

**3/11/1988**

**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS**



State of Oregon  
**Department of  
Environmental  
Quality**

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OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

March 11, 1988  
Fourth Floor Conference Room  
Executive Building  
811 S. W. Sixth Avenue  
Portland, Oregon

AGENDA

9:00 a.m. - CONSENT ITEMS

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 January 22, 1988, EQC Meeting.
- B. Monthly Activity Reports for December 1987 and January 1988.
- C. Tax Credits

9:05 a.m. - 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

- D. Request for Authorization to Conduct a Public Hearing on Amendments to Procedures for Issuance, Denial, Modification and Revocation of Permits (OAR 340-14-005 through 050), New Source Review, Procedural Requirements (OAR 340-20-230), and Issuance of NPDES Permits (OAR 340-45-035).
- E. Request for Authorization to Hold Hearings on Proposed Amendments to Rules Contained in OAR 340-41-445, Water Quality Standards not to be Exceeded, Willamette Basin.
- F. Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100, 102 and 104.

- G. Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Solid Waste Fee Schedule, OAR Chapter 340, 61-120.

ACTION ITEMS

Public testimony will be accepted on the following except items for which a public hearing has previously been held. Testimony will not be taken on items marked with an asterisk (\*). However, the Commission may choose to question interested parties present at the meeting.

- H. Appeal of Hearings Officer's Decision in DEQ vs. Merit USA, Inc.
- \*I. Proposed Adoption of Increases to the On-Site Sewage Disposal Fee Schedule (OAR 340-71-140) and Modification to the Definition of "Repair" (OAR 340-71-100(3)).
- J. Request for Approval of Construction Schedule for Philomath Boulevard (Corvallis) Health Hazard Annexation Area (Phase I).
- \*K. Proposed Issuance of Joint Permit for the Storage, Treatment and Disposal of Hazardous Waste to Chem-Security Systems, Inc., Star Route, Arlington, Oregon 97812 (Permit No. ORD 089452353).

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 a set time should arrive at 9:00 a.m. to avoid missing any item of interest.

The Commission will have breakfast (7:30) at the DEQ offices, 811 S. W. Sixth Avenue, Portland. Agenda items may be discussed at breakfast. The Commission will also have lunch at the DEQ offices.

The next Commission meeting will be April 29, 1988, in Medford, Oregon.

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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APPROVED
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APPROVED
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APPROVED
- F. Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100, 102 and 104.  
APPROVED

- G. Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Solid Waste Fee Schedule, OAR Chapter 340, 61-120.

APPROVED

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REDUCED CIVIL PENALTY TO \$2,000
- \*I. Proposed Adoption of Increases to the On-Site Sewage Disposal Fee Schedule (OAR 340-71-140) and Modification to the Definition of "Repair" (OAR 340-71-100(3)).  
APPROVED
- J. Request for Approval of Construction Schedule for Philomath Boulevard (Corvallis) Health Hazard Annexation Area (Phase I).  
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MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Eighty-Fifth Meeting  
January 22, 1988

811 S. W. Sixth Avenue  
Conference Room 4  
Portland, Oregon

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Commission Members Present:

James Petersen, Chairman  
Arno Denecke, Vice Chairman  
Wallace Brill  
Bill Hutchison  
Mary Bishop

Department of Environmental Quality Staff Present:

Fred Hansen, Director  
Kurt Burkholder, Assistant Attorney General, for Michael  
Huston  
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.

BREAKFAST MEETING

**Bacona Road Landfill Site:** Director Hansen informed the Commission about the status of the Bacona Road Landfill site. He also discussed the testing and monitoring activities at the site. Steve Greenwood briefed the Commission on Metro's solid waste planning and selection process and alternative disposal methods under consideration. Steve also advised the Commission that the draft permit for Oregon Waste Systems' proposed landfill at Arlington was being released and a hearing was scheduled in Arlington on February 18, 1988.

**PM<sub>10</sub>:** Director Hansen and John Core, Air Quality Division, told the Commission the Department would be modifying the State

Implementation Plan to conform to the new PM<sub>10</sub> requirements. Mr. Core indicated the Department has been working with local officials and citizen groups in the Grants Pass, Medford and Klamath Falls area. Wood Stove emissions are a major part of the problem in these communities. The next step is having local governments adopt ordinances to implement a mandatory program that prohibits wood heating on poor air quality days. Additionally, programs are being developed to further reduce industrial emissions. The Department continues to work with local governments and to provide information to the public.

FORMAL MEETING

CONSENT ITEMS:

Agenda Item A: Minutes of the Special Work Session on Legislative Concepts, December 10, 1987, and the December 11, 1988, EQC Meeting.

Action: It was MOVED by Commissioner Hutchison, seconded by Commissioner Brill, and passed unanimously that the minutes of the Special Work Session on Legislative Concepts, December 10, 1987, be approved.

The following modifications were proposed for the December 11, 1987, minutes of the regular meeting:

- ♦♦ Page 8 Agenda Item H, Appeal of Hearings Officer's Decision in DEQ vs. Kirkham: Commissioner Denecke requested the minutes be modified to reflect he supported dismissal of the appeal since the record indicated the hearings officer found the fire district would have given Mr. Kirkham a permit to burn if one had been requested.
- ♦♦ Page 15 Work Session on Yard Debris: Commissioner Hutchison requested the motion be corrected as follows:

It was MOVED by Commissioner Hutchison [Commissioner Denecke],...

Also, Commissioner Hutchison requested the minutes be modified to reflect that the EQC will consider the Yard Debris draft rule amendments at the April 29, 1988, meeting.

It was MOVED by Commissioner Bishop, seconded by Commissioner Hutchison and passed unanimously that the minutes for the December 11, 1987, regular meeting be approved with the corrections noted above.

Agenda Item B: Monthly Activity Reports for November 1987.

**Action:** It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the November 1987 Monthly Activity Report be approved.

Agenda Item C: Tax Credits

**Action:** It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the tax credits listed in the Director's recommendation be approved.

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-2248	Timber Products Company	baghouse
T-2353	Brand S Corporation	2 Geoenergy precipitators
T-2747	Dow Corning Corporation	baghouse

PUBLIC FORUM

Jeanne Orcutt, Gresham, read into the record a statement expressing her concerns that the Cities of Portland and Gresham were failing to comply with new requirements specified in Oregon Revised Statutes (ORS) 454. (In the 1987 Legislative Session, House Bill 3101 was adopted. This bill added requirements for municipalities affected by a Commission order pursuant to ORS 454.275 to 454.350.) She provided the Commission with a copy of her statement and attachments. A copy of Ms. Orcutt's materials is made a part of this record.

In summary, Ms. Orcutt's concerns were that Gresham has not yet adopted a safety net program, that citizen involvement is not occurring in Gresham, that the composition of Portland's citizens sewer advisory committee does not comply with the statute, that Multnomah County had inappropriately passed a resolution allowing the County to remonstrate against sewer assessments for county owned property (thereby increasing the cost to other property owners within an LID), and that Portland was inappropriately collecting their 7 percent franchise fee from customers outside city limits. She was also concerned that Portland was unfairly giving rebates on connection charges paid by people who had



previously connected to a city sewer. She said the grants being received are for the affected area and property owners who connected prior to the sewer mandate should not receive a rebate.

At the conclusion of the regular agenda, Chairman Petersen asked Dick Nichols, Water Quality Division Administrator, if he had investigated the concerns raised by Ms. Orcutt. While Mr. Nichols had not been able to review Ms. Orcutt's specific comments, he clarified the Department's views as presented to the Legislature during the hearings and work sessions on HB 3101.

He indicated the Department attempted to minimize any new obligations for the Commission as a result of the legislation. The only specific part of the legislation requiring Commission action was a section stating the Commission must approve any significant change to the areawide 208 plan. This plan is the governing master plan for the provision of sewage collection, treatment and disposal services by the municipalities in an affected area.

Chairman Petersen responded that from his perspective the Commission was concerned about people in the affected area being treated fairly. He asked the Department to keep this in mind when reviewing Ms. Orcutt's concerns.

John Charles, Executive Director, Oregon Environmental Council, spoke to the Commission about Senate Bill 405. Mr. Charles referred specifically to the provisions of ORS 459.188 which allow the Commission to require source separation of identified recyclable materials if specific findings can be made. He focused in particular on one of the required findings specified in ORS 459.188 (3)(a), as follows:

- 3(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;

Mr. Charles requested clarification of the terms "reasonable period of time" and "level of participation." Mr. Charles suggested the Solid Waste Advisory Committee be used to help develop draft rules and to define participation levels for an acceptable recycling program under SB 405. He asked the Commission to direct the Department to undertake these efforts.

Chairman Petersen asked if the Department's Solid Waste Advisory Committee could pursue Mr. Charles's request. Director Hansen stated the Department needs criteria for evaluating the effectiveness of recycling programs. He stated the Department will explore options for addressing this issue, including use of

the Solid Waste Advisory Committee, and will report back at the next EQC meeting with a proposed process.

Jeff Golden, Jackson County Commissioner, invited the Commission to hold a meeting in Medford and asked the Commission to devote an entire day to the Medford area. He felt this action would provide:

- ♦ a partnership between DEQ, local officials and Rogue Valley residents;
- ♦ the feeling that the DEQ's presence is strong and effective in the Rogue Valley; and
- ♦ public information to the citizens of Rogue Valley.

Commissioner Golden emphasized that if the Commission met in the Medford area this action would send a message of commitment from the Department to the Rogue Valley area. In addition, he said that improved quality and quantities of information would be made available to the area. Commissioner Golden asked the Commission to attend a town hall type of forum the night before the regular EQC meeting. The offset policy and proposed pulp and paper mill are topics of interest that could be discussed at the forum.

On behalf of the EQC, Chairman Petersen accepted Commissioner Golden's invitation, and the April 29 meeting date was chosen. A town hall forum will be held Thursday evening, April 28.

Director Hansen thanked Commissioner Golden for addressing the EQC and also thanked him for his participation in the woodstove citizen advisory committee. Commissioner Golden and Director Hansen discussed the air quality monitoring data being developed by the Department and Dr. Palzer's analysis of existing air quality information. The Department will be providing Dr. Palzer with the new fingerprinting data that was recently gathered.

Chairman Petersen asked to be kept informed about studies being developed by the Department and by Dr. Palzer. Chairman Petersen also requested that the Department to share this new monitoring data with those areas involved. Director Hansen indicated that Carolyn Young, Assistant to the Director for Public Affairs, would be providing that information to the areas through coordinated educational programs with Jackson and Klamath Counties.

#### HEARING AUTHORIZATIONS:

Agenda Item D: Information Report: new Federal Ambient Air

Quality Standards for Particulate Matter (PM<sub>10</sub>) and Its Effect on Oregon's Air Quality Program.

This agenda item is about several proposed changes to air quality rules outlined in subsequent agenda items. The proposed schedule for these items would result in adoption prior to the May 1, 1988, the date requested by the U. S. Environmental Protection Agency (EPA).

In July 1987, EPA adopted new national air quality standards called PM<sub>10</sub> to better protect public health from particulate matter. Changes are needed in the Department's air quality program so that implementation of the PM<sub>10</sub> standards in Oregon can occur.

This agenda item is also about the expected schedule for completing control strategies for the PM<sub>10</sub> problem areas in coordination with local governments. The Department expects the control strategies will be ready for adoption in June 1988. While the one month delay is not expected to result in any EPA sanctions, a longer delay does increase the risk of potential sanctions.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission concur in the following course of action to be pursued by the Department.

1. The Department will continue to coordinate Group I control strategies with local governments and request authorization from the Commission as soon as possible for public hearings. The Department expects this to be on the March 11, 1988, EQC agenda.
2. Following EQC public hearings and adoption of any necessary local ordinances, the Department will propose adoption of the Group I control strategies. The Department expects this to be on the June 3, 1988, EQC agenda.
3. Pending authorization to conduct public hearings requested at this meeting on the five other major PM<sub>10</sub> changes, the Department will proceed as quickly as possible to bring these five changes back to the Commission for adoption at the April 29, 1988, EQC meeting.

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

EQC Minutes  
Page 7  
January 22, 1988

Agenda Item E: Request for Authorization to Conduct a Public Hearing to Amend Ambient Air Standards (OAR 40-31-005 through 055) and Air Pollution Emergencies (OAR 340-27-005 through 012) Principally to add New Federal PM<sub>10</sub> Requirements as a Revision to the State Implementation Plan.

