specific criteria for the Tualatin subbasin, the Commission also considered at the July 8, 1988 meeting proposed rules that would specify the implementation plan and compliance schedule for achieving the criteria. This portion of the proposed rules was discussed extensively by the Commission and a number of suggested amendments were received from the public. The Commission did not adopt this portion of the proposed rules, but authorized the Department to hold public hearings on these proposed rules. The Commission also directed the Department to return to the Commission at the September 9, 1988 meeting for consideration of the proposed compliance schedule. Proposed compliance rules were developed and hearings were held on August 17 and 18, 1988. A copy of the Hearing's Officers report is contained in Attachment D. The Department has also included the April hearings as a part of the record for the August hearings and this report is included in Attachment C.

After completion of the public hearings, the Department believed that the parties in the Tualatin were not far apart on how to meet the criteria. Therefore, the Department formed a group of the interested parties to review the proposed compliance rules in light of the suggestions and comments

received during the public testimony. Such a group was assembled and included representatives of Washington County, Unified Sewerage Agency, Lake Oswego Corporation, the Cities of Tualatin, Portland, and Lake Oswego, agriculture and forestry (representatives of the Departments of Forestry and Agriculture were invited for the last meeting on September 1, 1988) and NEDC. This group, which will be referred to as the Tualatin work group in this report, met four times prior to the writing of this staff report. Much was accomplished in these meetings. At the time this staff report was prepared, the Department believes that most in the group found the proposed language of the rule (Attachment A) to be generally acceptable. At the time this staff report was drafted, a final proposed draft was being mailed to members of the group for review. Although no additional meetings were scheduled, the Department was willing to consider more meetings if necessary to resolve further concerns.

Public Hearings

The Department, in the public notice for the hearings, asked the public to examine four specific questions. These included:

1. Should there be a date specified in the rules for the plans to be implemented and the criteria to be met? What is an appropriate date? Should specific technical information be provided to support selection of a final date?
2. Should the counties recommend a designated agency for the agricultural nonpoint source control plan? What agency should this be?
3. Should the final approved compliance schedules and water quality control plans be codified in Oregon Administrative Rules?
4. Should the criteria for phosphorus and ammonia-nitrogen apply during a specific time for the year or should criteria be regulated by specific flow and temperature conditions?

In addition, the proposed rules in the public notice also contained suggested wording to require the Oswego Lake drainage to be included with the Tualatin subbasin requirements for urban runoff control.

Major Issues Identified During the Hearings and Work Group Meetings

The following is a discussion of the major issues that were raised during both the public hearings and work group meetings.

COMPLIANCE SCHEDULES

Commenters at the hearings felt that the proposed compliance period was overly aggressive. During the work group meetings, much of the discussion also focused on the timeframe for implementation. People on one side of the issue felt that everyone should have a specified date when the Tualatin will be in compliance with the adopted rules. This would give the public and public agencies a goal and show polluters that we were serious about cleaning-up the river. On the other side of the issue, there was considerable concern as to whether the date could be reached with all the work which needs to be done. People felt that the schedule did not allow for a complete review of potential options, enough time to develop a cost effective strategy, nor allow the regulated community enough time to establish a funding base to address pollution control. Commenters felt that a problem that took generations to create will take longer than five years to correct.

Commenters from the Lower Tualatin Valley Homeowners Association, River Grove, and several other individuals felt that compliance should begin immediately. They felt that additional planning is simply an excuse for not doing anything and that river conditions will just get worse and more difficult to fix while the planning continues.

Others felt that one could not criticize the June 30, 1993 date until one had reviewed the proposed plans to be sure that all reasonable steps were being taken to meet the criteria as soon as possible.

Department's Response:

The Department believes that a final compliance date and a realistic compliance schedule are necessary for successful implementation of controls to meet the ammonia-nitrogen and phosphorus criteria. The Department also believes that it is difficult to determine what an appropriate compliance schedule is until the local entities have provided plans. However, the Department believes that providing a final compliance date defines the time frame for producing results. As such, the date would provide guidance during the planning process. The date of June 30, 1993 established in the adopted rule provides this guidance to the entities in preparing the "program plans". The Tualatin work group discussed this issue extensively and concluded that the rules should concentrate on the submittal of "program plans" which will present a particular entity's approach to defining the problem, reviewing alternatives, and selecting a preferred solution.

Once the program plans are submitted, reviewed, and approved by the Commission, the actual compliance schedule will be much better delineated. The program plans submitted by the entities would also provide additional information which could allow the final compliance date to be reassessed. Consequently, the Department has included in section (3)(i) of the proposed

rule a provision for the Commission to consider changing the final compliance date based on the information presented in the program plans. This would give the cities and counties the opportunity to determine what is specifically required of each of them and time to develop well-conceived program plans which the Commission will have the opportunity to review to see if the compliance date needs to be modified.

SHOULD TMDLS NOT APPLY WHEN RIVER CONDITIONS ARE SUCH THAT WATER QUALITY PROBLEMS WILL NOT OCCUR?

The issue here is whether the rules should apply for a given set period of the year (May 1 through October 31, for example) or should the rule identify specific conditions that describe the beginning and ending of the low flow period.

The adopted rule sets a specific time period for which the rules would apply. This time period was established after considering those specific times where standards were violated and water quality was affected. The period surrounds that time of year when lower river flows, higher water temperatures, sun light, and other conditions combine to cause water quality standards violations. The concern expressed during the hearings and during the Tualatin work group meetings was that there are periods when low flow conditions may extend beyond the established time period. There are also times when high flow conditions exist during the May 1 to October 31 time period established in the rules.

Washington County and USA requested specific flow conditions for initiating and ending the "summer low flow period" be included in the rule. Concerns were raised that the proposed conditions may not be an accurate measurement of "low flow conditions". One commenter felt that the dates should stay in the rule and if the polluter felt a change was necessary, they should apply for a special change.

Department's Response:

The dates defining the critical low flow period in the Tualatin Basin were intended to surround that time of year when lower river flows exist. Obviously, these conditions will vary from year to year. However, the dates do provide a definite period for compliance. Exceptions to the date may be justified depending on the requirements of the control strategy selected. The permit process provides the Department the opportunity to address exceptions with the special conditions section. The Department, therefore, does not propose to recommend including flow related triggers in the proposed rule. The proposed rule, however, would allow for exceptions to be applied for in proposed program plans and included as permit conditions, if approved by the Commission.

Specifically, the Department proposes to modify the rule adopted by the Commission on July 8, 1988 to add the word approximately before May in sections (3)(a) and (b) and by adding a specific footnote in both section (3)(a) and (3)(b) which describes when and how the Department may consider different time periods for specific sources.

NONPOINT SOURCE POLLUTION FROM AGRICULTURAL AND SILVICULTURAL ACTIVITIES

In the hearing notice the Department specifically requested comment on how the rules should address nonpoint pollution control. In order for the Tualatin River to maintain compliance with the water quality standards and specifically, the criteria for phosphorus and ammonia-nitrogen, nonpoint source (NPS) pollution from agricultural and forestry have to be addressed in the rules. The practical issue is how to identify the appropriate agencies and develop and implement the needed controls.

In the proposed rules that were taken before the Commission on July 8th, the counties were asked to recommend an agency to control agricultural NPS. During the hearings, testimony was received that the Oregon Departments of Agriculture and Forestry should be the designated agency for agricultural and forestry nonpoint source problems, respectively.

The Tualatin work group felt that the Oregon Departments of Agriculture and Forestry were the appropriate lead agencies for agriculture and forestry nonpoint source controls. This suggestion is reasonable in that both of these agencies have been previously designated as statewide management agencies for these particular NPS activities. The Department is concerned that these agencies have not had much time to consider this approach. The work in the Tualatin has focused on urban stormwater runoff and agriculture NPS problems, but the counties and cities, and local Soil and Water Conservation District have been the key players and not the state agencies for forestry and agriculture. Therefore, these agencies need some time to become familiar with the issues and commitments they need to make.

Both of these agencies have been very cooperative in helping the Department review and modify its approach to controlling nonpoint source pollution as required by Section 319 of the Water Quality Act of 1987. The Department believes that it would be reasonable to allow these agencies to develop their Tualatin plans within the process developed out of Section 319.

Department's Response:

The Department has modified the proposed rules to require that program plans for forestry and agriculture be required in the Memorandums of Understanding that the Department will develop with the Departments of Forestry and Agriculture as a result of the Section 319 process. This approach is specifically described in section (3)(h) of the proposed rules.

CONTAINER NURSERIES

During the hearings two individuals felt that container nurseries should be identified in the rule as industrial sources, be given specific waste load allocations, and specific permits. Several representatives of the container nursery industry testified that they are an agricultural nonpoint source. These representative felt that container nurseries should be regulated by the Soil Conservation Service or Department of Agriculture.

Container nurseries have the potential to discharge nutrients to the Tualatin River and could have an adverse effort on the cleanup effort. The Tualatin work group discussed various ways of addressing this issue. Currently, the Department, outside the Tualatin River process, has been working with a technical advisory committee whose task it has been to assess the problem and develop a control strategy to address container nurseries statewide. The Department has been collecting data to determine the significance of this particular wastewater source and various ways that could be employed to control it. Container nurseries do need to be evaluated in the Tualatin Basin and the Department needs to define how load, or waste load, allocations will be made for individual nurseries.

Department's Response:

The Department proposes rule modifications in section (3)(j)(D) that require the Department to develop a control strategy for this potential source within 180 days of adoption of these rules.

OSWEGO LAKE SUB-BASIN DRAINAGE

Several commenters felt that the Oswego Lake sub-basin should be included in the rule as part of the Tualatin Basin. They felt that if urban runoff is to be controlled in the Tualatin Basin for the purpose, in part of helping to keep Oswego Lake clean, it is only appropriate that those drainage areas that drain directly to the lake should also do their share.

Department's Response:

No one either in hearing testimony or in the Tualatin work group objected to Oswego Lake being included in the proposed rules. Therefore, the Department has included it in the rules where appropriate.

ESTABLISHMENT OF WASTE LOAD ALLOCATIONS AND LOAD ALLOCATION

The adopted rules establish the instream criteria for phosphorus and ammonia-nitrogen and the formula for calculating the TMDL, WLA, and LA. Several people testified during the hearings that the Department did not distribute waste load allocations or load allocation to the various sources in the basin as required by the consent decree between EPA and NEDC and

federal regulations. Several members of the Tualatin work group also stated that they wanted to know what specific loads were to be allocated to each source. This issue was discussed extensively among the Tualatin work group members. Most felt it would be very difficult for entities to prepare program plans without knowing their specific waste load or load allocation.

Department's Response:

The Department agrees with the need to establish specific WLAs and LAs, and proposes wording in the rules in section (3)(j)(A) that would require the Department to establish initial WLAs and LAs within 90 days of adoption of the proposed rules.

CONTROLS ON URBAN RUNOFF FROM NEW DEVELOPMENT

There will be a time period from the adoption of the rules and the implementation of the rules when new developments will be built in the Tualatin and Oswego Lake drainage basins. How these developments will be controlled so they do not significantly increase the pollution problems in the river while the plans are being developed and implemented is an issue. At least one testifier thought the Department should develop rules using its permit authority to require new development in the subbasins to provide stormwater controls. It was felt that action taken early on in this regard would prevent expensive retrofitting of technology later when each entity began to implement its stormwater control programs.

This issue also received attention during the Tualatin work group meetings. Representatives of the cities and Washington County did not feel that they had the expertise to develop an effective program. The Department felt that a permit program for individual developments would be resource intensive and thought that such a program could best be handled through the building permit program conducted by the counties and some of the larger cities.

Department's Response:

To address this issue the rules were modified to include under section (3)(j)(C) the requirement that the Department will propose rules for permits to control stormwater from new developments.

COSTS FOR REACHING COMPLIANCE WITH THE CRITERIA HAVE NOT BEEN ADEQUATELY CONSIDERED

The Department recognizes that detailed cost estimates have not been calculated in preparing these proposed rules. The established criteria are based on a technical analysis of the data collected by the Department and provided by cooperating agencies. This information indicates that a phosphorus level of 70 ug/l in the Lower Tualatin is necessary to prevent nuisance algal growth at all existing flow conditions in the lower Tualatin

River and in Oswego Lake. The ammonia criteria is designed to attain the dissolved oxygen standard in the lower Tualatin River. The criteria provide long-term planning guidelines.

The Clean Water Act of 1988 does address cost-benefit analysis in Section 302(b). This section allows EPA's Administrator, with concurrence of the state, to issue a permit which modifies the effluent limitations required by TMDLs if the applicant demonstrates at a hearing that (whether or not technology or other control strategies are available) there is not reasonable relationship between the economic and social costs and benefits to be obtained (including attainment of the objective of this act) from achieving such limitation.

Department's Response:

The Department believes that the program plans are the appropriate place for describing how and when cost-benefit analysis will be conducted. Cost-benefit analysis may influence the compliance schedule as well as the established criteria. Program plans, and subsequent compliance plans, may include reassessment of the established criteria at key points. Key points could include, completion of pilot projects and analysis of available options, achievement of interim limits, or demonstration of a change in the assimilative capacity of the river by flow modification or other methods.

NEW OR ADDITIONAL LOADS

Two Commenters felt that new or additional loads needed to be further addressed in the proposed rule. One commenter felt that a moratorium on new sources should be imposed until compliance is attained. Another commenter felt that new loads should only be allowed where existing capacity is available.

Department's Response:

Although the Department recognizes that some water quality standards are being violated in the Tualatin River, the violation do not constitute a threat to public health or welfare. Therefore, a moratorium does not seem warranted at this time.

The Department recognizes that once a TMDL has been established and once the final compliance date has been reached, no additional discharges of ammonia-nitrogen or phosphorus can be allowed unless the total loading is within the TMDL. However, the Department also believes that orderly growth within the Tualatin basin should be allowed as long as steady progress is being made towards ultimate compliance with meeting the TMDL. The proposed rule allows the Director, subject to Commission approval, to allow additional discharges from the Unified Sewerage Agency facilities provided the Director finds that the facilities requiring the additional discharges are not inconsistent or

would impede compliance with the final deadline. The Tualatin work group did not object to the allowance of temporary increases in discharge loadings as long as Commission approval was necessary and the discharge was strictly temporary.

The Final Proposed Rules

The final proposed rules are contained in Attachment A. They represent modifications in the rules adopted by the Commission at the July 8, 1988 meeting, and they propose specific implementation plan requirements and compliance schedules. While the rules require considerable work from various agencies within the Tualatin and Oswego Lake subbasins, the Department has also committed itself to additional work including:

- Within 90 days, the Department must allocate waste loads allocations and load allocations to the various point and nonpoint sources in the basin;
- Within 120 days the Department must develop guidance for the preparation of the program plans to be submitted by the management entities;
- Within six months, the Department must develop a control strategy for container nurseries; and
- Finally, within six months, the Department must propose rules to control the runoff from new development that will be occurring in the two basins between now and the time the implementation programs are instituted.

In order to accomplish these activities, the Department will probably have to shift resources from other activities. No decisions have been made as to what activities or projects will be dropped or postponed to provide the necessary resources.

Summation

1. The Tualatin River is a tributary to the Willamette River, and it has been identified as a water quality limited stream segment because it does not meet established water quality standards to protect its identified beneficial uses.
2. The Department has conducted an intensive water quality study and has developed specific water quality criteria for phosphorus and ammonia-nitrogen in order to bring the river back into compliance with the established standards.

3. The Commission, at its July 9, 1988 meeting, adopted specific water quality criteria for phosphorus and ammonia-nitrogen for the purpose of setting total maximum daily loads, waste load allocations, and load allocations for the Tualatin subbasin.
4. The Commission directed the Department to rewrite the implementation and compliance portion of the proposed rules and take them out to hearing and return to the Commission at the September 9, 1988 meeting with a new proposed rule.
5. The proposed rules were rewritten and public hearings were held on August 17 and 18, 1988.
6. The Department also formed a work group of interested and affected parties who have met on several occasions to review and discuss various rule revisions.
7. The proposed rules include provisions for implementing TMDLs, WLAs, and LAs for the controlling phosphorus and ammonia-nitrogen within the Tualatin River and Oswego Lake subbasins.
8. Point and nonpoint sources including urban, agricultural, and silvicultural runoff are addressed in the proposed rules.
9. The proposed rules require the Department to establish LAs and WLAs, prepare guidance for the preparation of program plans, propose rules to control runoff from new development in the basin, and to develop a control strategy for container nurseries.
10. The June 30, 1993 date for achieving the phosphorus and ammonia-nitrogen criteria, remains in the rule but the proposed rules require the Commission to reconsider the final date when it approves the program plans for achieving the criteria.
11. The proposed rules add the Oswego Lake drainage basin and require that an urban runoff control program be developed by the appropriate local jurisdiction.

Director's Recommendation

Based on the summation, it is recommended that the Commission adopt the proposed rules for establishing plan requirements and implementation compliance schedules for achieving the phosphorus and ammonia criteria for.

EQC Agenda Item No. R
September 9, 1988
Page 11

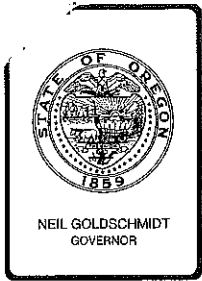
the Tualatin Basin established in OAR 340-41-470(3) Special Policies and Guidelines.

Fred Hansen

Attachments (4)

- Attachment A - Proposed Rule
- Attachment B - Need for Rulemaking
- Attachment C - Hearings Officer's Report for the April Hearings
- Attachment D - Hearings Officer's Report for the August Hearings

Neil J. Mullane:hs
WH2945
229-5284
September 6, 1988



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission DATE: April 11, 1989

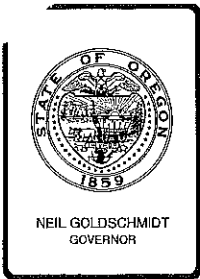
FROM: Fred Hansen, Director *Fred*

SUBJECT: Attached Staff Report

The attached staff report is concerned with the City of Brookings/Harbor Sanitary District. Some questions, including legal questions now being considered by the Attorney General's Office, remain to be answered before our final recommendation can be made; however, because of the potential for controversy on this item, I felt it appropriate to forward the report at this time.

Staff will work to resolve remaining questions and will prepare an addendum to this staff report as soon as possible.

CG\WC4772



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: _____
Division: Water Quality
Section: Construction Grants

SUBJECT:

Time extension request by City of Brookings to comply with construction schedules in Stipulated Consent Order, WQ-SWR-88-35.

PURPOSE:

To receive testimony from City officials, consider recommendations, and take action to approve, modify, or deny the extension request.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other:
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment
- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: Modify Stipulated Consent Order Attachment

Meeting Date: April 14, 1989
Agenda Item:
Page 2

DESCRIPTION OF REQUESTED ACTION:

The Department is requesting Environmental Quality Commission approval to modify Stipulated Consent Order, WQ-SWR-88-35, to initiate construction of the outfall line by a date that must be determined in conjunction with Oregon Department of Fish and Wildlife; and further, if the Attorney General's office finds that the Commission has the authority to do so in this case, to enter an Order against Harbor Sanitary District.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input checked="" type="checkbox"/> Statutory Authority: <u>ORS 468.090</u>	Attachment _____
<input checked="" type="checkbox"/> Pursuant to Rule: <u>OAR 340-12-048</u>	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: <u>PL 92-500 as amended.</u>	Attachment _____
<input type="checkbox"/> Other:	Attachment _____
<input checked="" type="checkbox"/> Time Constraints: Deadline for beginning construction of the outfall is May 1, 1989.	

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment _____
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment _____
<input type="checkbox"/> Response to Testimony/Comments	Attachment _____
<input checked="" type="checkbox"/> Prior EQC Agenda Items: Agenda Item Q, April 29, 1988 EQC Meeting	Attachment <u>C</u>
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment _____
<input checked="" type="checkbox"/> Supplemental Background Information	Attachment _____
Background Information on Issue	Attachment <u>A</u>
Motion for Extension of Time and Request for Hearing	Attachment <u>B</u>
Department Approval of User Charge System, Letter dated January 6, 1989	Attachment <u>D</u>
Brookings Request for Approval of Rate Methodology, Letter Dated March 1, 1989	Attachment <u>E</u>
Department Response to Brookings Requests, Letter Dated March 20, 1989	Attachment <u>F</u>
Department Summary of Brookings Meeting, Letter Dated April 10, 1989	Attachment <u>G</u>
Department Summary of Harbor S.D. Meeting, Letter Dated April 10, 1989	Attachment <u>H</u>

Meeting Date: April 14, 1989
Agenda Item:
Page 3

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The City of Brookings operates a sewage collection and treatment system under a National Pollutant Discharge Elimination System (NPDES) permit issued by the Department. On April 29, 1988, Brookings was issued a Stipulated Consent Order to upgrade their treatment facilities. The City may not be able to meet the schedule as described in the Order; if not, the City would be exposed to enforcement action from the Department.

Harbor Sanitary District operates a sewage collection system and discharges wastes into the Brookings collection and treatment system. The City and District are in dispute over user charges. Brookings believes they cannot proceed on facility upgrades without some assurances that user charge revenues will be sufficient to provide for operation and maintenance of the treatment works as well as debt service.

Harbor Sanitary District was not named as a co-respondent in the Stipulated Consent Order of April 29, 1988. The District has expressed interest in construction of a second sewage treatment facility, to which Brookings is opposed.

PROGRAM CONSIDERATIONS:

Commission approval of the recommended alternative (Alternative 3) may have an impact on agency allocation of resources or on the Water Quality Program priorities.

There are several municipalities in the state with intermunicipal agreements that are in dispute. The Department and Commission have not attempted to resolve these disputes by exercising statutory powers. If the Commission approves the recommended alternative, and if the City of Brookings and Harbor Sanitary District are unable to agree upon sewer user rates, the Department may request the Commission to mandate sewer user rates in Brookings/Harbor per the authority granted the Commission in ORS 454.030(5). Should the Commission impose rates, other communities involved in similar disputes may also seek resolution via the Commission's rate-setting powers. This could impact allocation of staff resources and the priorities of the Water Quality Division, Sewage Disposal and Construction Grant Sections.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Deny the request for an extension of time. The Department's March 20, 1989 letter approves the City's sewer rate methodology, and the Department's April 10, 1989 letter addresses the question of the second sewage treatment plant. This action may result in a violation of the May 1, 1989 deadline to initiate construction of the outfall. It will be difficult to sell bonds, select a consultant for engineering services, complete bid proceedings, and start construction in less than 90 days. Violation of the Order could result in fines and/or imposition of a moratorium on new connections to the City's sewerage system.

The Department does not recommend imposition of fines. The City has conscientiously and diligently attempted to comply with all Department and the Environmental Protection Agency (EPA) construction grant program requirements. Since the Harbor Sanitary District is not included in the Order, there is no provision for fines to be assessed against the District. Connections to the District's system could continue unless a separate moratorium was placed on the District.

2. Grant an extension of time until the Department can thoroughly assess the need for a second sewage treatment plant.

The City has indicated that compliance dates in the Order should be indefinitely deferred until the Department has assessed the need for a second sewage treatment plant to be operated by Harbor Sanitary District. At a minimum this would require that the outfall construction be deferred until summer of 1990. If the Department and Commission were to give strong consideration to a second sewage treatment plant, then sewerage system needs for the City of Brookings would have to be reevaluated. This could result in new design values for the outfall, sewage treatment plant improvements, and collection system improvements. Construction could probably not begin until 1991.

The Department does not recommend this alternative. There is no immediate need for a second sewage treatment facility and an additional ocean outfall. Further, the existing facility cannot meet permit limits and must be upgraded to achieve compliance as soon as possible. Consideration of a second sewage treatment facility should be deferred until the need is clearly defined, environmental issues are resolved, and it is demonstrated that two plants are more cost effective than a single regional plant.

Meeting Date: April 14, 1989
Agenda Item:
Page 5

3. Revise the Order to Brookings to require that outfall construction, now required to commence by May 1, 1989, commence by a date that must be determined in conjunction with the Department of Fish and Wildlife, and extend the outfall completion date to reflect the change in the construction commencement date. In addition, if the Attorney General's office finds that the Commission has the authority to do so in this case, issue an Order to Harbor Sanitary District that:
 - a. States the Department and Commission consider the District to be jointly responsible, with the City, for meeting the compliance dates in the Order to Brookings, and that any compliance actions and/or connection moratoriums imposed by the Department may, based solely upon the Department's determination that either or both parties did or did not make a good faith effort to assure compliance, be imposed upon either the City, the District, or both, with fines in proportion to the number of actual connections to each system;
 - b. Requires the District to submit plans and obtain approval in writing from the Department before extending service to any new areas;
 - c. Requires the District to determine the monthly average and peak daily flow data for wastes discharged into the City's sewerage system from January 1, 1988 through April 30, 1989 and submit this information to the Department and the City by June 1, 1989;
 - d. Requires the District to determine the total number of connections and connection permits issued as of the date of issuance of the order and submit this information to the Department and the City by May 15, 1989;
 - e. Requires the District to report all new sewer connection permits issued, including the number and type of units to be served, to the Department and the City within seven working days of permit issuance;
 - f. Requires the District to obtain and install, by July 1, 1989, a 24-hour flow proportional composite sampler to sample wastes discharged to the City, and to sample and analyze for Biological Oxygen Demand (BOD-5) and Total Suspended Solids at least twice per month to include one Saturday, and to report the sample results to the Department and the City by the 15th day of the following month;

Meeting Date: April 14, 1989
Agenda Item:
Page 6

- g. Requires the District to report total daily wastewater flows for each month to the Department and the City by the 15th day of the following month;
- h. Requires the District to submit an application, including all applicable fees, for a Water Pollution Control Facility permit to the Department by July 1, 1989;
- i. Provides for expiration of the order when Order WQ-SWR-88-35, issued to the City of Brookings, expires.

The Department recommends this alternative.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department proposes to recommend that the Environmental Quality Commission take action to approve Alternative 3 to modify the Stipulated Consent Order issued to the City of Brookings, as follows:

- "(b) Relocate or extend the existing ocean outfall as follows:
 - (i) By October 1, 1988, submit draft engineering plans and specifications to the Department.
 - (ii) By January 1, 1989, submit final engineering plans and specifications to the Department.
 - (iii) By (date to be determined before April 14, 1989 Commission meeting) [May 1, 1989] begin construction and complete all necessary blasting.
 - (iv) By (date to reflect the change in (iii), above), [September 1, 1989] complete construction and begin operation."

Further, the Department proposes to recommend that the Environmental Quality Commission enter an order against Harbor Sanitary District. Department staff will forward an amendment to this staff report, including a proposed order, prior to the April 14, 1989 Commission meeting.

This action would allow sufficient time for the City to complete remaining preconstruction activities and complete outfall construction during the 1989 construction season. The recommended action recognizes that the City has

Meeting Date: April 14, 1989
Agenda Item:
Page 7

attempted to comply with Department and EPA construction grants requirements. This action also recognizes that the City of Brookings and Harbor Sanitary District are jointly responsible for complying with Orders, Rules, Statutes, and Permits pertaining to the Brookings' sewage treatment facilities.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

Modifications to the Order are consistent with Department policies set forth in ORS 468.090, ORS 183.415(5), OAR 340-12-048 and with EPA's National Municipal Policy.

ISSUES FOR COMMISSION TO RESOLVE:

The Commission must decide to approve or deny the requested action (Alternative 3) or to direct the Department to pursue Alternatives 1 or 2.

INTENDED FOLLOWUP ACTIONS:

If the Commission approves the request, City officials can move forward in accordance with schedules modified in the Stipulated Consent Order.

Approved:

Section:

Division:

Director:

George Davis
Richard J. Miller
Jed Hen

Report Prepared By: Tom Lucas

Phone: 229-5219

Date Prepared: March 20, 1989

(TJL:kjc\hs)
(CG\WJ1638)
March 31, 1989

BACKGROUND INFORMATION ON ISSUE

The City of Brookings owns and operates a sewage collection system and treatment facility and has been issued an NPDES permit by the Department.

Harbor Sanitary District owns and operates a sewage collection system, and discharges the collected wastes into the City of Brookings' collection and treatment system under an intermunicipal contract between the City and the District.

OAR 340-45-015 (1) and (4) state that the owner of a sewage collection system that discharges wastes into another collection system operated under a valid NPDES permit is not required to obtain a permit if the NPDES permittee has control of the wastes entering the collection system. Until recently, the Department believed that the intermunicipal contract between the City and the District provided the City with control of the wastes entering the District's collection system; it is now clear that the intermunicipal contract does not provide the needed control, and direct regulation of the District is necessary.

In a letter dated March 29, 1989, the Department requested that the District submit an application for a Water Pollution Control Facilities permit.

Compliance

Brookings is currently under a Stipulated Consent Order to upgrade their sewerage facilities.

The upgrade is needed because 1) the treatment facility is unable to meet the permitted concentration and mass load limits during wet weather when flows exceed the facility's design capacity, and 2) because the end of the ocean outfall line is exposed at low tide so that effluent flows across the beach. The Order includes time schedules for extension or relocation of the ocean outfall and for upgrading the treatment facility, and specifies interim concentration and load limits while facility upgrades proceed.

On March 10, 1989, the City of Brookings submitted a request for a Hearing before the Commission to request an extension of time to comply with the Stipulated Consent Order "until it becomes clear what rates the City may recover from the District", and "pending a decision by the Commission whether a treatment plant proposed by the District on the Chetco River will be permitted" (Attachment B). To consider the request, the Commission should review past actions taken by the Department with respect to the rate issue and the question of a second treatment plant in the Brookings and Harbor Sanitary District areas.

Rate Issue

At its April 29, 1988 meeting, the Commission issued a Stipulated Consent Order for the City of Brookings, which included interim permit limits and schedules for engineering and construction necessary to implement improvements to the outfall line, sewage treatment plant, and collection system. The staff report and Order is Attachment C. Construction of the outfall line is scheduled for May 1, 1989.

During the several months following the Commission meeting, the City completed their facility plan, resolved several environmental issues, prepared a grant application, and on September 30, 1988, received a Construction Grant Award from EPA. The grant offer included a condition specifying that authorization to advertise for bids would not be given until a user charge system (i.e., sewer rates) was approved by the Department.

The City submitted a draft rate study in October, 1988. The study was reviewed by the Department and revised by the City's consultant; a final study was submitted in December, 1988. This study was approved by the Department on January 6, 1989, with the condition that Harbor Sanitary District, if dissatisfied, could respond with an analysis and propose an adjustment of the rates (Attachment D).

On January 16, 1989, the Department met with representatives from Brookings and Harbor Sanitary District. At the meeting, representatives of Brookings interpreted the Department's approval of the user rates as a mandate that the user rates be imposed upon both Brookings and Harbor. Staff stated that the approval did not constitute a mandate, and that imposition of rates remained a local matter to be agreed upon by both the City and Harbor Sanitary District. Representatives from Harbor Sanitary District refused to accept the rate study for implementation.

After the meeting, the City of Brookings concluded that the project could not move forward, since projected revenues necessary to finance improvements could not be assured. A stop work order was issued to the City's engineering consulting firm; selection of engineering services for construction management was delayed. Bond sales were also delayed. The Department was unable to give the City authorization to proceed to bid.

On March 1, 1989, the City submitted to the Department, with a request for approval: 1) a new rate methodology to be applied on an interim basis, until better information could be obtained on Harbor Sanitary District flows, and 2) a rate methodology to be applied after collection of necessary flow information (Attachment E). On March 20, 1989, the Department approved both rate methodologies for implementation (Attachment F).

Second Sewage Treatment Plant

This issue is part of a much larger issue, that is, the relations between Brookings and the Harbor Sanitary District. The communities cannot agree to terms of a new intermunicipal contract, and they have not reached agreement on allocation of rates and charges. The existing intermunicipal contract does not provide for termination or dispute resolution other than for the

City to take over operation and maintenance of the District's system in the event the District defaults on the agreement. The City feels the District is in default, and filed suit against the District in 1988; litigation is currently proceeding.

Harbor Sanitary District has, in the past, expressed interest in formation of a Sanitary Authority and in a regional sewage treatment plant to serve Brookings, the Harbor Sanitary District area, and the area south of the District to the Winchuck River. Recently, they have expressed strong interest in a second treatment plant. The City of Brookings has not supported a second sewage treatment plant.