This agenda item is about amending OAR 340-31-055 through 340-31-040, Ambient Air Quality Standards for the State of Oregon. The proposed changes would establish a new particulate standard for suspended particulate less than 10 microns in aerodynamic diameter (PM<sub>10</sub>); convert the units of standards for sulfur dioxide, carbon monoxide, ozone and nitrogen dioxide to parts per million by volume (ppm); and repeal the standard for hydrocarbons.

The Department also proposed to amend OAR 340-27-005 through 340-27-012, Air Pollution Emergencies, by deleting the criteria levels for the product of sulfur dioxide and particulate; changing the particulate levels from TSP to PM<sub>10</sub> as a criteria pollutant; and changing the expressed concentration units of all gaseous pollutants to ppm.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission authorize a public hearing on revisions to the Ambient Air Standards (OAR 340-31-005 through 055) and Emergency Action Plan (OAR 340-27-005 through 012).

**Action:** It was MOVED by Commissioner Bishop, seconded by Commissioner Denecke and passed unanimously that the Director's recommendation be approved.

Agenda Item F: Request for Authorization to Conduct a Public Hearing on Revisions to the New Source Review Rules (OAR 340-20-220 through 260) and Prevention of Significant Deterioration Rules (OAR 340-31-100 through 130).

This agenda item is about the relationship of PM<sub>10</sub> to the New Source Review program for air contaminant sources. The proposed rule modifications contain the minimum changes required by EPA. These and additional changes will improve the Department's ability to achieve statewide compliance with the ambient standards for PM<sub>10</sub>. The Department intends to hold public hearings on the proposed regulations along with the other public hearings on PM<sub>10</sub>.

**Director's Recommendation:** The Director recommended the Commission approve the request for a hearing on the proposed rule changes for the New Source Review Rules which would

incorporate requirements for reviewing new or modified sources for PM<sub>10</sub> emissions.

**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and passed unanimously that the Director's recommendation be approved.

Agenda Item G: Request for Authorization to Conduct a Public Hearing on Commitment for PM<sub>10</sub> Group II Areas (Bend, LaGrande, Portland) as a Revision to the State Implementation Plan (OAR 340-20-047).

This agenda item is about modifying the State Implementation Plan to include a section pertaining to areas that have a moderate chance of not meeting the new PM<sub>10</sub> standard.

This modification must be adopted by May 1988. The new section commits the Department to a program of monitoring, reporting and evaluating all areas eventually leading to a final determination of the attainment status for each area. These areas--Bend, LaGrande and Portland--are addressed in this amendment. The Lane Regional Air Pollution Authority is preparing a committal SIP for a fourth area, Oakridge.

Chairman Petersen asked the Department if budget constraints were a problem in accomplishing the needed monitoring. Air Quality staff indicated that permanent equipment was funded ongoing and that mobile site monitoring was funded through one-time expenditures. Equipment is also bought with EPA funds. Chairman Petersen requested that the DEQ studies be completed on time.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission authorize a public hearing to take testimony on revision of the State Implementation Plan to provide for the required monitoring and evaluation of Oregon's Group II areas against the new standard for particulate matter.

**Action:** It was MOVED by Commissioner Bishop, seconded by Commissioner Hutchison and passed unanimously that the Director's recommendation be approved.

Special Agenda Item: McInnis Enterprises Contested Case Proceeding

McInnis Enterprises appealed Department decisions which assessed a civil penalty and revoked their Sewage Disposal Service License. The Commission's Hearings Officer deferred the hearing pending

resolution of criminal proceedings filed against McInnis in Multnomah County Circuit Court.

Steve Sanders, Assistant Attorney General, presented the Commission with a motion for an order to proceed with a hearing on the McInnis Enterprises, Inc. contested case without waiting for resolution of the criminal proceeding.

Mark Blackman, representing McInnis Enterprises, agreed the hearing should proceed; however, he asked the Commission to set the hearing after April 1.

**Action:** It was MOVED by Commissioner Hutchison, seconded by Commissioner Bishop, and passed unanimously that the Hearings Officer be directed to set the McInnis hearing date as soon as reasonable and practicable after April 1, 1988, independent of the criminal case outcome.

Agenda Item H: Request for Authorization to Conduct Public Hearings Concerning Proposed Rules Relating to Asbestos Control and Proposed Amendments to the Hazardous Air Contaminant Rules for Asbestos, OAR Chapter 340, Division 25, Section 465.

This agenda item is about requesting authorization to conduct public hearings on proposed new rules for the asbestos abatement contractor licensing and worker training program. The Commission is required, by legislation adopted last session, to enact rules for this program by July 1, 1988. Rule revisions are also proposed to update the air quality hazardous air contaminant rules for asbestos.

George Guntermann, Chairperson of the Oregon Asbestos Advisory Board, spoke to the Commission. He indicated the committee had met seven times since October and has forwarded recommendations to the Department on the definition of small-scale, short-duration work and training. The advisory board will be sending further recommendations to the Department prior to the rulemaking hearing.

Chairman Petersen said he felt health considerations were equally important as economic feasibility. He also expressed the view that training was difficult without providing hands-on experience. Commissioner Denecke said he hoped that more publicity and recognition could be given to the contributions of advisory committees. He felt meeting dates and locations should be publicized as well as the names of committee members.

**Director's Recommendation:** Based upon the report summation, the Director recommended the Commission authorize the Department to conduct public hearings to take testimony on

proposed asbestos control rules concerning contractor licensing and worker training and proposed amendments to the hazardous Air Contaminant Rules, OAR Chapter 340, Division 25, Section 465.

**Action:** It was MOVED by Commissioner Hutchison, seconded by Commissioner Bishop and passed unanimously that the Director's recommendation be approved.

Agenda Item I: Request for Authorization to Conduct Public Hearings on Proposed Amendments to the General Groundwater Quality Protection Policy, OAR 340-41-029: General Policies, Groundwater Quality Management Classification System, Point Source Control Rules, Nonpoint Source Control and Groundwater Quality Standards.

This agenda item is about the Department's proposed rule amendments that address several problems with the existing groundwater policy. These revisions provide a base for groundwater quality protection by establishing mandatory minimum groundwater protection requirements. Contained in the revisions is a comprehensive framework the Department will integrate into the groundwater protection efforts.

In August 1981, the Commission adopted OAR 340-41-029, the General Groundwater Quality Protection Policy. Over the last several years, evidence of groundwater quality problems in Oregon has increased, and the Department has had difficulty in applying the policy to the problem situations. The Department evaluated the existing policy and developed alternatives for groundwater management. A citizens' advisory committee was formed to assist in this process.

Director Hansen indicated this proposed rule is a significant new step into the groundwater quality protection area. The Department is continuing to evaluate and consider suggestions for improving the proposed rules. He felt additional suggestions would come from public review of the rules. The Department's groundwater protection program will continue to evolve as new information becomes available; the proposed rules are a starting point.

Commissioner Hutchison asked about page 9 of the staff report which stated only the permit holder or the Department could apply for an alternative concentration limit (ACL). He asked how this relates to the provision of the Oregon Environmental Council settlement agreement on the ability of ten (10) people to request a hearing. Director Hansen said in most cases the ACL process would be used for increasing the allowable concentration limit over an adopted standard. This action will be the concern of the

party responsible for meeting the standard. An alternative concentration limit, if approved, would be the basis for drafting permit limits. The settlement agreement deals with the ability of citizens to request a hearing on a proposed permit prior to a final issuance decision.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission authorize the Department to proceed to public hearing to take testimony on the proposed amendments for groundwater quality protection, as presented in Attachment C of the staff report.

**Action:** It was MOVED by Commissioner Hutchison, seconded by Commissioner Denecke and passed unanimously that the Director's recommendation be approved.

Agenda Item J: Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Hazardous Waste Fee Schedules, OAR 340-102-065 and 340-105-113.

This agenda item is about requesting authorization to conduct a public hearing on a proposed increase in hazardous waste fees. The Department's Hazardous Waste program has a current shortfall in fee revenue of approximately \$494,000 for the current biennium. The Department proposes to review the shortfall with the Hazardous Waste Program Funding Committee and, with its recommendation, prepare a revised fee schedule for the 1988 billing period. Hearing authorization is requested to allow time for Department review with the Funding Committee and to prepare a proposed fee schedule for rule adoption prior to the 1988 billing period (June 1988).

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission authorize a public hearing to take testimony on proposed amendments to the hazardous waste fee schedules in OAR 340-102-065 and 340-105-113.

**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Hutchison and passed unanimously that the Director's recommendation be approved.

Agenda Item K: Proposed Adoption of Interim Underground Storage Tank Rules, OAR 340-150-101 through 340-150-150 and OAR 340-012-067.

This agenda item is about adopting proposed Interim Underground Storage Tank Rules. Hearings conducted in Portland, Eugene,



Medford, Bend and LaGrande during the week of December 1, 1987, generated testimony on the proposed rules. This oral testimony in addition to 26 separate documents of testimony were considered and used to modify the proposed rules. The rules have received extensive modification and are easier to understand and to comply with while protection of the environment has not been sacrificed.

Final rules will be brought before the Commission late in 1988, after the federal technical and financial responsibility rules are adopted. These final rules will contain the complete language of the federal rules and will address many of the concerns voiced by those who testified.

The Commission received a copy of a letter from Mr. Richard D. Bach of Stoel, Rives, Boley, Jones & Grey. Mr. Bach is the Chairperson for the Department's Underground Storage Tanks Citizens' Advisory Committee. In the letter, which is made a part of this record, Mr. Bach indicated the committee supported the rules with one exception. The exception to the rules deals with the term of permits to be issued under the proposed rules. The Commission then received a copy of a proposed change to that part of the rule the advisory committee had exception with. The amendment is also made a part of this record.

Commissioner Hutchison asked the Department about the August 1, 1989, deadline for stopping delivery to unpermitted tanks. Larry Frost and Richard Reiter, Hazardous and Solid Waste Division, indicated the statute provides that rules for permitting of tanks do not become effective until one (1) year after the rules are adopted by the Commission. The department considered a six-month period after the permit rules become effective (February 1989) to be a reasonable period for tank owners to be notified and obtain permits. After August 1989, delivery must be stopped if the tanks are not permitted.

**Director's Recommendation:** Based upon the report summation, the Director recommended the Commission adopt the proposed underground storage tank rules, OAR 340-150-010 through 340-150-150, OAR 340-0120-067 as presented in Attachment I of the staff report and the amendment to ORS 340-150-020 (5).

**Action:** It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the Director's recommendation, as amended, be approved.

Agenda Item L: Proposed Adoption of Rules to Establish Chapter 340, Division 130, Procedures Governing the Issuance of Environmental Hazard Notices.

This agenda item is about proposed adoption of rules to implement the Environmental Hazards Notice statute passed by the 1985 Legislature. Sites containing waste and contamination exist throughout the state. Some of these, such as solid waste disposal sites, are operating under permits issued by the Department. Other sites contain hazardous substances and may undergo cleanups that allow wastes or contamination to remain. The Department's existing regulatory authorities will end at these sites.

The environmental hazard notice ensures that present and future owners take into consideration environmental hazards posed by the remaining waste or contamination. The notice identifies the location of the sites for local governments and neighbors. Additionally, the notice restricts use of the site so that the remaining waste or contamination will not become a health or environmental problem.

The proposed rules create the procedure to issue the environmental hazard notices. The rules were drafted with the assistance of an advisory committee chaired by Portland land use attorney, Steve Schell.

The environmental hazard notice will only be used at certain sites. The notices are not meant to be used at every disposal site. However, the Department recognizes a notice will impact the affected use of a site and, therefore, will act cautiously and carefully when recommending a notice for a site.

Commissioner Hutchison asked why it took three (3) years to develop and implement the rules after the 1985 legislation. Director Hansen said the Department gave higher priority to the immediate implementation of other new programs and program enhancements and thus chose to defer the drafting of the rules.

Commissioner Hutchison questioned whether there was consideration of the issue of taking (condemnation) relative to the mandated environmental notice. Director Hansen responded that the value of the property is affected by the contamination present rather than the environmental notice that is consistent with the level of contamination present.

Chairman Petersen expressed concern that these rules expanded the process of appeal by allowing persons other than the site owner to appeal. He asked who would hold the contested case hearings. Bob Danko, Hazardous and Solid Waste Division, indicated this was a conscious decision to expand the appeal rights to adversely affected persons other than the site owner. The advisory committee felt the issuance of an environmental notice was significant action that can directly and adversely affect persons

other than the property owner and thus recommended expanding the appeal rights. Mr. Danko felt that once the rules were in place, experience would allow future direction on contested case hearings and petitioning. Director Hansen indicated that contested case hearings would be conducted on behalf of the Commission by the Hearings Officer in the same manner as other appeals are handled.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission adopt proposed rules to establish Chapter 340, Division 130, Procedures Governing the Issuance of Environmental Hazard Notices.

**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Hutchison and passed unanimously that the Director's recommendation be approved.

Agenda Item M: Proposed Adoption of Amendments to OAR 340-105-120 Concerning Hazardous Substances Remedial Action Fees (formerly Hazardous Waste Disposal Fee) to Support Remedial Action Program.

This agenda item is about proposed adoption of technical amendments to existing rules, which are necessary for consistency with changes mandated by Senate Bill 122. The rules concern the payment and collection of the fee paid by certain permitted hazardous waste disposal facilities, i.e., Arlington. This fee supports and will continue to support the Department's remedial action program to clean up toxic waste sites.

The amendments include the statutorily mandated increase in the fee from \$10 to \$20 per ton. There are also minor grammatical and textual changes made for clarification or consistency.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission adopt the proposed amendments to the rule concerning the Hazardous Substances Remedial Action Fee, OAR 340-105-120, as presented in Attachment I of the staff report.

**Action:** It was MOVED by Commissioner Bishop, seconded by Chairman Hutchison and passed unanimously that the Director's recommendation be approved.

Agenda Item N: Hearing and Request for Adoption of Temporary Rules to Certify Sewage Treatment Plant Personnel under a Voluntary Certification Program.

This agenda item is about proposed authorization to administer a voluntary sewage works operator certification program through the

adoption of temporary rules and fee schedule. The proposed rules would maintain a voluntary operator certification program for 180 days following adoption and filing of the temporary rules. Permanent rules are being developed to address the statutory requirements of Oregon Laws 1987, Chapter 635 and will be adopted before the temporary rules expire. The temporary rules will allow the Department to meet the needs of operators and facility owners while complying with the new laws.

Chris Mack, Chairperson of the Sewage Works Advisory Committee, requested clarification of the proposed fee schedule, Attachment E. Staff responded by providing a revised Attachment E. This new revision, which is made a part of this record, clarifies that examination fees are included with the application for certification. Additionally, Attachment D, Administration Rules, page 3, item 20, should be amended to read "Collection system as defined in (18) above."

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission adopt the temporary rules and temporary fee schedule for administering the voluntary sewage works operator certification program (Attachments D and E). Adoption of the temporary fee schedule (Attachment E) is subject to the approval of the Emergency Board on January 26, 1988. The Director also recommended the amendments noted above be adopted.

**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and passed unanimously that the Director's recommendation, as amended, be approved.

Agenda Item O: Request for Issuance of an Environmental Quality Commission Order for the City of Lowell, Oregon.

This agenda item is about a proposed compliance order to be issued to the City of Lowell, Oregon, for National Pollution Discharge Elimination System (NPDES) permit violations and to address issues raised by EPA's National Municipal Policy. The order contains interim effluent limitations and a schedule of milestones to bring the City into compliance.

Chairman Petersen asked if representatives from the City were in attendance. Ken Vigil, Water Quality Division, responded that while the City had been invited and encouraged to attend the meeting, they were unable to do so. Mr. Vigil added that Department staff had read through the staff report with the City Council, and the council had agreed with the report's recommendation. The City Council, therefore, felt it was not absolutely necessary to attend.

Chairman Petersen asked if the compliance schedule included in the order was reasonable. Mr. Vigil responded the schedule had been developed with the cooperation of the City and their engineers and all parties thought the order was reasonable. Director Hansen said additional increments of time had been included in the schedule to allow for unavoidable delays.

Commissioner Hutchison asked if the term "facilities" as it appears on line 4 of page 4 of the order is well defined or was there a chance for misunderstanding. Director Hansen replied that as it is used, the term "facilities" is narrowly defined by EPA. Mary Halliburton, Water Quality Division, added that on page 1 of the order a more specific reference to waste water treatment and disposal facilities was included.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission issue the compliance order as discussed in Alternative 3 of the staff report by signing the document prepared as Attachment D.

**Action:** It was MOVED by Commissioner Hutchison, seconded by Commissioner Denecke and passed unanimously that the Director's recommendation be approved.

Agenda Item P: Request for Commission Approval of Metropolitan Service District Updated Regional Waste (Water) Treatment Management Plan.

This agenda item is about approval of Metro's updated Regional Waste Treatment Management Plan pursuant to Chapter 627, Oregon Laws 1987 (House Bill 3101).

The Metropolitan Service District (Metro) prepared a Regional Waste Treatment Management Plan for the Portland area which was adopted by the Metro Council in 1980. Since that time, the Management Plan has been updated several times. These updates reflected housekeeping changes made in service area boundaries and service agreements among the jurisdictions.

In 1986, the management plan was updated to include the Commission's Findings and Order pursuant to ORS 454.275 which declared a "Threat to Drinking Water" in the Mid-Multnomah County area and to include the Mid-Multnomah County Sewer Implementation Plan.

During 1987, Metro reviewed and updated the management plan. The Metro Council adopted the updated plan on October 22, 1987, and submitted the plan to the Department on November 30, 1987, asking

that it be forwarded to EPA for recertification. In 1987, legislation was passed that amended the threat to drinking water statute (ORS 545.275) and that required the Commission to approve amendments to the Regional Water Treatment Management Plan.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission approve the updated 208 Management Plan adopted by Metro Council on October 22, 1987, and authorize the Department to submit the plan to the U. S. Environmental Protection Agency for recertification.

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

Other Business:

Director Hansen advised the Commission about the action he was taking to modify an order issued to the City of Coos Bay. The order requires improvements to the Coos Bay No. 1 sewerage facility. The change in the order provides interim effluent limits during the summer and alters interim dates. However, the final date for completing the project and attaining compliance with final permit limits is not changed. There were no comments or questions by the Commission.

Director Hansen also noted the Commission had been provided with a memorandum about Mr. Newkirk's sewage backup problem at his house located in Twin Rocks Sanitary District near Tillamook. Director Hansen indicated the memo included as an attachment a letter from the Twin Rocks Sanitary District. The letter was in reply to a letter sent by Fred Hansen to the District concerning the problem and requesting the District take necessary action. Chairman Petersen emphasized his concern that the Department work aggressively with the district to resolve the problem.

There was no further business and the meeting adjourned at 11:45 a.m. The next Environmental Quality Commission meeting will be held in Portland on Friday, March 11, 1988.

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EOC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Eighty-Sixth Meeting  
March 11, 1988

811 S. W. Sixth Avenue  
Conference Room 4  
Portland, Oregon

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Commission Members Present:

James Petersen, Chairman  
Arno Denecke, Vice Chairman  
Wallace Brill  
Bill Hutchison

Commission Members Absent:

Mary Bishop

Department of Environmental Quality Staff Present:

Fred Hansen, Director  
Kurt Burkholder, Assistant Attorney General, for Michael  
Huston  
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.

BREAKFAST MEETING

**Groundwater Resources Management Program:** Director Hansen indicated that although a number of agencies in state government are involved in groundwater, no coordinated comprehensive groundwater management program currently exists. Director Hansen introduced Neil Mullane who described the Department's groundwater management program.

Mr. Mullane provided a brief review of the Department's past groundwater activities and the development of the general

groundwater protection policy adopted by the Environmental Quality Commission in 1981. He noted that federal programs such as the Resource Conservation and Recovery Act (RCRA) and Superfund have helped to identify numerous groundwater problems. As a result, a more comprehensive statewide groundwater management program must be developed. A grant has been received from the U. S. Environmental Protection Agency to assist the Water Quality Division and other agencies to develop a broader based groundwater management program for the state.

The Commission asked Mr. Mullane about the involvement of the Water Resources Commission and whether the Department may suggest a need to consolidate parts of agencies to deal with groundwater management. Director Hansen and Mr. Mullane responded that the Water Resources Commission is looking to the Department to provide groundwater information for their statewide water resources program. Director Hansen added that consolidation is unlikely unless a natural resources agency is formed. Until a consolidation occurs, current agency groundwater activities will continue. Commissioner Denecke requested that the report entitled, "Assessment of Oregon's Groundwater for Agricultural Chemicals," be sent to each of the commissioners.

**Salt Caves:** Director Hansen advised the Commission on the status of the City of Klamath Falls' revised application for Section 401 Certification of the Salt Caves Hydroelectric Project. Two public hearings are scheduled for March 29: one to be held in Klamath Falls and the other in Portland. Written comments will be received through April 11, 1988. Director Hansen indicated the Department expects to complete action on the application within the 90-day time period established in EQC rules; however, if significant new information is received at the public hearing, analysis of that information may slow the application review.

**McInnis Enterprises:** McInnis Enterprises is proposing a settlement of proceedings initiated by the Department. Stephen Sanders, Assistant Attorney General, provided the Commission with the details of the proposed settlement. McInnis Enterprises would be on probation for a three-year period. Any future violations by the company would trigger a stipulation to past violations and their license would be revoked. Additionally, unauthorized pumping would immediately cause suspension of their license. McInnis will pay the civil penalties in quarterly installments over a two-year period. It was noted that the Director has the authority to settle the case, but wanted to give the Commission opportunity to comment. The Commission expressed no objections to the Director proceeding with settlement of the case.



**Proposed Medford Meeting:**

Carolyn Young told the Commission about some of the topics that will be discussed at the April 28 public forum. Those topics include woodstoves and pulp and paper mills. Since Klamath Falls residents may attend the public forum, it is possible there will be an attempt to discuss Salt Caves. Chairman Petersen noted that discussion of Salt Caves would be inappropriate since their revised application is pending before the Department. Department staff propose to brief the Commission on the background of the area problem and the current status of activities prior to the public forum. Ms. Young also discussed the proposed format of the public forum meeting.

**FORMAL MEETING**

**CONSENT ITEMS:**

**Agenda Item A: Minutes of the January 22, 1988, EQC Meeting.**

**Action:** It was MOVED by Commissioner Hutchison, seconded by Commissioner Brill, and passed unanimously that the minutes of the January 22, 1988, meeting be approved.

**Agenda Item B: Monthly Activity Reports for December 1987 and January 1988.**

Commissioner Hutchison asked about the air contaminant discharge permit (ACDP) modification issued to Bergsoe. Lloyd Kostow, Air Quality Division, said the existing ACDP for Bergsoe had been modified so that the facility could be started during the clean-up process, if necessary.

**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Hutchison, and passed unanimously that the December 1987 and January 1988 Monthly Activity Reports be approved.

**Agenda Item C: Tax Credits.**

Chairman Petersen asked about the drop box facilities proposed for certification. Robert Brown, Hazardous and Solid Waste Division, explained that the drop box was specially constructed with compartments to receive different types of glass. The glass is then transported to Owens-Illinois for recycling. Senate Bill 405

provides the opportunity to recycle, and the facility is used as a dedicated recycling depot. Commission Hutchison asked about what would happen if the drop boxes were no longer used to collect recyclables. Mr. Brown indicated that if the facility is converted to another purpose, it would no longer be eligible for tax credit and the certificate would be revoked.

**Action:** It was MOVED by Commissioner Hutchison, seconded by Commissioner Brill and passed unanimously that the tax credits listed in the Director's recommendation be approved.

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-2276	Fink Sanitary Service	2 Drop Boxes
T-2335	Newberg Garbage Service Inc.	Drop Box
T-2392	Gregory Affiliates, Inc.	Boiler, dutch oven and particulate collector
T-2400	International Paper Co.	Modifications to No. 3 recovery furnace air and liquor supply systems
T-2401	International Paper Co.	Modifications to caustic plant
T-2402	International Paper Co.	Non-condensable gas systems

#### PUBLIC FORUM

Jeanne Orcutt, Gresham, told the Commission she did not have enough time to review the Department's response to her January EQC testimony. She indicated that many important issues appeared to have been glossed over by the Department. She further said the City of Portland has agreed to stop charging franchise fees to residents outside the City.