In letters dated March 1, 1989 and March 10, 1989, the City has requested or indicated a desire for Department and Commission decisions as to whether or not an application for a second plant would be approved. The City views this decision as critical to their interests. If an affirmative decision were given, Brookings would have to revise financing plans to account for a smaller revenue stream to finance system improvements and they would need to revise estimates of needed treatment plant capacity.

In the March 20, 1989 response, the Department stated that the question of a second treatment plant could not be addressed because the District has not submitted correspondence or an application for a permit. The Department did suggest criteria which would have to be met, should Harbor Sanitary District apply for a permit.

Department of Fish and Wildlife Concerns

In a letter to the Division of State Lands dated February 2, 1989, the Department of Fish and Wildlife recommended that: 1) blasting necessary for outfall construction be performed in April or May to protect sea life, and 2) that the outfall diffuser box be located at a depth of minus 15 feet. Department staff did not receive a copy of this letter until March 17, 1989.

On March 21, 1989, Department staff contacted Tom Gaumer, DFW Shellfish Biologist. Mr. Gaumer indicated the April/May period was preferred because favorable low tides would reduce the need for underwater blasting (with resulting harm to sea life due to hydrostatic shock) and because many animals would still be in a free-floating developmental stage during that period and therefore less susceptible to harm from blasting and settling of debris. He stated that tides were favorable through June 10, 1989. If blasting were not allowed after June 10, outfall construction would be delayed a year.

On March 30, 1989, the City Manager of Brookings informed Department staff that the DFW Biologist responsible for the Brookings area had indicated that DFW might allow blasting after June 10, 1989, but that if allowed, the blasting would have to be closely coordinated with DFW. The City's contractor was also seeking ways to minimize the need for blasting. This issue had not been resolved as of March 31, 1989.

Regarding the recommended diffuser box depth of minus 15 feet, Mr. Gaumer indicated that this was not a firm figure, but that DFW wanted to ensure the

diffuser box location would be subtidal. He stated that the present diffuser box design of minus 10 feet is acceptable.

Environmental Impact of Delaying Outfall Construction

The end of the present outfall line is exposed during low tides, posing a possible health hazard. However, the outfall line is located in a relatively inaccessible area, and the Department does not consider the health hazard to be serious. There has also been a problem in the past when the treated effluent has been over-chlorinated to assure adequate disinfection. The excess chlorine was harmful to intertidal animals exposed directly to undiluted effluent during low tide. This was a very localized effect, and has been reduced by better control of the chlorine dosage. The Department does not consider the environmental effect of delaying outfall construction to be significant.

Director's Meetings With City and Harbor Sanitary District

On March 28, 1989, the Director met separately with representatives of both the City of Brookings and Harbor Sanitary District.

Representatives of the City stated that an agreement with Harbor Sanitary District regarding user rates had not been reached, and that the project could not proceed without assurance that the City's debt could be serviced. City Representatives also stated that Harbor Sanitary District may be interested in constructing a new sewage treatment facility, and that if this were done the City's planned facility upgrades and financing plans would have to be revised.

The Director reaffirmed that the Department had approved the user rate methodology submitted in the City of Brookings' March 1, 1989 letter. In recognition of the City's need to be assured of operating revenues and funds for debt service, the Director indicated that if the City and the District were unable to resolve user rate issues, then, as a last resort, the Department would recommend that the Commission impose rates as allowed by ORS 454.030(5).

The Director also indicated that the Department would be willing to consider permitting a second sewage treatment plant, but that such consideration must include a cost-effective comparison of a second treatment plant versus upgrading the existing treatment facility, and that consideration may also be made contingent upon other circumstances, such as the existing facility approaching full capacity and/or assurances of adequate debt service revenues.

Representatives of the City also stated that it would not be possible to complete blasting for outfall construction by June 10, but they would contact the local DFW Biologist to determine if blasting could be conducted after that date.

Representatives of Harbor Sanitary District were concerned about certain portions of the user rates that they considered inappropriate. They believed that certain adjustments were necessary before they could agree to

the rates. The Director reaffirmed that the Department had approved the user rate methodology, that user rate issues should be resolved by the City and the District, and that, as a last resort, the Department would recommend that the Commission impose rates to ensure that needed treatment plant upgrades could proceed. The Director also indicated that the Department would likely assume direct regulation of the District via an order and/or a Water Pollution Control Facilities permit.

Letters confirming the meetings and the results were prepared (Attachments G and H) and sent to the City and the District.

RAGEN, TREMAINE, KRIEGER,
SCHMEER & NEILL

FRED M. AEBI
JAMES F. AMBROSE
GARY M. ANDERSON
DAVID C. BACA
DOUGLAS G. BECKMAN
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MILTON C. LANKTON, P.C.
RODNEY E. LEWIS, JR.
D. CHARLES MAURITZ
JOHN F. McGRORY, JR.
WILLIAM R. MILLER, JR.
CHRIS L. MULLMANN
JAMES K. NEILL, JR.
ROBERT D. NEWELL
PHILLIP C. QUERIN
RONALD K. RAGEN
MICHAEL H. SCHMEER, P.C.
MILTON R. STEWART
H. STEWART TREMAINE, P.C.
JOSEPH M. VANLEUVEN
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LAWYERS
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TELEX 185224

WASHINGTON, D.C. OFFICE
SUITE 800
2300 M STREET, N.W.
WASHINGTON, D.C. 20037
(202) 333-6400

March 10, 1989

AMY R. ALPERN
ANNE L. BARRAGAR
DUANE A. BUSWORTH
MYLES A. CONWAY
WALLACE FITZWATER
SUSAN G. HOWE
JAY D. HULL
CLAUDIA MICHELLE LARKINS
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O. MICHAEL RINKE
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MARK A. WENTZIEIN
VICKI HOPMAN YATES

OF COUNSEL
WALTER H. EVANS III
ELIZABETH C. MADSEN
WATSON D. ROBERTSON

HAND DELIVERED

Mr. Fred Hansen
Director
Department of Environmental Quality
811 S.W. 6th Ave.
Portland, OR 97204

Re: DEQ v. City of Brookings
Curry County No. WQ-SWR-88-35
Our File No. 20191-001

Dear Mr. Hansen:

Enclosed please find the original Motion For Extension of Time and Request for Hearing to be filed on behalf of the City of Brookings in the above-entitled matter. Thank you.

Very truly yours,

RAGEN, TREMAINE, KRIEGER,
SCHMEER & NEILL


Richard M. Glick

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 10 1989

OFFICE OF THE DIRECTOR

RMG:hm
Enclosure
cc: Mr. William Hutchinson
Mr. Michael Huston
Mr. Robie Russell
State Senator Bill Bradbury
State Senator Walt Schroeder
Mr. Manville Heisel

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 16 1989

OFFICE OF THE DIRECTOR

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
2 OF THE STATE OF OREGON

3	DEPARTMENT OF ENVIRONMENTAL QUALITY,)	
	OF THE STATE OF OREGON,)	
4		)	MOTION FOR EXTENSION
	Department,	)	OF TIME AND REQUEST
5		)	FOR HEARING
	v.)	
6	CITY OF BROOKINGS,	)	No. WQ-SWR-88-35
		)	Curry County
7)	
	Defendant.)	

8 The City of Brookings (hereinafter "the City") hereby moves
9 the Environmental Quality Commission for an extension of time to
10 comply with that certain Stipulation and Final Order (hereinafter "the
11 Order") entered herein on or about April 29, 1988, a copy of which is
12 attached hereto as Exhibit 1. This request is based upon the
13 following facts. The City has, by virtue of a 1974 Agreement,
14 been providing sewage treatment for the adjoining Harbor Sanitary
15 District (hereinafter "the District"). The District has failed to
16 cooperate with the City in meeting requirements of the EPA grant and
17 in taking other steps necessary for the City to maintain eligibility
18 for EPA grant funds. Consequently, in July, 1988, the City filed a
19 legal action against the District in an attempt to terminate its
20 agreement to provide sewer services for the District. The City did
21 that following a letter from DEQ dated May 25, 1988, which waived the
22 requirement for an intermunicipal agreement with the District as a
23 grant condition. That litigation is presently pending in Curry
24 County, Oregon.

25 The Order requires the City, inter alia, to relocate or
26 extend its existing ocean outfall, arrange for financing of new or

1 upgraded sewage treatment facilities, and construct and operate such
2 treatment facilities. It further requires construction to begin on
3 the ocean outfall by May 1, 1989, and completion of that outfall to
4 occur on September 1, 1989. Pages 4 and 5 of the Order set out in
5 detail step-by-step deadlines.

6 The City was completely on schedule to meet those deadlines
7 until January, 1989, when it was forced to delay issuance of bonds to
8 finance construction because of the District's unwillingness to accept
9 sewage rates established by the City and approved by the DEQ. On
10 January 16, 1989, the City met with representatives of the District
11 and DEQ in an attempt to agree on imposition of monthly sewage rates
12 on all users of the system on an interim basis pending final
13 resolution of the conflicts between the City and the District. That
14 effort failed.

15 At that meeting, Mr. Richard Nichols of DEQ refused to
16 require the immediate implementation of user charges set forth in the
17 earlier, approved Wastewater Rate Study upon the District as well as
18 the City. Mr. Nichols' action was contrary to the letter dated
19 January 6, 1989, which stated:

20 "Based on the above assumptions, we are approving
21 your user charge methodology as meeting the
22 requirements of the EPA construction grants
23 program. This approval allows for immediate
24 implementation of a rate structure by the City of
25 Brookings, but with the condition that Harbor
26 Sanitary District, if dissatisfied, can respond
with an analysis and propose an adjustment of the
rates."

25 A copy of that letter is attached hereto as Exhibit 2. The City
26 recently made a settlement proposal to the District, which has yet to

1 respond.

2 The bottom line is that bonds cannot be sold to finance the
3 required alterations to the sewer system as long as serious questions
4 loom concerning the ability of the City to collect lawfully es-
5 tablished rates from the District. Absent bond funding, the City
6 simply cannot comply with the construction phase of the Order.

7 Moreover, the District recently made public its intent to
8 build its own sewage treatment plant on the Chetco River. If that
9 were allowed, it would render unnecessary the changes DEQ is requir-
10 ing in the City's treatment plant, since those changes assume that
11 the plant will service the District for the next twenty years. It
12 makes no sense for the City to sell its bonds and go forward if the
13 District will be allowed to build its own plant.

14 CONCLUSION

15 The City therefore respectfully requests that:

16 1. the City be given an extension of time to comply
17 further with the Order until it becomes clear what rates the City may
18 recover from the District;

19 2. the City be given an extension of time to comply
20 further with the Order pending a decision by the Commission whether
21 a treatment plant proposed by the District on the Chetco River will
22 be permitted;

23 3. the Commission schedule time at its next meeting to

24 ///

25 ///

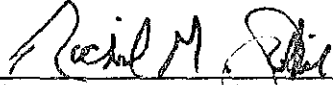
26 ///

1 hear argument and rule on this Motion.

2 DATED this 10th day of March, 1989.

3 Respectfully submitted,

4 RAGEN, TREMAINE, KRIEGER,
5 SCHMEER & NEILL

6 By: 
7 Richard M. Glick
8 Timothy R. Volpert
9 Of Attorneys for City of Brookings

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Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission
 From: Director
 Subject: Agenda Item Q, April 29, 1988, EQC Meeting

Request for Issuance of an Environmental Quality Commission
 Compliance Order for the City of Brookings, Oregon.

Background and Problem Statement

The Department is requesting that the Commission issue a compliance order to the City of Brookings. The compliance order would be used to resolve National Pollution Discharge Elimination System (NPDES) permit compliance problems and address other policy issues related to the Federal Water Pollution Control Act Amendments of 1972 (the Clean Water Act).

The City of Brookings, a coastal community of about 3500 located in southwest Curry County near the California border, operates and maintains sewage collection, treatment, and disposal facilities. The sewage collection system receives large quantities of extraneous flow during storm periods. These high flows occur even though past maintenance efforts have reportedly identified and corrected structural defects in the collection system. During these storm periods, the sewage treatment plant becomes hydraulically overloaded, resulting in reduced detention times in the system and lower treatment efficiency. The sewage treatment plant, consisting of primary treatment units constructed in the late 1950s and secondary treatment units constructed in 1973, also has design and operational deficiencies that reduce treatment capability. Once treated, the sewage is discharged to the Pacific Ocean via a short outfall line. This outfall is exposed during low tides and the treated sewage runs across the beach before it enters the ocean.

As a result of high flows and the limitations of its sewage treatment facilities, Brookings violates its NPDES permitted discharge limits (Attachment A). Monthly average biochemical oxygen demand (BOD) and suspended solids (SS) concentration limits were violated 23 and 12 percent of the time respectively from January 1983 to January 1988. Monthly average mass loading limits for BOD and SS were violated 57 and 43 percent of the time respectively during this same period. Attachment B is a graphical summary of effluent quality and effluent limit violations.

Schedule C of the existing NPDES permit requires the City to replace the currently inadequate disinfection facilities by July 1, 1988. Schedule C also requires an extension or relocation of the ocean outfall to a suitable

depth and location by July 1, 1988. These deadlines will not be met. The community, in coordination with the Department, has conscientiously decided to pursue a major upgrade and expansion of its entire sewage treatment and disposal facilities. The upgrade and expansion will take place according to a revised compliance schedule.

The City of Brookings violates provisions of the Clean Water Act by exceeding NPDES permitted discharge limits. The Environmental Protection Agency (EPA) introduced the National Municipal Policy (NMP) to address such violations, and to achieve the water quality objectives of the Act. The NMP, introduced in 1984, is designed to bring all noncomplying Publicly Owned Treatment Works (POTWs) into compliance with the Clean Water Act as soon as possible, but no later than July 1, 1988. If the July 1, 1988, deadline cannot be met, the EPA and the State are to work with the affected municipality to ensure that they are on enforceable schedules for achieving compliance.

City officials have initiated work to achieve compliance with the Clean Water Act. They have prepared a wastewater facilities plan that reviews the problems of their existing facilities and outlines various alternatives for adequately collecting, treating, and disposing of their sewage. An extension of the effluent outfall from its existing location out into the ocean where adequate dilution and mixing would occur is part of the plan's recommended alternative. The facilities plan is currently under review by the Department.

The City proposes to finance the alternative recommended in the facilities plan with local funds and an EPA sewerage works grant. A bond election is planned for securing local funds for the project and the grant application is being completed. To qualify for an EPA sewerage works grant, however, EPA maintains that the National Municipal Policy would require that the City be under an enforceable compliance schedule since construction activities would extend beyond July 1, 1988.

Brookings has completed a project implementation schedule as part of the facilities planning process. The implementation schedule identifies planning, design, and construction tasks and the expected dates for completing these tasks. The schedule would result in the community obtaining operational level of acceptable sewage collection, treatment, and disposal facilities according to the schedule in Attachment C.

Alternatives and Evaluation

The Department has identified the following alternatives for the Commission's consideration. Each alternative would address the City of Brookings' noncompliance with provisions of the Clean Water Act.

1. Direct the Department to modify the existing NPDES permit. The modified permit would include interim and final effluent limits and a revised compliance schedule that identifies dates to complete specific tasks that would bring the City into compliance.

Alternative 1 would not involve an EQC order or further EQC action. The NPDES permit would be used as a compliance mechanism and the City would be expected to meet the revised compliance schedule and conditions outlined in the permit.

The Department has been advised by EPA, however, that compliance conditions, schedules, and interim limits for meeting requirements of the Clean Water Act should be contained in administrative orders. EPA also maintains that the National Municipal Policy prohibits them from awarding sewerage grants to municipalities not meeting secondary treatment standards, where construction of their sewage treatment facilities would take place after July 1, 1988, unless the municipality is covered by an administrative order.

2. Direct the Department to litigate against the City of Brookings pursuant to ORS 468.035 and ORS 454.020 for noncompliance and have a federal or state court issue a court order that would include compliance conditions and a schedule that extends beyond July 1, 1988.

The Department staff do not recommend pursuing this alternative. It implies that the City of Brookings is being uncooperative and it would not necessarily expedite compliance. City officials have been conscientiously trying to find a solution to their sewage treatment and disposal problems. They have submitted a facilities plan that addresses their sewerage needs and outlines an implementation schedule for coming into compliance with the Clean Water Act. They are also willing to contribute local funds and are pursuing a federal grant in order to pay for the required wastewater treatment facilities.

3. Issue a Stipulated Consent Agreement and Final Order to the City of Brookings. The order would contain interim effluent limitations, a schedule of milestones for bringing the City into compliance, and penalties for failure to meet milestones by the specified dates in the compliance schedule (Attachment C).

The Department staff recommends Alternative 3 for the following reasons: (1) it recognizes the Commission's authority to enforce water quality objectives of the State under ORS 468.090 et. seq., (2) this approach has been used in the past to address similar water quality violations by other municipalities, (3) the Commission Order recognizes that the terms of the existing NPDES permit cannot be met, (4) Commission Orders have satisfied EPA in the past with regard to the National Municipal Policy and compliance with the Clean Water Act, (5) the City of Brookings is agreeable to the Order, and (6) the Order would act to positively reinforce the City's ongoing sewer system planning efforts and act as a commitment by the city to attain a long-term solution to its sewage treatment and disposal needs in a timely manner.

Summation

1. The City of Brookings violates provisions of the Clean Water Act by failing to meet its NPDES permit requirements. The NPDES permit limits are exceeded due to limitations of the sewage treatment facilities and the occurrence of extraneous flow into the sewage collection system during storm periods.
2. The City of Brookings discharges treated effluent to the Pacific Ocean via an ocean outfall line. The outfall line is exposed during low tides and treated sewage runs across the beach before it enters the ocean.
3. City officials have submitted a facilities plan that outlines wastewater treatment and disposal options. They are pursuing local and federal funding to pay for an upgrade of their sewage treatment plant and an extension of their outfall line.
4. Each of the alternatives outlined in this report for addressing Brookings' compliance problems would involve setting interim and final effluent limits and establishing a compliance schedule. The first alternative would do this through the NPDES permit process; the second through litigation and a court order; and the third through an EQC order.
5. The Department staff prefer the issuance of an EQC order since it would address EPA concerns over noncompliance and the National Municipal Policy, address Department concerns about the improper outfall location, and act as a positive commitment by the City to adequately treat and dispose of its municipal sewage.

Directors Recommendation

Based on the Summation, the Director recommends that the Commission issue the Compliance Order discussed in Alternative 3 by signing the document prepared as Attachment C.

Fred Hansen

Attachments: (3)

- A. NPDES permit number 100197
- B. Summary of NPDES permit violations Jan. 1983 to Oct. 1987
- C. Environmental Quality Commission Compliance Order

Kenneth M. Vigil:hs
(229-5622)
WH2538
April 7, 1988

Permit Number: 100197
Expiration Date: 3-31-91
File Number: 11297
Page 1 of 4 Pages

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WASTE DISCHARGE PERMIT
Department of Environmental Quality
522 Southwest Fifth Avenue, Portland, OR
Mailing Address: Box 1760, Portland, OR 97207
Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

ISSUED TO:

City of Brookings
898 Elk Drive
Brookings, OR 97415

SOURCES COVERED BY THIS PERMIT:

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Domestic Sewage	001	Pacific Ocean

PLANT TYPE AND LOCATION:

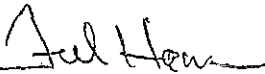
Trickling Filter STP South
of Wharf street and east of road
to Chetco Point

RECEIVING SYSTEM INFORMATION:

Major Basin: South Coast
Minor Basin: Chetco
Receiving Stream: Pacific Ocean
County: Curry
Applicable Standards: OAR 340-41-325

Issued in response to Application No. OR-202035-4 received July 30, 1984.

This permit is issued based on the land use findings in the permit record.


Fred Hansen, Director

JUN 20 1986
Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a waste water collection, treatment, control and disposal system and discharge to public waters adequately treated waste waters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	2
Schedule B - Minimum Monitoring and Reporting Requirements...	3
Schedule C - Compliance Conditions and Schedules.....	3-4
Schedule D - Special Conditions.....	4
General Conditions.....	Attached

Each other direct and indirect discharge to public waters is prohibited.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

SCHEDULE A

1. Waste Discharge Limitations not to be Exceeded After Permit Issuance.

Outfall Number 001

Parameter	Average Effluent Concentrations		Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lbs
	Monthly	Weekly			

May 1 - October 31:

BOD	30 mg/l	45 mg/l	250	375	500
TSS	30 mg/l	45 mg/l	250	375	500
FC per 100 ml	200	400			

November 1 - April 30:

BOD	30 mg/l	45 mg/l	250	375	500
TSS	30 mg/l	45 mg/l	250	375	500
FC per 100 ml	200	400			

Other Parameters (year-round)

Limitations

pH	Shall be within the range 6.0-9.0
Average dry weather flow to the treatment facility	1.0 MGD

2. Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which will violate Water Quality Standards as adopted in OAR 340-41-325 except in the following defined mixing zone:

The allowable mixing zone shall not exceed that portion of the Pacific Ocean within a 300 foot radius of the point of discharge.

SCHEDULE B

Minimum Monitoring and Reporting Requirements
(unless otherwise approved in writing by the Department)

Outfall Number 001 (sewage treatment plant outfall)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Continuous Recorder
Quantity Chlorine Used	Daily	
Effluent Chlorine Residual	Daily	Grab
BOD-5 (influent)	2 Per Week	Composite
BOD-5 (effluent)	2 per week	Composite
TSS (influent)	2 per week	Composite
TSS (effluent)	2 per week	Composite
pH (influent and effluent)	3 per week	Grab
Fecal Coliform (effluent)	1 per week	Grab
Average Percent Removed (BOD & TSS)	Monthly	Calculation
Sludge analysis as defined in OAR 340-50-035 (2) (a)	Once Annually	Grab

Monitoring reports shall include a record of the location and method of disposal of all sludge and a record of all applicable equipment breakdowns and bypassing.

Reporting Procedures

Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the following month.

SCHEDULE C

Compliance Conditions and Schedules

1. By July 1, 1986, the permittee shall submit to the Department a detailed sludge management plan in accordance with requirements of OAR 340, Division 50.
2. On or before December 1, 1986, the permittee shall submit a report which identifies known sewerage system bypass locations and a plan for estimating the frequency, duration and quantity of sewage bypassing treatment.
3. On or before April 30, 1987, the permittee shall submit to the Department a plan which addresses relocation of the existing ocean outfall. The plan must identify alternatives for extension or relocation of the outfall to a suitable depth and location in order to comply with Schedule A of this permit and Oregon's Water Quality Standards. The plan must also include a correction schedule that culminates in relocation of the ocean outfall no later than July 1, 1988.

Any relocation, changes or modifications to the existing ocean outfall must be approved by the Department, in writing, prior to construction of modification.

4. On or before April 30, 1987, the permittee shall submit to the Department a plan which addresses alternatives for replacement of existing disinfection facilities. The disinfection facilities shall be upgraded or replaced on or before July 1, 1988.
5. On or before April 30, 1987, the permittee shall submit a facilities plan to the Department which evaluates the collection and treatment system and addresses how the City intends to finance and implement improvements to assure compliance with the effluent limitations set forth in Schedule A.
6. The permittee shall implement a program to identify and reduce excessive infiltration/inflow (I/I) into the Brookings sewerage system (as identified in the City's March, 1979 infiltration/inflow study) and any adjunct sewerage collection systems.

No later than January 15 of each year, the permittee shall submit to the Department a report of all I/I work completed the previous calendar year. Included shall be a proposal for the I/I work scheduled for the next calendar year. This report and proposal must address the Brookings and Harbor Sanitary District sewerage collection systems.

7. The permittee shall submit an annual report on the number of new connections into the Brookings and Harbor Sanitary District sewerage collection system(s).

This report shall be provided for each calendar year following permit issuance. The report is due on or before January 15 following each calendar year.

8. Effective the issuance date of this permit, the permittee is prohibited from accepting septage wastes in the sewerage collection system or wastewater treatment facility.
9. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

SCHEDULE D

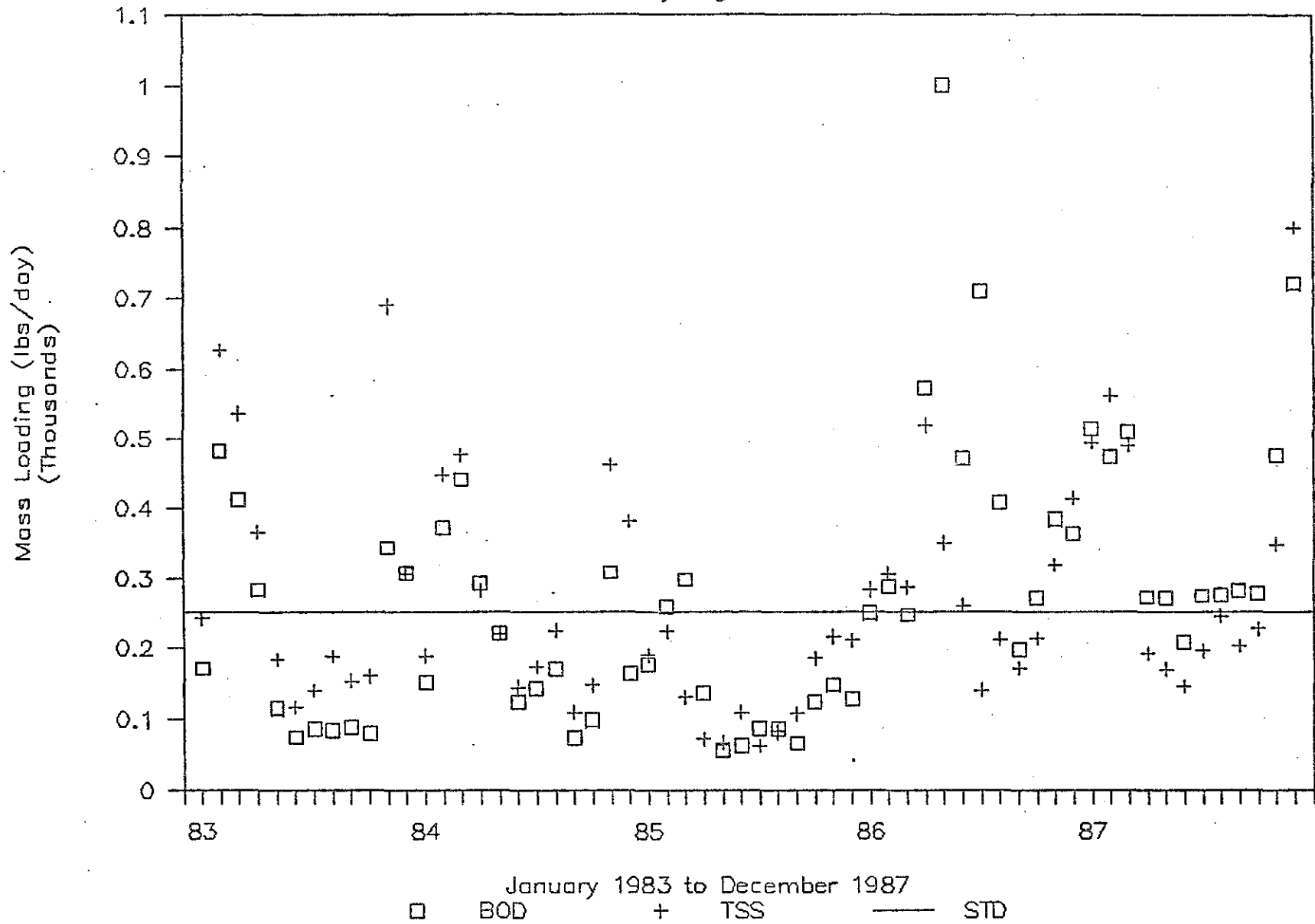
Special Conditions

1. Prior to discharging any wastes into the waters of the state, the permittee shall provide waste collection, treatment and disposal facilities which are adequate to meet the standards of Schedule A of this permit with a reasonable factor of safety.

P11297.W

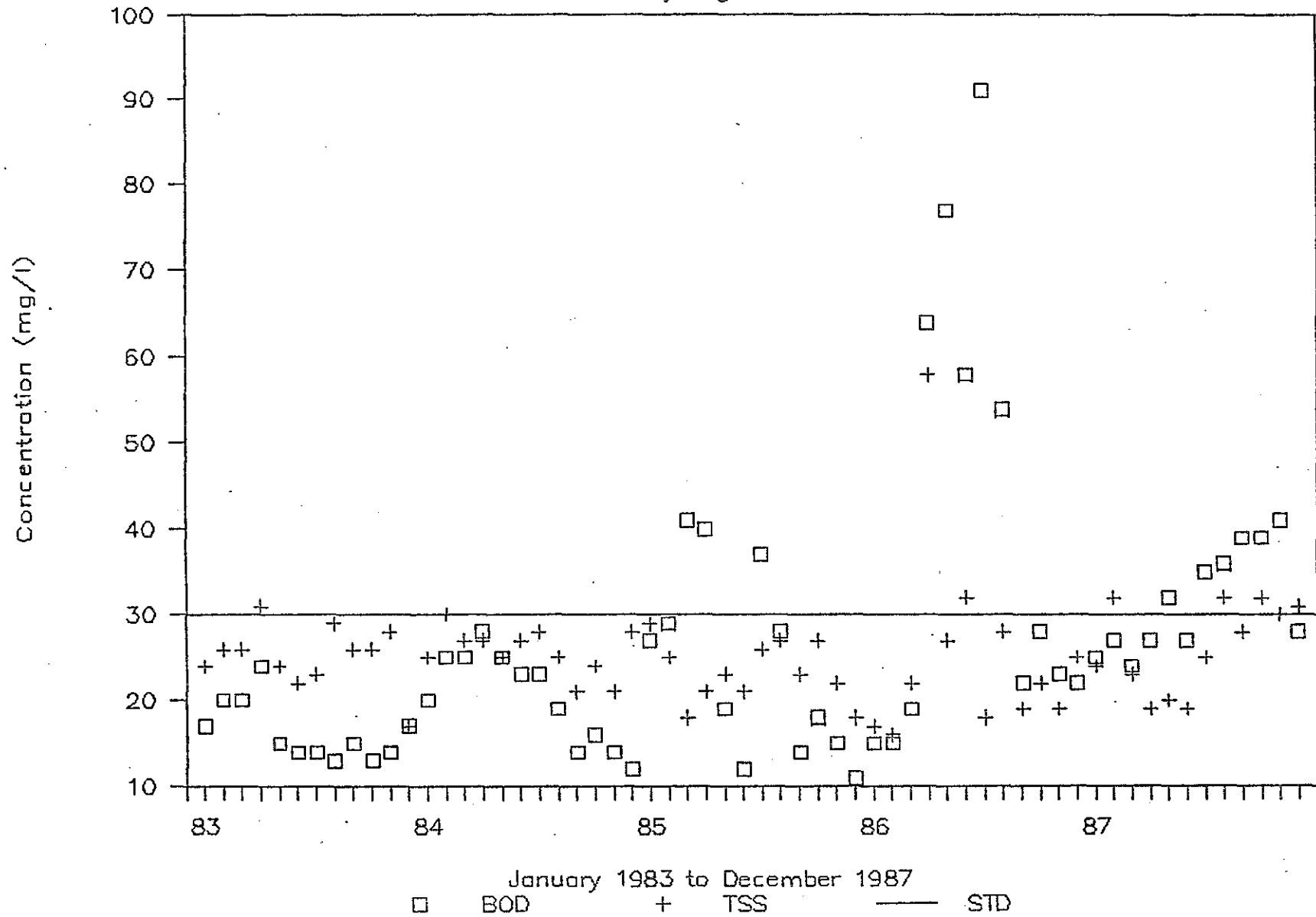
BROOKINGS EFFLUENT BOD/TSS

Monthly Avg. Values



BROOKINGS EFFLUENT BOD/TSS

Monthly Avg. Values



2. Condition 1 of Schedule A of the Permit does not allow Respondent to exceed the following waste discharge limitations after the Permit issuance date:

Outfall Number 001

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average</u> <u>lb/day</u>	<u>Effluent Loadings</u>	
	<u>Monthly</u>	<u>Weekly</u>		<u>Weekly Average</u> <u>lb/day</u>	<u>Daily Maximum</u> <u>lbs</u>
BOD	30 mg/l	45 mg/l	250	375	500
TSS	30 mg/l	45 mg/l	250	375	500
FC per 100 ml	200	400			

Other Parameters (year-around)

Limitations

pH Shall be within the range 6.0 - 9.0

Average dry weather flow to the treatment facility. 1.0 MGD

3. During the time period the Permit has been in effect, Respondent has not been able to consistently meet the above effluent limitations due to design and operational limitations of the sewage treatment plant and due to the high flows into the sewage collection system following storm events.