Chairman Petersen asked Dick Nichols, Water Quality Division Administrator, to investigate the concerns raised by Ms. Orcutt.

John Pointer, representing Citizens Concerned with Wastewater Management and United Citizens, spoke to the Commission about the City of Portland's sludge disposal program. He feels the sludge exceeds heavy metals standards and is toxic. Mr. Pointer said the Department should not rely on source self-monitoring and should allow concerned citizens to perform monitoring activities and investigations. Chairman Petersen responded that the Department will continue to perform their own investigations.

**HEARING AUTHORIZATIONS:**

Agenda Item D: Request for Authorization to Conduct a Public Hearing on Amendments to Procedures for Issuance, Denial, Modification and Revocation of Permits (OAR 340-14-005 through 050), New Source Review, Procedural Requirements (OAR 340-20-230), and Issuance of NPDES Permits (OAR 340-45-035).

This agenda item requests hearing authorization on proposed amendments to Commission rules on general permitting procedures. The Department proposed to add the requirement that a public hearing will be held on proposed permit actions if ten individuals or an organization(s) representing at least ten persons submit written hearing requests.

The proposed amendments clarify that New Source Air Contaminant Discharge Permits and National Pollutant Discharge Elimination System (NPDES) permits are subject to this new requirement. Resource Conservation and Recovery Act (RCRA) and Underground Storage Tank (UST) permits are exempted. The Department proposed to amend the time frame for issuance of temporary permits from 45 days after notification that an application is complete to 45 days after closing the hearings record or public comment period.

Chairman Petersen asked whether the Entek settlement agreement locked the Commission into any particular course of action. Director Hansen said the settlement agreement was only binding upon the Department and not the Commission. Chairman Petersen then asked if any attempt had been made to evaluate the costs of the proposed rule which requires public hearings on permit applications when ten or more people request a hearing. Director Hansen responded that under the new rule, the cost of public hearings should not be any different since the new rules simply codify the operating policy the Department has always followed. In response to Chairman Petersen's concern that this rule change could be too burdensome to industry, Director Hansen replied that the Department can implement the process without placing undue burden upon permit applicants.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission authorize a public hearing to take testimony on the proposed rule changes to procedures for issuance, denial, modification and revocation of permits (OAR 340-14-005) and related amendments to rules on issuance of New Source Air Contaminant Discharge Permits (OAR 340-20-230) and issuance of NPDES permits (OAR 340-45-035).

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**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Hutchison and passed unanimously that the Director's recommendation be approved.

Agenda Item E: Request for Authorization to Hold Hearings on Proposed Amendments to Rules Contained in OAR 340-41-445, Water Quality Standards not to be Exceeded, Willamette Basin.

This agenda item requests authorization for public hearings on the proposed rule to establish phosphorus and ammonia standards for the Tualatin River. These proposals were developed in response to the Northwest Environmental Defense Center (NEDC)/U. S. Environmental Protection Agency (EPA) lawsuit settlement that required the development of Total Maximum Daily Loads (TMDL) on the Tualatin River. The TMDLs were developed to address water quality standards violations for dissolved oxygen (DO) and nuisance algal growth.

The proposed rules were developed after an intensive water quality investigation of the Tualatin River by the Department, Lake Oswego Corporation and the Unified Sewerage Agency (USA). The proposed rules were also developed with the assistance of a citizen and technical advisory committee.

Gary Ott, Tigard, told the Commission he was a user of the Tualatin River and a rate payer to the Unified Sewerage Agency. He expressed the view that the effect of establishing a TMDL on water quality in the Tualatin River should be quantitatively described so that individuals know what they are paying for. He said the recreational benefits achieved by the TMDLs need to be clarified. Additionally, the frequency and extent of the algal blooms needs to be quantified, and associated environmental costs, such as energy costs, need to be evaluated. Mr. Ott said that removal of the Lake Oswego Diversion Dam may have a positive benefit to water quality and should not have been eliminated from consideration. His greatest concern was that there is no assurance that significant investments will result in desired water quality improvement.

Jack Churchill, NEDC and a Lake Oswego resident, said a letter, which he provided to the EQC and is made a part of this record, from the General Accounting Office (GAO) study on the effectiveness of the Clean Water Act in the Tualatin Basin indicated that \$100 million has been misspent in Washington County. Further, he said, as goes the Tualatin, so goes water quality in Oregon. Mr. Churchill felt the EQC needs to take action on the agenda item rather than by inaction trigger automatic abdication of water quality management in the Tualatin to EPA.

Ted Kreedon, resident and Mayor of Rivergrove, spoke to the Commission about several concerns. He felt the cost figures for options to meet the proposed TMDLs provided by consultant to USA are biased, and that the Department by citing these figures in their report have endorsed the figures. Also, by using the biased figures, USA and Washington County were attempting to intimidate and threaten individuals who are attempting to clean up the Tualatin River. Mayor Kreedon said alternative means to cleaning up the river, such as wetlands, may cost much less. The Department should retain a competent engineering firm to evaluate the cost associated with wetland alternatives.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission to proceed to public hearing to take testimony on the proposals to add a phosphorus standard and an ammonia standard to the rules establishing water quality standards for the Tualatin River and establish definitions for TMDL, WLA and LA.

**Action:** It was MOVED by Commissioner Denecke, seconded by Commissioner Hutchison and passed unanimously that the Director's recommendation be approved.

Agenda Item F: Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100, 102 and 104.

This agenda item requests authorization to conduct a public hearing on proposed amendments to the Department's hazardous waste management rules. The Department is proposing the adoption, by reference, of a group of new federal regulations. This action is necessary if the Department is to maintain authorization from EPA to management a state-operated hazardous waste program.

The Department is also proposing the repeal of an existing state rule concerning the closure of surface impoundments, which is more stringent than one of new Federal rules. Additionally, the Department proposes to expand the reporting requirements for hazardous waste generators and hazardous waste management facilities.

Commissioner Hutchison asked how the Federal rule concerning waste minimization, which the Department proposes to adopt, relates to the Oregon Student Public Interest Research Group's (OSPIRG) proposed waste reduction legislation, and whether adoption of the Federal rule would prevent the state from implementing OSPIRG's proposal. Director Hansen responded that the Federal rule simply requires hazardous waste generators to certify on their shipping

manifests they are making a good-faith effort to reduce wastes. There are no specific waste reduction standards or requirements.

In contrast, the OSPIRG proposal is a comprehensive program that includes a poison tax on hazardous materials, an independent certification program for people who would oversee and evaluate waste minimization programs, and the eventual ban on the use or sale of certain toxic materials in the state. Adoption of the Federal rule would not prevent the state in any way from implementing the OSPIRG proposal. Director Hansen also noted the Federal rule was already in effect, and the proposed rules simply allow DEQ to enforce the federal rules.

**Director's Recommendation:** Based upon the report summation, the Director recommended the Commission authorize the Department to conduct a public hearing, to take testimony on these proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102 and 104.

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

Agenda Item G: Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Solid Waste Fee Schedule, OAR Chapter 340, 61-120.

This agenda item requests authorization to conduct a public hearing on proposed amendments to the Solid Waste Fee Schedule. The Department's 1987-89 legislatively approved budget anticipates a fee increase of 20 percent for solid waste and recycling fees. The increase is to fund program maintenance, not expansion.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission authorize a public hearing to take testimony on proposed amendments to the solid waste fee schedules in OAR 340-61-120.

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

Agenda Item H: Appeal of Hearings Officer's Decision in DEQ vs. Merit USA, Inc.

Merit USA, Inc., has appealed the decision of the Hearing Officer finding the company liable for civil penalties totaling \$2,000. The Department has cross-appealed seeking review of the Hearings Officer's decision reducing the civil penalty imposed by the Department from \$3,500 to \$2,000. Merit USA (respondent) filed briefs, presented argument, and appeared by its attorney, Orrin R. Onken; the Department also filed briefs, presented argument, and appeared by Arnold B. Silver, Assistant Attorney General.

Mr. Onken indicated the issues before the commission have been extensively briefed and that decision of the Hearings Officer was not well received. He summarized the respondent's position by questioning whether DEQ was pursuing the correct party (a bankrupt company). DEQ employees observed Merit employees cleaning up the oil. There was no testing of the oil or investigation of other sources of the oil. The Hearings Officer improperly determined the oil belonged to Merit. The Hearings Officer improperly put the burden on Merit to prove its case. The Hearings Officer found no act or omission or negligence on the part of Merit. However, the Department said the respondent does not have to be negligent, just that the oil in the water must be the respondent's. Merit maintains there was no proof the respondent caused or permitted or even controlled the oil that went into the water. The Hearings Officer found no negligence or breach of duty causing the oil to go into the waters and, therefore, cannot support a penalty based on a finding of negligence. Finally, the Department said the Hearings Officer cannot reduce the fine. Merit argues the Hearings Officer is a designee of the Commission and is empowered to set a fine after the hearing and did so.

Mr. Silver summarized arguments by saying the Department recognizes there were no eye witnesses to the oil spill. However, circumstances indicate there was responsibility. On or about March 10, 1987, approximately 200 gallons of oil was spilled into the waters of the state from property (oil recovery and processing facility) owned by the respondent. The respondent claimed the spilled oil came from under tires on neighboring property and did not come from his oil recovery pond. DEQ investigators found the spilled oil to be consistent with waste recovery. Merit employees were engaged in clean-up when Department investigators arrived. Mr. Briggs, company president, estimated clean-up costs of \$6,000 to \$10,000. Although he claimed the oil came from the neighbor's property, he did not intend to sue his neighbor for recovery of the clean-up cost. Department investigators were informed by an individual, referred to as a shareholder, a partner, or an employee, that the oil pond overflowed due to rain. Later, this statement was recanted.

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Investigation showed a straight line of oil leading from the oil recovery pond to public waters. The Hearings Officer found the Department's conclusions to be more logical and credible than the conclusions presented by the respondent. Department does not claim the spill was intentional, rather the pond overflowed into public waters and Merit is responsible for cleaning up.

Commissioner Hutchison asked about the issue of strict liability versus negligence. Mr. Silver responded the statute cited does not require negligence or an intentional act to occur for the property owner to be responsible. Another statute, the strict liability statute, also applies.

Mr. Onken responded there was nothing in the record to indicate the treatment pond overflowed or that the Hearings Officer found the pond had overflowed. He also noted the rule authorizing the penalty specifically refers to negligent action.

The Commission elected to then hear the arguments on the cross-appeal before making a decision on the appeal.

Mr. Silver characterized the cross-appeal as a policy issue and also a legal issue. The Director imposed a \$3,500 penalty after considering mitigating and aggravating circumstances as required by Commission rules. No new mitigating factors were revealed at the hearing, and there was no failure of proof on the Director's part. The Hearings Officer considered the identical mitigating and aggravating factors and reduced the penalty to \$2,000. The Hearings Officer's judgement was substituted for that of the Director's. The Department interprets past Commission policy direction to allow the Hearings Officer to mitigate the penalty only if the Department fails to prove the violation or if new information on mitigating factors is presented at the hearing. Therefore, the matter is brought to the Commission on cross-appeal.

Chairman Petersen noted Mr. Onken's earlier argument that the Hearings Officer is an extension of the Commission and empowered to reduce the penalty.

Commissioner Hutchison asked Kurt Burkholder to advise the Commission on the legal issues. Mr. Burkholder characterized the issues before the Commission as evidentiary issues. Mr. Burkholder discussed the appeal based on the claim the respondent did not release oil into the water and the cross-appeal about whether there was new information or lack of proof to justify lowering the penalty. Commission rules are either unclear or do not speak to the extent of the Hearings Officer's discretion; however, the Commission at this hearing does have discretion to look at the record, consider the mitigating and aggravating



factors, and determine whether the Director's initial assessment of penalty was appropriate. Mr. Burkholder also advised the Commission he agrees with the Department that this is a strict liability statute. The negligence criteria referred to by the respondent is simply a mitigating or aggravating factor the Director can take into account in determining the amount of the penalty.

Commissioner Hutchison indicated he was persuaded there were mitigating circumstances (including cost of clean up, steps taken to prevent spills, and the rain) the Commission should take into account when deciding the issue. He asked if there were aggravating factors that should be also considered. Mr. Silver noted prior violations as the primary aggravating factor.

Chairman Petersen then suggested the Commission first consider whether to affirm or reverse the Hearings Officer's Findings of Fact and Conclusions of Law as to the guilt of the respondent. He then suggested the Commission consider the issue of the penalty and the policy issue raised in the cross-appeal.

**Action:** Commissioner Hutchison MOVED that the Hearings Officer's Findings of Fact and Conclusions of Law be affirmed and that the penalty be set at \$2,750. The motion died for lack of a second.

Commissioner Denecke MOVED that the Hearings Officer's decision be affirmed as far as liability (Findings of Fact and Conclusions of Law) was concerned. The motion was seconded by Commissioner Hutchison and carried unanimously.

The Commission then decided on the amount of penalty.

**Action:** Commissioner Denecke MOVED that the fine be set at \$2,000 based on his understanding of mitigating and aggravating circumstances. The motion died for lack of a second.

Commissioner Hutchison MOVED that the penalty be set at \$2,750. The motion died for lack of a second.

Commissioner Brill MOVED that the penalty be set at \$1,000. The motion died for lack of a second.

Commissioner Hutchison noted that it is difficult to second guess either the Director or the Hearings Officer. He noted the Hearings Officer made very strong statements on mitigating factors. He also noted the company was bankrupt. Commissioner Hutchison then MOVED that the penalty be set at

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\$2,000. The motion was seconded by Commissioner Denecke, and passed with Chairman Petersen voting no.

The Commission then turned to the policy question about the Hearings Officer's authority. The Chairman reiterated the position of the Department that the Hearings Officer should not have the discretion to mitigate the penalty unless new evidence is introduced at the hearing.

Director Hansen advised the Commission they had previously authorized hearing on proposed revisions to the contested case procedural rules. The rules taken to hearing included proposed codification of the Department's understanding of past Commission policy direction: the Hearings Officer should give deference to the Director's determination and should not mitigate a penalty unless new information not previously considered by the Director is raised at the hearing. Those rules will be considered for adoption at the next EQC meeting.

Since the policy matter will be before the Commission at the next meeting, the Commission decided there was no need to take further action at this meeting on the policy issue.

Agenda Item I: Proposed Adoption of Increases to the On-Site Sewage Disposal Fee Schedule (OAR 340-71-140) and Modification to the Definition of "Repair" (OAR 340-71-100(3)).

This agenda item proposes adoption of increases to the On-Site Sewage Disposal Fee Schedule. Proposed increases will generate sufficient revenue, at present activity levels, to fund approximately 89 percent of program costs. Five septic tank pumpers responded unfavorably to the proposed fee increase for pumper truck inspections and the proposed fee increase from \$25 to \$95 was reduced to \$35. One respondent spoke in favor of the proposed fee increases and asked the Department to consider an additional \$25 inspection fee for certain systems. Based on testimony, modifications were made to the original fee schedule proposed to the Commission on December 11, 1987.

Commissioner Hutchison asked about the opposition to the fee increases. Dr. Robert Paeth, Water Quality Division, responded no opposition was received on the modified pumper truck inspection fee of \$35.

**Director's Recommendation:** Based upon the report summation, the Director recommended the Commission adopt the proposed amendments to OAR Chapter 340, Division 71, as presented in Exhibit C of the staff report.

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

Agenda Item J: Request for Approval of Construction Schedule for Philomath Boulevard (Corvallis) Health Hazard Annexation Area (Phase I).

This agenda item seeks approval of documents prepared by the City of Corvallis as a result of a State Health Division's Order. The order stipulated that certain territory with failing septic tank systems is a health hazard. The EQC must determine the adequacy of the city's submittal to remove or alleviate the dangerous conditions.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission approve the proposal of the City of Corvallis and certify approval to the City.

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

Agenda Item K: Proposed Issuance of Joint Permit for the Storage, Treatment and Disposal of Hazardous Waste to Chem-Security Systems, Inc., Star Route, Arlington, Oregon 97812 (Permit No. ORD 089452353).

This agenda item proposes issuance of a permit to Chem-Security Systems to operate a facility for the storage, treatment and disposal of hazardous wastes. The permit is proposed to be issued jointly by the Commission, the Department and EPA and is in response to a permit application initially made by Chem-Security in November 1983 and revised thereafter. Currently, Chem-Security is operating under a 1980 state license and federal interim status standards. To afford Chem-Security the opportunity to a contested case appeal of the permit, it was necessary for the Environmental Quality Commission to also issue an order giving Chem-Security 20 days after permit issuance (until March 31) to do so.

The disposal facility is located in Gilliam County, approximately 12 road miles from Arlington. The site primarily serves the Pacific Northwest, Alaska and Hawaii, although hazardous wastes have occasionally been received from other Western states and foreign counties.

The draft permit and permit application were on public review for over 45 days and public comments are contained in the staff report.

No testimony was taken. Director Hansen summarized the main issues associated with the permit issuance as follows:

- a. Site Ownership -- Following passage of legislation which eliminated the requirement that a hazardous waste disposal site be state owned, the Department is proposing to deed property, previously deeded to the state, back to CSSI.
- b. Prior Approval of Wastes -- The proposed permit eliminates the past requirement that the Department approve each waste proposed to be received at the site. This is replaced with provisions in the permit setting forth wastes which may be accepted at the site. Director Hansen stated this change is being recommended based on the understanding that CSSI will not begin to receive wastes from areas not in their current service area.
- c. Modification of Language -- Kurt Burkholder described proposed language modifications being requested by EPA. The modification corrected wording of one of the permit conditions dealing with monitoring wells.

In response to questions from the Commission about liability, Kurt Burkholder responded there is no statute of limitations on liability. Federal Law considers the site operator and the land owner to be responsible for any problems. The state cannot escape any liability for disposal at the site when the land is state owned. The extent of liability is left to a future determination.

Commissioner Hutchison asked what steps are being taken to prevent off-site contamination. Director Hansen and Fred Bromfeld, Hazardous and Solid Waste Division, cited the need for double-lining of trenches, the use of various dust suppressing methods and techniques for reducing volatile organic emissions.

**Director's Recommendation:** Based on the report summation, the Director recommended the Commission:

1. Join the Department and EPA in issuing a permit to store, treat and dispose of hazardous waste to Chem-Security Systems, Inc.

2. Issue the order proposed by legal counsel to provide CSSI the opportunity for a contested case appeal within 20 days of issuance of the permit.

The Director also recommended the permit amendment proposed by EPA be approved.

The Chairman called a brief recess during which time a deed was signed to transfer the state's interest in the CSSI site back to CSSI. The meeting was then reconvened.

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

There was no further business and the regular meeting adjourned at 12:05 a.m.

The next Environmental Quality Commission meeting will be held in Medford on Friday, April 29, 1988.

#### LUNCHEON MEETING

During lunch, the Commission received briefings on the following:

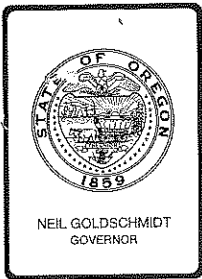
**United Chrome:** Tom Miller, Remedial Project Manager, presented a slide presentation on the clean up of the United Chrome Products Superfund site located in Corvallis, Oregon. Mr. Miller provided background information about the site, discussed the nature and extent of the contamination and summarized the remedial action being taken. A handout was prepared to supplement the presentation and is made a part of this record.

**Solid Waste:** Steve Greenwood, Solid Waste Section Manager, briefed the Commission on the status of solid waste proposals for the Portland Metropolitan Area. The METRO Executive Officer has recommended approval of a contract with Oregon Waste Systems for disposal at their Arlington site. Council action was expected within two weeks. DEQ issuance of the permit for the site could occur in several weeks. Inclinometers have been installed at the Bacona Road site. Other work at the site (which can be completed rapidly) has been delayed pending the METRO decision. METRO is seeking private proposals for a transfer depot in the Portland area. Finally, since special wastes (ash, liquids, asbestos, demolition materials) will not be taken by Oregon Waste Systems, METRO still must develop options for such wastes.

**Youth Involvement/DEQ:** Donny Adair, Personnel Manager, spoke to the Commission about how the Department is becoming involved in

EQC Minutes  
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March 11, 1988

youth programs. The Department is determining what kinds of opportunities can be provided, reviewing budgets for available resources, investigating the possibility of youth involvement on advisory committees and developing internships and paid-work experiences for after school and summer employment.



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. B, March 11, 1988, EQC Meeting  
December 1987 and January 1988 Activity Reports

### Discussion

Attached are the December, 1987 and January, 1988 Program Activity Reports.

ORS 468.325 provides for Commission approval or disapproval of plans and specifications for construction of air contaminant sources.

Water Quality and Hazardous and Solid Waste facility plans and specifications approvals or disapprovals and issuance, denials, modifications and revocations of air, water and solid waste permits are prescribed by statutes to be functions of the Department, subject to appeal to the Commission.

The purposes of this report are:

1. To provide information to the Commission regarding the status of reported activities and an historical record of project plan and permit actions;
2. To obtain confirming approval from the Commission on actions taken by the Department relative to air contaminant source plans and specifications; and
3. To provide logs of civil penalties assessed and status of DEQ/EQC contested cases and status of variances.

### Recommendation

It is the Director's recommendation that the Commission take notice of the reported program activities and contested cases, giving confirming approval to the air contaminant source plans and specifications.

*Michael Hansen*  
for  
Fred Hansen

MD26

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

December 1987 and January 1988

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

December 1987 and January 1988  
 (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	<u>11</u>	<u>51</u>	<u>15</u>	<u>60</u>	<u>0</u>	<u>0</u>	<u>22</u>
Total	11	51	15	60	0	0	22
<u>Water</u>							
Municipal	14	56	35	96	0	0	41
Industrial	<u>4</u>	<u>36</u>	<u>4</u>	<u>38</u>	<u>0</u>	<u>0</u>	<u>8</u>
Total	18	92	39	134	0	0	49
<u>Solid Waste</u>							
Gen. Refuse	6	22	2	7	-	2	59
Demolition	1	2	-	-	2	2	1
Industrial	1	5	-	6	-	1	21
Sludge	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>6</u>
Total	8	31	2	13	2	5	87
<u>GRAND TOTAL</u>	37	174	56	207	2	5	158

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
10	0132 THUNDERBIRD FURNITURE	DOUGLAS	01 07/30/87	COMPLETED-APRVD	12/07/87
15	0159 BIOMASS-ONE OPERATING CO.	JACKSON	01 11/04/87	COMPLETED-APRVD	12/21/87
18	0013 WEYERHAEUSER COMPANY	KLAMATH	01 12/30/87	COMPLETED-APRVD	12/31/87
19	0022 RENEWABLE RESOURCE SYSTEM	LAKE	01 12/07/87	COMPLETED-APRVD	12/22/87
20	2125 DOW-CORNING CORP.	LANE	01 11/09/87	COMPLETED-APRVD	12/09/87
22	0143 DURAFLAKE CO	LINN	01 11/17/87	COMPLETED-APRVD	12/17/87
23	0020 HOLY ROSARY HOSPITAL	MALHEUR	01 10/12/87	COMPLETED-APRVD	12/22/87
26	2044 OWENS-CORNING FIBERGLAS	MULTNOMAH	01 12/08/87	COMPLETED-APRVD	12/14/87
26	3110 TREASURE CHEST ADVRTSNG	MULTNOMAH	01 11/13/87	COMPLETED-APRVD	12/08/87
36	5034 CASCADE STEEL MILLS	YAMHILL	01 11/20/87	COMPLETED-APRVD	11/25/87

TOTAL NUMBER QUICK LOOK REPORT LINES 10

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division

December, 1987

(Reporting Unit)

(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	1	13	2	20	12		
Existing	0	11	1	11	9		
Renewals	7	37	6	38	48		
Modifications	<u>11</u>	<u>39</u>	<u>8</u>	<u>42</u>	<u>24</u>		
Total	19	100	17	111	93	1398	1422
<u>Indirect Sources</u>							
New	3	7	3	8	4		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>1</u>	<u>3</u>	<u>0</u>	<u>2</u>	<u>1</u>		
Total	<u>0</u>	<u>10</u>	<u>3</u>	<u>10</u>	<u>5</u>	<u>279</u>	<u>283</u>
<u>GRAND TOTALS</u>	23	110	20	121	98	1677	1705