4. Department and Respondent recognize that until new or modified facilities are constructed and put into full operation, Respondent will continue to violate the permit effluent limitations at times. In addition, Respondent will not be able to meet portions of the compliance conditions contained in Conditions 3 and 4 of Schedule C of the Permit which requires extension or relocation of the ocean outfall and new or upgraded disinfection facilities by July 1, 1988.

///

1 5. Respondent presently is capable of treating its effluent so as to
 2 meet the following effluent limitations, measured as specified in the
 3 Permit:

<u>Parameter</u>	Average Effluent Concentrations		Monthly Average <u>lb/day</u>	<u>Effluent Loadings*</u>	
	<u>Monthly</u>	<u>Weekly</u>		Weekly Average <u>lb/day</u>	Daily Maximum <u>lbs</u>
BOD	45 mg/l	60 mg/l	375	500	600
TSS	45 mg/l	60 mg/l	375	500	600
FC per 100 ml	200	400			

<u>Other Parameters (year-around)</u>	<u>Limitations</u>
pH	Shall be within the range 6.0 - 9.0.
Average dry weather flow to the treatment facility	1.0 MGD

*Effluent loading limits do not apply when flow to the treatment facility exceeds 1.5 MGD.

6. The Department and Respondent recognize that the Environmental Quality Commission has the power to impose a civil penalty and to issue an abatement order for violations of conditions of the Permit. Therefore, pursuant to ORS 183.415(5), the Department and Respondent wish to settle those past violations referred to in Paragraph 3 and to limit and resolve the future violations referred to in Paragraph 4 in advance by this stipulated final order.

7. This stipulated final order is not intended to settle any violation of any interim effluent limitations set forth in Paragraph 5 above. Furthermore, this stipulated final order is not intended to limit, in any way, the Department's right to proceed against Respondent in any

1 forum for any past or future violation not expressly settled herein.

2 NOW THEREFORE, it is stipulated and agreed that:

3 A. The Environmental Quality Commission shall issue a final order:

4 (1) Requiring Respondent to comply with the following schedule:

5 (a) By October 1, 1988, arrange for financing of new or upgraded
6 sewage treatment and disposal facilities and notify the
7 Department in writing when such has been accomplished.

8 (b) Relocate or extend the existing ocean outfall, as follows:

9 (i) By October 1, 1988, submit draft engineering plans and
10 specifications to the Department.

11 (ii) By January 1, 1989, submit final engineering plans and
12 specifications to the Department.

13 (iii) By May 1, 1989, begin construction.

14 (iv) By September 1, 1989, complete construction and begin
15 operation.

16 (c) Construct and operate new or upgraded sewage treatment
17 facilities, as follows:

18 (i) By February 1, 1989, submit draft engineering plans and
19 specifications.

20 (ii) By June 1, 1989, submit final engineering plans and
21 specifications.

22 (iii) By March 1, 1990, begin construction.

23 (iv) By September 1, 1991, complete construction.

24 (v) By December 1, 1991, attain operational level and meet
25 all waste discharge limitations of the NPDES waste
26 discharge permit in effect at that time.

1 (2) Requiring Respondent to meet the interim effluent limitations set
2 forth in Paragraph 5 above until December 1, 1991.

3 (3) Requiring Respondent to comply with all the terms, schedules and
4 conditions of the Permit, except those modified by Paragraph A(2)
5 above and except for Conditions 3 and 4 of Schedule C of the
6 Permit, or of any other NPDES waste discharge permit issued to
7 Respondent while this stipulated final order is in effect.

8 (4) Requiring Respondent, should Respondent fail to comply with the
9 above schedule, to cease allowing new connections to Respondent's
10 sewage collection system upon written requirement of the
11 Department.

12 B. Regarding the violations set forth in Paragraph 3 and 4 above,
13 which are expressly settled herein without penalty, Respondent and
14 Department hereby waive any and all of their rights to any and all notices,
15 hearings, judicial review, and to service of a copy of the final order
16 herein. Department reserves the right to enforce this order through
17 appropriate administrative and judicial proceedings.

18 C. Regarding the schedule set forth in Paragraph A(1) above,
19 Respondent acknowledges that Respondent is responsible for complying with
20 that schedule regardless of the availability of any federal or state grant
21 monies.

22 D. Respondent acknowledges that it has actual notice of the contents
23 and requirements of this stipulated and final order and that failure to
24 fulfill any of the requirements hereof would constitute a violation of this
25 stipulated final order. Therefore, should Respondent commit any violation
26 of this stipulated order, Respondent hereby waives any rights it might have

1 to an ORS 468.125(1) advance notice prior to the assessment of civil
2 penalties. However, Respondent does not waive its rights to an ORS
3 468.135(1) notice of assessment of civil penalty.

4 RESPONDENT

5
6
7 Date _____

(Name _____)
(Title _____)

8
9
10 DEPARTMENT OF ENVIRONMENTAL QUALITY

11
12 Date _____

Fred Hansen
Director

13
14 FINAL ORDER

15 IT IS SO ORDERED:

16 ENVIRONMENTAL QUALITY COMMISSION

17
18 Date _____

James E. Petersen, Chairman

19
20 Date _____

Mary V. Bishop, Member

21
22 Date _____

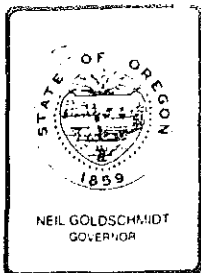
Wallace B. Brill, Member

23
24 Date _____

Arno H. Denecke, Member

25
26 Date _____

William P. Hutchison, Jr., Member



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 9-5696

January 6, 1989

Mr. Roy Rainey, City Manager
City of Brookings
898 Elk Drive
Brookings, OR 97415

Project file

Re: City of Brookings; C-410672-01
Approval of User Charge System

Dear Mr. Rainey:

We have reviewed the City of Brookings and Harbor Sanitary District Wastewater Rate Study (December 1988) prepared by Brown and Caldwell. This review was performed pursuant to regulations issued by the Environmental Protection Agency (EPA) (40 CFR, Part 35.2140), which basically states that a user charge system must:

1. Be designed to produce adequate revenues required for operation and maintenance (including replacement);
2. Provide that each user which discharges pollutants that cause an increase in the cost of managing the effluent or sludge from the treatment works shall pay for such increased costs; and
3. Provide that each user pays its proportionate share of operation and maintenance (including replacement) costs of treatment works within the grantee's service area.

As provided by EPA's regulations, our review covered only the operation, maintenance, and replacement (O,M&R) portion of the study and was based on the assumption (as cited in Brown and Caldwell's December 5, 1988, letter to Brookings) that all wastewater management costs associated with both the City of Brookings and the Harbor Sanitary District (HSD) are recovered from all users tributary to both systems. In other words, all sewage disposal works costs (which includes collection systems for both Brookings and HSD) are distributed equitably over the entire service area.

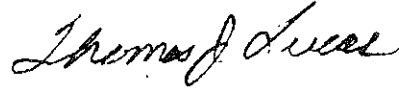
We are also assuming that Harbor Sanitary District has had the opportunity to review and comment on the study, as well as local citizens.

City of Brookings
January 6, 1989
Page 2

Based on the above assumptions, we are approving your user charge methodology as meeting the requirements of the EPA construction grants program. This approval allows for immediate implementation of a rate structure by the City of Brookings, but with the condition that Harbor Sanitary District, if dissatisfied, can respond with an analysis and propose an adjustment of the rates.

If you have any questions, please feel free to call me at 229-5415 or Ruby Lane at 229-5789.

Sincerely,



Thomas J. Lucas, Manager
Construction Grants Section
Water Quality Division

TJL:RRL:kjc
WJ1427

cc: Harbor Sanitary District
Greg Matthews, Brown and Caldwell
Southwest Region, DEQ
Corps of Engineers
Region 10, EPA

1/6/89 copy faxed to Rick Glick
MANVILLE Heissell.

Phone (503) 469-2163

CITY OF BROOKINGS

898 Elk Drive
Brookings, Oregon 97415

The Home of Winter Flowers

MAR 3 1989

Water Quality Division
Dept. of Environmental Quality

March 1, 1989

COPYMr. Fred Hansen, Director
Department of Environmental Quality
811 SW Fifth Ave.
Portland, Oregon 97204

REFERENCE: CITY OF BROOKINGS/HARBOR SANITARY DISTRICT

Dear Mr. Hansen:

This is to advise that the City of Brookings ("City") intends to withdraw and replace the waste water rate study dated December 1988 ("1988 Rate Study"), which the Department of Environmental Quality ("DEQ") apparently had earlier approved. Also, a proposal for commencing construction of those necessary wastewater treatment system improvements which will bring the City into compliance with treatment and discharge requirements is contained herein. The City Council approved this action on February 15, 1989. We are forced to offer a new rate study for three reasons.

First, the number of connections within the District is now reported to be 1,184, rather than the 782 figure relied upon in the 1988 Rate Study which diminishes its validity and much of the planning and engineering which has been done.

Second, the City does not have reliable information on the quantity and quality of material transmitted by the District to the City's sewage treatment plant with which to prepare flow or load-based rates.

Third, it does not appear that DEQ is prepared to exercise its rate oversight and regulatory authority against the District in support of the City's efforts to achieve compliance with the Consent Order and grant conditions for plant improvements so as to allow for fulfilling terms of the EQC Consent Order.

By letter dated January 6, 1989, Mr. Richard Nichols advised the District that the City's 1988 Rate Study had been approved and the rates were fully implemented within the District's service area pending a counter rate proposal by the District. The counter rate proposal was suggested by the City staff to allow for Harbor Sanitary District input into the rate making process under the same conditions as the City, i.e., a professional rate study and rational rate schedules. By your letter dated May 25, 1988, DEQ waived the grant requirement that the City obtain an inter-municipal agreement between the District and the City subject to the City continuing in good faith to try to work out a resolution of its differences with the District. Copies of the Consent Order and these letters are enclosed.

Mr. Fred Hansen, Director
Department of Environmental Quality
March 1, 1989
Page 2

At a meeting requested by the City on January 16, 1989, between representatives of DEQ, the City and the District, Mr. Nichols retreated from the support earlier given, thereby contradicting the assumptions which underlie the 1988 Rate Study and crippling the City's year-long efforts to comply. Mr. Nichols said that it was not the intent of his letter to impose City rates in the District service area pending a counter proposal and that DEQ always had in mind that the rate issue would be resolved locally between the City and the District. He said DEQ would not get involved unless the parties failed to reach an agreement.

Because of Mr. Nichols' refusal to support implementation of the rates approved by DEQ within the District's service area, the City had to cancel the sale of bonds to finance, and bidding for construction of, improvements to the sewage treatment plant, outfall and collection system. The City cannot comply with the May 1 deadline for beginning construction of the improvements under these circumstances. (A proposal is outlined below which could allow for compliance.) The City believes this is a direct result of DEQ's not following through on its commitments (now going back over a year) to support the City's rate-making efforts. This is particularly disappointing in light of the excellent cooperation the City has enjoyed with DEQ staff during the past several months while we were developing our rate proposal.

Our new rate proposal will address several concerns the City has had about its relationship with the District. Despite our repeated demands, the District has refused to adopt system replacement charges as required by Federal regulations, and has placed an undue rate burden on the residents of the City. In addition, as mentioned above, information on connections, flows and loads within the District has been wholly inadequate and unreliable. Finally, because of our understanding of the Federal regulations requiring us to be responsible for the entire sewage treatment operation, including the District's system, we have been concerned about our ability to assure management of the District collection system.

The features of our new rate proposal are as follows:

1. The City would submit a new interim rate proposal in which the District would be charged a flat monthly rate for each single or multi-family connection and a flat rate for each commercial establishment. The District's rates would be based on its proportionate share of total required revenues as determined by the District's proportion of total connections.

Mr. Fred Hansen, Director
Department of Environmental Quality
March 1, 1989
Page 3

2. Since District flow and load data are questionable or nonexistent, the City would install its own equipment to measure flows and loading at the point where the District's system connects to the City's. The equipment would be operated and maintained by the City in accordance with sound engineering practices and would be available along with all records for the District's reasonable inspection.
3. The interim rates charged the District would reflect the City's cost of operation, maintenance and replacement of the sewage treatment plant and outfall, including capital improvements to be grant funded and bond financed this year. The rates would also reflect a 15 percent risk assessment, since the City and its taxpayers would continue to incur the total risk of bonded indebtedness and regulatory compliance for the sewage treatment plant. We understand from Brown and Caldwell and Ruby Lane of EPA, that such a risk assessment is appropriate for arrangements such as the one we are proposing. The rates would not include charges to fund improvements to or replacement of the City's collection system, except for a reasonable charge for the sewer connecting the District's force main to the treatment plant.
4. At the end of one year of data collection, new rates would be developed for a 20-year period based on the following model. The District would be charged per gallon of flow and per pound of BOD and suspended solids, as measured by the City's equipment installed under paragraph 2, above. Capital costs allocated to the District would include the sewage treatment plant and outfall; the flow meter and load sampler; replacement costs; and risk allocation. Operation and maintenance costs allocated to the District would include plant operation and flow meter calibration and maintenance; periodic inspection of the District system by City staff; and inspection of new installations within the District by City staff. Capital cost allocation to the District would be on the basis of peak flows and loads since the treatment plant must be of sufficient capacity to handle the peaks. O&M cost allocation would be on an average flow and load basis and would include replacement as required by Federal regulations.
5. The District would be obligated to notify the City of any new development plans within the District's service areas or plans to expand the service area. The City would have the right to reject any new connections based upon the capacity of the plant to absorb additional flows and loading. The City would have the right to inspect all new sewerage installations within the District prior to transmission.

Mr. Fred Hansen, Director
Department of Environmental Quality
March 1, 1989
Page 4

6. The City would be relieved by DEQ and EPA of any and all responsibility whatever for operation, maintenance or replacement of the District's collection system. The District is an independent municipal corporation and is solely responsible for compliance with State and Federal laws dealing with sewage collection.

This rate proposal assumes that the District really is interested in a long-term commitment to use the Brookings plant. In a press release dated February 17, 1989 (copy enclosed), the District announced plans to build its own sewage treatment plant, although it has done nothing to determine the feasibility of an additional ocean outfall, a new plant, or compatibility with State and local land use requirements. We have formally asked the District if they seriously intend to pursue this course and we are awaiting an answer. A copy of our letter containing the settlement offer to the District is enclosed.

DEQ should also follow up since the DEQ's compliance requirements for the City are called into question. DEQ should advise very soon whether it will entertain another sewage treatment plant in the Brookings/Harbor area, since continued local planning and DEQ grant funding will both be materially impacted.

You are well aware that the Brookings urban growth boundary ends at the District boundaries. Although the area south of the UGB is urbanizing, in considerable part due to DEQ's environmental policies, it is not supposed to be an urban area. We expect that you will not agree to public sewer services outside the Brookings UGB in the rural portions of Curry County. Because of the uncertainties of the situation, we may be required to file a motion to stay the Environmental Quality Commission's order indefinitely.

The City is deeply disappointed and concerned that relations with the Harbor Sanitary District, which should have been clarified early in our planning process, now threaten to prevent our compliance with commitments we have made to ourselves and to the EQC. By way of making a final effort to meet the terms of Compliance Order No. 11297, dated April 19, 1988, we respectfully submit the following proposal:

1. That the City be authorized by DEQ to proceed with construction of:
 - a. The ocean outfall.
 - b. The headworks reconstruction.
 - c. The collection system improvements.

Mr. Fred Hansen, Director
Department of Environmental Quality
March 1, 1989
Page 5

2. That engineering plans and specifications be completed for the entire wastewater treatment system improvements which are included in the current grant program.
3. That the grant be appropriately adjusted to allow these projects to proceed immediately and to defer plant reconstruction until DEQ acts on the Harbor Sanitary District application for a second wastewater treatment plant.
4. That reconstruction of the treatment plant be indefinitely postponed until such time as Harbor Sanitary District and DEQ reach final agreement on the question of a second wastewater treatment plant.
5. That an immediate moratorium be placed upon the Harbor Sanitary District preventing any and all new connections until a decision shall have been reached by DEQ on permits for construction of a second wastewater treatment plant.
6. That the rate proposal contained in this letter be immediately approved subject to receipt of supporting rate documentation.

If Harbor Sanitary District diligently pursues permits for the second treatment facility then minor improvements to the City plant will allow for acceptable treatment levels for City loads and for reasonable growth. Upgrading the existing plant for a two or three year service period cannot be justified if Harbor Sanitary District is allowed to withdraw. In the event Harbor Sanitary District cannot obtain approvals for a second plant then the City facility will be upgraded according to plans which are now nearing completion. The City can make no further plans relative to expanding its plant until solid information and firm commitments are available to support rational decisions. Any continued activity beyond that which is herein proposed would be ridiculous.

If DEQ desires to continue on the established schedule then required approvals will be necessary within ten days from the date of this letter. Time is obviously of the essence. The City will move as expeditiously as possible to sell bonds and bid the outfall project and to complete plans for headworks replacement and collection system improvements.

Mr. Fred Hansen, Director
Department of Environmental Quality
March 1, 1989
Page 6

We solicit your earliest consideration and your favorable approval.
None of us can afford the consequences of further delay.

Sincerely,



Roy G. Rainey
City Manager

RGR/dmvr

Enclosure

cc: Mr. William Hutchinson, Chairperson, Environmental Quality
Commission
Mr. Robie Russell, Director, Region 10, Environmental
Protection Agency
Oregon State Senator Bill Bradbury
Oregon State Representative Walt Schroeder
Mr. Manville Heisel, Harbor Sanitary District
Mr. Richard M. Glick

wastwatr\deq0301.89



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

MAR 20 1989

City of Brookings
 Attn: Roy G. Rainey, City Manager
 898 Elk Drive
 Brookings, OR 97415

Re: City of Brookings
 C410671-01
 Curry Country

Dear Mr. ^{Roy} Rainey:

The Director of our Department has requested that I respond to your March 1, 1989 letter enumerating issues and a proposal for resolving them. We recognize the City of Brookings' concerns and frustrations with the project, and the immediate need to move to the construction phase. We are responding to the items in your proposal, and request a meeting to address remaining issues.

DEQ RESPONSE TO CITY OF BROOKINGS PROPOSAL

1. The City requests authorization to proceed with construction of elements below:
 - a. The ocean outfall.
 - b. The headworks reconstruction.
 - c. The collection system improvements.

DEQ Response:

The Department approves your request to construct the outfall, headworks, and collection system improvements. We concur that there are no impediments to performing this work.

2. The City requests that engineering plans and specifications be completed for the entire wastewater treatment system improvements which are included in the current grant program.

DEQ Response:

The Department approves your request. Contract documents have been approved for the outfall construction. Remaining engineering design should proceed in accordance with schedules incorporated in the Stipulated Consent Order.

City of Brookings
Attn: Roy G. Rainey, City Manager
Page 2

3. The City requests that the grant be appropriately adjusted to allow the project listed in item 1 to proceed, but that reconstruction of the treatment plant be indefinitely postponed until such time as Harbor Sanitary District and DEQ reach final agreement on the question of a second wastewater treatment plant.

DEQ Response:

We believe this request is premature. The grant to Brookings has been awarded and funds obligated. A lowering of the grant amount could result in deobligation of funds by the Environmental Protection Agency. The Stipulated Consent Order requires initiation of construction for the sewage treatment plant improvements by March 1, 1990. The Department believes this date is achievable and should be met.

In addition, the Harbor Sanitary District has not submitted a permit application or any correspondence requesting permission to plan, design, or build a new sewage treatment plant. For the Department to consider an application for a permit, the Harbor Sanitary District would have to demonstrate that the new facility would be environmentally acceptable, cost effective, and compatible with LCDC approved comprehensive plans. A proposed new outfall would require the District to expend considerable planning effort to evaluate water quality impacts and to address statutes and rules pertaining to LCDC Goal 19 (protection of ocean resources). Until these are resolved by the Harbor Sanitary District to the Department's satisfaction, a permit could not be issued. In addition, Harbor Sanitary District is obligated to ensure that all of its sewage is adequately treated, now and in the future. The Department expects the District to participate with the City in correcting existing sewage treatment deficiencies at the Brookings' plant as needed to provide acceptable treatment of sewage until a new plant is built, if ever.

4. The City requests that an immediate moratorium be placed upon the Harbor Sanitary District preventing any and all new connections until a decision shall have been reached by DEQ on permits for construction of a second wastewater treatment plant.

DEQ Response:

The Department and Environmental Quality Commission are committed to correcting sewage treatment deficiencies at the Brookings' wastewater plant as soon as it is practical. The Department expects the City to meet its commitments to correct the deficiencies. If it fails to meet commitments, enforcement actions, as appropriate, will be considered by the Department. Such actions could include civil penalties or imposition of connection moratoriums on Harbor Sanitary District or the City of Brookings or both. At this time, however, we do not believe it

to be appropriate to consider a moratorium. We believe the City is making a good-faith effort to meet the compliance schedule.

5. The City requests that the rate proposal contained in the March 1, 1989 letter be immediately approved subject to receipt of supporting rate documentation.

DEQ Response:

The proposal includes both a methodology for interim rates, and after a year of flow measurements and analysis, a methodology for final rates.

- a. **Interim Rates:** The methodology for establishing these rates should meet federal grant requirements and is approved for implementation. When the actual rates are calculated, they must be submitted, along with supporting documentation, to the Department for approval, and they must meet federal requirements for equity and sufficiency.
- b. **Final Rates:** The methodology for final rates is based on charges for flow, BOD, and TSS. The proposed allocation of these charges to system components appears consistent with federal grant requirements and is reasonable. The methodology proposed is standard, often used, and is approved by the Department for development of final rates. The final rates must meet federal requirements for sufficiency and equity, and must be approved by the Department.

PROPOSED AGENDA

There are obviously many issues enumerated in your letter, and just as obviously, some misunderstandings between the Department and the City of Brookings. We believe a meeting would be helpful in resolving issues. Items listed below are topics we believe should be addressed; however, you may wish to add topics. Representatives from the Department, City of Brookings and the Harbor Sanitary District should attend.

Harbor Sanitary District Proposal to Construct a Second Sewage Treatment Plant -- Although we have not received a proposal, we have read articles from the local newspaper, and we are aware that there has been considerable interest expressed by the District. The discussion should include Brookings and Harbor Sanitary District Service areas, and areas outside the Brookings Urban Growth Boundary. Area population and economic growth should also be covered during the discussion. Although we do not believe a second sewage treatment plant is feasible, we are willing to explore such a possibility if the City of Brookings, Harbor Sanitary District, and Curry County support such a proposal.

City of Brookings
Attn: Roy G. Rainey, City Manager
Page 4

Other Items Enumerated in Your Rate Proposal -- You requested approval to install and operate flow measuring equipment; authority to inspect District sewerage installations; authority to reject service connections based on plant capacity; and a requirement for the Harbor Sanitary District to notify the City of development plans. Installing new flow measuring equipment should be done at your discretion. We do not believe we have authority to grant your other requests.

Responsibility for Performance of Harbor Sanitary District System -- There appears to be some confusion regarding the City's responsibilities. We do not believe that Brookings is responsible for operation of the Harbor system. This is a responsibility of the Harbor Sanitary District. Oversight of the District's operation is a regulatory responsibility of the Department. A letter requesting that Harbor Sanitary District submit a Water Pollution Control Facilities permit application and describing their responsibilities as owners of a collection system is being prepared by staff.

The City is responsible for assuring compliance with permit conditions for its sewerage facility. In order to do this, the City must have a mechanism to limit or control wastewater entering the facility. There may be a number of mechanisms available to accomplish this, including the use of an intergovernmental agreement. We would like to assist in any way we can to facilitate this process.

Flows, Design Parameters -- Accurate flows are essential for proper sizing of sewage treatment plant components. Since you expressed concern regarding the adequacy of information on flows from the District, we should discuss this to make sure that the design values are sound.

Dawson Tract and Other Areas that may be Served -- We are currently rating the Dawson Tract area for inclusion on the FY 1989 construction grant project priority list. Indications are that the project will rate high enough to be eligible to receive grant award this year. We are also aware that there may be proposed amendments to the Public Facilities part of the Brookings comprehensive plan. Any proposed increases in service area should be discussed relative to sewage treatment capacity.

DEQ's Environmental Policies South of the UGB -- Your letter expressed concern -- we need to discuss this item in conjunction with a discussion on land use and LCDC approved comprehensive plans. We have heard that Curry County may be interested in expanding the UGB south to the Winchuk River. This, too, needs to be reviewed.

Roy, we believe that the City of Brookings has been very responsive to Department requests, environmental concerns, and to efforts to upgrade sewerage facilities. We hope this letter will allow you to move forward on bond sales and remaining work necessary to initiate construction by the

City of Brookings
Attn: Roy G. Rainey, City Manager
Page 5

May 1, 1989 deadline established in the Environmental Quality Commission Order. Please let me know if you are agreeable to a meeting.

If I can be of further assistance, please call me at 229-5301.

Sincerely,

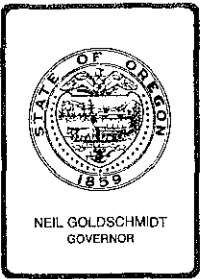


Richard J. Nichols
Administrator
Water Quality Division

RJN:hs/kjc

CG/WH3311 (TJL)

cc: Mr. William Hutchison, Chairperson, Environmental Quality Commission
Mr. Robie Russell, Director, Region 10, Environmental Protection Agency
Oregon State Senator Bill Bradbury
Oregon State Representative Walt Schroeder
Mr. Manville Heisell, Harbor Sanitary District
Mr. Richard M. Glick



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

April 10, 1989

Roy Rainey, City Manager
 City of Brookings
 898 Elk Drive
 Brookings, OR 97415

Re: City of Brookings; C410672-01;
 March 28, 1989 Meeting

Roy
 Dear Mr. Rainey:

I appreciated the opportunity to meet with you and Mayor Hummel on Tuesday to discuss issues associated with the Brookings' sewerage project. Because resolution of these issues is essential to meeting construction schedules, I believe it is necessary to briefly summarize our discussion and to restate what was agreed to by the Department and the City.

Second Sewage Treatment Plant:

Discussion of this issue focused on whether or not the Department would approve a proposal for a second plant and what would be the financial impact on the City. As I stated at our meeting, I do not want to foreclose the possibility of a second plant at some point in the future. Given the rapid growth in the area, continued expansion of the existing facility will be necessary. The facility plan prepared by your engineering consultants clearly demonstrated that expansion of the Brookings' plant is, at this time, the cost effective solution to treatment needs for the next few years. At some point in the future, however, a second plant may become economically feasible, and if environmental concerns can be satisfactorily resolved, the City, Harbor S.D. and Curry County may desire to construct a second plant. In the event this occurs, there would still be the problem of retiring debt issued for the current expansion. I want to assure you, the Department is committed to protecting Brookings from financial duress. The Department expects the Harbor S. D. to participate financially in the current plant reconstruction, and this participation must include retirement of debt now incurred. Without Harbor S. D. participation in debt retirement, the Department would not approve a proposal for a second sewage treatment plant.

Roy Rainey, City Manager
City of Brookings
April 10, 1989
Page 2

Approval of Sewer Rates:

There was discussion of our January 6, 1989 and March 20, 1989 letters and whether or not they constituted approval for implementation of the rates. I want to be as clear as possible: Our March 20, 1989 letter approved the Brookings' rate methodology (both interim and final) for immediate implementation in the entire sewer service area. This includes the area served by the Brookings collection system and the area served by the Harbor S. D. system. The Department expects both the City and the District to collect from their customers sufficient revenues for debt retirement and for operation, maintenance and replacement of the treatment works. The rate methodology meets Environmental Protection Agency requirements for sufficiency (enough revenue) and equity (fair and reasonable).

Regulatory Presence:

You expressed concern that the Department regulates the City but does not regulate the District. This is essentially correct; the Department has, for several years, regulated NPDES permit holders and has relied on inter-municipal contracts between NPDES permit holders (the owner-operator of the treatment plant) and communities which discharge to the permit holder's system. This arrangement has worked well in the past, and for many communities it is still a satisfactory arrangement.

In the present situation between the City and the District it appears that the existing agreement does not provide an adequate regulatory link between the City and the District. We have concluded that direct regulation of the District is necessary. A request for the District to apply for a Water Pollution Control Facility (WPCF) permit has been mailed to the District; a copy is attached for your files. Although it is possible to regulate the District through a permit, we still believe a solid working relationship between the communities can best be achieved through an inter-municipal contract. We hope that ultimately a contract acceptable to both communities will be prepared.

Petition to Environmental Quality Commission:

Our understanding is that the City still intends to petition the Commission to stay the Stipulated Consent Order. We believe that the Commission will want to remain with the May 1, 1989 schedule for construction of the outfall line, if at all possible. I recommend that you move as quickly as possible to complete selection of a consultant for engineering services and initiate procurement of a construction contractor. It may still be possible to meet or come close to the May 1, 1989 deadline for outfall construction. I realize that there is a recent issue regarding underwater blasting after June 10, 1989. We should all work as rapidly as possible to resolve this one remaining issue before the April 14, 1989 Commission meeting.

Roy Rainey, City Manager
City of Brookings
April 10, 1989
Page 3

After our meeting with the City, we held a brief meeting with Harbor S. D. officials. In that meeting we stated our intent to directly regulate the District. We further stated that we had approved the Brookings rate methodology for immediate implementation. A letter to the District, summarizing the meeting and discussing additional items, is enclosed for your review.

Roy, we believe that the City of Brookings has been very responsive to our requests, and is conscientiously endeavoring to fulfill remaining requirements. I am convinced that this is good project, and a very necessary project for protection of the environment. If you have any questions, please contact me at 229-5300.

Sincerely,



Fred Hansen
Director

FH:hs
CG\WH3336 (TJL)
Enclosure

cc: Senator Bill Bradbury
Mr. William Hutchison, Chairperson, Environmental Quality Commission.
Mr. Tom McKenzie, Superintendent, Harbor Sanitary District
Mr. Manville Heisell, Harbor Sanitary District
Mr. Gary Grimes, Southwest Region, DEQ



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

April 10, 1989

Manville Heisell
Harbor Sanitary District
P. O. Box 2457
Harbor, OR 97415

Manville
Dear Mr. ~~Heisell~~:

Thank you for the opportunity to meet with you and Tom McKenzie on Tuesday, March 28, 1989, to discuss issues pertaining to the Brookings' sewerage project. Because we believe this is a very important project, I would like to summarize our statements and position. In addition, I would like to discuss one other item in this letter, and that is the question of a second sewage treatment plant.

Approval of Sewer Rates:

The Department approved the Brookings' sewer rate methodology by letter dated March 20, 1989. A copy was mailed to you. At our meeting, we stated again that the methodology was approved for immediate implementation, and that it would apply to the Harbor Sanitary District. At the meeting, you asked if the approval included the 15 percent charge for risk assessment; we stated that it did. We also suggested that any other remaining rate issues between the District and the City should be directly negotiated between the two parties.

There may be some confusion regarding Department actions pertaining to sewer rate approval. At the January 16, 1989 meeting between the Department and representatives from the District and the City, it was suggested that the rates would only be approved if both the District and the City agreed to them. This is not the case. Our March 20, 1989 approval is for immediate implementation and covers both the District and the City.

Regulation of Harbor Sanitary District:

At our meeting, we stated that the Department intended to directly regulate the District rather than rely on an inter-municipal contract between the District and the City. We still believe that there should be a solid working relationship between the two communities, and that this could be effected through a contract acceptable to both parties. Application material for a Water Pollution Control Facilities (WPCF) permit was mailed to the District on March 29, 1989.