Number of  
Pending Permits

Comments

10	To be reviewed by Northwest Region
12	To be reviewed by Willamette Valley Region
5	To be reviewed by Southwest Region
2	To be reviewed by Central Region
1	To be reviewed by Eastern Region
20	To be reviewed by Program Operations Section
25	Awaiting Public Notice
<u>18</u>	Awaiting end of 30-day Public Notice Period
93	

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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	0029 ASH GROVE CEMENT WEST INC	BAKER	46	03/30/87 PERMIT ISSUED	12/08/87	RNW
02	2164 MIDWAY FOREST PRODUCTS CO	BENTON	06	09/14/87 PERMIT ISSUED	12/16/87	RNW
02	7080 PEAK LUMBER SALES	BENTON	05	06/01/87 PERMIT ISSUED	12/16/87	RNW
03	2721 HANDSCHY INDUSTRIES INC.	CLACKAMAS	17	00/00/00 PERMIT ISSUED	01/04/88	MOD
05	2574 BERGSOE METAL CORP	COLUMBIA	20	00/00/00 PERMIT ISSUED	12/28/87	MOD
			21	00/00/00 PERMIT ISSUED	12/28/87	MOD
10	0006 UMPQUA EXCAVATION CO	DOUGLAS	27	10/16/87 PERMIT ISSUED	12/31/87	RNW
15	0041 RVP CORP.	JACKSON	33	11/30/87 PERMIT ISSUED	12/16/87	MOD
22	6009 SYNTHETECH, INC.	LINN	06	11/30/87 PERMIT ISSUED	12/16/87	MOD
26	2067 ESCO CORPORATION PLANT 3	MULTNOMAH	30	06/11/87 PERMIT ISSUED	12/10/87	RNW
26	2068 ESCO CORPORATION PLANT 1	MULTNOMAH	31	06/11/87 PERMIT ISSUED	12/10/87	RNW
29	0027 DENIS SCHMITZ	TILLAMOOK	22	03/04/87 PERMIT ISSUED	12/18/87	EXT
30	0053 MERIDIAN AGGREGATES CO.	UMATILLA	20	11/27/87 PERMIT ISSUED	12/16/87	MOD
31	0037 WOOD GASIFICATION, INC.	UNION	22	11/27/87 PERMIT ISSUED	12/16/87	MOD
33	0003 KERR-MCGEE CHEMICAL CORP.	WASCO	36	11/30/87 PERMIT ISSUED	12/16/87	MOD
37	0379 SEUBERT EXCAVATORS, INC.	PORT.SOURCE	01	10/06/87 PERMIT ISSUED	12/31/87	NEW
37	0380 RIVERSIDE CONTRACTING	PORT.SOURCE	01	10/12/87 PERMIT ISSUED	12/31/87	NEW

TOTAL NUMBER QUICK LOOK REPORT LINES

17

04

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division	December, 1987
(Reporting Unit)	(Month and Year)

PERMIT ACTIONS COMPLETED

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

Indirect Sources

Marion	Evergreen Plaza Shopping Center, 1,013 spaces, File No. 24-8711	12/04/87	Final Permit Issued
Clackamas	Clackamas Promenade, 2,500 spaces, File No. 03-8712	12/04/87	Final Permit Issued
Washington	Hall-Blvd. - Allen to Greenway, File No. 34-8714	12/21/87	Final Permit Issued

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

December 1987  
(Month and Year)

PLAN ACTIONS COMPLETED - 21

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

MUNICIPAL WASTE SOURCES - 17

Benton	Corvallis - Airport Industrial Area Lift Station - Mary's River Lift Station	12-10-87	Provisional Approval	
Umatilla	Milton-Freewater Mobile Home Park (Paul Seaquist)	12-16-87	Provisional Approval	
Lincoln	Newport N.W. 20th & Oceanview Drive	12-16-87	Provisional Approval	
Yamhill	Dundee Fifth Street Improvements	12-16-87	Provisional Approval	
Lane	Junction City East Front Street (Relocation)	12-16-87	Provisional Approval	
Josephine	Redwood SSS District Sewer, C.A. Cangilose Property	12-16-87	Provisional Approval	
Coos	Coquille Riverside Sewer Improvements	12-17-87	Provisional Approval	
Marion	Salem Development Illane Hills Illane Hills, PUD, Phase 1	12-16-87	Provisional Approval	
Linn	Linn County Parks and Recreation Sunnyside RV Park Drainfield Addition, 3650 gpd	12-15-87	Provisional Approval	

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

December 1987  
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
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MUNICIPAL WASTE SOURCES (cont'd)

Columbia	Scappoose NW 4th Street Sewer Ext	12-24-87	Provisional Approval	
Deschutes	Starwood Sanitary District CMU Septic Tank Design	12-24-87	Provisional Approval	
Tillamook	Pacific Campground Backup Drainfield	12-22-87	Provisional Approval	
Coos	Bandon Sophie's Subdivision (David L. Davis)	12-16-87	Provisional Approval	
Douglas	Elkton Planning Report	12-24-87	Accepted with Comments	
Wallowa	Wallowa County Wallowa Lake County Service District Collection and Treatment Report	12-11-87	Preliminary Engineering Report Acceptance & EQC Staff Report	
Columbia	Portland General Electric Trojan STP Expansion	12-23-87	Comment Letter To Company	

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

December 1987  
(Month and Year)

PLAN ACTIONS COMPLETED - 21

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

INDUSTRIAL WASTE SOURCES - 4

Marion	John Coelho & Sons Manure Control Facility	6-25-87	Approved
Washington	Delta Engineering & Manufacturing Co. Wastewater Pretreatment System	12-1-87	Approved
Multnomah	Pacific Power & Light Co. Oil Spill Control	12-10-87	Approved
Tillamook	Buck Dairy Manure Control Facility	12-8-87	Approved



Summary of Actions Taken  
On Water Permit Applications in DEC 87

8 JAN 38

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	3		2	15			4			17		5	17				
RW										1								
RWO	4	4		32	16		1			19	16		60	34				
MW				1									2					
MWO										19	2		5	1				
Total	5	7		35	31		1	4		39	35		72	52		222	187	29
Industrial																		
NEW	1	1	2	1	5	16		1		1	7	15	3	13	6			
RW																		
RWO	8	3		16	14		1	3	1	8	8	2	23	22				
MW	1	1		1	1								2	1				
MWO	1			5	2	1				7	3		1	1	1			
Total	11	5	2	23	22	17	1	4	1	16	18	17	29	37	7	164	134	388
Agricultural																		
NEW						1			28			317		1				
RW																		
RWO				1	1							1	1	1				
MW																		
MWO																		
Total				1	1	1			28			318	1	2		2	12	372
Grand Total	16	12	2	59	54	18	2	8	29	55	53	335	102	91	7	388	333	789

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-DEC-87.

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

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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 RWO	OR003243-3	103427/A CALIFORNIA HOME BRANDS, INC.	HILLSBORO	WASHINGTON/NWR	29-DEC-87	31-DEC-90
<u>General: Subsurface Suction (potential)</u>							
AGR	800 GEN08 NEW		103374/A JUD FARMS	NEHALEM	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103376/A TOBIN, ROBERT & RAEDENE	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103386/A MAHAFFY JR., CHARLES W.	COOS BAY	COOS/SWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103388/A TOHL, KENNETH & BEVERLY	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103390/A BEATTIE, MARK	COOS BAY	COOS/SWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103392/A ROSS, BOB & NANETTE	COQUILLE	COOS/SWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103394/A HOLT FARMS	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103396/A BIRCH CIRCLE FARMS, INC.	MCMINNVILLE	YAMHILL/WVR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103398/A MEIER SWISS FARMS, INC.	BORING	CLACKAMAS/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103400/A PRINCE, GEORGE	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103402/A BOQUIST, HAROLD	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103404/A PUTNAM DAIRY	BEND	DESCHUTES/CR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103406/A MARVIN REMPEL	VALE	MALHEUR/ER	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103405/A VALLEY CREEK DAIRY	SALEM	MARION/WVR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103403/A RIEGER, JAMES A. & KATHY M.	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800 GEN08 NEW		103401/A MARTI, FRITZ W. & IDA J.	NEHALEM	TILLAMOOK/NWR	02-DEC-87	31-JUL-92

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CAT	PERMIT NUMBER	TYPE	SUB-TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
AGR	800	GEN08	NEW		103399/A	WILHARRY DAIRY	COVE	UNION/ER	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103397/A	GALLON HOUSE BRIDGE DAIRY	SILVERTON	MARION/WVR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103395/A	DE JAGER, ROGER	JEFFERSON	MARION/WVR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103393/A	SHIRHAR FARMS, INC.	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103391/A	ALLEN DAIRY, GEORGE V.	TILLAMOOK	TILLAMOOK/NWR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103389/A	STRAABE, LOUIS & LUETTA	JACKSONVILLE	JACKSON/SWR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103387/A	A-D DAIRY	MERLIN	JOSEPHINE/SWR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103377/A	ROBINSON, JAMES & PATRICIA	GRANTS PASS	JOSEPHINE/SWR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103375/A	SCHWEIZER, LEE & CHARLENE	CLACKAMAS	CLACKAMAS/NWR	02-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103428/A	BLOOMERS DAIRY	GASTON	WASHINGTON/NWR	15-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103430/A	ROGUE VIEW DAIRY	GRANTS PASS	JOSEPHINE/SWR	15-DEC-87	31-JUL-92
AGR	800	GEN08	NEW		103429/A	COATES & SONS, E.S.	SALEM	MARION/WVR	15-DEC-87	31-JUL-92

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NPDES

IND	100413	NPDES	RWO	OR000107-4	36335/A	POPE & TALBOT PULP, INC.	HALSEY	LINN/WVR	28-DEC-87	31-DEC-92
DOM	100414	NPDES	RWO	OR002628-0	97612/A	GRADOW, GEORGE S.	CANBY	CLACKAMAS/NWR	28-DEC-87	31-DEC-92

WPCF

DOM	100406	WPCF	NEW		102959/A	MT. BACHELOR, INC.		DESCHUTES/CR	08-DEC-87	31-OCT-92
IND	100407	WPCF	NEW		102797/A	CLERMONT FRUIT PACKERS, INC.	CORNELIUS	WASHINGTON/NWR	09-DEC-87	31-OCT-92
DOM	100408	WPCF	NEW		102777/A	CAMELLIA PARK SANITARY DISTRICT	BROOKINGS	CURRY/SWR	09-DEC-87	31-OCT-92
DOM	100409	WPCF	NEW		102899/A	DELGADO, GRACE A.	DRAIN	DOUGLAS/SWR	16-DEC-87	30-NOV-92

PERMIT CAT NUMBER	TYPE	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
IND 100410	WPCF	RWO	84801/A	NORPAC FOODS, INC.	DAYTON	YAMHILL/WVR	16-DEC-87	31-OCT-92
IND 100410	WPCF	RWO	84801/A	NORPAC FOODS, INC.	DAYTON	YAMHILL/WVR	16-DEC-87	31-OCT-92
IND 100411	WPCF	RWO	29912/A	FLAVORLAND FOODS, INC	FOREST GROVE	WASHINGTON/NWR	18-DEC-87	30-NOV-92
DOM 100412	WPCF	NEW	102772/A	JAMES MCDONALD	BORING	CLACKAMAS/NWR	23-DEC-87	31-OCT-92

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

December 1987  
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Multnomah	Waybo Pit Proposed demolition landfill	12/18/87	Preliminary approval disapproved.	*
Washington	Hillsboro Landfill Existing demolition landfill expansion	12/29/87	Plans disapproved.	*



* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Malheur	Harper TS	6/22/87	6/22/87	(N) Plan received	HQ
Malheur	Willowcreek Indfl.	6/22/87	6/22/87	(C) Plan received	HQ
Klamath	Klamath Falls Landfill	7/6/87	7/6/87	(R) Plan received	HQ
Wasco	Northern Wasco Transfer	7/24/87	7/24/87	(N) Plan received	HQ
Jackson	South Stage	7/29/87	7/29/87	(R) Plan received	HQ
Malheur	Harper Landfill	8/17/87	8/17/87	(C) Plan received	HQ
Gilliam	Waste Mgmt, Inc.	8/31/87	8/31/87	(N) Plan received	HQ
Lane	Short Mountain Landfill	9/16/87	9/16/87	(R) Revised operational plan	HQ
Morrow	Tidewater Barge Lines (Finley Butte Indfl.)	10/15/87	10/15/87	(N) 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