Manville Heisell
Harbor Sanitary District
April 10, 1989
Page 2

At our meeting, there was not sufficient time to discuss the question of a second sewage treatment plant. Although we have not received an application or correspondence from the District, there is apparently some interest in pursuing a second plant. Brookings is very concerned insofar as they need a commitment from the District to participate in the current Brookings' facility reconstruction. This commitment is necessary both from a capacity perspective and from a financial perspective. The City needs a revenue flow from the District to help retire bonded indebtedness over a 20 year period. In our discussion with the City, we did not preclude the possibility of a second treatment plant at some time. Given the current growth rates in the District and in Brookings, a second treatment plant may be the most environmentally sound and fiscally prudent plan at some future time. Currently, however, we feel that regional solutions to regional sewage needs make the most environmental sense. In most cases, this is also the most cost-effective option.

If a second plant is to be built, payment for the current plant and improvements will have to be covered. This would mean that flows from Harbor as well as payments for service would need to continue until debts could be retired. The Department, in its evaluation of any second treatment plant, would ensure that the current plant's viability is maintained.

Immediately prior to our meeting, we met with representatives from the City of Brookings. A copy of a letter summarizing that meeting is enclosed. You also requested that we forward some additional information; this will be sent separately as soon as possible.

If you have any questions, please contact me at 229-5300.

*Sorry to
I was very hear
of Tom's
death.*

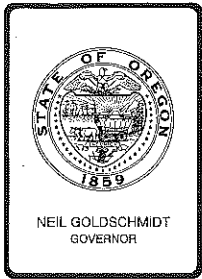
Sincerely,



Fred Hansen
Director

FH:hs
CG\WH3337 (TJL)
Enclosure

cc: Senator Bill Bradbury
Mr. William Hutchison, Chairperson, Environmental Quality Commission
Mr. Fred Hummel, Mayor, City of Brookings
Mr. Roy Rainey, Brookings' City Manager
Mr. Gary Grimes, Southwest Region, DEQ



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission DATE: April 13, 1989

FROM: Fred Hansen, Director

SUBJECT: Addendum to Staff Report, Agenda Item Q, regarding a time extension request by the City of Brookings to comply with construction schedules in Stipulated Consent Order, WQ-SWR-88-35

Department staff were in contact with Department of Fish and Wildlife staff on April 13, 1989. Department of Fish and Wildlife staff indicated that it may be possible to negotiate outfall construction blasting during the months of August and September. At this time it has not been firmly established whether or not blasting would be allowed in August and September.

If blasting could be done in August and September, the construction period would likely be from August through November. September may not be favorable because low tides, which are most desirable for blasting and construction work, occur at night. The months of October and November are unfavorable for construction due to storms. The indications staff have gotten are that contractors either would not bid on the job or would charge substantially more to do the work during that time period.

Staff have written an addendum to the Brookings order requiring that outfall construction start by August 1, 1989 with outfall completion by December 1, 1989. Staff have also added a condition that if construction during that time is not feasible, then the Director may revise those dates to require that outfall construction begin by April 15, 1990 with completion by September 1, 1990.

Staff have also prepared an order to be entered against Harbor Sanitary District. The order specifies conditions as described in the staff report. Staff discussed the contents of the order with the attorney for Harbor Sanitary District on April 13, 1989; the attorney indicated that he did not have serious objections to the order at that time.

CG\WC4819

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BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY)	
OF THE STATE OF OREGON,)	
)	
Department,	)	ADDENDUM TO STIPULATION
v.)	AND FINAL ORDER
)	NO. WQ-SWR-88-35
CITY OF BROOKINGS,)	CURRY COUNTY
)	
Respondent.)	
)	

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WHEREAS:

1. Stipulation and Final Order No. WQ-SWR-88-35 was issued by the Environmental Quality Commission (Commission) to the City of Brookings (Respondent) on April 29, 1988.

2. Paragraph A (1) of the Order requires Respondent to comply with a schedule to begin construction of a new outfall line by May 1, 1989, and to complete construction and begin operation by September 1, 1989.

3. Respondent, on March 10, 1989, filed a motion and request for an extension of time until financing issues can be resolved between the Respondent and the Harbor Sanitary District, and until the Commission decides if a second sewage treatment plant proposed by the Harbor Sanitary District will be permitted.

4. As of April 14, 1989, Respondent has not initiated bid proceedings for selection of a contractor to construct the outfall, pending a hearing before the Commission.

5. Respondent must comply with the Environmental Protection Agency construction grant regulations regarding bid proceedings. The regulations require advertisement for bids and sufficient response time to properly

1 prepare bid documents. Bid proceedings normally require 75 to 90 days to
2 complete. Because of the time necessary to complete bid proceedings,
3 Respondent cannot meet the May 1, 1989 schedule to start construction of the
4 outfall line.

5 6. The Department of Fish and Wildlife, in a letter to the Division
6 of State Lands, stated, that to protect sealife, blasting necessary for
7 outfall construction must be completed in April and May. Department of
8 Fish and Wildlife officials have stated that the April/May period is
9 preferred because favorable low tides would reduce the need for underwater
10 blasting; they further stated that blasting will not be allowed from June
11 11, 1989 through July, 1989. Department of Fish and Wildlife officials have
12 stated that it might be possible to schedule blasting in August or
13 September; however, this will require negotiation with the Department of
14 Fish and Wildlife.

15 7. Construction conditions are not favorable in the fall and winter
16 months. It is likely, even if blasting is allowed in August and September
17 by the Department of Fish and Wildlife, that contractors will be unwilling
18 to undertake outfall construction work at that time, or that the cost of
19 such work will be much higher at that time.

20 NOW THEREFORE, it is stipulated and agreed that the Commission shall
21 amend the Order as follows:

22 Amend item numbers A (1) (b) (iii) and (iv) to read:

23 (iii) By August 1, 1989, begin construction.

24 (iv) By December 1, 1989, complete construction and begin operation.

25 //

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1 If outfall construction is not feasible between the dates of
2 August 1, 1989 and December 1, 1989, the Director may amend this Order as
3 follows:

4 Amend item numbers A (1) (b) (iii) and (iv) to read:

5 (iii) By April 15, 1990, begin construction.

6 (iv) By September 1, 1990, complete construction and begin operation.

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10 RESPONDENT

11

12 _____ By _____
13 Date City of Brookings

14 DEPARTMENT OF ENVIRONMENTAL QUALITY

15

16 _____ By _____
17 Date Fred Hansen, Director

18

19 FINAL ORDER

20 IT IS SO ORDERED:

21 ENVIRONMENTAL QUALITY COMMISSION


22

23 _____ By _____
24 Date Fred Hansen, Director
25 Department of Environmental Quality
Pursuant to OAR 340-11-136(1)

26

INTEROFFICE MEMO

To: Fred Hansen, Director

From: George Davis, WQ 

Date: April 13, 1989

Subject: EQC Hearing on Brookings; Order to Harbor S.D.

Regarding the draft order to Harbor Sanitary District, our approach has been to impose conditions that would normally be included in a permit, on the premise that it is necessary to impose regulatory control immediately, rather than wait through a lengthy permit process; a permit would also be required.

Michael Huston has reviewed our draft order and offers the following comments:

1. The order, as drafted, presents a creative and accurate premise for issuing the order; however, an effective rebuttal could be constructed.

2. Our case, based on authority given by ORS 468, is weak. The authority to set rates, in ORS 454, gives much clearer authority to issue an order; however, there is no clear link between rate-setting powers and the monitoring requirements set forth in the draft order.

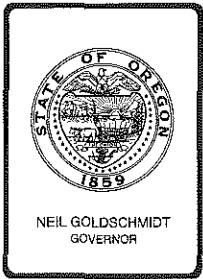
(Comment: We deliberately avoided ORS 454 authority insofar as we did not want to put the Commission in the position of taking direct action on the sewer rates).

3. Our actions are not consistent with the normal approach, i.e., we have determined that a permit is necessary, but rather than simply require that a permit be obtained, we jump immediately to an order without specifying clear violations in the order.

(Comment: Violations have occurred, but our response to the violations that have occurred would be to require a permit).

4. It might be worth issuing the order despite the weakness of the case. If it is not appealed, it remains in effect; if appealed, there may be an opportunity to build a stronger case and order. The possibility of building a stronger case would be greater if an appeal were heard by the Commission itself.

(Further comment: Should the Commission decide not to issue an order to Harbor S.D., an alternative might be to pursue a Stipulated Consent Order. I do not believe this alternative is desirable because (1) our time would be just as well spent working on the permit and the time frames would be similar, and (2) with the recent passing of Tom McKenzie, Harbor S.D. may not be in position to negotiate a consent order).



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC DISCUSSION

Meeting Date: April 14, 1989

Agenda Item: R

Division: H&SW

Section: Waste Reduction

SUBJECT:

Discussion of the need for performance standards for recycling programs required under the Oregon Recycling Opportunity Act. "Performance standards" would require recycling collectors to meet a goal for recycling participation, quantity of material recycled, or some other pre-set measure of recycling performance.

PURPOSE:

Enforceable recycling performance standards should result in conservation of energy and natural resources and extension of the useful life of existing solid waste disposal sites by requiring Recycling Opportunity Act programs to significantly increase recovery of recyclable material and public participation in recycling.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment

Meeting Date: April 14, 1989
Agenda Item:
Page 2

<input type="checkbox"/> Approve Department Recommendation	
<input type="checkbox"/> Variance Request	Attachment <input type="checkbox"/>
<input type="checkbox"/> Exception to Rule	Attachment <input type="checkbox"/>
<input type="checkbox"/> Informational Report	Attachment <input type="checkbox"/>
<input type="checkbox"/> Other: (specify)	Attachment <input type="checkbox"/>

DESCRIPTION OF REQUESTED ACTION:

The Department requests guidance from the Commission regarding the development of performance standards for recycling under the Recycling Opportunity Act. Guidance is requested regarding whether standards should be developed, timing issues related to the development of standards, and whether an increased legislative mandate should be sought for standards development. If the decision is made to proceed with developing standards, further discussion is requested regarding issues involved in standards development.

Two different types of standards could be set: performance standards and program standards. Performance standards relate to the quantity of material recycled, amount of waste reduced, participation rate, or some other pre-set measure of recycling performance. Program standards, on the other hand, relate to the type of recycling program and level of recycling service provided.

Presently, the only measure used by the Department to determine compliance with the Recycling Opportunity Act is whether recycling programs that meet certain minimum program standards are offered in an area. The minimum program standards required under the Act include:

1. On-route recycling collection offered at least monthly to all garbage service customers within the urban growth boundary of cities of 4,000 or more population;
2. Recycling opportunities offered at disposal sites or "more convenient locations";
3. A recycling education and promotion program that gives notice to each person of the opportunity to recycle, and encourages source-separation of recyclable material. The Commission has adopted a rule (OAR 340-60-040) requiring written or more effective notice to each person on the opportunity to recycle, reminder notices at least twice a year to recipients of on-route recycling collection, written information distributed at disposal sites, and distribution of recycling-related information to community groups and the news media.

Meeting Date: April 14, 1989
Agenda Item:
Page 4

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Response to Testimony/Comments	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment	<input type="checkbox"/>
<input type="checkbox"/> Supplemental Background Information	Attachment	<input type="checkbox"/>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

In the spring of 1988, the Oregon Environmental Council (OEC) addressed the Commission and requested that the Department develop performance standards to judge the adequacy of Recycling Opportunity Act programs and to determine if mandatory participation is the only practical alternative to fulfill the purposes of the general solid waste management policy.

Recycling service providers and local governments would be the primary recipients of performance standard evaluation and are expected to strongly oppose performance standards which will require increased activity in recycling without funding to defray the costs. These groups have consistently voiced opposition to mandatory recycling and to certain types of performance standards, and will want an active part in the development of any standards. They will also want assurance that economic factors are incorporated into any standard which is developed.

Effective new standards should result in increased recycling service to the public. However, standards may result in more cost to the public in the form of increased disposal system charges. In addition, the public will also be affected if the Commission orders mandatory recycling because performance standards are not met.

Groups that advocate recycling have supported implementation of the Recycling Opportunity Act. They should also support the development of new performance standards. Their primary interest is expected to be on standards which result in increased service levels, participation rates, education and promotion, and material recovery.

Meeting Date: April 14, 1989
Agenda Item:
Page 5

PROGRAM CONSIDERATIONS:

The process of developing standards, including solicitation of and response to public comments, will require significant Waste Reduction Section staff resources, up to 0.5 full-time-equivalents (FTE) for six to eight months. Total Waste Reduction staff are 3.5 FTE.

Enforcement of minimum recycling performance standards will represent a further shift in program emphasis towards enforcement and away from technical assistance. Staff resources now used for technical assistance and promotion and education activities would need to be shifted to enforce compliance with the standards.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Proceed immediately to develop recycling performance standards, prepare proposed rules, and return to the Commission with a request to hold a public hearing as soon as possible.

The sooner that standards are developed, the sooner that collection companies will work to meet those standards and increase the amount of material recycled. The disadvantage of this alternative, however, is that the whole process might have to be repeated after the legislative session (see below).

2. Work with the Legislature to include standards, or a mandate for the Commission to adopt standards, in recycling legislation. Delay the development of recycling performance standards until after the conclusion of the legislative session.

Groups involved in recycling, including the Association of Oregon Recyclers, have indicated that they intend to seek amendments to SB 424, the Department's solid waste/recycling bill, that would either legislatively set standards for recycling programs, or that would require the Commission to adopt standards. The Department supports these amendments in concept, and would like to work with the various affected parties to develop the specific language of the amendments. If legislative efforts are not sufficient to address the issue of standards, the Department would proceed with rulemaking after session.

One advantage of pursuing changes through the legislature is to obtain broader authority for the Commission over

recycling. Under present legislative authority, the only action allowed by the Commission is the ordering of mandatory participation, and that is possible only if the strict requirements of ORS 459.188 are met. New legislation might give the Commission a wider range of alternatives, such as the ability to order increased program standards, such as weekly collection or the provision of recycling containers, if performance standards are not met.

3. Not develop performance standards.

Under this alternative, performance standards would be adopted only if specifically required by new legislation. This alternative would not result in any significant impact on the Department's resources, and would allow the Department to continue to spend the existing resources on technical assistance and promotion of recycling programs. However, this alternative also would not provide any significant new mandate for increased recycling performance.

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department believes that some type of standards or goals would be useful to increase the effectiveness of curbside recycling programs in Oregon. The Department recommends approval of Alternative 2. This alternative would allow the Commission the possibility of increased legislative authority and a better range of enforcement options related to performance standards. The specific rules implementing new standards would be written and adopted after the legislative session is completed, if necessary. In the event that no significant changes are made in the Recycling Opportunity Act during the present legislative session, the Department will develop performance standards or goals which reflect the present requirements of the Act.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The Recycling Opportunity Act, ORS 459.165 to 459.200 does not explicitly require development and enforcement of recycling program performance standards. ORS 459.015(2)(h) provides general authority for the adoption and enforcement of minimum performance standards for solid waste management activities. ORS 459.188 allows the Commission to require mandatory recycling participation if recycling programs provided under the Recycling Opportunity Act do not fulfill the goals of ORS 459.015. This requirement implies that some

sort of recycling goals or standards may be adopted by the Commission in order to allow determination of whether mandatory recycling participation should be required.

The Department believes that the legislature will be considering proposals which would amend the Act and require standards. Choosing Alternative 2 will allow the Commission better ability to incorporate any new legislative mandate into new standards.

ISSUES FOR COMMISSION TO RESOLVE:

1. Should performance standards be used by the Department to direct the implementation of the Opportunity to Recycle Act?

Up to this point, implementation of the Act has been associated with provision of minimum required service levels set in the Act. It appears that implementation of the Act at these minimal level is not highly effective in attaining either moderate levels of public participation or material recovery. If the Act is going to be more effective, measurable results-oriented performance standards should be set.

2. How will needed resources be provided?

The Recycling Opportunity Act did not provide any specific resource base for service provider implementation of the opportunity to recycle. The establishment of performance standards will significantly increase the involvement and resource expenditure for both the service providers and the Department. It will not be practical to develop performance standards if the Department does not have resources to enforce them and the service providers do not have resources to meet them. The level of commitment to recycling as a method of solid waste management which is reflected in effective recycling performance standards will have to be matched with equivalent resources. SB 424, the solid waste/recycling bill proposed by the Department, would provide resources that would allow achievement of higher recycling standards, but if SB 424 or similar legislation is not passed, resource availability for implementing stronger recycling programs will be a problem.

3. Should recycling program performance standards be developed under the existing law, should the Commission seek increased legislative authority before adopting standards, or should the Commission not adopt standards unless required to by new legislation?

4. If standards are to be developed, should the Department start this process immediately, or after the legislative session?
5. If the Commission decides to pursue development of standards, a whole set of issues will have to be resolved regarding those standards. Some of these issues include:
 - A) Should performance measurement regarding standards involve just those recycling collection programs required under the Recycling Opportunity Act, or should other recycling programs be taken into account? At present, other recycling programs such as the bottle bill, recycling depots, non-profit group collection, and buy-back centers account for most of the recycling in Oregon. Programs required under the Recycling Opportunity Act account for less than 10 percent of the total amount of material recycled in this state at this time.
 - B) What sort of standard should be set, and what measurement system should be set up to determine compliance with standards?
 - C) How much emphasis should be placed by the Department in providing technical assistance, versus how much effort should be placed on enforcement compliance.

These issues will need to be considered by the Commission, the Department, and the other affected parties during the standards-development process, but do not have to be resolved at this time.

INTENDED FOLLOWUP ACTIONS:

If the Commission approves Alternative 2 as requested, the Department will work with the Legislature and with other affected parties to seek legislative authority for the Commission to proceed with comprehensive standards. If legislation is passed, the rule-development process would begin as soon as possible thereafter. If no appropriate legislation is passed, the Department would proceed with rule adoption based on the present requirements of the Act.

If the Commission approves Alternative 1, the Department will proceed immediately with the rule-development process. Depending on the length of time required to develop rules, the Department would prepare proposed rules and request authorization for a public hearing at the July 1989

Meeting Date: April 14, 1989
Agenda Item:
Page 9

Commission meeting or the earliest possible meeting date thereafter.

Approved:

Section:

David Rozell

Division:

Stephanie Gallock

Director:

*Judicia Taylor
for Fred Hansen*

Report Prepared By: David K. Rozell

Phone: 229-6165

Date Prepared: March 28, 1989

DKR:wrb,phs
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459.015 Policy. (1) The Legislative Assembly finds and declares that:

(a) The planning, development and operation of recycling programs is a matter of state-wide concern.

(b) The opportunity to recycle should be provided to every person in Oregon.

(c) There is a shortage of appropriate sites for landfills in Oregon.

(d) It is in the best interests of the people of Oregon to extend the useful life of existing solid waste disposal sites by encouraging recycling and reuse of materials whenever recycling is economically feasible.

(2) In the interest of the public health, safety and welfare and in order to conserve energy and natural resources, it is the policy of the State of Oregon to establish a comprehensive state-wide program for solid waste management which will:

(a) After consideration of technical and economic feasibility, establish priority in methods of managing solid waste in Oregon as follows:

(A) First, to reduce the amount of solid waste generated;

(B) Second, to reuse material for the purpose for which it was originally intended;

(C) Third, to recycle material that cannot be reused;

(D) Fourth, to recover energy from solid waste that cannot be reused or recycled, so long as the energy recovery facility preserves the quality of air, water and land resources; and

(E) Fifth, to dispose of solid waste that cannot be reused, recycled or from which energy cannot be recovered by landfilling or other method approved by the department.

(b) Clearly express the Legislative Assembly's previous delegation of authority to cities and counties for collection service franchising and regulation and the extension of that authority under the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(c) Retain primary responsibility for management of adequate solid waste management programs with local government units, reserving to the state those functions necessary to assure effective programs, cooperation among local government units and coordination of solid waste management programs throughout the state.

(d) Promote research, surveys and demonstration projects to encourage resource recovery.

(e) Promote research, surveys and demonstration projects to aid in developing more sanitary, efficient and economical methods of solid waste management.

(f) Provide advisory technical assistance and planning assistance to local government units and other affected persons in the planning, development and implementation of solid waste management programs.

(g) Develop, in coordination with federal, state and local agencies and other affected persons, long-range plans including regional approaches to promote reuse, to provide land reclamation in sparsely populated areas, and in urban areas necessary disposal facilities for resource recovery.

(h) Provide for the adoption and enforcement of minimum performance standards necessary for safe, economic and proper solid waste management.

(i) Provide authority for counties to establish a coordinated program for solid waste management, to regulate solid waste management and to license or franchise the providing of service in the field of solid waste management.

(j) Encourage utilization of the capabilities and expertise of private industry in accomplishing the purposes of ORS 459.005 to 459.105, 459.205 to 459.245 and 459.255 to 459.285.

(k) Promote means of preventing or reducing at the source, materials which otherwise would constitute solid waste.

(L) Promote application of resource recovery systems which preserve and enhance the quality of air, water and land resources. [1971 c.648 §1; 1975 c.239 §2; 1983 c.729 §15]

(Recycling)

459.165 Definitions for ORS 459.165 to 459.200 and 459.250. (1) As used in ORS 459.015, 459.165 to 459.200 and 459.250, the "opportunity to recycle" means at least:

(a) A place for collecting source separated recyclable material located either at a disposal site or at another location more convenient to the population being served and, if a city has a population of 4,000 or more, collection at least once a month of source separated recyclable material from collection service customers within the city's urban growth boundary or, where applicable, within the urban growth boundary established by a metropolitan service district; or

(b) An alternative method which complies with rules of the commission.

(2) The "opportunity to recycle" defined in subsection (1) of this section also includes a public education and promotion program that:

(a) Gives notice to each person of the opportunity to recycle; and

(b) Encourages source separation of recyclable material. [1983 c.729 §2]

459.168 Commission duties. The commission shall:

(1) Amend the state solid waste management plan to conform to the requirements of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(2) Review department reports on compliance with and implementation of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(3) Submit a report to each regular session of the Legislative Assembly regarding compliance with and implementation of the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995. [1983 c.729 §9]

459.170 Commission to adopt rules regarding waste disposal and recycling. (1) By January 1, 1985, and according to the requirements of ORS 183.310 to 183.550, the commission shall adopt rules and guidelines necessary to carry out the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995, including but not limited to:

(a) Acceptable alternative methods for providing the opportunity to recycle;

(b) Education, promotion and notice requirements, which requirements may be different for disposal sites and collection systems;

(c) Identification of the wastesheds within the state;

(d) Identification of the principal recyclable material in each wasteshed;

(e) Guidelines for local governments and other persons responsible for implementing the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995;

(f) Standards for the joint submission of the recycling report required under ORS 459.180 (1); and

(g) Subject to prior approval of the appropriate legislative agency, the amount of an annual or permit fee or both under ORS 459.235, 459.245 and 468.065 necessary to carry out the provisions of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995.

(2) In adopting rules or guidelines under this section, the commission shall consider:

(a) The purposes and policy stated in ORS 459.015.

(b) Systems and techniques available for recycling, including but not limited to existing recycling programs.

(c) Availability of markets for recyclable material.

(d) Costs of collecting, storing, transporting and marketing recyclable material.

(e) Avoided costs of disposal.

(f) Density and characteristics of the population to be served.

(g) Composition and quantity of solid waste generated and potential recyclable material found in each wasteshed. [1983 c.729 §3]

459.175 Notice to affected person in wasteshed; appeal; request for modification or variance. (1) After the commission identifies a wasteshed, the department shall notify each affected person to the extent such affected persons are known to the department, of the following:

(a) That the affected person is within the wasteshed; and

(b) The recyclable material for which affected persons within the wasteshed must provide the opportunity to recycle in all or part of that wasteshed.

(2) Any affected person may:

(a) Appeal to the commission the inclusion of all or part of a city, county or local government unit in a wasteshed;

(b) Request the commission to modify the recyclable material for which the commission determines the opportunity to recycle must be provided; or

(c) Request a variance under ORS 459.185 (8). [1983 c.729 §5]

459.180 Recycling report; implementation of opportunity to recycle. (1) Upon final determination of the wasteshed and identification of recyclable material and any variance, the cities and counties within the wasteshed shall coordinate with all other affected persons in the wasteshed to jointly develop a recycling report to submit to the department. The report to the department shall explain how the affected persons within the wasteshed are implementing the opportunity to recycle.

(2) Unless extended by the commission upon application under ORS 459.185 after the affected persons show good cause for an extension, the affected persons within the wasteshed shall implement the opportunity to recycle and submit the recycling report to the department not later than July 1, 1986. [1983 c.729 §6]

459.185 Approval, disapproval of recycling report; effect of disapproval. (1) The department shall review a recycling report submitted under ORS 459.180 to determine whether the opportunity to recycle is being provided within all of the affected portion of the wasteshed.

(2) The department shall notify the affected persons who participated in preparing the report of acceptance or disapproval of the recycling report based on written findings.

(3) If the department disapproves a recycling report:

- (a) An affected person may:
- (A) Request a meeting with the department to review the department's findings, which meeting may include all or some of the affected persons who prepared the report; or
- (B) Correct the deficiencies that the department found in the report.
- (b) The department may grant a reasonable extension of time for the affected persons to correct deficiencies in the recycling report.
- (c) The affected persons submitting the report shall notify the department of any action taken to correct a cited deficiency.
- (4) In the event of disapproval and after a reasonable extension of time to correct deficiencies in the opportunity to recycle, the director of the department shall notify the commission that the affected persons within a wasteshed have failed to implement the opportunity or submit a recycling report.
- (5) Upon notification under subsection (4) of this section, the commission shall hold a public hearing within the affected area of the wasteshed.
- (6) If, after the public hearing and based on the department's findings on review of the recycling report and the hearing record, the commission determines that all or part of the opportunity to recycle is not being provided, the commission shall by order require the opportunity to recycle to be provided. The commission order may include, but need not be limited to:
- (a) The materials which are recyclable;
- (b) The manner in which recyclable material is to be collected;
- (c) The responsibility of each person in the solid waste collection and disposal process for providing the opportunity to recycle;
- (d) A timetable for development or implementation of the opportunity to recycle;
- (e) Methods for providing the public education and promotion program;
- (f) A requirement that as part of the recycling program a city or county franchise to provide for collection service; and
- (g) Minimum standards for the mandatory franchising.
- (7) If a recycling program is ordered under this section, the department shall work with affected persons and designate the responsibilities of each of them.
- (8)(a) Upon written application by an affected person, the commission may, to accommodate special conditions in the wasteshed or a

portion thereof, grant a variance from specific requirements of the rules or guidelines adopted under ORS 459.170 or a recycling program ordered by the commission under subsection (6) of this section.

(b) The commission may grant all or part of a variance under this section.

(c) Upon granting a variance, the commission may attach any condition the commission considers necessary to carry out the provisions of ORS 459.015, 459.165 to 459.200 and 459.250.

(d) In granting a variance, the commission must find that:

(A) Conditions exist that are beyond the control of the applicant;

(B) Special conditions exist that render compliance unreasonable or impractical; or

(C) Compliance may result in a reduction in recycling.

(9) An affected person may apply to the commission to extend the time permitted under ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 for providing for all or a part of the opportunity to recycle or submitting a recycling report to the department. The commission may:

(a) Grant an extension upon a showing of good cause;

(b) Impose any necessary conditions on the extension; or

(c) Deny the application in whole or in part. [1983 c.729 §7]

459.188 Mandatory participation in recycling. (1) Upon findings made under subsection (3) of this section, the commission may require one or more classes of solid waste generators within all or part of a wasteshed to source separate identified recyclable material from other solid waste and make the material available for recycling.

(2) In determining which materials are recyclable for purposes of mandatory participation, the cost of recycling from commercial or industrial sources shall include the generator's cost of source separating and making the material available for recycling or reuse.

(3) Before requiring solid waste generators to participate in recycling under this section, the commission must find, after a public hearing, that:

(a) The opportunity to recycle has been provided for a reasonable period of time and the level of participation by generators does not fulfill the purposes of ORS 459.015;

(b) The mandatory participation program is economically feasible within the affected watershed or portion of the watershed; and

(c) The mandatory participation program is the only practical alternative to carry out the purposes of ORS 459.015.

(4) After a mandatory participation program is established for a class of generators of solid waste, no person within the identified class of generators shall put solid waste out to be collected nor dispose of solid waste at a disposal site unless the person has separated the identified recyclable material according to the requirements of the mandatory participation program and made the recyclable material available for recycling. [1983 c.729 §8]

459.190 Limitation on amount charged person who source separates recyclable material. A collection service or disposal site may charge a person who source separates recyclable material and makes it available for reuse or recycling less, but not more, for collection and disposal of solid waste and collection of recyclable material than the collection service charges a person who does not source separate recyclable material. [1983 c.729 §11]

459.192 Exemptions. Nothing in ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 applies to recyclable material which is:

(1) Source separated by the generator; and

(2) Purchased from or exchanged by the generator for fair market value for recycling or reuse. [1983 c.729 §12]

459.195 Prohibitions against removing or mixing recyclable material. A person may not:

(1) Without the permission of the owner or generator of recyclable material, take recyclable material set out to be collected by a person authorized by a city or county to provide collection service for that recyclable material.

(2) Remove any recyclable material from a container, box, collection vehicle, depot or other receptacle for the accumulation or storage of recyclable material without permission of the owner of the receptacle.

(3) Mix source separated recyclable material with solid waste in any vehicle, box, container or receptacle used in solid waste collection or disposal. [1983 c.729 §13]

459.200 City, county authority to issue collection service franchises; opportunity to recycle; rates. (1) The Legislative Assembly

finds that providing for collection service including but not limited to the collection of recyclable material as part of the opportunity to recycle is a matter of state-wide concern.

(2) The exercise of the authority granted by this section is subject to ORS 221.735 and 459.085 (3).

(3) It is the intent of the Legislative Assembly that a city or county may displace competition with a system of regulated collection service by issuing franchises which may be exclusive if service areas are allocated. The city or county may recognize an existing collection service. A city or county may award or renew a franchise for collection service with or without bids or requests for proposals.

(4) In carrying out the authority granted by this section, a city or county acts for and on behalf of the State of Oregon to carry out:

(a) The purposes of ORS 459.015;

(b) The requirements of ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995;

(c) Waste reduction programs; and

(d) The state solid waste management plan.

(5) After October 15, 1983, a city or a county may continue, extend or renew an existing franchise or grant a new franchise for collection service. If a city or county, in furtherance of ORS 459.005 to 459.385, has granted a collection service franchise before October 15, 1983, it may treat the franchise as if adopted under this section.

(6)(a) If a collection service franchise is continued, extended, renewed or granted on or after October 15, 1983, the opportunity to recycle shall be provided to a franchise holder's customers no later than July 1, 1986. This subsection does not apply to that portion of the opportunity to recycle provided at or in connection with a disposal site under ORS 459.250.

(b) The opportunity to recycle may be provided by:

(A) The person holding the franchise;

(B) Another person who provides the opportunity to recycle to the franchise holder's customers; or

(C) A person who is granted a separate franchise from the city or county solely for the purpose of providing the opportunity to recycle.

(c) In determining who shall provide the opportunity to recycle, a city or county shall first give due consideration to any person lawfully providing recycling or collection service on June

1, 1983, if the person continues to provide the service until the date the determination is made and the person has not discontinued the service for a period of 90 days or more between June 1, 1983, and the date the city or county makes the determination.

(7) In granting a collection service franchise, the city or county may:

(a) Prescribe the quality and character of and rates for collection service and the minimum requirements to guarantee maintenance of service, determine level of service, select persons to provide collection service and establish a system to pay for collection service.

(b) Divide the regulated area into service areas, grant franchises to persons for collection service within the service areas and collect fees from persons holding such franchises.

(8) The rates established under this section shall be just and reasonable and adequate to provide necessary collection service. The rates established by the city or county shall allow the person holding the franchise to recover any additional costs of providing the opportunity to recycle at the minimum level required by ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 or at a higher level of recycling required by or permitted by the city or county. The rates shall also allow the person to recover the costs of education, promotion and notice of the opportunity to recycle provided by a person holding a franchise.

(9) Instead of providing funding for the opportunity to recycle through rates established pursuant to subsection (8) of this section, a city or county may provide an alternative method of funding all or part of the opportunity to recycle.

(10) In establishing service areas, the city or county shall consider:

(a) The policies contained in ORS 459.015;

(b) The requirements of ORS 459.165 to 459.200 and 459.250;

(c) Any applicable local or regional solid waste management plan approved by the department;

(d) Any applicable waste reduction plan approved by the department; and

(e) The need to conserve energy, increase efficiency, provide the opportunity to recycle, reduce truck traffic and improve safety.