Demolition Waste Sources - 0

Industrial Waste Sources - 10

Douglas	I.P., Gardiner	2/20/86	12/9/86	(N) Add'l. info. received	HQ
Klamath	Weyerhaeuser, Klamath Falls	3/24/86	11/25/86	(N) Add'l. info. requested	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Multnomah	Penwalt Corp.	4/2/86	7/14/86	(N) Add'l. info. requested	HQ
Linn	Willamette Industries, Inc. Lime Rejects Site Closure	7/3/86	7/3/86	(C) Plan received	HQ
Douglas	Roseburg Forest Products Co. (Riddle)	7/22/86	12/22/86	(R) Add'l. info. rec'd.	HQ
Coos	Rogge Lumber	7/28/86	6/18/87	(C) Additional info. submitted to revise previous application.	HQ
Douglas	Roseburg Forest Products Co. (Dixonville)	3/23/87	3/23/87	(R) Operational plan	HQ
Douglas	Louisiana-Pacific Round Prarie	9/30/87	9/30/87	(R) Operational plan	HQ
Coos	Weyerhaeuser Co. (North Spit Indfl.)	10/30/87	10/30/87	(N) Plan received	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Plan received	HQ

Sewage Sludge Sources - 3

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
Clackamas	Cascade-Phillips Corp. (septage)	11/12/87	11/12/87	(N) Plan received	HQ



DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

December 1987  
(Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		PLANNED
	No. <u>This Month</u>	No. <u>Fiscal Year to Date (FYTD)</u>	No. <u>in FY 88</u>
Treatment	-0-	-0-	-0-
Storage	-0-	-0-	7
Disposal	-0-	-0-	1

INSPECTIONS

	COMPLETED		PLANNED
	No. <u>This Month</u>	No. <u>FYTD</u>	No. <u>in FY 88</u>
Generator	7	30	45 <sup>1</sup>
TSD	1	9	29

CLOSURES

	PUBLIC NOTICES			CERTIFICATIONS ACCEPTED		
	No. <u>This Month</u>	<u>FYTD No.</u>	<u>Planned in FY88</u>	No. <u>This Month</u>	<u>No. FYTD</u>	<u>No. Planned in FY 88</u>
Treatment	-0-	-0-	-0-	-0-	-0-	-0-
Storage	1	1	3	1	4	4
Disposal	1	1	2	0	1	3

<sup>1</sup> Revised from 38 to 45 generator inspections.

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
04-DEC-87	GRAVEL CONTAMINATED/PURE MERCURY	RCRA SPILL CLEANUP	0.14 CUBIC YARDS
1 Request(s) approved for generators in Alaska			
10-DEC-87	GRAPHITE FILTER CAKE/CHROMIUM & CADMIUM	ALKALIES & CHLORINE	1000.00 CUBIC YARDS
1 Request(s) approved for generators in British Columbia			
09-DEC-87	TAR/SOIL-FUEL OIL-DIESEL/SOIL	RAILROADS, LINE-HAUL OPERATING	1284.00 CUBIC YARDS
1 Request(s) approved for generators in California			
17-DEC-87	PCB CONTAMINATED SOLID	PCB REMOVAL & CLEANUP ACTIVITY	0.54 CUBIC YARDS
1 Request(s) approved for generators in Idaho			
04-DEC-87	LAB WASTE-MANDITORY ANALYSIS	HW TREAT/STORE/DISPOSE FCULTY	1.21 CUBIC YARDS
04-DEC-87	WOOD-LAST CCA SPILL RESIDUE	OTHER CHEMICAL PREPARATIONS	5.40 CUBIC YARDS
17-DEC-87	CHEMAX	OTHER CHEMICAL PREPARATIONS	0.27 CUBIC YARDS
17-DEC-87	SPENT PENTACHLOROPHENOL	WOOD PRESERVING	5.00 CUBIC YARDS
17-DEC-87	2,4,-D CONTAMINATED DRUMS	RCRA SPILL CLEANUP	0.54 CUBIC YARDS
18-DEC-87	SOIL CONTAMINATED WITH MINERAL SPIRITS, PETROLEUM NAPHTHS	RCRA SPILL CLEANUP	20.00 CUBIC YARDS
21-DEC-87	CONTAMINATED SOIL	NON-SUPERFUND SITE CLEANUP	110.00 CUBIC YARDS
7 Request(s) approved for generators in Oregon			

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
01-DEC-87	LAB PACK - ORM-E	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - ORM-E	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - COMBUSTIBLE LIQUID	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - NONREGULATED	FARM SUPPLIES & FEED	0.54 CUBIC YARDS
01-DEC-87	LAB PACK - ORM-E	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - POISON B	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - FLAMMABLE LIQUID	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - POISON B	FARM SUPPLIES & FEED	1.35 CUBIC YARDS
01-DEC-87	LAB PACK - POISON B	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - POISON B	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - POISON B	FARM SUPPLIES & FEED	0.54 CUBIC YARDS
01-DEC-87	LAB PACK - COMBUSTIBLE LIQUID	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK - FLAMMABLE LIQUID	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
01-DEC-87	LAB PACK-FLAMMABLE LIQUID/POISON	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
04-DEC-87	TOLUENE CONTAMINATED SOIL	RCRA SPILL CLEANUP	24.00 CUBIC YARDS
04-DEC-87	ELECTROMELT DUST	ELECTROMETALLURGICAL PRODUCTS	81.00 CUBIC YARDS
04-DEC-87	DRY BROKEN BATTERY PARTS	RAILROADS, LINE-HAUL OPERATING	100.00 CUBIC YARDS
04-DEC-87	LAB PACK - MISCELLANEOUS	CHEMICALS & ALLIED PRODUCTS	1.35 CUBIC YARDS
04-DEC-87	WASTE PHENOLIC RESIN RINSATE	TRUCKING TERMINAL FACILITIES	145.53 CUBIC YARDS
04-DEC-87	LAB PACK - OXIDIZERS	ELEMENTARY & SECONDARY SCHOOLS	0.27 CUBIC YARDS
04-DEC-87	SAFT VI-33 BATTERIES	RAILROADS, LINE-HAUL OPERATING	100.00 CUBIC YARDS
04-DEC-87	SAFT SP 3600 BATTERIES	RAILROADS, LINE-HAUL OPERATING	100.00 CUBIC YARDS
09-DEC-87	SOLIDS/FLAMMABLE SOLIDS	SUPERFUND SITE CLEANUP	4.92 CUBIC YARDS
11-DEC-87	COPPER SANDBLAST SAND	PRIMARY PRODUCTION OF ALUMINUM	13.50 CUBIC YARD
11-DEC-87	RUST & SLUDGE/VAPAM	FARM SUPPLIES & FEED	1.50 CUBIC YARDS

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
11-DEC-87	CHEMICAL RINSATE WASTE	FARM SUPPLIES & FEED	2.43 CUBIC YARDS
11-DEC-87	LAB PACK - CORROSIVE	OTHER GOVERNMENT AGENCY	0.81 CUBIC YARDS
11-DEC-87	LAB PACK - FLAMMABLE LIQUID	OTHER GOVERNMENT AGENCY	0.81 CUBIC YARDS
11-DEC-87	LAB PACK - POISON B	OTHER GOVERNMENT AGENCY	1.62 CUBIC YARDS
11-DEC-87	CHEMICAL RINSATE WASTE/SLUDGE	FARM SUPPLIES & FEED	0.27 CUBIC YARDS
11-DEC-87	LAB PACK - ORM-A	OTHER GOVERNMENT AGENCY	4.05 CUBIC YARDS
11-DEC-87	LAB PACK - ORM-E	OTHER GOVERNMENT AGENCY	0.81 CUBIC YARDS
17-DEC-87	SOIL CONTAMINATED/HALOGENATED ORGANIC COMPOUNDS	NON-SUPERFUND SITE CLEANUP	100.00 CUBIC YARDS
17-DEC-87	PCB CONTAMINATED SOLIDS	PCB REMOVAL & CLEANUP ACTIVITY	300.00 CUBIC YARDS
17-DEC-87	SOIL CONTAMINATED/PENTACHLOROPHENOL	RCRA SPILL CLEANUP	20.00 CUBIC YARDS
21-DEC-87	SOLIDIFIED SLUDGE/PERCHLOROETH	SUPERFUND SITE CLEANUP	3.78 CUBIC YARDS
21-DEC-87	CONCRETE DEBRIS/PERCHLOROETHYLENE	NON-RCRA SPILL CLEANUP	10.00 CUBIC YARDS
21-DEC-87	CLOTHING-DEBRIS/PERCHLOROETHYLENE	SUPERFUND SITE CLEANUP	0.54 CUBIC YARDS

38 Request(s) approved for generators in Washington

20  
49 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

December 1987  
(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	4		
Closures	-	1	-	-	5		
Renewals	1	5	-	3	17		
Modifications	-	12	-	11	-		
Total	1	21	0	15	26	176	176
<u>Demolition</u>							
New	-	-	-	-	-		
Closures	-	-	-	-	-		
Renewals	-	-	-	1	1		
Modifications	-	1	-	1	-		
Total	0	1	0	2	1	12	12
<u>Industrial</u>							
New	-	4	-	4	6		
Closures	-	-	-	-	1		
Renewals	-	2	-	-	6		
Modifications	-	9	-	9	-		
Total	0	15	0	13	13	104	104
<u>Sludge Disposal</u>							
New	-	1	-	-	2		
Closures	-	1	-	-	1		
Renewals	-	-	-	-	-		
Modifications	-	6	-	6	-		
Total	0	8	0	6	3	17	17
Total Solid Waste	1	45	0	36	43	309	309

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

December 1987  
(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)

December 1987  
(Month and Year)

PERMIT ACTIONS PENDING - 41

* 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 - 26

Clackamas	Rossmans	3/14/84	2/11/87	(C) Applicant review (second draft)	HQ/RO
Malheur	Brogan-Jamieson	6/29/84	4/21/86	(R) Application filed	HQ
Baker	Haines	1/30/85	6/20/85	(R) Applicant review	HQ
Malheur	Adrian	11/7/85	11/7/85	(C) Application filed	RO
Jackson	Ashland	12/9/85	1/13/86	(R) Draft received	HQ
Jackson	So. Stage	12/30/85	8/24/87	(R) Draft received	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 Indfl.	9/22/86	7/9/87	(R) Draft received	HQ
Douglas	Lemolo Trans. Sta.	12/10/86	7/28/87	(R) Draft received	HQ
Multnomah	St. Johns Landfill	12/17/86	12/17/86	(C) Application filed	RO/HQ
Coos	Bandon Landfill	1/20/87	1/20/87	(R) Application filed	RO
Deschutes	Negus Landfill	2/4/87	11/16/87	(R) Applicant review	HQ
Douglas	Reedsport Indfl.	5/7/87	5/7/87	(R) Application filed	RO
Malheur	Harper Transfer	6/22/87	6/22/87	(N) Application filed	RO
Malheur	Willowcreek Indfl.	6/22/87	6/22/87	(C) Application filed	RO
Klamath	Klamath Falls Landfill	7/6/87	7/6/87	(R) Application filed	RO

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 *
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Wasco	Northern Wasco Co. Transfer	7/24/87	11/16/87	(N) Applicant review	HQ
Malheur	Harper Landfill	8/17/87	8/17/87	(C) Application filed	RO
Gilliam	Waste Mgmt. Inc.	8/31/87	8/31/87	(N) Application filed	HQ
Grant	Hendrix Landfill	9/17/87	9/17/87	(R) Application filed	RO
Lane	Florence Landfill	9/21/87	9/21/87	(R) Application filed	RO
Morrow	Tidewater Barge Lines (Finley Butte Landfill)	10/15/87	10/15/87	(N) Application filed	HQ
Douglas	Roseburg Landfill	10/21/87	10/21/87	(R) Application filed	RO
Marion	Ogden-Martin of Marion, Inc. (Brooks)	11/12/87	11/12/87	(R) Applicant review	HQ
Curry	Port Orford Indfl.	12/14/87	12/14/87	(R) Application filed	RO

Demolition Waste Sources - 1

Coos	Bracelin/Yeager (Joe Ney)	3/28/86	9/2/86	(R) Draft received	HQ
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Industrial Waste Sources - 13