(11) A city or county may further restrict competition by permitting one or more collection service franchise holders to cooperate to provide

the opportunity to recycle if the city or county finds that such cooperation will:

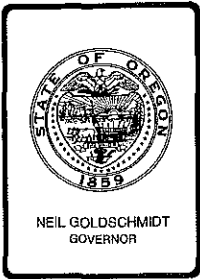
(a) Improve collection service efficiency;

(b) Guarantee an adequate volume of material to improve the feasibility and effectiveness of recycling;

(c) Increase the stability of recycling markets; or

(d) Encourage joint marketing of materials or joint education and promotion efforts.

(12) The provisions of this section are in addition to and not in lieu of any other authority granted to a city or county. A city or county's exercise of authority under this section is not intended to create any presumption regarding an activity of the local government unit not addressed in this section. This section shall not be construed to mean that it is the policy of Oregon that other local government activities may not be exercised in a manner that supplants or limits economic competition. [1983 c.729 §10]



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC DISCUSSION

Meeting Date: April 14, 1989
 Agenda Item: S
 Division: H&SW
 Section: Waste Reduction

SUBJECT:

Status report on yard debris recycling planning and implementation.

PURPOSE:

This report provides the Commission with an update on the level of local government compliance with yard debris recycling rules adopted on 9/9/88.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
 - Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment
- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: (specify) Attachment

Meeting Date: April 14, 1989
Agenda Item:
Page 2

DESCRIPTION OF REQUESTED ACTION:

This report is presented as an informational item. No Commission action is requested.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input type="checkbox"/> Statutory Authority: <u>ORS 459.165 - 200</u>	Attachment _____
<input type="checkbox"/> Pursuant to Rule: <u>OAR 340-60-035, 115-125</u>	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment _____
<input type="checkbox"/> Other: _____	Attachment _____
<input type="checkbox"/> Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment _____
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment _____
<input type="checkbox"/> Response to Testimony/Comments	Attachment _____
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment _____
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment _____
<input checked="" type="checkbox"/> Supplemental Background Information	
Yard Debris Recycling Status Report	Attachment <u>A</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

A total of 35 local governments within the five Portland area watershed are required to develop yard debris recycling plans under rules adopted by the Commission on September 9, 1988. All these local governments were required to report to the Department by February 15, 1989 the status of their yard debris plans as part of their annual watershed recycling report updates.

Three local governments, Gladstone, Oregon City, and West Linn, are currently providing the opportunity to recycle yard debris which meet the standards in the Commission rules. Gladstone and West Linn have submitted yard debris recycling plans to the Department. Although Oregon City has a yard debris recycling program, the city has not submitted its plan to the Department. The programs in these three cities were used as models for the development of the yard debris

Meeting Date: April 14, 1989
Agenda Item:
Page 3

collection rules. Oregon City and Gladstone have weekly on-route collection of source separated yard debris. West Linn has a community yard debris recycling depot supplemented by on-route collection.

All ten local governments within the urban growth boundary of the Metropolitan Service District in the Washington wasteshed have joined together to develop a single yard debris recycling program. The amount of time and effort involved in developing a wasteshed-wide yard debris recycling program which coordinates all of the local government yard debris recycling efforts will be much greater than that required for each individual local government program to develop a plan.

The Department feels that a wasteshed-wide effort will be more effective in coordinating the supply of yard debris and the markets than several individual programs. In order to have time to do an adequate job, the Washington wasteshed requested an extension of the February 15, 1989 planning deadline. The mechanism by which the extension will be allowed is the Washington wasteshed recycling report update. The update will be conditionally approved, final approval contingent upon receipt of the wasteshed's yard debris recycling plan by August 15, 1989.

Each local government which is participating in the Washington wasteshed yard debris planning process has signed an intergovernmental agreement with Washington County, the coordinator of the plans, and committed to participate in the planning process. Washington County, acting on behalf of the ten local governments, will submit a joint yard debris recycling plan to the Department by August 15, 1989. Washington County will coordinate their yard debris plan with the Metropolitan Service District.

Four local governments, Johnson City, Maywood Park, Multnomah County and Oregon City, have not submitted yard debris recycling plans nor committed to work with Metro in a yard debris planning process.

All of the other local governments within the urban growth boundary of the Metropolitan Service District have committed to work with Metro on a regional yard debris recycling program required as part of the Commission waste reduction order for Metro. Local governments which are working with Metro on a regional yard debris recycling plan are already committed to work with Metro through an earlier written agreement to cooperate in their regional solid waste management planning process. The Metro yard debris recycling

Meeting Date: April 14, 1989
Agenda Item:
Page 4

plan will be completed by July 1, 1990 as required by the Commission order No. SW-WR-89-01. The yard debris recycling rules allow for this time schedule without any special Department action.

PROGRAM CONSIDERATIONS:

Department staff are reviewing the two yard debris plans which have been submitted to insure that these local governments are in compliance with the yard debris recycling rules. Department staff have also been providing technical assistance, reviewing staff reports, and attending policy and technical advisory committees for both the Metro and Washington watershed planning processes. Staff are working with the four local governments, Johnson City, Maywood Park, Multnomah County, and Oregon City, which have not submitted yard debris plans to bring them into compliance with the requirements of the yard debris recycling rules. The Department is also negotiating with Canby, which lies outside of the boundary of the Metropolitan Service District, regarding their need to provide a yard debris recycling program.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

Not applicable

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

Not applicable

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The present local government yard debris recycling planning and program implementation activities are consistent with the intent of the Opportunity to Recycle Act and yard debris recycling rules, OAR 340-60-035 and 115 to 125. The opportunity to recycle yard debris is already available in three Portland area communities, Gladstone, Oregon City and West Linn.

ISSUES FOR COMMISSION TO RESOLVE:

1. Is the present yard debris planning and implementation process progressing at an acceptable rate?
2. What further actions, if any, should the Department be taking to encourage and facilitate yard debris recycling?

Meeting Date: April 14, 1989
Agenda Item:
Page 5

INTENDED FOLLOWUP ACTIONS:

1. The Department believes that yard debris planning and implementation in the Metropolitan Portland area is proceeding at an acceptable rate. Processor capability, market demand, and collection system costs remain the significant yard debris recycling issues to be addressed. The regional and local planning efforts will provide the Department and local governments with accurate information on processor capability and growth potential. The Department will continue to provide technical assistance and coordination to individual local governments, the Washington wasteshed and Metro on planning and implementation of yard debris recycling programs.
2. The Department will contact the four local governments which have not submitted yard debris plans and require them to either submit a completed plan or commit to work with Metro on the regional yard debris plan. The Department will also work with Canby to assist them in the development of an appropriate yard debris collection and processing system for their community.
3. The Department will bring a status report to the Commission in the early fall, after the Washington wasteshed yard debris recycling plan has been completed.

Approved:

Section:

Division:

Director:

David Rozell
Stephanie Hallock
Ryosia Taylor
for Fred Hansen

Report Prepared By: David K. Rozell

Phone: 229-6165

Date Prepared: March 23, 1989

DKR:wrb
ydb01.eqc
3/23/89

YARD DEBRIS RECYCLING PLANS
STATUS REPORT

There are five wastesheds in the metropolitan Portland area. All have submitted recycling report updates to the Department. These updates included the status of local government yard debris planning.

Washington Wasteshed

The cities of Beaverton, Cornelius, Durham, Forest Grove, Hillsboro, King City, Sherwood, Tigard, and Tualatin have committed to work with Washington County on a wasteshed-wide yard debris recycling plan and program. The wasteshed has requested an extension of the February 15, 1989 yard debris planning deadline. The Department is responding to the wasteshed with a conditional approval of the Washington wasteshed recycling report update. The condition of approval is that the wasteshed complete a yard debris recycling plan which includes all Washington wasteshed local governments within the Metro urban growth boundary by August 15, 1989. Washington County will be coordinating the planning efforts for the wasteshed.

West Linn Wasteshed

The City of West Linn submitted a yard debris recycling plan with the West Linn wasteshed's recycling report update. The Department is reviewing the plan, which on initial review appears to be acceptable. Final review will be completed by March 15, 1989.

Portland Wasteshed

The City of Portland has committed to work with Metro on a regional yard debris recycling plan. While Metro is developing their regional plan, Portland will be studying yard debris collection options. A recent shift in the bureau assignments of Portland City Commissioners has temporarily delayed Portland's collection planning process.

The City of Maywood Park has not submitted a yard debris recycling plan. The Department will contact the City and require that they either submit a yard debris plan or commit to work with Metro on a regional yard debris recycling plan.

Multnomah Wasteshed

The cities of Fairview, Gresham, Troutdale and Wood Village have committed to work with Metro on a regional yard debris recycling

plan. Multnomah County has not responded to the requirement that a yard debris plan be submitted by February 15, 1989. The Department will be contacting the County and require the County to either submit a plan or commit to work with Metro on the regional yard debris recycling plan.

Clackamas Wasteshed

Both Gladstone and Oregon City presently have yard debris recycling programs which meet the requirements of the Commission's yard debris recycling rules. The City of Gladstone has submitted a yard debris recycling plan with the wasteshed's recycling report update. The Department is reviewing the plan, which upon initial review appears to be acceptable. Final review will be completed by March 15, 1989. The City of Oregon City has not provided a yard debris recycling plan. The Department will be contacting Oregon City and requiring them to either submit their own yard debris recycling plan or commit to work with Metro on the regional yard debris recycling plan.

Clackamas County and the cities of Happy Valley, Lake Oswego, Milwaukie, Rivergrove, and Wilsonville have committed to work with Metro on a regional yard debris recycling plan. The City of Johnson City has not submitted a yard debris plan. The Department will contact the City and require that they either submit a plan or commit to work with Metro.

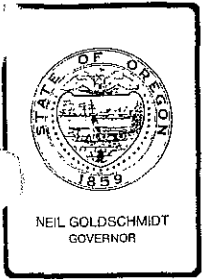
Cities Outside of the Metro Urban Growth Boundaries

The City of Canby is within the Clackamas wasteshed but is outside of the Metro urban growth boundary. Canby has a population of over 4000 and on-route collection of recyclable materials is required. Canby has submitted a letter to the Department stating that yard debris is not a recyclable material in Canby and requesting an extension of the yard debris planning deadline while they investigate the development of a local yard debris processing facility and market. The Department is reviewing the situation in Canby and will be working with the City and local collectors to develop an appropriate yard debris collection and processing program for this community.

The cities of Banks, Barlow, Estacada, Gaston, Molalla, Sandy, and North Plains are within Portland area wastesheds but are outside of the Metro urban growth boundary. These cities all have populations of less than 4,000 and on-route collection of recyclable materials is not required. Because on-route collection is not required in these cities the Department has contacted them and exempted them from the requirement of submitting a plan which would describe how a yard debris collection program would function.

YARD DEBRIS PLANNING STATUS SUMMARY

Clackamas wasteshed	Recycling report update approval pending
Multnomah Wasteshed	Recycling report update approval pending
Portland Wasteshed	Recycling report update approval pending
Washington Wasteshed	Recycling report update approval pending
West Linn Wasteshed	Recycling report update approval pending
Beaverton	Part of Washington wasteshed plan
Cornelius	Part of Washington wasteshed plan
Durham	Part of Washington wasteshed plan
Forest Grove	Part of Washington wasteshed plan
Hillsboro	Part of Washington wasteshed plan
King City	Part of Washington wasteshed plan
Sherwood	Part of Washington wasteshed plan
Tigard	Part of Washington wasteshed plan
Tualatin	Part of Washington wasteshed plan
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Clackamas County	Metro
Gladstone	Plan submitted - Under review
Happy Valley	Metro
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Wilsonville	Metro
Fairview	Metro
Gresham	Metro
Multnomah County	No plan
Troutdale	Metro
Wood Village	Metro
Maywood Park	No plan
Portland	Metro
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Banks	Excused by DEQ, less than 4,000 pop.
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North Plains	Excused by DEQ, less than 4,000 pop.
Canby	Being negotiated



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC DISCUSSION

Meeting Date: April 14, 1989
Agenda Item: S
Division: H&SW
Section: Waste Reduction

SUBJECT:

Status report on yard debris recycling planning and implementation.

PURPOSE:

This report provides the Commission with an update on the level of local government compliance with yard debris recycling rules adopted on 9/9/88.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment

- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: (specify) Attachment

Meeting Date: April 14, 1989
Agenda Item:
Page 2

DESCRIPTION OF REQUESTED ACTION:

This report is presented as an informational item. No Commission action is requested.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input type="checkbox"/> Statutory Authority: <u>ORS 459.165 - 200</u>	Attachment _____
<input type="checkbox"/> Pursuant to Rule: <u>OAR 340-60-035, 115-125</u>	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment _____
<input type="checkbox"/> Other: _____	Attachment _____
<input type="checkbox"/> Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment _____
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment _____
<input type="checkbox"/> Response to Testimony/Comments	Attachment _____
<input type="checkbox"/> Prior EQC Agenda Items: (list)	
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment _____
<input type="checkbox"/> Supplemental Background Information	Attachment _____
Yard Debris Recycling Status Report	Attachment <u>A</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

A total of 35 local governments within the five Portland area wastesheds are required to develop yard debris recycling plans under rules adopted by the Commission on September 9, 1988. All these local governments were required to report to the Department by February 15, 1989 the status of their yard debris plans as part of their annual wasteshed recycling report updates.

Three local governments, Gladstone, Oregon City, and West Linn, are currently providing the opportunity to recycle yard debris which meet the standards in the Commission rules. Gladstone and West Linn have submitted yard debris recycling plans to the Department. Although Oregon City has a yard debris recycling program, the city has not submitted its plan to the Department. The programs in these three cities were used as models for the development of the yard debris

Meeting Date: April 14, 1989

Agenda Item:

Page 3

collection rules. Oregon City and Gladstone have weekly on-route collection of source separated yard debris. West Linn has a community yard debris recycling depot supplemented by on-route collection.

All ten local governments within the urban growth boundary of the Metropolitan Service District in the Washington wasteshed have joined together to develop a single yard debris recycling program. The amount of time and effort involved in developing a wasteshed-wide yard debris recycling program which coordinates all of the local government yard debris recycling efforts will be much greater than that required for each individual local government program to develop a plan.

The Department feels that a wasteshed-wide effort will be more effective in coordinating the supply of yard debris and the markets than several individual programs. In order to have time to do an adequate job, the Washington wasteshed requested an extension of the February 15, 1989 planning deadline. The mechanism by which the extension will be allowed is the Washington wasteshed recycling report update. The update will be conditionally approved, final approval contingent upon receipt of the wasteshed's yard debris recycling plan by August 15, 1989.

Each local government which is participating in the Washington wasteshed yard debris planning process has signed an intergovernmental agreement with Washington County, the coordinator of the plans, and committed to participate in the planning process. Washington County, acting on behalf of the ten local governments, will submit a joint yard debris recycling plan to the Department by August 15, 1989. Washington County will coordinate their yard debris plan with the Metropolitan Service District.

Four local governments, Johnson City, Maywood Park, Multnomah County and Oregon City, have not submitted yard debris recycling plans nor committed to work with Metro in a yard debris planning process.

All of the other local governments within the urban growth boundary of the Metropolitan Service District have committed to work with Metro on a regional yard debris recycling program required as part of the Commission waste reduction order for Metro. Local governments which are working with Metro on a regional yard debris recycling plan are already committed to work with Metro through an earlier written agreement to cooperate in their regional solid waste management planning process. The Metro yard debris recycling

Meeting Date: April 14, 1989
Agenda Item:
Page 4

plan will be completed by July 1, 1990 as required by the Commission order No. SW-WR-89-01. The yard debris recycling rules allow for this time schedule without any special Department action.

PROGRAM CONSIDERATIONS:

Department staff are reviewing the two yard debris plans which have been submitted to insure that these local governments are in compliance with the yard debris recycling rules. Department staff have also been providing technical assistance, reviewing staff reports, and attending policy and technical advisory committees for both the Metro and Washington watershed planning processes. Staff are working with the four local governments, Johnson City, Maywood Park, Multnomah County, and Oregon City, which have not submitted yard debris plans to bring them into compliance with the requirements of the yard debris recycling rules. The Department is also negotiating with Canby, which lies outside of the boundary of the Metropolitan Service District, regarding their need to provide a yard debris recycling program.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

Not applicable

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

Not applicable

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The present local government yard debris recycling planning and program implementation activities are consistent with the intent of the Opportunity to Recycle Act and yard debris recycling rules, OAR 340-60-035 and 115 to 125. The opportunity to recycle yard debris is already available in three Portland area communities, Gladstone, Oregon City and West Linn.

ISSUES FOR COMMISSION TO RESOLVE:

1. Is the present yard debris planning and implementation process progressing at an acceptable rate?
2. What further actions, if any, should the Department be taking to encourage and facilitate yard debris recycling?

Meeting Date: April 14, 1989
Agenda Item:
Page 5

INTENDED FOLLOWUP ACTIONS:

1. The Department believes that yard debris planning and implementation in the Metropolitan Portland area is proceeding at an acceptable rate. Processor capability, market demand, and collection system costs remain the significant yard debris recycling issues to be addressed. The regional and local planning efforts will provide the Department and local governments with accurate information on processor capability and growth potential. The Department will continue to provide technical assistance and coordination to individual local governments, the Washington wasteshed and Metro on planning and implementation of yard debris recycling programs.
2. The Department will contact the four local governments which have not submitted yard debris plans and require them to either submit a completed plan or commit to work with Metro on the regional yard debris plan. The Department will also work with Canby to assist them in the development of an appropriate yard debris collection and processing system for their community.
3. The Department will bring a status report to the Commission in the early fall, after the Washington wasteshed yard debris recycling plan has been completed.

Approved:

Section:

Division:

Director:

Report Prepared By: David K. Rozell

Phone: 229-6165

Date Prepared: March 23, 1989

DKR:wrb
ydb01.eqc
3/23/89

YARD DEBRIS RECYCLING PLANS
STATUS REPORT

There are five wastesheds in the metropolitan Portland area. All have submitted recycling report updates to the Department. These updates included the status of local government yard debris planning.

Washington Wasteshed

The cities of Beaverton, Cornelius, Durham, Forest Grove, Hillsboro, King City, Sherwood, Tigard, and Tualatin have committed to work with Washington County on a wasteshed-wide yard debris recycling plan and program. The wasteshed has requested an extension of the February 15, 1989 yard debris planning deadline. The Department is responding to the wasteshed with a conditional approval of the Washington wasteshed recycling report update. The condition of approval is that the wasteshed complete a yard debris recycling plan which includes all Washington wasteshed local governments within the Metro urban growth boundary by August 15, 1989. Washington County will be coordinating the planning efforts for the wasteshed.

West Linn Wasteshed

The City of West Linn submitted a yard debris recycling plan with the West Linn wasteshed's recycling report update. The Department is reviewing the plan, which on initial review appears to be acceptable. Final review will be completed by March 15, 1989.

Portland Wasteshed

The City of Portland has committed to work with Metro on a regional yard debris recycling plan. While Metro is developing their regional plan, Portland will be studying yard debris collection options. A recent shift in the bureau assignments of Portland City Commissioners has temporarily delayed Portland's collection planning process.

The City of Maywood Park has not submitted a yard debris recycling plan. The Department will contact the City and require that they either submit a yard debris plan or commit to work with Metro on a regional yard debris recycling plan.

Multnomah Wasteshed

The cities of Fairview, Gresham, Troutdale and Wood Village have committed to work with Metro on a regional yard debris recycling

plan. Multnomah County has not responded to the requirement that a yard debris plan be submitted by February 15, 1989. The Department will be contacting the County and require the County to either submit a plan or commit to work with Metro on the regional yard debris recycling plan.

Clackamas Wasteshed

Both Gladstone and Oregon City presently have yard debris recycling programs which meet the requirements of the Commission's yard debris recycling rules. The City of Gladstone has submitted a yard debris recycling plan with the wasteshed's recycling report update. The Department is reviewing the plan, which upon initial review appears to be acceptable. Final review will be completed by March 15, 1989. The City of Oregon City has not provided a yard debris recycling plan. The Department will be contacting Oregon City and requiring them to either submit their own yard debris recycling plan or commit to work with Metro on the regional yard debris recycling plan.

Clackamas County and the cities of Happy Valley, Lake Oswego, Milwaukie, Rivergrove, and Wilsonville have committed to work with Metro on a regional yard debris recycling plan. The City of Johnson City has not submitted a yard debris plan. The Department will contact the City and require that they either submit a plan or commit to work with Metro.

Cities Outside of the Metro Urban Growth Boundaries

The City of Canby is within the Clackamas wasteshed but is outside of the Metro urban growth boundary. Canby has a population of over 4000 and on-route collection of recyclable materials is required. Canby has submitted a letter to the Department stating that yard debris is not a recyclable material in Canby and requesting an extension of the yard debris planning deadline while they investigate the development of a local yard debris processing facility and market. The Department is reviewing the situation in Canby and will be working with the City and local collectors to develop an appropriate yard debris collection and processing program for this community.

The cities of Banks, Barlow, Estacada, Gaston, Molalla, Sandy, and North Plains are within Portland area wastesheds but are outside of the Metro urban growth boundary. These cities all have populations of less than 4,000 and on-route collection of recyclable materials is not required. Because on-route collection is not required in these cities the Department has contacted them and exempted them from the requirement of submitting a plan which would describe how a yard debris collection program would function.

YARD DEBRIS PLANNING STATUS SUMMARY

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Canby	Being negotiated



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC DISCUSSION

Meeting Date: April 14, 1989
Agenda Item: S
Division: H&SW
Section: Waste Reduction

SUBJECT:

Status report on yard debris recycling planning and implementation.

PURPOSE:

This report provides the Commission with an update on the level of local government compliance with yard debris recycling rules adopted on 9/9/88.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item for Current Meeting
 - Other: (specify)
- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment
 - Rulemaking Statements Attachment
 - Fiscal and Economic Impact Statement Attachment
 - Public Notice Attachment
- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment
- Approve Department Recommendation
 - Variance Request Attachment
 - Exception to Rule Attachment
 - Informational Report Attachment
 - Other: (specify) Attachment

Meeting Date: April 14, 1989
Agenda Item:
Page 2

DESCRIPTION OF REQUESTED ACTION:

This report is presented as an informational item. No Commission action is requested.

AUTHORITY/NEED FOR ACTION:

<input type="checkbox"/> Required by Statute: _____	Attachment _____
Enactment Date: _____	
<input type="checkbox"/> Statutory Authority: <u>ORS 459.165 - 200</u>	Attachment _____
<input type="checkbox"/> Pursuant to Rule: <u>OAR 340-60-035, 115-125</u>	Attachment _____
<input type="checkbox"/> Pursuant to Federal Law/Rule: _____	Attachment _____
<input type="checkbox"/> Other:	Attachment _____
<input type="checkbox"/> Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

<input type="checkbox"/> Advisory Committee Report/Recommendation	Attachment _____
<input type="checkbox"/> Hearing Officer's Report/Recommendations	Attachment _____
<input type="checkbox"/> Response to Testimony/Comments	Attachment _____
<input type="checkbox"/> Prior EQC Agenda Items: (list)	Attachment _____
<input type="checkbox"/> Other Related Reports/Rules/Statutes:	Attachment _____
<input checked="" type="checkbox"/> Supplemental Background Information	Attachment _____
Yard Debris Recycling Status Report	Attachment <u>A</u>

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

A total of 35 local governments within the five Portland area wastesheds are required to develop yard debris recycling plans under rules adopted by the Commission on September 9, 1988. All these local governments were required to report to the Department by February 15, 1989 the status of their yard debris plans as part of their annual wasteshed recycling report updates.

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Meeting Date: April 14, 1989
Agenda Item:
Page 3

collection rules. Oregon City and Gladstone have weekly on-route collection of source separated yard debris. West Linn has a community yard debris recycling depot supplemented by on-route collection.

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The Department feels that a wasteshed-wide effort will be more effective in coordinating the supply of yard debris and the markets than several individual programs. In order to have time to do an adequate job, the Washington wasteshed requested an extension of the February 15, 1989 planning deadline. The mechanism by which the extension will be allowed is the Washington wasteshed recycling report update. The update will be conditionally approved, final approval contingent upon receipt of the wasteshed's yard debris recycling plan by August 15, 1989.

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Meeting Date: April 14, 1989
Agenda Item:
Page 4

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PROGRAM CONSIDERATIONS:

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ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

Not applicable

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

Not applicable

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

The present local government yard debris recycling planning and program implementation activities are consistent with the intent of the Opportunity to Recycle Act and yard debris recycling rules, OAR 340-60-035 and 115 to 125. The opportunity to recycle yard debris is already available in three Portland area communities, Gladstone, Oregon City and West Linn.

ISSUES FOR COMMISSION TO RESOLVE:

1. Is the present yard debris planning and implementation process progressing at an acceptable rate?
2. What further actions, if any, should the Department be taking to encourage and facilitate yard debris recycling?

Meeting Date: April 14, 1989
Agenda Item:
Page 5

INTENDED FOLLOWUP ACTIONS:

1. The Department believes that yard debris planning and implementation in the Metropolitan Portland area is proceeding at an acceptable rate. Processor capability, market demand, and collection system costs remain the significant yard debris recycling issues to be addressed. The regional and local planning efforts will provide the Department and local governments with accurate information on processor capability and growth potential. The Department will continue to provide technical assistance and coordination to individual local governments, the Washington wasteshed and Metro on planning and implementation of yard debris recycling programs.
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3. The Department will bring a status report to the Commission in the early fall, after the Washington wasteshed yard debris recycling plan has been completed.

Approved:

Section:

Division:

Director:

Report Prepared By: David K. Rozell

Phone: 229-6165

Date Prepared: March 23, 1989

DKR:wrb
ydb01.eqc
3/23/89

YARD DEBRIS RECYCLING PLANS STATUS REPORT

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Washington Wasteshed

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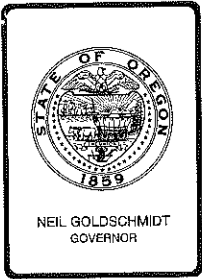
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YARD DEBRIS PLANNING STATUS SUMMARY

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North Plains	Excused by DEQ, less than 4,000 pop.
Canby	Being negotiated



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

REQUEST FOR EQC ACTION

Meeting Date: April 14, 1989
Agenda Item: T
Division: Office of the Director
Section: _____

SUBJECT:

Schedule for Future Commission Meetings

PURPOSE:

Provide the Commission, staff and the public with a tentative schedule of meetings for 6-9 months beyond the July 21, 1989 meeting.

ACTION REQUESTED:

- Work Session Discussion
 - General Program Background
 - Potential Strategy, Policy, or Rules
 - Agenda Item ___ for Current Meeting
 - Other: (specify)

- Authorize Rulemaking Hearing
- Adopt Rules
 - Proposed Rules Attachment _____
 - Rulemaking Statements Attachment _____
 - Fiscal and Economic Impact Statement Attachment _____
 - Public Notice Attachment _____

- Issue a Contested Case Order
- Approve a Stipulated Order
- Enter an Order
 - Proposed Order Attachment _____

- Approve Department Recommendation
 - Variance Request Attachment _____
 - Exception to Rule Attachment _____
 - Informational Report Attachment _____
 - Other: (specify)
Meeting Schedule Attachment A

Meeting Date: April 14, 1989
Agenda Item: T
Page 2

DESCRIPTION OF REQUESTED ACTION:

(See purpose statement above)

AUTHORITY/NEED FOR ACTION:

___ Required by Statute: _____	Attachment ___
Enactment Date: _____	
___ Statutory Authority: _____	Attachment ___
___ Pursuant to Rule: _____	Attachment ___
___ Pursuant to Federal Law/Rule: _____	Attachment ___
___ Other:	Attachment ___
___ Time Constraints: (explain)	

DEVELOPMENTAL BACKGROUND:

___ Advisory Committee Report/Recommendation	Attachment ___
___ Hearing Officer's Report/Recommendations	Attachment ___
___ Response to Testimony/Comments	Attachment ___
___ Prior EQC Agenda Items: (list)	Attachment ___
___ Other Related Reports/Rules/Statutes:	Attachment ___
___ Supplemental Background Information	Attachment ___

REGULATED/AFFECTED COMMUNITY CONSTRAINTS/CONSIDERATIONS:

The public and regulated community frequently ask for information about the future meeting schedule. Scheduling several months into the future assists in general planning.

PROGRAM CONSIDERATIONS:

The Department can more effectively use its resources if it knows the schedule for future meetings.

ALTERNATIVES CONSIDERED BY THE DEPARTMENT:

1. Meetings should be scheduled at least 6 weeks apart to avoid problems with overlapping workloads.
2. Meetings should generally be scheduled to avoid conflicts with holidays.

Meeting Date: April 14, 1989
Agenda Item: T
Page 3

DEPARTMENT RECOMMENDATION FOR ACTION, WITH RATIONALE:

The Department recommends Commission approval of the meeting schedule as shown in Attachment A.

This schedule identifies potential meeting dates which avoid holidays and maintains 6 weeks between meetings. Dates may be modified as necessary to accommodate Commissioners' schedules.

CONSISTENCY WITH STRATEGIC PLAN, AGENCY POLICY, LEGISLATIVE POLICY:

No conflicts identified.

ISSUES FOR COMMISSION TO RESOLVE:

Are any adjustments necessary or appropriate to the schedule as shown in Attachment A?

INTENDED FOLLOWUP ACTIONS:

Develop more detailed Department Staff Action schedule based on schedule of Commission meetings.

Update schedule of future Commission agenda items, including potential meeting locations.

Approved:

Section: Harold Sawyer

Division: _____

Director: By Asia Taylor
for Fred Hansen

Report Prepared By: Harold Sawyer

Phone: 229-5776

Date Prepared: March 16, 1989

HLS:1
APR14-SC
3/16/89

1989-1990

EQC MEETING SCHEDULE

April 1989

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May 1989

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

June 1989

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

July 1989

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August 1989

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 1989

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

April

13 2:00pm EQC Work Session
14 8:00am EQC Meeting

May

29 Memorial Day (Observed) - HOLIDAY

June

1 2:00pm EQC Work Session
2 8:00am EQC Meeting

July

4 Independence Day - HOLIDAY
20 2:00pm EQC Work Session
21 8:00am EQC Meeting

September

4 Labor Day - HOLIDAY

November

10 Veterans Day - HOLIDAY (Observed)
11 Veterans Day - HOLIDAY
23 Thanksgiving - HOLIDAY

December

25 Christmas - HOLIDAY

January

1 New Year's Day - HOLIDAY
15 Martin Luther King, Jr. - HOLIDAY

February

19 President's Day - HOLIDAY

=====//=====

○ - State Holiday

◊ - Scheduled Meeting

◻ - Potential Meeting Dates

October 1989

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November 1989

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December 1989

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

January 1990

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February 1990

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28			

March 1990

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: March 1, 1989

TO: Environmental Quality Commission
FROM: Harold Sawyer
SUBJECT: Future Commission Meetings

April 13-14, 1989 Meeting

Thursday, April 13, 1989 -- Rather than a normal work session, there will be an all day field trip to Arlington. The tentative schedule and arrangements are as follows:

7:30 a.m.	Leave Portland by Van for Arlington.
10:30 a.m.	Arrive at the site of the new Oregon Waste Systems Regional Landfill. Observe the location, construction, leachate collection system (liner), etc.
12:00 noon	Lunch. (Take Box Lunches along from Portland.)
1:00 p.m.	Arrive CSSI Hazardous Waste Disposal Site for tour of facilities.
3:00 p.m.	Leave CSSI
6:00 p.m.	Arrive Portland

It may also be possible to drive by problem sites at The Dalles either going or coming (Martin Marietta, Union Pacific)

Friday, April 14, 1989 -- Regular Meeting will be in the Portland Area. The meeting can either be held in the 4th floor conference room or at some other location in the area.

June 1-2, 1989 Meeting

This meeting is tentatively scheduled for the Southern Oregon (Medford) area. This was based on the expectation that the air quality SIP would be ready for adoption. The SIP will not be ready for adoption then -- fall seems more likely now. It may be more appropriate to have the meeting in the Portland Area.

July 13-14, 1989 Meeting

This meeting could logically be in the Corvallis area. The Pope & Talbot pulp mill expansion would be a major item for the agenda.

August and beyond -- Meeting dates have not been established yet.



UNIFIED SEWERAGE AGENCY OF WASHINGTON COUNTY

April 14, 1989

Oregon Environmental Quality Commission
811 SW Sixth Avenue
Portland, Oregon 97204

Dear Commissioners:

SUBJECT: USA Program Plan to Address Nutrient TMDL's for Tualatin River; April 14, 1989 Agenda Item "O"

This letter is to summarize the testimony given on behalf of the Unified Sewerage Agency by Mr. Gary Kraemer, Mr. Gordon Culp, and Ms. Loretta Skurdahl.

You should have received a document entitled Tualatin River Watch from the Unified Sewerage Agency. This is the USA's most recent status report as to our activities concerning the Tualatin River. We are moving aggressively to seek the authority from the Boundary Commission to take on surface water management. Generally, this has been an extremely cooperative effort on the part of local governments within the Tualatin River Basin.

You will also note that, in USA's Final Draft Program Plan, and recognized by the DEQ staff report, USA has proposed to meet the TMDL's and waste load allocations for nutrients at four of the six USA treatment facilities. There are, however, some points of disagreement as to the DEQ staff report and recommendations for your action.

AVAILABLE TECHNOLOGY

1. At first glance, there would appear to be a factual dispute as to whether conventional tertiary treatment technology at Rock Creek can meet the WLA (enhanced chemical addition including filtration). USA's conclusion on this issue is based upon standard approaches of the engineering profession as to design assumptions for a treatment facility. DEQ's conclusion apparently is based upon the results of a telephone survey of treatment plant operators. USA performed this survey. Results are not verified and should not be relied upon for making a decision as to the suitability, reliability, and efficacy of a treatment process to achieve numerical limits.

DEQ's position puts USA in a quandary. On one hand, DEQ appears to say that conventional technology will meet the WLA. USA based its conclusions in the Program Plan on the assumption that the WLA's must be met. If DEQ and this Commission are confident of this conclusion, and if no more evaluation of technology or alternatives is necessary, USA can immediately begin the process of implementing this alternative at Rock Creek. This would be a direction to implement a technology-based solution at this facility. There is a risk that the WLA would not be met. But USA is optimistic that, if it is given clear direction that this alternative is an acceptable solution for the Rock Creek facility, we could implement this within the time prescribed in the TMDL rule.

If the facilities are constructed, properly operated, and do not meet the WLA, it should not be USA's responsibility to provide additional treatment facilities to remove phosphate at Rock Creek.

MODIFIED SCHEDULE AND COSTS

2. USA's position and request in its program plan regarding the role of costs was seriously mischaracterized. USA did not request modification of the WLA flow regime or extension of time because of cost. Modification of Waste Load Allocation/flow regime was requested because the cost would be substantially less and because, according to DEQ's data, it would be expected to achieve virtually the same level of instream nutrient concentrations and thus water quality in terms of algae.

USA's schedule request had nothing to do with cost. The modification was requested because our analysis of the time necessary to complete the component tasks extended beyond 6/30/93. This is reflected in the Final Draft Program plan. DEQ has not produced a comparable schedule for necessary component tasks that would result in achievement of the deadline. It has not identified any of the required sub-tasks as unnecessary or requiring a shorter time frame. The staff recommendation appears to have simply lumped all tasks and schedules and assigned a shorter time element.

USA identified the range of costs for each alternative identified and the expected impact in terms of its customer charges. USA did not say that the costs were unacceptable or could not be paid. We did state that the total package would be a significant challenge for USA. We did not request an extension of time because of cost.

FLOW AUGMENTATION

3. USA can commit to an aggressive program of seeking and securing available water for Tualatin River augmentation. USA cannot ensure a given flow in the river at all times; no one can make such an assurance. USA does believe that, for practical planning purposes, it is reasonable to base a load allocation range on the 150 cfs flow regime. We suggest that the Commission authorize staff to implement such a flow regime.

THE DURHAM FACILITY

4. DEQ commented that USA should be farther advanced in its planning and design for the Durham facility. USA placed greater emphasis upon early facility planning and construction at Rock Creek because that facility reached capacity earlier. USA prepared and submitted a facility plan for the Durham facility in October, 1986. DEQ has no general mechanism for review and approval of facility plans, outside of the construction grants program. USA has received no written response to its facility plan. Nevertheless, USA proceeded with design of needed improvements for the Durham facility, known as Durham Phase I. This design was begun in June 1988, just before the Commission set TMDL's, and completed in December, 1988. USA submitted plans for the Durham Phase I project to DEQ in January, 1989. DEQ has not approved or rejected these plans. The TMDL decision has a critical effect upon basic planning assumptions in the design process. The NH₃ removal factor can result in a variation of 30% or more in the sizing of secondary treatment facilities.

USA asks that the Department develop criteria for review of facility plans, if they wish to review and approve such plans. USA further asks that the Department develop criteria for review of treatment facility designs, and a reasonable time frame for their review.

PILOT TESTING RELIABILITY

5. The DEQ staff report stated that pilot testing does not perform as well as full scale facilities and therefore we can plan on better performance. No authority is cited for this statement. This is not a factual foundation on which to base multi-million dollar program decisions.

INSTREAM PHOSPHATE LEVELS

6. DEQ's staff report states that USA's proposed transfer of the Durham WLA and Department reserve would cause localized stress as to phosphate. No authority is given for this assertion. Phosphate is a substance which takes time to react with other factors. This is very different than the oxygen sag caused by ammonia loads from point sources. This proposal should not be rejected on this basis without factual investigation. No explanation is given for the nature of the potential harm caused by accepting USA's proposal.

THE DEPARTMENT'S RESERVE

7. What is the purpose of the Department's reserve on the Tualatin? Based upon the staff report, it appears it is to accommodate new sources. In the Tualatin Basin, new sources are very unlikely except as dischargers to the existing treatment facilities. Such a reserve may be more appropriate for water bodies with many dischargers such as the Willamette or Columbia rivers.

LAND USE COORDINATION

8. It is USA's understanding that DEQ's waste load allocations were based upon allocations to urban and rural areas which are not the same as the land use designations in local land use plans as adopted and acknowledged by LCDC. If this is the case, DEQ should revise its allocations using these designations, as well as the urban growth boundary, as benchmarks.

SEASONAL MEDIAN

9. DEQ proposes for the first time a seasonal median. DEQ has advanced no water quality basis for this requirement. If the Waste Load Allocations as promulgated by the Department are valid, there should not be a need for restrictions in addition to those loads. USA proposes that these not be authorized unless a need related to water quality is shown.

THE LAKE CORPORATION AGREEMENT

10. USA proposed a provision and time schedule for developing and implementing an agreement with the Lake Corporation to address algal growth in the Lake. USA wishes to note that Lake Oswego is a private lake. USA can commit to take actions to address Tualatin River water quality which in turn may improve Lake water quality. It is not USA's responsibility to attain or assure a certain level of quality in Lake Oswego. Nevertheless, we do propose to work in good faith with the Lake Corporation on this issue.

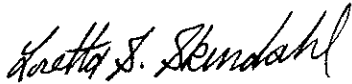
Oregon EQC
April 14, 1989
Page 5

KEEP THE DOOR OPEN

11. USA believes its Final Draft Program Plan represented a rational approach to addressing the TMDL's and WLA's adopted for the Tualatin River. The Draft Program Plan should not be viewed as cast in stone. USA requests that the Department and this Commission make clear that they will be receptive to alternatives and technology in addition to those identified in the Program Plan, as they may arise in the course of further study of the River and available treatment processes.

Thank you for considering this testimony.

Sincerely,



Loretta S. Skurdahl
Attorney for USA

①

FRIDAY APRIL 14, 1989

LEONARD GEORGE STARKS

5050 S.W. CHILDS ROAD

LAKE OSWEGO, OREGON 97035

DEPARTMENT OF ENVIRONMENTAL QUALITY

811 S.W. SIXTH AVENUE

PORTLAND, OREGON 97204-1390

DEAR D.E.Q. BOARD:

THANK YOU FOR THE PACKET RECEIVED
ON TUESDAY APRIL 11, 1989. REQUEST FOR FCC ACTION

NO APOLOGIES BUT I AM NOT
A PROFESSIONAL BUT ONLY A CITIZEN. THAT
HAS ATTENDED AND PUT IN ON ALL TULLY RIVER
ISSUES OF CLEANING UP. YOU HAVE DONE A
GOOD JOB. THINGS CAN'T BE DONE OVERNIGHT
THAT HAVE BEEN BUILDING UP FOR 100 YEARS.

① I HAVE SAID IT BEFORE BUT
IT ISN'T FAIR THAT A SMALL NUMBER OF
PEOPLE SHOULD "FEEL" THE BILL. ALL OF
US THAT HAVE PARTICIPATED WITH BENEFIT SHOULD
SHOULD BE JUSTLY INVOLVED.

② BRING A LOT OF TALK OF VERY
EXPENSIVE PIPE LINES TO CARRY THE DISCHARGE
OUT. FOCUS ABOUT THAT.

③ WE HAVE A BUILT IN NATURAL
PIPE LINE THE RIVER USE THAT.

④ TAKE THAT PIPE LINE AND
HOWEVER FEELING IT INTO IMPROVING OUT
TWO BLOCKS OF RIVERS. DUNHAM & RIVER CREEK.

5) TALK II CHEAP & LOW PER USA.

GET SOME REAL ACTION FROM THE CONSTRUCTION
THAT ARE THE ONES TO GET THE BALL ROLLING.
YOU AT D.R.O. HAVE DONE THE 'L.R.C. WORKS
TO GET GOALS AND APPLIANCES, SCHOOLS,

6) WHY TALK DELAYS NOW BEFORE
ANY POSITIVE WORK HAS BEEN MADE, SHOW
FOR 1892. IF MORE TIME IS NEEDED AT THAT
TIME COMES, SOMETHING CAN BE DONE, AT
LEAST WE CAN SEE THAT PHYSICAL ~~EFFORTS~~
EFFORTS HAVE BEEN DONE.

7) I WOULD SAY GET L.P.C. ACTION
STARTED RIGHT NOW FOR FUNDS TO START.

8) LIKE OJIBWA MENTIONED, AND
PORTLAND (WEST SIDE OF WILLAMETTE HILL, THAT
SHOWS THAT CLEARLY AND MULTIMEDIA TO
THOUGHTFUL ~~WORK~~

9) I HAVE NOT HAD TIME TO
DO THIS ~~THAT~~ PAMPHLET TO ONLY TO ~~SEE~~
ALL THE OTHER NON POINT SOURCES AND HOW
TO POLICE THEM. AS YET.

10) MANY OTHER POINTS I HAVE BROUGHT
UP IN THE PAST. LIKE GETTING MORE WATER
FROM OTHER SOURCES, DON'T DIVERT ANY
WATER FROM THE RIVER, DON'T REMOVE THE
'BUSHES' DAM IN THE RIVER, BUILD SMALLER AND
MORE SMALL HOLDING DAMS (NOT THE SAISON DAM)
SAVE OUR WATERSHEDS, AND BUILD MORE, ETC. ETC.


THANK YOU, GOD BLESS *Leond E. Stet*

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 11, 1989

TO: Environmental Quality Commission
THROUGH: Fred Hansen, Director DEQ
FROM:  Bill Jasper, Air Quality/Vehicle Inspection Program
SUBJECT: Status of Fuel Volatility Regulations -- Federal

At the March EQC meeting, you authorized the Department to conduct public hearings on establishing a maximum limit for gasoline volatility during the ozone season. The need for this rule action was based upon the Environmental Protection Agency's (EPA) lack of progress on its own fuel volatility regulations. These hearings are scheduled for April 17 and 19, 1989.

On March 22, 1989, the USEPA adopted nationwide fuel volatility regulations. EPA's regulations establish a 10.5 psi standard for gasoline in this area, the same level that was proposed in the plan authorized for hearing. Other aspects of the federal plan are more restrictive than the state's proposal. The only major aspect of the state's plan that was more severe, concerns how gasoline/alcohol blends would be treated. On that respect, the staff report had noted that alcohol blends were generally not available, and the subject was a moot point for our region. The federal regulations provide for an additional 1 psi allowance.

Because of the concern for meeting this summer's ozone standard, and the possibility that EPA might be sued, thereby preventing enforcement of its regulations, the hearings are still scheduled. The testimony received and recommended action, will be presented at the June 2, 1989 EQC meeting.

Deluxe Fuel Company

P.O. Box 66112
Portland, Ore. 97266
(503) 771-4894

4/11/89

William P. Hutchinson, Jr.
Chairman, EQC
333 SW Taylor
Portland, Or.



Mr. Hutchinson,

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed from the proposed

	<u>Level 1</u>	<u>Level 11</u>	<u>Level 111</u>
TPH gasoline	100 ppm	200 ppm	1000 ppm
TPH diesel	200 ppm	1000 ppm	10,000 ppm

to the following:

	<u>Level 1</u>	<u>Level 11</u>	<u>Level 111</u>
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1000 ppm

The range for determining the level of cleanup should be changed as follows:

Level 1	60 points
Level 11	40 - 59 points
Level 111	0 - 39 points

Thank you for your time and attention.

Regards,

John Hanson



PHONE 325-1972

NIEMI OIL CO

"BE WARM & TANKFUL"

WARREN and ALICE BECHTOLT
P.O. BOX 989 - ASTORIA, OREGON 97103

April 7, 1989

Dear Members of The Environmental Quality Commission

We are writing you with information provided by the O H I of Oregon.

Next week you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a petroleum jobber in Oregon this firm has several concerns about this proposed matrix. Although I do not believe this will affect me during my business life, I do realize this will affect our firm for many years to come and would like you to consider the following.

We do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not sure that the technology is available to meet these proposed cleanup levels.

We are certainly interested in protecting our natural resources and would like to do it as soon as possible. We suggest that the levels of cleanup in the matrix be changed from the proposed;

	Level I	Level II	Level III
TPH gasoline	100 ppm	200 ppm	1000 ppm
TPH diesel	200 ppm	1000 ppm	10000 ppm

To the following;

	Level I	Level II	Level III
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1000 ppm

We propose the following levels of cleanup;

Level I	60 points
Level II	40 - 59 points
Level III	0 - 39 points

Sincerely yours
NIEMI OIL CO


Warren E. Bechtolt, Pres.

WEB;a



BRETTHAUER OIL CO.

P.O. BOX 475 • HILLSBORO, OREGON 97123 • 648-2531 OR 648-7966

April 7, 1989

Dear MR. HUTCHINSON:

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed from the proposed

	Level I	Level II	Level III
TPH gasoline	100 ppm	200 ppm	1000 ppm
TPH diesel	200 ppm	1000 ppm	10000 ppm

to the following:

	Level I	Level II	Level III
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1000 ppm

The range for determining the level of cleanup should be changed as follows:

Level I	60 points
Level II	40-59 points
Level III	0-39 points

Thank you for your time and attention.

Cordially yours,

Andy Bretthauer

PRIDE OF OREGON

MERRITT TRUAX OIL CO., INC.

205 Columbia Street NE • P.O. Box 2099
Salem, Oregon 97308 503 • 588-0455

April 6, 1989

William P. Hutchinson, Jr.
Chairman, EQC
333 SW Taylor
Portland, OR 97204-2496

Dear Mr. Hutchinson

On April 14, 1989 you will be asked to approve a numerical matrix for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

Our company is interested in protecting our natural resources but we do not think we can accomplish a perfect environment overnight. I would like to suggest that the levels of cleanup in the matrix be changed to the following:

	<u>LEVEL I</u>	<u>LEVEL II</u>	<u>LEVEL III</u>
TPH gasoline	100	200	1,000
TPH diesel	200	1000	10,000

The range from determining the level of cleanup should be changed as follows:

LEVEL I	0 - 39 points
LEVEL II	40 - 59 points
LEVEL III	60 points and more

Thank you for your time and attention.

Yours truly,



Peter F. Meyer

PFM:pag

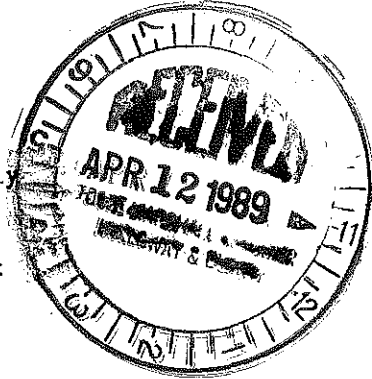
William P. Hutchinson, Jr
Chairman, EQC
333 SW Taylor
Portland, or 97204-2496

Dear Mr. Hutchinson,

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed from the proposed



	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100 ppm	200 ppm	1000 ppm
TPH diesel	200 ppm	1000 ppm	10,000 ppm

to the following:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1,000 ppm

The range for determining the level of cleanup should be changed as follows:

Level I	60 points
Level II	40 - 59 points
Level III	0 - 39 points

Thank you for your time and attention.

Regards,

ED STAUB & SONS PETROLEUM, INC.
P. O. BOX 671
LAKEVIEW, OR 97630

RECEIVED

MAR 24 1989

300 Grandview Dr.

Ashland, Oregon 97520

March 25, 1989

OFFICE OF THE DIRECTOR

Environmental Quality Commission
Salem, Oregon

Re: Industrial Emissions and Medco's Application

Dear Commissioners;

We are very concerned that the data upon which DEQ has been basing its evaluations of impacts are not reliable. This was made evident at the Medford hearing March 21.

It is of utmost importance that all data used be accurate if DEQ is to be credible before the people.

It is also extremely important to regulate all industrial emissions which may be hazardous to health, including NOX, SO2, CO, and VOC. We urge you to include these in your deliberations and decisions. There should be no increases permitted of any of these in the Medford area. Continuous instrumental monitoring is also essential.

WE refer you to Dr. Robert Palzer's analysis of the Air Quality problems in our area. DEQ should be directed to incorporate Dr. Palzer's recommendations in its recommendation to you. Then we'll have a good chance to clean up our dangerously polluted air.

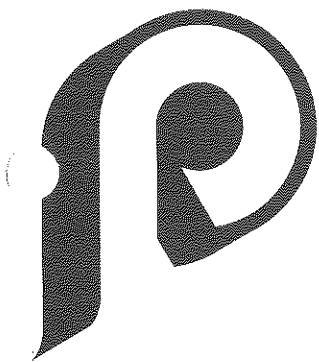
Very truly yours,

Alan + Myra Erwin

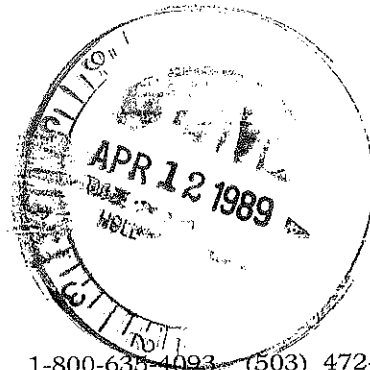
Alan and Myra Erwin

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 25 1989

AIR QUALITY CONTROL



peavey oil co.



p.o. box 787 • mcminnville, oregon 97128 • 1-800-635-4093 (503) 472-6138

April 11, 1989

Dear William P. Hutchinson, Jr.:

On April 14, 1989 you will be reviewing a numerical matrix designed for cleaning up the soil from petroleum contamination. As a Petroleum Marketer in Oregon I have serious reservation about this proposed matrix. My reservation stems from my ability to survive as a small business if this matrix is enacted.

I do not feel that the Department of Environmental Quality has shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed from the proposed:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100 ppm	200 ppm	1,000 ppm
TPH diesel	200 ppm	1,000 ppm	10,000 ppm

to the following:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1,000 ppm

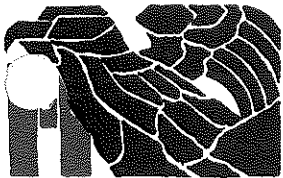
The range for determining the level of cleanup should be changed as follows:

Level I	60 points
Level II	40 - 59 points
Level III	0 - 39 points

Thank-you for you attention to this issue.

Sincerely

Mark A. Bidwell
General Manager



Hawk Oil Company

P.O. BOX 1388 • 1050 SO. RIVERSIDE
MEDFORD, OREGON 97501
PHONE 503/772-5275



April 7, 1989

William P. Hutchinson, Jr.
Chairman, EQC
333 SW Taylor
Portland, Oregon 97204-2496

Dear Mr. Hutchinson, Jr.

I Understand that on April 14th, you must decide on a numerical matrix for clean-up of a petroleum contamination. We are a Petroleum marketer, and as you are probably well aware, we are already facing tremendous costs relating to our underground tank systems. The petroleum industry has always worked on very slim margins. While Petroleum Marketers supply some 50% of Oregon's fuel needs, our financial abilities are already quite strained, and we simply can't afford additional pressures.

We have long been supporters of environmental wild life, and other efforts. We just can't afford to do everything at once.

Apparently, D.E.Q. has not proven that the proposed levels are absolutely necessary for Oregon's protection. Other states have not required such stringent clean-up levels. I'm not even sure if such levels are possible, much less financially practical.


Reportedly, a TPH level of 400 ppm would be reasonable at level III, versus the proposed 1,000 level. Also, a 500 TPH level for diesel at level II, and 1,000 at level III. Also, a more reasonable range for establishing clean-up levels would be:

Level I	60 points
Level II	40-59 points
Level III	0-39 points

I realize these issues are very difficult, and I thank you for your consideration. We are already investing \$40,000-\$60,000 - or more at our locations, trying to protect the environment. As always, the margins never seem to improve. We're also facing other legislative requirements - minimum wage, etc., while Oregon continues to disallow self-serve. Oregon is already losing many fuel outlets, and the supply they provide, particularly in some of the more rural areas. We simply can not afford more financial pressures.

Thanks again, for your consideration.

Sincerely,


Mike Hawkins
President

MH/cj



STAFFORD OIL CO. INC.

603 W. MAIN ST.
P.O. BOX 450
MOLALLA, OR 97038
829-5441
TOLL FREE (800) 452-5471

JACK STAFFORD,
President
ED STAFFORD,
Sec.-Treas.

April 6, 1989

Dear Commissioner,

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed to the following:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100ppm	200ppm	400ppm
TPH diesel	200ppm	500ppm	1,000ppm

The range for determining the level of cleanup should be changed as follows:

Level I	60 points
Level II	40-59 points
Level III	0-39 points

Thank you for your time and attention.

Sincerely,



Ed Stafford

CAPITAL CITY COMPANIES, INC.

SERVICE OIL COMPANY • METRO-VALLEY TRANSPORT • CAPITAL WAREHOUSE COMPANY

1295 JOHNSON ST., N.E.
P.O. BOX 7168

SALEM, OR 97303
(503) 362-2436

April 6, 1989

Mr. William P. Hutchinson, Jr.
Chairman, EQC
333 SW Taylor
Portland, OR 97204-2496

Dear Mr. Hutchinson:

I wish to address the proposed Numerical Soil Cleanup Matrix which you will be asked to approve at the upcoming April 14, 1989 meeting. We in the petroleum industry are very concerned about this proposed matrix as it may effect the very survival of some of Oregon's small petroleum distributors.

As a member of the Oregon Petroleum Marketers Association Committee on operations and engineering I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary to protect the health and welfare of the people of Oregon. I feel that these cleanup levels are too stringent and we committee members raise serious doubt as to whether or not there is sufficient technology to meet these proposed cleanup levels.

Our company is concerned about this environmental aspect and would like to protect all natural resources.

I would like to encourage that the levels of cleanup in the matrix be changed from the proposed:

<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH Gasoline 10 ppm	50 ppm	100 ppm
TPH Diesel 100 ppm	500 ppm	1,000 ppm

to the following:

<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH Gasoline 100 ppm	200 ppm	400 ppm
TPH Diesel 200 ppm	500 ppm	1,000 ppm

The range for determining the level of clean up should be changed as follows:

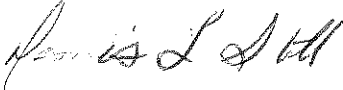
Level I	60	points
Level II	40-50	points
Level III	0-39	points

Once again I would like to emphasize the impact this proposed matrix could have upon our industry if instituted as currently proposed.

Thank you for your consideration in this extremely important issue.

Very truly yours,

CAPITAL CITY COMPANIES, INC.



Dennis L. Stoll
Vice President

DLS/jfc

HENDRIKSEN OIL COMPANY

OIL HEATS BEST
 P. O. Box 23
 11 Basin Street

Astoria, Oregon 97103

April 7, 1989

William P. Hutchinson, Jr.
 Chairman, EQC
 333 SW Taylor
 Portland, OR 97204

Dear Mr. Hutchinson

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed from the proposed;

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100 ppm	200 ppm	1000 ppm
TPH diesel	200 ppm	1000 ppm	10,000 ppm

to the following:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1,000 ppm

HENDRIKSEN OIL COMPANY

OIL HEATS BEST
P. O. Box 23
11 Basin Street

Astoria, Oregon 97103

The range for determining the level of cleanup
should be changed as follows:

Level I 60 points

Level II 40-59 points

Level III 0-39 points

Thank you for your time and attention.

Sincerely

Harold C. Hendriksen

Harold C. Hendriksen
Hendriksen Oil Company

Robben & Sons Heating
Division of Robben Oil Company

2300 S.E. 7th - P. O. Box 14867
Portland, Oregon 97214
503 233 5841

April 6, 1989

William P. Hutchinson, Jr.
Chariman, EQC
333 SW Taylor
Portland, OR 97204-2496



Authorized
Dealer

Dear Sir:

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed from the proposed

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100ppm	220ppm	1000ppm
TPH diesel	200ppm	1000ppm	10,000ppm

to the following:

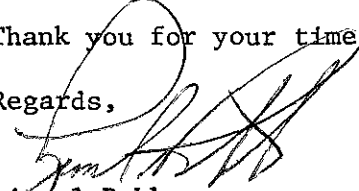
	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100ppm	200ppm	400ppm
TPH diesel	200ppm	500ppm	1,000ppm

The range for determining the level of cleanup should be changed as follows:

Level I	60 points
Level II	40 - 59 points
Level III	0 - 39 points

Thank you for your time and attention.

Regards,


Lionel Robben

April 7, 1989

William P. Hutchinson, Jr.
Chairman, EQC
333 SW Taylor
Portland, Oregon 97204-2496

Dear Mr. Hutchinson,

It has come to my attention that you are one of those who will be asked to give approval to a numerical matrix that is designed to clean up soil that has been contaminated by a petroleum product. I am a part of the petroleum industry here in Oregon and I am really concerned over this proposed matrix. I am worried, frankly, about my own position as a small business person, if these rules are passed, will my business survive?

It seems to me that the numbers you (the Department of Environmental Quality) which you say are absolutely necessary to protect the health and welfare of the people of Oregon, are just too high. It appears the area needs more study to be sure; since even your department has not proven these levels to be absolute. Why are the levels proposed for Oregon so much higher than any other state? I still have misgivings as to whether the actual technology is available to accomplish the cleanup to your required level.

I want to protect and preserve the natural resources and the environment of this nation as much as any one else, but I also know some things take time to accomplish, this is a huge undertaking and it will not happen over the period of one season.

I would like to suggest the following numbers, as proposed cleanup levels in the matrix and I would hope you would consider them in your decision.

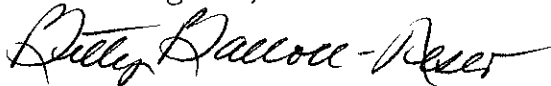
	Level I	Level II	Level III
TPH gasoline	100 ppm	200 ppm	400 ppm
TPH diesel	200 ppm	500 ppm	1,000 ppm

I would also suggest the following range for determining the level of cleanup to be;

Level I-60 points Level II-40 to 59 points Level III-0 to 39 points

Thank you for your time and efforts and for any consideration you might give in this matter.

Kindest regards,



Betty Ballou-Neser
#48 SW Aquinas
Lake Oswego, Oregon 97035
503-636-4768

RE: PETROLEUM + DIESEL CLEANUP MATRIX (ITEM G)

I HAVE READ SEVEN LETTERS SUBMITTED TO YOU FROM VARIOUS PEOPLE REACTING NEGATIVELY TO THE PROPOSED MATRIX. OF THESE, SIX ARE SUBSTANTIALLY IDENTICAL. IT APPEARS THAT THEY ~~ALL~~ USED AN AGREED-UPON LETTER + ALTERED IT SLIGHTLY. WILSON OIL, BETTY BALLOU-NESEB, NIEMI OIL, ROBBEN + SONS HEATING, HENDRIKSEN OIL COMPANY, AND CAPITAL CITY COMPANIES EACH SUBMITTED ESSENTIALLY THIS SAME LETTER.

THESE LETTERS ASSERTED THE PROPOSAL WAS OF CONCERN TO THEM BECAUSE:

- (1) DEQ HAS NOT ADEQUATELY SHOWN THAT THESE LEVELS ARE ABSOLUTELY NECESSARY
- (2) OTHER STATES AREN'T AS STRINGENT
- (3) THERE IS DOUBT AS TO WHETHER THERE'S SUFFICIENT TECHNOLOGY TO MEET THE PROPOSED LEVELS.

THE LETTERS ALSO PROPOSE ALTERNATIVE LEVELS. THE PARTIES DON'T QUITE HAVE THE CORRECT INFORMATION ON THE PROPOSED LEVELS, THOUGH. ~~FOUR~~ ~~ARE~~ ~~OF~~ THESE LETTERS QUOTE THE PROPOSED LEVELS AS BEING SOMETHING DIFFERENT THAN WHAT THEY REALLY ARE. THESE FOUR LETTERS THEN PROPOSE LEVELS WHICH ARE LOWER THAN

WHAT THEY THINK DEQ'S PROPOSED LEVELS ARE. THIS SHOWS THAT THEY ARE A BIT CONFUSED, AS LOWER PROPOSED LEVELS MEAN THAT THE MATRIX BECOMES MORE STRINGENT. FOR EXAMPLE NIEMI OIL CLAIMS THAT DEQ'S PROPOSED LEVEL III TPH DIESEL LEVEL OF CLEAN-UP IS 10,000 ppm (ACTUALLY IT'S 1000 ppm). THEY SUGGEST A NEW LEVEL OF 1000 ppm. THEREFORE, WHAT THEY PROPOSE IS TO MAKE THE CLEANUP LEVEL TO BE ~~10,000~~ 1,000 ppm INSTEAD OF 10,000 ppm, A STANDARD 10 TIMES MORE STRINGENT I DON'T THINK THIS IS WHAT THEY MEAN. WILSON OIL & BETTY BALLOU - NESSER SUGGEST SIMILAR LEVELS. ~~BE SURE TO LOOK~~ THE SEVENTH LETTER, FROM HAWK OIL COMPANY, MAKES SIMILAR MISSTATEMENTS

EVERY LETTER PROPOSES THE FOLLOWING FOR RANGES OF CLEANUP LEVELS:

LEVEL I	60 PTS.
LEVEL II	40-59 PTS.
LEVEL III	0-39 PTS.

THIS DEQ PROPOSES:

LEVEL I	40 PTS
LEVEL II	25-40 PTS
LEVEL III	0-25 PTS

THE FOLLOWING IS A SUMMARY OF PROPOSED LEVELS:

	LEVEL I		LEVEL II		LEVEL III	
	TPH (GASOLINE)	TPH (DIESEL)	TPH (GASOLINE)	TPH (DIESEL)	TPH (GAS)	TPH (DIESEL)
DEQ	10 ppm	100 ppm	50 ppm	500 ppm	100 ppm	1000 ppm
WILSON OIL	100 ppm	200 ppm	200 ppm	1000 ppm	1000 ppm	10,000 ppm
BETTY BALDWINESER	100 ppm	200 ppm	200 ppm	500 ppm	400 ppm	1000 ppm
NIEMI OIL	100 ppm	200 ppm	200 ppm	500 ppm	400 ppm	1000 ppm
FORBEN + SONS	100 ppm	200 ppm	200 ppm	500 ppm	400 ppm	1000 ppm
HENDRICKSON OIL	100	200	200	500	400	1000
CAPITAL CITY	100	200	200	500	400	1000
HAWK OIL				500	400	1000

AS YOU CAN SEE, THE LETTERS ALL HAD THE SAME PROPOSED LEVELS AS WELL AS THE SAME CONTENT

WILSON OIL, INC.

110 Panel Way - P.O. Box 69
Longview, Washington 98632
Phone 423-3300

April 4, 1989

William P. Hutchinson, Jr.
Chairman, EQC
333 SW Taylor
Portland, OR 97204-2496

Dear Mr. Hutchinson, Jr.,

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources, but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed to the following:

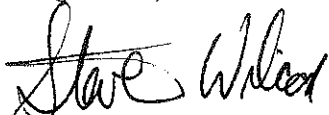
	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100	200	1000
TPH diesel	200	1000	10,000

The range for determining the level of cleanup should be changed as follows:

Level I	0 - 39 points
Level II	40 - 59 points
Level III	60 points and more

Thank you for your time and attention.

Regards,



Steve Wilcox

SW/mw
c:dear

COLUMBIA
PLYWOOD
CORPORATION



P.O. BOX 1780 - KLAMATH FALLS, OR 97601 - (503) 882-7281

March 22, 1989

Ms. Genevieve Pisarski Sage
75 Wimer Street
Ashland, OR 97520

REF: Concerns over proposed industrial air standards in Klamath Falls

Dear Ms. Sage:

Columbia Plywood is writing to all members of the Environmental Quality Commission on the proposed industrial air standards for Klamath Falls. We feel that the Department of Environmental Quality has been unfair in their approach to solving our air quality problem in the Klamath Basin.

We urge you to please read our enclosed written comment regarding concerns over this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Drew Honzel".

Drew Honzel
Assistant Manager

DH/cw

Attachment

cc: B.Z. Agrons



DESIGN AND SALES OF CUSTOM BUILT MACHINERY
P.O. BOX 1540 — PHONE (503) 883-3373
KLAMATH FALLS, OREGON 97601

March 1, 1989

Genevieve Pisarski Sage
75 Wimer St.
Ashland, OR 97520

Dear Ms. Sage:

A matter of great importance to Klamath Falls will soon be before the Environmental Quality Commission. This matter is the Department of Environmental Qualities proposal to reduce the significant emission rate from 15 tons PM10 to 5 tons PM10 annually.

Industry in Klamath Falls wants to see the air shed problem here solved as much as anyone. However, buy the Department's own data, the current proposal will have minimal impact on this problem and the cost to industry and economic development will be severe. Furthermore, the true costs and economic impacts of the proposal are unknown. Because of this, I have enclosed a copy of my written comments and hope that you have an opportunity to review them in their entirety. It is also my hope that you will reach the same conclusion that I and the large majority of the testifiers reached; that Klamath County's plan (preliminary copy enclosed) should be given time to work, and the proposed rule change withdrawn.

If you have any questions I would be happy to discuss them with you. Thank you for your careful consideration of the above matter.

Sincerely,

Stanley K. Meyers, P.E.
Vice President of Engineering

SKM/eh

Encls

cc: Bernie Agrons, State Representative
Ted Lindow, Klamath Falls County Commissioner
Joe Gero, KCEDA
Greg Williams, President, Klamath County Chamber of Commerce



Weyerhaeuser

P.O. Box 9
Klamath Falls, Oregon 97601
Tel (503) 884 2241

March 1, 1989

Ms. Genevieve Pisarski Sage, E.Q.C.
75 Wimer Street
Ashland, OR 97520

Re: Proposed Amendment to OAR 340 Division 20-
Significant Emission Rates for New or Modified
Industrial Sources in Klamath Falls - Hearing
December 15, 1988

Dear Ms. Sage:

At a recent D.E.Q. hearing in Klamath Falls concerning the proposal to reduce industrial air emissions of PM₁₀, much testimony was presented by various companies in the Klamath Falls area. I am enclosing a copy of the testimony presented on behalf of Weyerhaeuser Company at that hearing.

As you will note, it is our opinion that further restrictions on industry will not significantly alter the air quality in the Klamath Falls area. Additional industrial expense with little or no air quality improvement would not address the problem or serve the interest of the Klamath Falls populace. I would urge you to consider the facts of this issue if and when it is brought to your attention and reject the proposal as simply not wise or prudent.

Thank you for your help in this matter.

Sincerely,

WEYERHAEUSER COMPANY
Klamath Falls Operations

John D. Monfore
Land Use Manager

Enclosure

JDM:ch

WILSON OIL, INC.

110 Panel Way — P.O. Box 69
Longview, Washington 98632
Phone 423-3300

April 4, 1989

Genevieve Pisarski-Sage
2834 Yvonne
Medford, OR 97504

Dear Ms. Pisarski-Sage,

On April 14, 1989 you will be asked to approve a numerical matrix designed for cleaning up the soil from petroleum product contamination. As a Petroleum Marketer in Oregon I have several concerns about this proposed matrix. My concerns stem from my ability to survive as a small business if these rules are enacted.

I do not feel that the Department of Environmental Quality has adequately shown that these levels are absolutely necessary in order to protect the health and welfare of the people of Oregon. Other states have not required such stringent cleanup levels. Secondly, I am not convinced that the technology is available to meet these proposed cleanup levels.

I am interested in protecting our natural resources, but I do not think we can accomplish a perfect environment overnight. I would like to propose that the levels of cleanup in the matrix be changed to the following:

	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
TPH gasoline	100	200	1000
TPH diesel	200	1000	10,000

The range for determining the level of cleanup should be changed as follows:

Level I	0 - 39 points
Level II	40 - 59 points
Level III	60 points and more

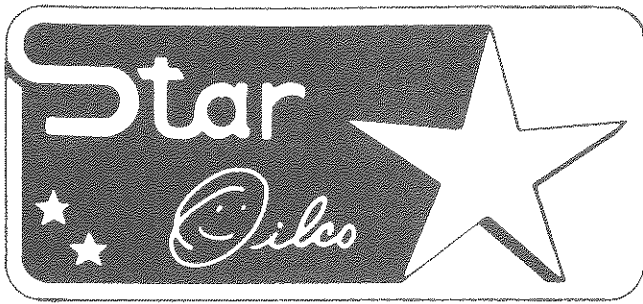
Thank you for your time and attention.

Regards,



Steve Wilcox

SW/mw
c:dear



April 4, 1989

Genevieve Pisarski-Sage
2834 Yvonne
Medford, Oregon 97504

Dear Ms. Pisarski-Sage:

On 13 April, the advisory committee will present to you a recommended fast track matrix for petroleum clean-up.

The recommendation is being presented to you without industry endorsement, and as to Level I, without technology to reach 10 PPM.

Please understand, I am for a clean environment, but I need reasonable standards. May I recommend:

	LEVEL I	LEVEL II	LEVEL III
Gasoline	100	200	400
Diesel	200	500	1000

SITE RANKING

Level I 60 points
Level II 40-59 points
Level III 0-39 points

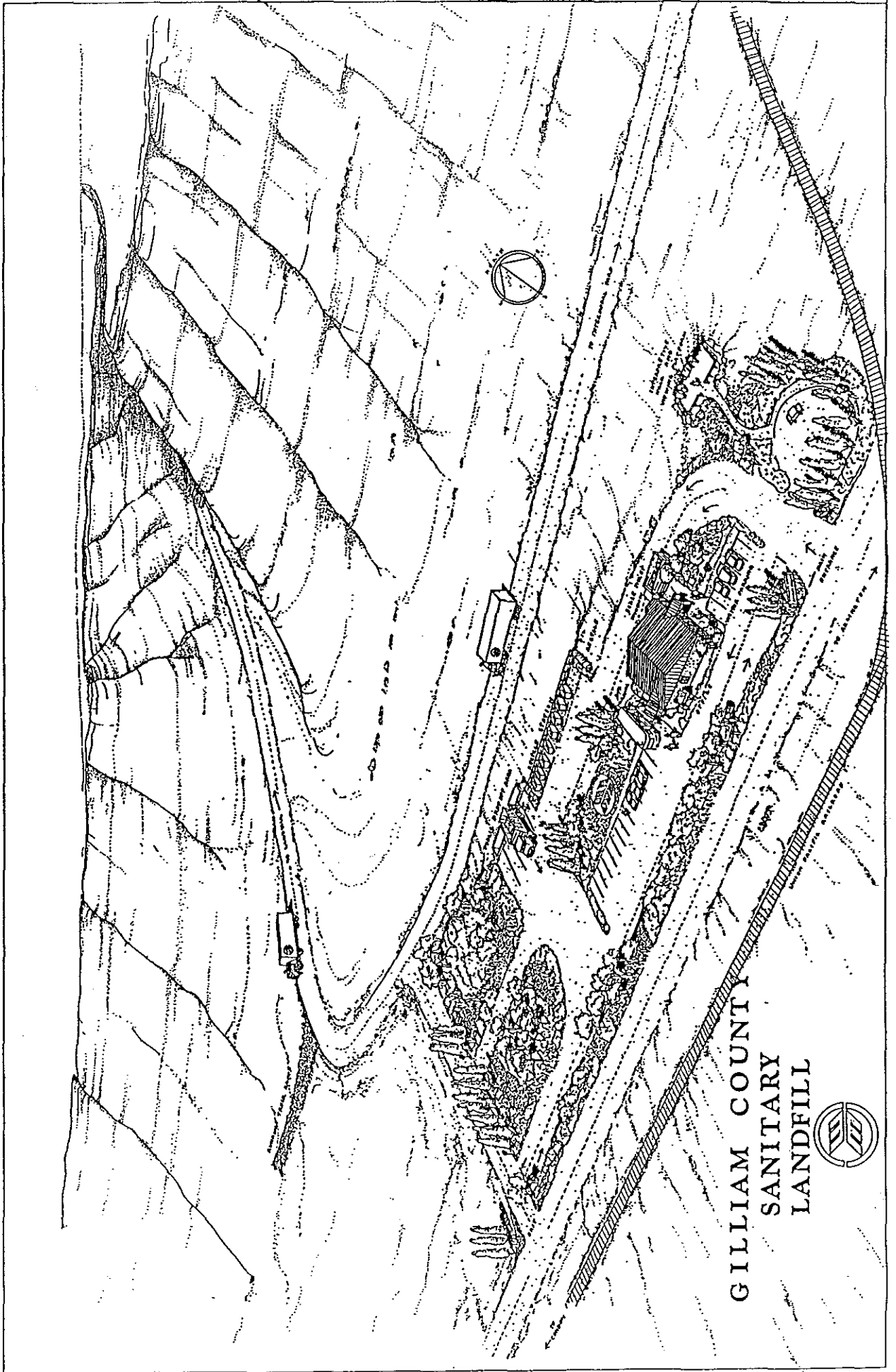
With the above simple change and the ability to aerate soils off site, everyone in the petroleum industry will endorse your plan.

Sincerely,


Michael A. Fitz
General Manager

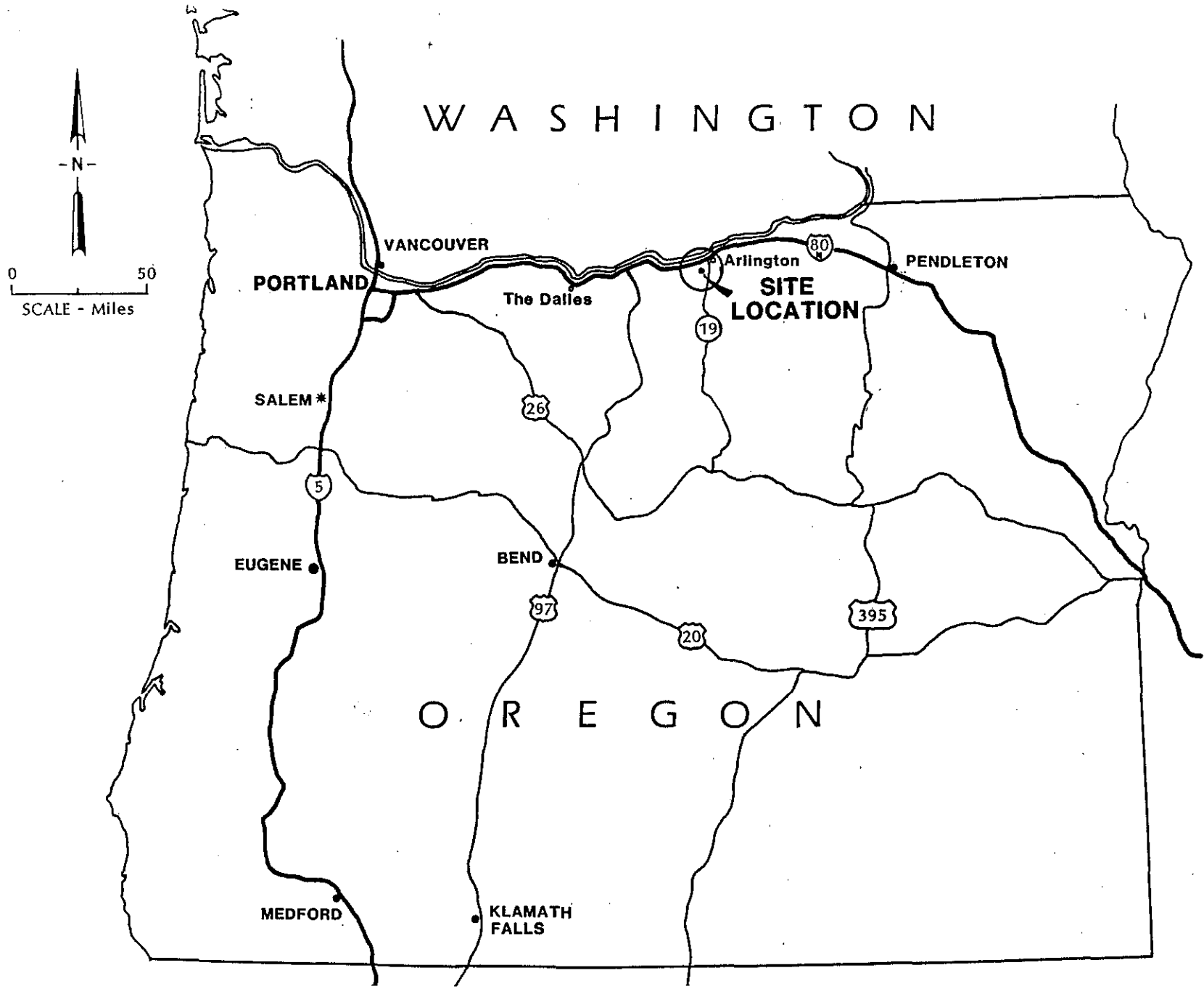
232 N.E. Middlefield Rd. • Portland, OR 97211-1295
283-1256 • 286-8285



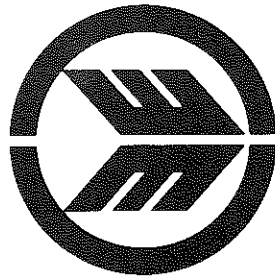


GILLIAM COUNTY
SANITARY
LANDFILL





SITE LOCATION MAP



Oregon Waste Systems, Inc.

A Waste Management Company

Construction Begins!

OREGON WASTE SYSTEMS SETS JULY 1989 DATE FOR OPENING LANDFILL

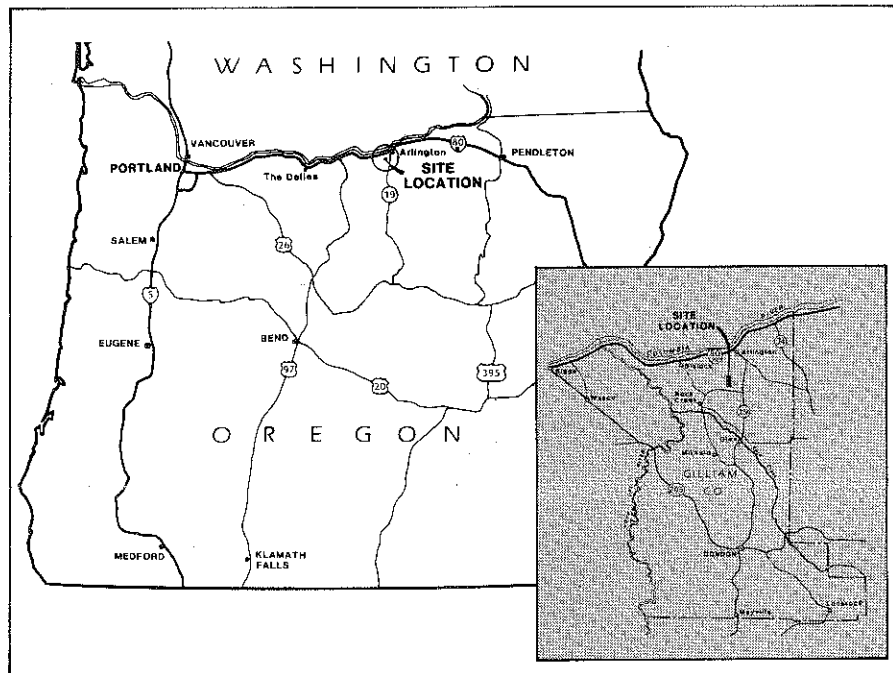
Construction equipment at what will be the Northwest's largest sanitary landfill are rushing to meet an important date — July 1989.

Oregon Waste Systems, Inc., will open its new landfill on that date, marking a new era in solid waste management in the Pacific Northwest.

You might think that building and operating the state's newest and largest sanitary landfill is simply a matter of digging a large hole and burying the waste in it as it rolls in from Portland, 140 miles away. Actually, construction at the 2,000-acre site, located 10 miles south of Arlington in Eastern Oregon; will take one year and employ up to 30 construction workers.

Oregon Waste Systems, Inc., of Portland is building the multimillion dollar landfill to the highest environmental design standards in the

Continued on page 2



Gilliam County — The landfill site is approximately 140 miles east of Portland in Gilliam County and about ten miles south of the city of Arlington.

CONSTRUCTION SCHEDULE

1988	
May	Preliminary site preparations.
June	General contractor selected.
June 25	Ground breaking and community celebration.
July-December	Access roads completed, entrance and local resident recycling and disposal area completed, administration building completed, first 15-acre module excavated.
1989	
January-June	Plastic liner constructed in first module.
July	Landfill opens.

Waste Disposal Solutions for the Pacific Northwest



LANDFILL LINER SYSTEM — The bottom of the Gilliam County sanitary landfill will be covered with a high density polyethylene (HDPE) (plastic), similar to the one being installed here at another Waste Management, Inc. facility. The liner is part of the environmental control system designed to protect ground water.



SOLID WASTE CRISIS ENDS — Ten years of uncertainty ended for Portland Area residents when Metro Executive Officer Rena Cusma signed a contract with Oregon Waste Systems, Inc., for landfill services. The 20-year contract provides Metro with space for about 17 million tons of waste in the new regional landfill near Arlington, Oregon, about 140 miles east of Portland. Joining in a brief signing ceremony at Metro headquarters on April 11 were (from left) Gary Hansen, Metro Councilor; Mike Ragsdale, Metro Council Presiding Officer; Rena Cusma; John Slocum, a Waste Management, Inc., vice president; Rick Daniels, Oregon Waste Systems, Inc. General Manager; and Alan Anderson, Gilliam County Commissioner.



SPACE AVAILABLE — The landfill site is located in a natural bowl created by the desert rangeland hills of Gilliam County. Doug Strauch, a Waste Management district engineering manager, studied the 2,000-acre parcel in early 1987 to determine its qualifications for a landfill.

NATURE'S OWN PROTECTION AIDED BY EXTENSIVE ENVIRONMENTAL CONTROLS

Oregon's Department of Environmental Quality is responsible for regulating sanitary landfill operations in the state. On May 18, 1988, DEQ issued a permit to Oregon Waste Systems to build and operate the most modern landfill in the state's history.

In terms of protecting the environment, the Gilliam County site is impressive for a number of reasons. Geologists have determined that groundwater beneath the site is far below the surface. That groundwater is protected by one of the best natural barriers offered by a landfill site — about 200 feet of clay soil.

Man-made devices will further prevent the flow of leachate, should it develop. Those controls include construction of a plastic lining at the bottom of the landfill combined with a layer of compacted clay. A network of underground pipes — a leachate collection system — also is being installed, under the terms of the DEQ permit.

Monitoring devices also will check the underground flow of methane gas, a byproduct of decomposing waste.

In addition to the plastic liner and leachate collection systems, other environmental controls at the site include:

- Groundwater monitoring and protection systems.
- Odor reduction through a landfill gas (methane) collection system.
- Compaction and a daily covering of garbage with six-inches of soil.
- Systems for on-site collection and evaporation of leachate and contaminated water, should it be present.

Oregon Waste Systems must construct, operate and monitor its landfill to these standards that are designed to protect the public and the environment. Although the landfill is projected to have a life of up to 100 years, DEQ has issued a permit for only seven years. This allows the company the chance to open and close about four 15-acre sections — and it gives DEQ a chance to determine the effectiveness of its regulations, the highest permit requirements in the state.

LANDFILL OPENING

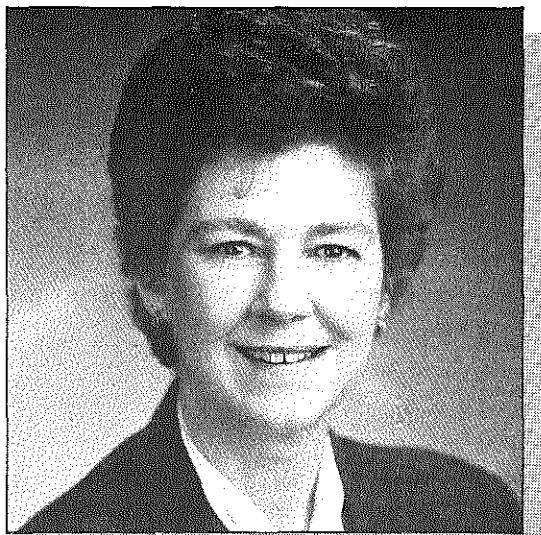
Continued from front page

nation, says Richard A. Daniels, vice president and general manager.

During the year-long construction phase, workers will build the necessary support facilities, pave roads and prepare the first cells of 15-to-30 acres each for receiving trash. Ultimately, there will be as many as 20 cells during the life of the landfill.

Residents in the Portland Area may be the first to use the new landfill. Under a 20-year contract, the Metropolitan Service District has reserved space for Portland's waste at the Gilliam County site. The new landfill is estimated to have up to a 100-year capacity. Waste will be shipped 140 miles east from Portland and will allow the over-flowing St. Johns Landfill to close.

THE CUSTOMER



Rena Cusma

PROBLEM SOLVED: A NEW ERA BEGINS FOR PORTLAND AREA

By **RENA CUSMA**
Metro Executive Officer

On April 11 this year, I signed a 20-year contract on behalf of Metro that will send much of the Portland Area's trash to a new sanitary landfill in Gilliam County.

The new contract, authorized by the Metro Council, opens a new era of modern waste management for the one million residents in the Portland Area. The old St. Johns Landfill in North Portland will be closing after 50 years of service. The new system is one that is likely, once again, to put Oregon in the national spotlight for its innovative environmental solutions.

Today, most of the 2,600 tons of trash produced each day in the Tri-County urban area goes directly to the St. Johns facility. When St. Johns closes, the new system goes into place. Your garbage collection company — the people who come to your house every week — will no longer drive their trucks to a landfill. Instead, trash haulers will drive to a transfer station and recycling center.

Each of the three counties surrounding Portland is expected to have at least one transfer station in place by 1990, or shortly after that date. Waste dumped at the transfer stations ultimately will be compacted and placed in sealed containers for shipment — by rail, truck or barge — to the new landfill in Eastern Oregon.

Metro — the Metropolitan Service District — has signed a long-term contract with Oregon Waste Systems, Inc., to reserve space at this new sanitary landfill, which will be one of the largest in the nation. Under the terms of the contract, 90 percent of trash destined for a landfill will go to this Gilliam County site.

The region's waste also may be diverted to other non-landfill methods of disposal, such as recycling and composting.

Metro's selection of a landfill outside the Portland Area ends more than a decade of debate and frustration about how to replace St. Johns.

"The Oregonian" hailed Metro's decision as a "Bold decision for the future:

"The action at long-last will permit closure of the over-flowing St. Johns Landfill in North Portland," the editorial stated. "It will provide the essential foundation Metro must have to put flesh for its long-standing skeletal policies for dealing with the region's solid waste. Reduce, reuse and recycle."

THE HOST COMMUNITY



Judge Laura Pryor

NEIGHBOR TO NEIGHBOR: AN OPEN LETTER FROM JUDGE LAURA PRYOR

By **JUDGE LAURA PRYOR**
Gilliam County Commission

Oregon Waste Systems' sanitary landfill now under construction means a tremendous economic boost for us here in Gilliam County.

Many of our residents are farmers and ranchers. We have an historic relationship with the land, a stewardship dating back to Oregon Trail days. If we thought the land was going to suffer irreversible damage, no amount of development would convince us to approve a project. Any project.

Frankly, if it was just a dump, we wouldn't have it. End of story.

Waste Management, Inc., is the parent of two companies doing business in Gilliam County. We've had more experience doing business with Waste Management than any other county in Oregon. The Chem-Security Systems, Inc., facility, a subsidiary, has successfully and safely operated a hazardous waste depository here for a decade.

When Oregon Waste Systems came to us with the landfill proposal to ship Portland's waste for burial in Gilliam County, we knew the questions to ask from past experience. The company worked hard to provide the answers and proposed solutions to potential problems.

Convinced of the merits of the proposal, Gilliam County approved — without citizen opposition — the necessary land-use permit for the project.

I believe that modern technology may be used with common sense, to build the best landfill in the Northwest. Working together, our communities are creating a solution the Northwest can be proud of.

LANDFILL MANAGEMENT



Richard A. Daniels

WASTE DISPOSAL: A CHALLENGE WE ALL SHARE

By **RICHARD A. DANIELS**
Vice President
Oregon Waste Systems, Inc.

We all have a stake in finding a solution to our solid waste disposal problem in the Northwest. At stake is the livability of our communities.

A sanitary landfill, sited and operated to the highest scientific standards of environmental safety, is a key element of any sensible solution. Such a landfill will be open for business in 1989 in Eastern Oregon's Gilliam County, and soon after will be receiving waste from the Metropolitan Portland-Vancouver Area.

Oregon Waste Systems, Inc., responded to Portland's needs and is prepared to meet the challenge of your community's problem, too. We provide innovative waste solutions, solutions which include the commitment of our parent company, Waste Management, Inc., in the areas of waste reduction, recycling and waste disposal. First, and foremost, we think of ourselves as an environmental protection company.

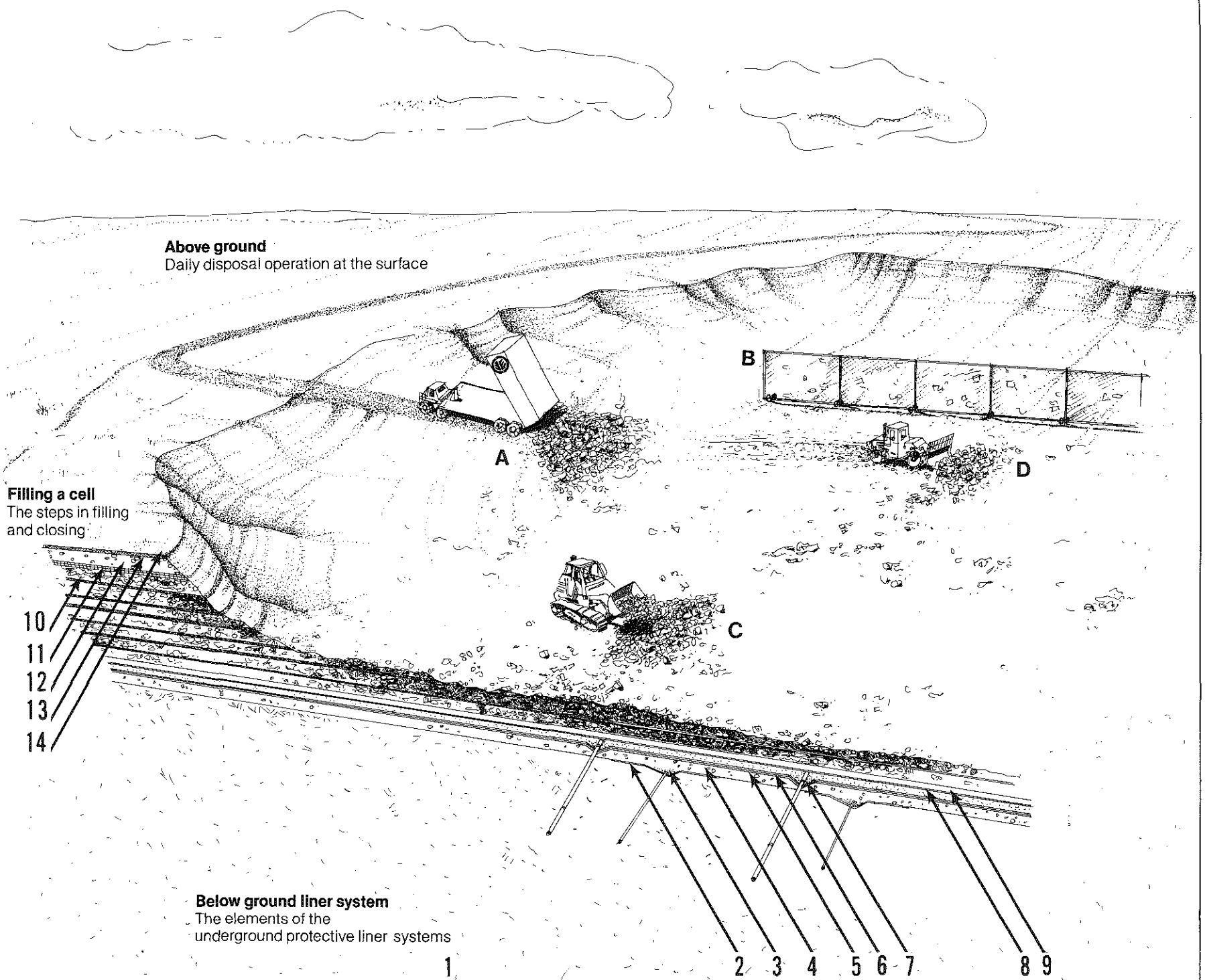
We intend to be a good corporate citizen and fine neighbor in Gilliam County. We'll pay our fair share of the tax burden; we'll generate new jobs. We'll bring more than garbage to Gilliam County — we'll bring economic opportunity.

Initially, when we presented this unique project, we called it "A Happy Ending to a Trashy Story." We now think of it as just the beginning of a great opportunity for communities throughout the region to solve their waste disposal problem.

In just a short time, Gilliam County will become a national model on how to take on a tough environmental problem and do it right. Oregon Waste Systems' Gilliam County alternative is a solution we can all live with.

OREGON WASTE SYSTEMS WELCOMES YOUR COMMENTS. We will be happy to provide more information. Use this space for your notes and write or call Rick Daniels, Vice President and General Manager, at the address below.

OREGON WASTE SYSTEMS 5240 NE Skyport Way Portland, Oregon 97218 (503) 281-2722



Above ground
Daily disposal operation at the surface

Filling a cell
The steps in filling and closing

Below ground liner system
The elements of the underground protective liner systems

AN ENVIRONMENTALLY SUPERIOR SANITARY LANDFILL SITE

*Dry.
Remote.
Geologically sound.
And, available!*

Those attributes best describe Oregon Waste Systems' sanitary landfill, now being built in Gilliam County, Oregon.

Once part of the Stone Ranch in Gilliam County's Alkalai Canyon, the proposed landfill will occupy 2,000 acres of desert rangeland. About 700 acres of the site are being developed as the actual fill area. The land will revert to its original use — grazing and farming — when the landfill closes in the next century.

Oregon Waste Systems was granted a conditional land-use permit for the site by Gilliam County's planning commission on June 7, 1987. Not one person spoke in opposition and many persons spoke in favor of the proposal.

Under a 20-year agreement with the Metropolitan Service District (Metro), Portland Area waste will be shipped to the landfill starting in 1990 or 1991.

Oregon Waste Systems has found the perfect landfill site for the following reasons:

DRY CLIMATE BEST

Located east of the Cascade Mountains on the rim of the Great American Desert, the site averages only nine inches of rainfall each year.

That is a significant number when it comes to protecting precious underground water resources.

Technicians say that landfill sites exposed to more than 20 inches of rain yearly often produce leachate. Leachate is contaminated effluent produced when rain mixes with buried garbage. Landfills located in dry climates rarely produce leachate.

SITE FAR FROM NEIGHBORS

Far from population centers, the site is served by an existing rail line.

The closest community is Arlington, a town of nearly 500 persons, located 10 miles to the northeast. The nearest residence is no closer than one mile from the landfill.

Although remote, the proposed landfill is centrally located to many Oregon and Washington communities, allowing Oregon Waste Systems to offer affordable disposal rates.



Oregon Waste Systems, Inc.
A Waste Management Company

KEY TO LANDFILL OPERATIONS

Above ground

Daily disposal operation at the surface of each 15-to-30-acre module includes:

- A. Off-road tipper truck delivers containerized waste shipped from Portland by barge, truck or train.
- B. Movable mesh screen prevents loose trash from blowing away.
- C. Bulldozer spreads waste.
- D. Compactor breaks down and compresses waste material. A six-inch layer of soil is used to cover each day's deposit of waste.

Below ground liner system

The elements of the underground protective liner systems include:

1. Natural clay, at least 200 feet deep, protects sub-surface ground water from becoming contaminated, should leachate escape the composite liner systems. Leachate is created when surface water mixes with garbage.
2. Synthetic (plastic) liner, high density polyethylene (HDPE) in a leak detecting trench.
3. Gravel and soil drainage layer which contains leak detection pipe — a back-up system to the leachate collection system.
4. Two-foot layer of compacted clay.
5. Synthetic (plastic) liner, high density polyethylene (HDPE).
6. Layer of geotextile, a filter fabric liner.
7. Gravel and soil drainage layer which includes the leachate collection pipes. The pipes carry any leachate to evaporation ponds.
8. Layer of geotextile, a filter fabric liner.
9. One-foot minimum of protective soil.

Filling a module

The steps in filling and closing each 15-to-30-acre module include:

10. Layers of daily waste deposits and daily soil cover.
11. One-foot intermediate cover.
12. Three-foot clay cap.
13. One foot of top soil material.
14. New vegetation.

Oregon Waste Systems, Inc.
5240 N.E. Skyport Way
Portland, Oregon 97218
(503) 281-2722
Fax (503) 284-6957



A Waste Management Company

**Attendees of April 13, 1989
Gilliam County Landfill Tour**

Environmental Quality Commission

William P. Hutchison, Chairman
Wallace B. Brill
Genevieve Pisarski Sage
William W. Wessinger

Department of Environmental Quality

Fred Hansen, Director
Harold Sawyer, Inter/Intra Program Coordinator
Carolyn Young, Assistant to the Director for Public Affairs
Stephanie Hallock, Administrator, Hazardous and Solid Waste
Steve Greenwood, Solid Waste Manager
Paul Christiansen, Hazardous Waste Engineer
Ernie Schmidt, Solid Waste Disposal Specialist
Ken Brooks, Assistant Regional Administrator for Oregon,
U.S. Environmental Protection Agency, Oregon Office
Tina Payne, Secretary to the Director and E.Q.C.

Metropolitan Service District

Jim Shoemake, Facility Manager
Dennis O'Neil, Senior Analyst

Oregon Waste Systems

Richard A. Daniels, Vice President and General Manager
Odee Lenderink, Region Landfill Manager
Bruce J. McIntosh, Region Environmental Engineer
Marty Sara, Principal Hydrogeologist
Bill Whealy, Construction Manager
Denise Denley, Office Manager
Ed Gill, Security

Citizen Advisory Committee Members

Grant Wilkins, Arlington
Mike Yutzie, Arlington
Richard Zweig, Chemical Security Systems, Inc.
Morris Wilson, Condon
Dave Jones, Chairman
Rich Harper, Secretary, Ione
Iva Hickey, Arlington

Oregon Waste Systems, Inc.
5240 N.E. Skyport Way
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(503) 281-2722
Fax (503) 284-6957



A Waste Management Company

GILLIAM COUNTY LANDFILL

The cities in the rainy regions of Oregon are generating garbage faster than their solid waste professionals can dispose of it. Waste Management of North America, Inc. conducted an extensive study that identified this Gilliam County Landfill site approximately 10 miles south of Arlington, Oregon, as the ideal location for a regional landfill. Oregon Waste Systems obtained all necessary permits for the landfill from Gilliam County and the State of Oregon. The Gilliam County Landfill is now under construction and nearing completion. It will be ready to accept waste in July, 1989.

The landfill site is on 2,036 acres of land formerly used for grazing cattle and growing dryland grain. The property is bounded on the west by several hundred acres of land owned by Chem-Security Systems, Inc. (CSSI) and used for disposal of hazardous waste. The landfill is within the jurisdictions of the Port of Arlington, the County of Gilliam, and the State of Oregon.

Approximately 700 of the 2,036 acres will be developed into the active landfill, with the remaining land used for the buffer area and unloading and support facilities. The 700 acre site will be developed sequentially, with only about 25 to 30 acres under



active development at any given time. As each area is filled and completed, that portion of the site will be revegetated.

Based on receiving 2,000 tons of waste per day, the proposed landfill capacity will permit it to operate for approximately 100 years.

Advantages of the Gilliam County Landfill Site:

The Gilliam County Landfill's rural location offers many advantages. The site lies in a remote area approximately ten miles south of Arlington. It is not visible from any residence or roadway. No residences are located in the immediate area.

Little leachate should be generated due to the low precipitation (less than nine inches annually) and high evaporation and transpiration in the area. If leachate were generated, design features such as the composite clay and plastic liner and the leachate collection and removal system would contain and remove it for proper disposal. Underlying geologic formations, consisting of thick layers of low-permeability soils, would also mitigate leachate migration.

The landfill will cause few adverse environmental impacts. The site currently contains no unique vegetation, wildlife, wetlands,

or forest that require special protection. Moreover, during the landfill's life and after it closes, the site will be vegetated to its former uses.

The location complies with Gilliam County's land use plan. The Gilliam County Planning Commission has granted Oregon Waste Systems a conditional use permit to operate the landfill. In addition, the Gilliam County Landfill has created many temporary jobs during construction and will offer 25-30 permanent jobs when it is operational. The Gilliam County Landfill will become the second largest employer in the county. By 1992, the Gilliam County Landfill will generate \$1.2 million per year in local personal income and \$1 million per year in local tax revenues.

The Gilliam County Landfill has contracted to receive waste from Gilliam County and from the three counties comprising the Metropolitan Service District.

County residents have enthusiastically supported this project.

Oregon Waste Systems, Inc.

5240 N.E. Skyport Way

Portland, Oregon 97218

503/281-2722



Richard A. Daniels

Vice President



A Waste Management Company

Gilliam County Landfill and
Chem-Security Systems, Inc. Hazardous Waste Facility
Tour

Thursday, April 13

ITINERARY

7:00 a.m. Coffee and Rolls
DEQ Offices, Conference Room 4

7:30 a.m. Leave for Arlington
Yamhill Street Turnout

10:30 a.m. Arrive at the Gilliam County Landfill

NOON Box Lunches
Location will depend on the weather

1:00 p.m. Arrive at Chem-Security

3:00 p.m. Depart for Portland

6:00 p.m. Arrive Portland

- Gilliam County Landfill: Dress should be comfortable. You will be walking on dusty ground and it is typically windy.
- Chem-Security: You will be viewing the facility from a van. Long pants (no dresses) and closed-toe shoes (no sandals) are required by the facility.

Graduate School
University Graduate
Faculty of Economics



Corvallis, Oregon 97331-3607

(503) 754-3621

April 7, 1989

William P Hutchison
Tooze, Marshall, Shenker,
Holloway & Duden
333 SW Taylor Street
Portland, OR 97204-2496

Dear Bill:

I will be unable to go on the field trip on April 13. However, I plan to be present for our meeting on April 14.

The assignments in your recent letter appear reasonable. I will do what I can to be helpful in that regard.

See you soon.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Emery N. Castle".

Emery N. Castle
Chairman

cc: Fred Hansen
✓ Tina Payne

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
APR 11 1989

OFFICE OF THE DIRECTOR



Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission DATE: April 13, 1989

FROM: Fred Hansen, Director *Ful*

SUBJECT: Addendum to Staff Report, Agenda Item Q, regarding a time extension request by the City of Brookings to comply with construction schedules in Stipulated Consent Order, WQ-SWR-88-35

Department staff were in contact with Department of Fish and Wildlife staff on April 13, 1989. Department of Fish and Wildlife staff indicated that it may be possible to negotiate outfall construction blasting during the months of August and September. At this time it has not been firmly established whether or not blasting would be allowed in August and September.

If blasting could be done in August and September, the construction period would likely be from August through November. September may not be favorable because low tides, which are most desirable for blasting and construction work, occur at night. The months of October and November are unfavorable for construction due to storms. The indications staff have gotten are that contractors either would not bid on the job or would charge substantially more to do the work during that time period.

Staff have written an addendum to the Brookings order requiring that outfall construction start by August 1, 1989 with outfall completion by December 1, 1989. Staff have also added a condition that if construction during that time is not feasible, then the Director may revise those dates to require that outfall construction begin by April 15, 1990 with completion by September 1, 1990.

Staff have also prepared an order to be entered against Harbor Sanitary District. The order specifies conditions as described in the staff report. Staff discussed the contents of the order with the attorney for Harbor Sanitary District on April 13, 1989; the attorney indicated that he did not have serious objections to the order at that time.

CG\WC4819

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 14, 1989

TO: THE ENVIRONMENTAL QUALITY COMMISSION

FROM: NICK NIKKILA, ADMINISTRATOR, AIR QUALITY DIVISION 

SUBJECT: ROGUE VALLEY GROUP SIERRA CLUB

On April 14, 1989, at 9:25 A.M., Management Assistant Linda L. Joy received a phone call from Myra Erwin, Vice-Chair, of the Rogue Valley Group Sierra Club. The following is a request made specifically to the Commission from the Sierra Club:

"The Rogue Valley Group Sierra Club requests that the Environmental Quality Commission consider public testimony about the Medford Corporation (Medco) permit at their June 2, 1989 meeting in Medford.

There are many questions regarding this permit. Public testimony at the Department of Environmental Quality hearing was totally opposed to issuing the permit until after the new industrial rules have been adopted. Medco has no intention of using the permit now, so there is no time crunch.

Therefore, we believe it is inappropriate to issue the permit before the new industrial rules are adopted, and before the Environment Quality Commission has an opportunity to review the situation."

Ms. Erwin specifically asked that William Hutchison or Genevieve Sage contact her at 482-9293.

PRELIMINARY SURVEY OF PLANTS WITH STRINGENT PHOSPHORUS LIMITS

Location	Effluent Phosphorus (mg/l)	Flow (mgd)	Ease ^a	Phosphorus Removal Process
Centerville, VA	0.01	14.0	+	Advanced
Brighton, MI	0.02	0.8	+	Conventional
Roanoke, VA	0.02	35.0	●	Conventional
Dillon, CO	0.02	1.0	+	Conventional
Breckenridge, CO	0.02	3.0	+	Conventional
Alexandria, VA	0.04	54.0	0	Conventional
Bemidji, MN	0.09	1.0	●	Conventional
Durham ^b	0.09	16.5	N/A	Undetermined
Washington, D.C.	0.10	301.0	+	Conventional
Copper Mountain, CO	0.10	0.8	-	Conventional
Woodbridge — No. 1, VA	0.10	4.0	0	Conventional
Woodbridge — No. 2, VA	0.10	12.0	+	Conventional
Ely, MN	0.18	1.6	0	Conventional
Rock Creek ^c	0.18	15.0	N/A	Undetermined
Quakertown, PA	0.20	4.0	◆	Conventional

a Ease in comparison with other treatment processes: + = Easy, ● = Minor Difficulty, 0 = Average, ◆ = More Difficult, and - = Major Difficulty.

b Based on existing flow without irrigation or reuse, @ YR 2005: Q = 26.6 mgd and effluent P = 0.07 mg/l.

c Based on existing flow without irrigation or reuse, @ YR 2005: Q = 27.9 mgd and effluent P = 0.12 mg/l.

RECEIVED

APR 11 1989

STATE OF OREGON

OFFICE OF THE DIRECTOR

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 11, 1989

TO: Fred Hansen

FROM: Stephanie Hallock

Stephanie

SUBJECT: Recommended Change, Proposed Waste Tire Rule

We just received what amounts to late "testimony" from a landfill operator concerning the proposed "block pass" provision in the waste tire carrier rules to be considered by the EQC for adoption on Friday. We think his problem is valid, and would like to put forward a change in our proposed rule to remedy the problem.

Problem:

The landfill operator (in LaGrande) has been looking for ways to recycle tires economically. Viking Freight Co. is willing to site a trailer at the landfill, send a cab to pick it up when full of tires, and haul it to Waste Recovery in Portland at an attractive rate. Viking is a common carrier with several hundred cabs. They would use whatever cab is available for the backhaul to Portland. It would not be feasible for Viking to get a waste tire carrier permit and decals for all cabs which might be involved in hauling these trailers. This is just the sort of situation the "block pass" was meant to address.

The glitch is that our proposed rule would allow a common carrier to operate under a block pass only three times a quarter. LaGrande says they generate enough waste tires to require the trailer to be hauled off more frequently. They also point out that if the entire "ration" of block passes for Viking was used for the LaGrande landfill, Viking could not provide this service for other landfills that might want to take advantage of it.

Recommendation:

The following rule change would remedy the situation:

- Remove the "three haul per quarter" block pass restriction for common carriers. Retain it for private carriers. (See attached wording change in proposed rule.)

Justification:

This change would encourage the practice of "spotting trailers" to collect tires for recycling at landfills. The only practical

Memo to: Fred Hansen
April 11, 1989
Page 2

alternative for many remote landfills may be to request an exemption to bury tires whole or not accept waste tires at all. The frequency restriction for use of block passes was added at the Task Force's suggestion, to avoid abuses by haulers for whom hauling waste tires was a significant part of their business. We have discussed this change with the new Chairperson of the Waste Tire Advisory Committee, and he concurs. He does not foresee abuses by common carriers; but definitely wants to keep the frequency limit for private carriers.

Fred -- we would like to explain the change to the EQC at the meeting rather than give them any additional paper. This memo is just for you to understand the issue.

Attachment
comcar.mem

carrier shall keep a block pass properly filled out for the current trip in the cab of the vehicle.

(i) An unpermitted [common carrier or] private carrier may operate as a waste tire carrier using a block pass no more than three times in any calendar quarter. Before a [common carrier or] private carrier may operate as a waste tire carrier more than three times a quarter, he or she must first apply for and obtain a waste tire carrier permit from the Department.

(20) [(17)] For the purposes of ORS 459.995(1), the transportation of waste tires under OAR 340-62-055 through 340-62-063 is deemed to be collection of solid waste, and violations of these rules are subject to a civil penalty under the Solid Waste Management Schedule of Civil Penalties, OAR 340-12-065.

Waste Tire Carrier Permittee Obligations

340-62-063 (1) Each person required to obtain a waste tire carrier permit shall:

(a) Comply with OAR 340-62-025(1).

(b) Display [a] current decals with [their] his or her waste tire carrier identification number issued by the Department when transporting waste tires. The decals shall be displayed on the sides of the front doors of each truck used to transport tires.

(c) Maintain the financial assurance required under ORS 459.730(2) (d).

(2) When a waste tire carrier permit expires or is revoked, the [applicant] former permittee shall immediately remove all waste tire permit decals from its vehicles.

(3) Leasing, loaning or renting of permits is prohibited. No permit holder shall engage in any conduct which falsely tends to create the appearance that services are being furnished by the holder when in fact they are not.

(4) A waste tire carrier shall leave waste tires for storage or dispose of them only in a permitted waste tire storage site, at a [solid waste] land disposal site permitted by the Department, or at another site approved by the Department.

(5) Waste tire carrier permittees shall record and maintain for three years the following information regarding their activities for each month of operation:

(a) The approximate quantity of waste tires collected. Quantities may be measured by aggregate loads or cubic yards, if the carrier documents the approximate number included in each load;

EQC ATTACHMENT TO APRIL 14 TAX CREDIT STAFF REPORT

EQC ACTION ON PRELIMINARY CERTIFICATION WAIVERS

Oregon Administrative Rule 340 Division 16 allows the EQC to waive the filing of a preliminary certification application if its determined that special circumstances render the filing unreasonable and if the facility would otherwise qualify for tax credit certification.

"Special Circumstances " means emergencies which call for immediate erection, construction or installation of a facility, cases where applicant has relied on incorrect information provided by Department personnel as demonstrated by letters, records of conversation or other written evidence, or similar adequately documented circumstances which directly resulted in applicant's failure to file a timely application for preliminary certification. Special circumstances shall not include cases where applicant was unaware of tax credit certification requirements or applied for certification in a manner other than prescribed by rule 340-16-015 (1).

From 1983 through 1985, nine requests for waivers were submitted to the EQC. Of the nine, five were denied and four approved.

Reasons for denial:

- Application was notified of filing requirements.
- Applicant's misunderstanding of conversation with DEQ staff does not constitute a special circumstance.
- Applicant's accountant did not inform applicant of filing requirement.
- Applicant learned of requirements from supplier; had no prior contact with DEQ staff.

Reasons for approval of waiver:

- Staff error.
- Proposed facilities were required as condition of DEQ permit; DEQ's knowledge of plans and construction and involvement was accepted as the filing of a Request for Preliminary Certification.
- Applicant claimed to have submitted application; consultant files indicate application was hand delivered to DEQ.

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
2 OF THE STATE OF OREGON

3 IN THE MATTER OF HARBOR SANITARY DISTRICT) FINAL ORDER
4 SEWAGE COLLECTION AND CONVEYANCE TO) NO. EQC-SWR-89-80
5 CITY OF BROOKINGS SEWERAGE SYSTEM)

6 FINDINGS

7 Pursuant to Oregon Revised Statutes 468.090 through 468.110, and Oregon
8 Revised Statutes 183.310 through 183.550, the Environmental Quality
9 Commission makes the following findings:

10 1. The Harbor Sanitary District collects domestic sewage within
11 District boundaries and discharges the sewage to the City of Brookings'
12 collection system for conveyance and treatment at the Brookings' sewage
13 treatment plant. On April 29, 1988, the City of Brookings was issued
14 Stipulation and Final Order, No. WQ-SWR-88-35, to upgrade their treatment
15 facilities. The Order includes time schedules for extension or relocation
16 of the ocean outfall and for upgrading the treatment facility, and specifies
17 interim concentration and load limits while facility upgrades proceed.
18 Proper control of wastes entering the Harbor Sanitary District system is
19 essential for the City of Brookings to meet the conditions of the Order.
20 Control would normally be provided by an intermunicipal contract between the
21 two communities.

22 2. An intermunicipal contract exists between the two communities.
23 Until recently, the Department believed that this contract provided the
24 City with control of the wastes entering the District's collection system;
25 however, it is now clear that the contract does not provide the needed
26 control, and direct regulation of the District is necessary.

1 2. The District shall submit engineering plans and required land use
2 compatibility statements to the Department for review, and obtain written
3 approval of the plans before extending service to any new areas.

4 3. The District shall determine the total number of connections, by
5 customer class, to the District system as of May 1, 1989, and report this
6 information to the Department and the City of Brookings by June 1, 1989.

7 4. The District shall collect flow measurements daily, and report
8 total daily wastewater flows for each month to the Department and the City
9 of Brookings by the 15th day of the following month.

10 5. The District shall evaluate and determine monthly average flows
11 and peak daily flows for wastes discharged from the Harbor Sanitary District
12 into the City of Brookings' sewerage system from May 1, 1988 to April 30,
13 1989, and submit this information to the Department and the City of
14 Brookings by June 1, 1989.

15 6. The District shall report all new sewer connection permits issued,
16 including the number and type of units served, to the Department and the
17 City of Brookings within seven working days of permit issuance.

18 7. The District shall obtain and install, by July 1, 1989, a 24-hour
19 flow proportional composite sampler to sample wastes discharged to the City,
20 and to sample and analyze for Biochemical Oxygen Demand (BOD-5) and Total
21 Suspended Solids at least twice per month, to include one Saturday, and to
22 report the sample results to the Department and the City of Brookings by the
23 15th day of the following month.

24 8. The District shall submit an application, including all applicable
25 fees, for a Water Pollution Control Facility permit to the Department by
26 July 1, 1989.

1 9. This Order shall expire when Order No. WQ-SWR-88-35, issued to
2 the City of Brookings, expires.

3 CIVIL PENALTIES

4 This Order gives notice that if the City of Brookings Order No.
5 WQ-SWR-88-35 is violated, the Department may take appropriate enforcement
6 actions against the Harbor Sanitary District. Enforcement actions may,
7 based solely upon the Department's determination that either the City of
8 Brookings or Harbor Sanitary District did not assure compliance with Order
9 No. WQ-SWR-88-35, be imposed upon either the City, the District, or both
10 ~~with~~ *in which each case* fines in proportion to the number of actual connections to each system.

11 OPPORTUNITY FOR HEARING

12 The Harbor Sanitary District may request a hearing before the
13 Commission or its Hearings Officer regarding this Order. Any such request
14 must be made in writing and received by the Director of the Department
15 within twenty-one (21) days from the date of mailing of this notice. Any
16 such request must be accompanied by a written answer admitting or denying
17 all factual matters contained in this Order, and must affirmatively allege
18 any and all affirmative claims or defenses the District might have. Any
19 hearing shall be conducted under Oregon Revised Statutes, Chapter 183, and
20 Oregon Administrative Rules, Chapter 340, Division 11, or as the Commission
21 may otherwise direct. If the District does not request a hearing within
22 twenty-one (21) days of mailing of this Order, the District shall waive the
23 right to a hearing under Oregon Revised Statute, Chapter 183. In the
24 absence of a timely answer and request for a hearing, this Order shall
25 become final and effective on April 14, 1989, and thereafter shall not be
26 subject to judicial review.

1 FINAL ORDER

2 IT IS SO ORDERED:

3 ENVIRONMENTAL QUALITY COMMISSION

4
5
6 _____
7 Date

By _____
Fred Hansen, Director
Department of Environmental Quality
Pursuant to OAR 340-11-136(1)

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: April 20, 1989

TO: Bill Hutchison
cc: Fred Hansen

FROM: Harold Sawyer *HS*

SUBJECT: Scheduled Items for Future EQC Meetings

Attached is a draft of the projected agenda items as updated by the Division Administrators through April 19, 1989. (The schedule through February 1990 is still being updated.)

Your thoughts or reactions on the following items would be appreciated:

1. June Meeting Location -- I have indicated Portland Area as the location for the June meeting. I am assuming that legislative matters will be much more critical at that time and meeting close to the office will be the most appropriate thing to do.
2. July RETREAT -- The Commission decided on a split retreat -- Legislation implementation strategy in conjunction with the July Work Session, and Strategic Plan in conjunction with the September Work Session.

Options might be as follows:

- a. 1½ day retreat + a ½ day work session on Wednesday and Thursday.
- b. 1 day retreat + a 3 hour evening work session on Thursday.

What should we plan on for July?
.....for September?

3. July Meeting Location -- We had earlier identified the Corvallis Area as a possible location for the July Meeting. This was to focus on the Pope & Talbot Mill expansion and color issue.

Memo to: Bill Hutchison
April 20, 1989
Page 2

Unless the decision on Retreat format/location would suggest otherwise, I assume Corvallis is still a reasonable location for July. I will explore facilities that could be used for meetings.

4. September Meeting Location -- We have not yet established any tentative location for a September meeting. Medford or Southern Oregon would be a possibility, although not a necessity and definitely more difficult relative to arranging a retreat.

Any thoughts?

<u>Date</u>	<u>Div</u>	<u>Type</u>	<u>Topic</u>
<u>June 1, 1989 Work Session</u>		<u>Portland Area</u>	
06-01-89	AQ	Work Session	Asbestos Abatement Program: Status Report and Discussion of Residential Abatement Program Issue Background discussion of need for Temporary Rule to suspend Residential Program and need for other rule amendments.
06-01-89	AQ	Work Session	Woodstove Emission Offsets: Discussion on Feasibility and Criteria for External Woodstove Offsets for New and Expanding Industry Work Session discussion requested at April 14, 1989 meeting.
<u>June 2, 1989 Regular Meeting</u>		<u>Portland Area</u>	
F 06-02-89	AQ	Hearing Auth.	New Source Performance Standards (NSPS) and New National Emission Standards for Hazardous Air Pollutants (NESHAPS): Proposed Adoption of New Federal rules
G 06-02-89	AQ	Rule Adoption	Field Burning: Permanent rules to replace temporary rules adopted during the last burning season
H 06-02-89	AQ	Rule Adoption	Gasoline Volatility: Proposed Rule to Limit Gasoline Volatility During the 1989 Summer Ozone Season. Proposal is in accordance with the direction established at the January Work Session. Hearing Authorized at March Meeting.
I 06-02-89	AQ	Rule Adoption	Klamath Falls Area: New Industrial Rules for PM10 Deferred from April 14, 1989 Meeting.
J 06-02-89	HSW	Rule Adoption	Hazardous Waste Rules: General RCRA Program Rule Revisions including Adoption of New Federal Rules (by reference)
K 06-02-89	WQ	Rule Adoption	Construction Grant Rules: Modification to Implement Transition to Revolving Loan Fund This is the next step in implementing the transition strategy considered by the EQC in January. Hearing Authorized in March.
L 06-02-89	WQ	Rule Adoption	Increased Wastewater Discharges: Rule Modification
M 06-02-89	WQ	Rule Adoption	TMDL's: for the Yamhill River Hearing Authorized at March Meeting.
N 06-02-89	AQ	Approval	Asbestos Abatement Program: Proposed Adoption of Temporary Rule Suspending Existing Rules on Residential Abatement
O 06-02-89	HSW	Approval	CSSI Permit: Modifications Commission approval of modifications to the permit for the Hazardous Waste Disposal Facility at Arlington.

April 20, 1989

SCHEDULE OF FUTURE EQC AGENDA TOPICS

Page 2

<u>Date</u>	<u>Div</u>	<u>Type</u>	<u>Topic</u>
P 06-02-89	WQ	Approval	Jeld-Wen, Inc; Klamath Falls: Increased Wastewater Discharge to Klamath Lake EQC approval is requested to allow increased discharge of wastewater (boiler blowdown) to Klamath Lake from a new boiler installation.
Q 06-02-89	WQ	Approval	METRO Master Sewerage Plan (208 Plan): Recertification Periodic changes to the plan must be certified to EPA.
R 06-02-89	MSD	Information	State/EPA Agreement (SEA) Final EQC Review of proposed State/EPA Agreement priorities and expected accomplishments.

July 19-20, 1989 RETREAT / Work Session

Corvallis Area

07-19-89/ 07-20-89	EQC	RETREAT	RETREAT: New Legislation Implementation EQC Retreat with Senior Staff to Brainstorm New Legislation and develop implementation strategies.
07-20-89	OD	Field Trip	Halsey Pulp Mill Area Field Trip to view Pope & Talbot Pulp Mill Area in relation to proposed expansion.
07-20-89	AQ	Work Session	Emission Exceedances: Discussion on unifying Department/Source requirements and actions upon exceedance of permit conditions, rules, etc. This discussion relates to exceedances principally caused by Start-up, Shut-down, Scheduled Maintenance, and Breakdowns.
07-20-89	WQ	Work Session	Discussion of Significant New Waste Discharge to Columbia River: Proposed WTD Pulp Mill Background on proposed new WTD Pulp Mill to be located at the old Beaver Army Terminal Site.
07-20-89	WQ	Work Session	Halsey Pulp Mill Expansion Background Discussion on Proposed Expansion of Pope & Talbot's Halsey Pulp Mill and the issue of color removal from the effluent.

July 21, 1989 Regular Meeting

Corvallis Area

07-21-89	HSW	Hearing Auth.	Hazardous Waste Fee Rules: Revision of Compliance Fees for Generators and TSDF's Note: May need to consider this item as a Temporary Rule in June.
07-21-89	HSW	Hearing Auth.	Solid Waste Fee Rules: Proposed Increase Rule Modifications to increase fees to account for inflation and changes in program emphasis.
07-21-89	HSW	Hearing Auth.	UST Rules: Proposed Adoption of Federal UST Technical Standards and Financial Responsibility Rules; and rules allowing local government to administer UST program.

<u>Date</u>	<u>Div</u>	<u>Type</u>	<u>Topic</u>
07-21-89	WQ	Hearing Auth.	NPDES/WPCF Rules: Modification of Procedures and Fees Rule update and Fee increase to account for inflation and increased program costs.
07-21-89	WQ	Hearing Auth.	On-Site Sewage Disposal Program Rules: Modification of Fee Schedule Rule update and Fee increase to account for inflation and increased program costs.
07-21-89	AQ	Rule Adoption	Kraft Mill Regulations: Modifications to Correct Deficiencies, Add Opacity Standard for Recovery Boilers, Clarify Monitoring Requirements
07-21-89	ECD	Rule Adoption	Leaking Underground Storage Tanks: Matrix for Evaluating Cleanup Levels in Soils
07-21-89	WQ	Rule Adoption	TMDL's: for Bear Creek Hearing Authorization scheduled for April Meeting.
07-21-89	WQ	Rule Adoption	Tualatin Basin: Interim Stormwater Control Rules Previous rulemaking requires the Department to propose such rules by March 1989. Hearing Authorized in March.
07-21-89	WQ	Approval	Approval of Significant New Waste Discharge to Columbia River: Proposed WTD Pulp Mill Approval of Proposed new discharge pursuant to policy that requires EQC approval of significant new waste discharges.
07-21-89	WQ	Approval	Pope & Talbot Pulp Mill Expansion: Request for Increased Winter Waste Loads EQC review and approval of proposed increase in winter time discharge loads to accommodate an increase in production capacity of the Pulp Mill at Halsey.
<u>September 6-7, 1989 RETREAT / Work Session</u>			<u>?????????????</u>
09-06-89/ 09-07-89	EQC	RETREAT	RETREAT: Strategic Plan Review, Update, and Finalize Strategic Plan
09-07-89	WQ	Work Session	Ontario Aquifer Management Plan
09-07-89	WQ	Work Session	Sludge Program Delegation and Sludge Rules
<u>September 8, 1989 Regular Meeting</u>			<u>?????????????????</u>
09-08-89	AQ	Hearing Auth	Asbestos Abatement Program: Rule Amendments

<u>Date</u>	<u>Div</u>	<u>Type</u>	<u>Topic</u>
09-08-89	AQ	Hearing Auth.	Emission Exceedances: New Rule to Define where Exceedances due to Start-up, Shut-down, or Malfunction Situations Could be Allowed. Work Session Discussion held at July Meeting.
09-08-89	AQ	Hearing Auth.	SIP Control Strategies for PM10 in Medford, Grants Pass, and Klamath Falls
09-08-89	AQ	Hearing Auth.	Woodstove Certification Program: Proposed Modifications to Conform to New EPA Requirements
09-08-89	WQ	Hearing Auth.	Malheur Basin Aquifer Management Plan: Proposed Rules
09-08-89	WQ	Hearing Auth.	On-Site Sewage Disposal Rules: Modification to Revise Design Flow Basis for Sizing Systems
09-08-89	WQ	Hearing Auth.	Surety Bond Rules: Modification to Clarify Applicability to Mobile Home Parks
09-08-89	WQ	Hearing Auth.	Tualatin River: Implementation Plan Schedules
09-08-89??	WQ	Hearing Auth.	Protection of Beneficial Uses of Water: Antidegradation Policy Consideration of potential amendments to existing Water Quality regulations relating to Antidegradation.
09-08-89	AQ	Rule Adoption	Industrial PM10 Rules for Medford and Grants Pass Hearing Auth. 11/4/88. (Klamath Falls considered separately.)
09-08-89	AQ	Rule Adoption	New Source Performance Standards (NSPS) and New National Emission Standards for Hazardous Air Pollutants (NESHAPS): Proposed Adoption of New Federal Rules
09-08-89	HSW	Rule Adoption	Special Waste: Proposed Rules
09-08-89	HSW	Rule Adoption	Spill and Release Reportable Quantity Rules: Amendments to Maintain Consistency with Federal Rules
09-08-89	WQ	Approval	Assessment Deferral Loan Program: Applications for funding during 1989-91 biennium.
09-08-89	WQ	List Adoption	Revolving Loan Fund: Draft Priority List
09-08-89	WQ	Information	Container Nurseries: Update on Current Status Followup on March 2, 1989 Work Session Discussion