Lane	Bohemia, Dorena	1/19/81	9/1/87	(R) Applicant review of second draft	HQ
Wallowa	Boise Cascade Joseph Mill	10/3/83	5/26/87	(R) Applicant comments received	HQ
Douglas	Int'l Paper (Gardiner)	2/20/86	2/20/86	(N) Application filed	RO
Klamath	Weyerhaeuser, Klamath Falls (Expansion)	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Multnomah	Penwalt	4/2/86	7/14/86	(N) Add'l. info. requested	HQ
Curry	South Coast Lbr.	7/18/86	7/18/86	(R) Application filed	RO



* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Linn	Western Kraft Lime storage	8/11/86	8/11/86	(C) 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
Linn	Freres Lumber (Lebanon)	7/6/87	7/6/87	(R) Application filed	RO
Columbia	Boise Cascade St. Helens Sludge	7/10/87	12/21/87	(R) Applicant review	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Application filed	RO
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO

Sewage Sludge Sources - 3

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
Clackamas	Cascade-Phillips Corp. Septage land application	11/12/87	11/12/87	(N) Application received	RO

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<p>Noise Control Program (Reporting Unit)</p>	<p>December, 1987 (Month and Year)</p>
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SUMMARY OF NOISE CONTROL ACTIONS

<u>Source Category</u>	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	5	57	6	79	224	225
Airports			0	8	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit)	December, 1987 (Month and Year)
---	------------------------------------

FINAL NOISE CONTROL ACTIONS

County	* Name of Source and Location	* Date	* Action
Clackamas	Arrowhead Timber Company, Carver	12/87	In compliance
Washington	GTE Mobilnet Cellular Service SW 185th near Gassner Road, Beaverton	12/87	In compliance
Washington	Raleigh West Shopping Center, owner: The RREEF Fund, Portland	12/87	In compliance
Lane	Oregon Pacific & Eastern Railway Co., Cottage Grove	12/87	Pre-empted by US FRA rules
Coos	Automotive Industrial Engineering, Inc., Coos Bay	12/87	In compliance
Union	Peacock Lumber Company, Alicel	12/87	No violation

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit)	December, 1987 (Month and Year)
---	------------------------------------

NOISE COMPLAINT SUMMARY

for the

1987 CALENDAR YEAR

Category	Number of Complaints	% of 1987 Complaints	% Change from 1986
Industry & Commerce	577	69%	+14%
Motor Vehicles	138	17%	+ 1.5%
Airports	42	5%	+87%
Racing Events/ Facilities	20	2%	+33%
Other	<u>57</u>	<u>7%</u>	<u>- 8%</u>
TOTAL	835	100%	+13%

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY  
1987

CIVIL PENALTIES ASSESSED DURING MONTH OF DECEMBER, 1987:

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Richard J. Robbins dba/R.J. Honey Truck, Douglas County	OS-SWR-87-96 Disposed of septage on the ground and not not licensed to perform sewage disposal work.	12/8/87	\$600	Paid 12/24/87
PSI Manufacturing Corporation St. Helens, Oregon	HW-NWR-87-93 Several violations of the hazardous waste management generator regulations.	12/15/87	\$500	Paid 12/23/87
Clarence Jensen Coos Bay, Oregon	AQOB-SWR-87-109 Open burned prohibit- ed materials (tires).	12/17/87	\$300	Paid 1/4/88
Dan Class Portland, Oregon	WQ-NWR-87-100 Discharged sewage from a houseboat into the Willamette River.	12/23/87	\$100	Awaiting response to notice.
Container-Care Portland, Inc. Portland, Oregon	HW-NWR-87-83 Disposed of pesticide residue at unautho- rized location.	12/23/87	\$2,500	Awaiting response to notice.
Kendle Willingham Douglas County	OS-SWR-87-115 Represented himself as being a sewage disposal service without being licensed.	12/31/87	\$100	Awaiting response to notice.
Paul Saylor Douglas County	OS-SWR-87-116 Installed a sewage holding tank without obtaining a permit.	12/31/87	\$100	Awaiting response to notice.
Michael Sperling Douglas County	OS-SWR-87-117 Installed a sewage holding tank without obtaining a permit.	12/31/87	\$100	Awaiting response to notice.

GB7274 (12/87)

-1-

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
David Bonebrake Linn County	AQ-FB-87-01 Late field burning.	12/21/87	\$500	Paid 12/31/87.
Robert Cook Linn County	AQ-FB-87-02 Late field burning.	12/21/87	\$500	Awaiting response to notice.
Douglas Fisher Marion County	AQ-FB-87-03 Late field burning.	12/21/87	\$400	Paid 12/24/84.
George Krantz Linn County	AQ-FB-87-04 Late field burning.	12/21/87	\$400	Paid 1/5/88.
Richard Doerfler Marion County	AQ-FB-87-05 Late field burning.	12/23/87	\$400	Awaiting response to notice.
Fred Kaser Clackamas County	AQ-FB-87-06 Late field burning.	12/21/87	\$400	Awaiting response to notice.
Joe Wheeler Louise Wheeler Linn County	AQ-FB-87-07 Late field burning.	12/23/87	\$400	Received response on 1/4/88.
Julian Lafayette Mark Lafayette Polk County	AQ-FB-87-08 Open burned a field without a permit.	12/23/87	\$500	Paid 1/5/88.
Joe L. Heitzman Lane County	AQ-FB-87-09 Open burned a field without a permit.	12/21/87	\$500	Contested on 12/31/87.
Ron Heyerly Clackamas County	AQ-FB-87-10 Improper propane flaming of a field.	12/21/87	\$200	Paid 1/6/88.
Randy Crisell Marion County	AQ-FB-87-11 Conducted agricultural open burning during prohibited period.	12/21/87	\$50	Paid 12/30/87.
Charles Sherman Marion County	AQ-FB-87-12 Conducted agricultural open burning during prohibited period.	12/21/87	\$200	Paid 12/30/87.

December, 1987  
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	1	1
Discovery	0	0
Settlement Action	2	3
Hearing to be scheduled	1	0
Department reviewing penalty	0	0
Hearing scheduled	0	3
HO's Decision Due	0	0
Briefing	0	0
Inactive	<u>4</u>	<u>4</u>
SUBTOTAL of cases before hearings officer.	8	11
HO's Decision Out/Option for EQC Appeal	0	0
Appealed to EQC	5	1
EQC Appeal Complete/Option for Court Review	0	3
Court Review Option Taken	0	0
Case Closed	<u>1</u>	<u>0</u>
TOTAL Cases	14	15

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 Rftrl            Date when Enforcement Section requests Hearing Section schedule a hearing  
 Hrngs                 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

December 1987  
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrml	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	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
McINNIS ENTERPRISES, LTD., et al.	09/20/83	09/22/83		Prtys	56-WQ-NWR-83-79 WQ Civil Penalty of \$14,500	Hearing deferred.
McINNIS ENTERPRISES, LTD., et al.	10/25/83	10/26/83		Prtys	59-SS-NWR-83-33290P-5 SS license revocation	Hearing deferred.
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 action.
ω D BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	Dept	23-HSW-85 Declaratory Ruling	EQC issued declaratory ruling July 25, 1986. Department of Justice to draft final order reflecting EQC action.



December 1987  
DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rgst</u>	<u>Hrng Rfrnl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type &amp; No.</u>	<u>Case Status</u>
NULF, DOUG	01/10/86	01/13/86	05/05/86	Dept	01-AQFB-85-02 \$500 Civil Penalty	<u>EOC reduced penalty to \$100. DOJ to draft final order.</u>
VANDERVELDE, ROY	06/06/86	06/10/86	11/06/86	Prtys	05-WQ-WVR-86-39 \$5,500 Civil Penalty	<u>EOC approved H.O. decision. DOJ to draft final order.</u>
RICHARD KIRKHAM dba, WINDY OAKS RANCH		01/07/87	03/04/87	Resp	1-AQ-FB-86-08 \$680 civil penalty	<u>EOC dismissed penalty.</u>
MERIT USA, INC.	05/30/87	06/10/87	09/14/87	Prtys	4-WQ-NWR-87-27 \$3500 civil penalty (oil)	Merit appealed to EQC. <u>Cross appeal by Dept.</u>
PACIFIC COATINGS, INC.	07/09/87	07/10/87	02/12/88	Prtys	5-AQ-NWR-87-40 \$500 civil penalty (odor)	<u>Hearing scheduled.</u>
VANPORT MFG.	09/14/87	09/16/87		Hrg	6-WQ-NWR-87-45 \$800 civil penalty (turbidity)	<u>Settlement Action.</u>
THE WESTERN COMPLIANCE SERVICES, INC.	09/11/87	09/15/87		Prtys	7-HW-NWR-87-48 RCRA & PCB violations	Preliminary issues.
<u>ROGER DEJAGER</u>	<u>10/13/87</u>		<u>02/05/88</u>	<u>Prtys</u>	<u>8-WQ-WVR-87-68</u>	<u>Hearing scheduled.</u> <u>\$1000 Civil Penalty</u>
<u>CITY OF KLAMATH FALLS</u>			<u>03/14/88</u>		<u>1-P-WQ-88</u> <u>Salt Caves</u>	<u>Discovery</u>

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
09 0001	654 02 DESCHUTES	213	DAW FOREST PRODUCTS CO	SCRUBBER FOR BOILER	
26 3231	650 02 MULTNOMAH	220	WILLAMETTE ELECTRIC PRODS	HEAT CLEANING OVEN	
10 0030	651 02 DOUGLAS	223	SUN STUDS, INC	BOILER PRE-HEATER	

TOTAL NUMBER QUICK LOOK REPORT LINES 3

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division

January, 1988

(Reporting Unit)

(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	1	14	4	24	9		
Existing	2	13	3	14	8		
Renewals	4	41	7	45	45		
Modifications	<u>4</u>	<u>43</u>	<u>8</u>	<u>50</u>	<u>24</u>		
Total	11	111	22	133	86	1398	1422
<u>Indirect Sources</u>							
New	0	7	1	9	3		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>1</u>	<u>4</u>	<u>0</u>	<u>2</u>	<u>2</u>		
Total	<u>1</u>	<u>11</u>	<u>1</u>	<u>11</u>	<u>5</u>	<u>280</u>	<u>283</u>
<u>GRAND TOTALS</u>	12	122	23	144	91	1678	1705

Number of  
Pending Permits

Comments

13	To be reviewed by Northwest Region
9	To be reviewed by Willamette Valley Region
7	To be reviewed by Southwest Region
2	To be reviewed by Central Region
0	To be reviewed by Eastern Region
17	To be reviewed by Program Operations Section
26	Awaiting Public Notice
<u>12</u>	Awaiting end of 30-day Public Notice Period
86	

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AA5323

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	2633 STIMSON LUMBER COMPANY	CLACKAMAS	08	07/08/87 PERMIT ISSUED	02/04/88	RNW
03	2731 MOORES' FLOUR MILL	CLACKAMAS	01	11/23/87 PERMIT ISSUED	02/04/88	EXT
05	2585 HALEY & ADLER CORP.	COLUMBIA	15	01/19/88 PERMIT ISSUED	02/02/88	MOD
06	0003 C.B. CEDAR	COOS	15	11/02/87 PERMIT ISSUED	01/14/88	MOD
10	0007 NICKEL MOUNTAIN RESOURCES	DOUGLAS	28	01/05/88 PERMIT ISSUED	01/28/88	MOD
10	0132 THUNDERBIRD FURNITURE	DOUGLAS	01	04/23/86 PERMIT ISSUED	01/25/88	NEW
15	0075 PROVIDENCE HOSPITAL	JACKSON	07	10/20/87 PERMIT ISSUED	02/04/88	MOD
15	0103 MEDFORD READY MIX CONCRET	JACKSON	15	12/02/87 PERMIT ISSUED	01/28/88	RNW
21	0005 GEORGIA PACIFIC CORP	LINCOLN	23	08/03/84 PERMIT ISSUED	01/25/88	RNW
21	0051 PACIFIC TIMBER SALVAGE	LINCOLN	11	00/00/00 PERMIT ISSUED	01/28/88	MOD
22	6029 CONMEL, INC.	LINN	01	10/21/87 PERMIT ISSUED	01/19/88	NEW
23	0002 AMALGAMATED SUGAR CO	MALHEUR	22	06/30/86 PERMIT ISSUED	01/28/88	RNW
24	8055 SERVICE OIL COMPANY	MARION	01	08/19/87 PERMIT ISSUED	02/02/88	EXT
26	2402 PORTLAND PROVISION CO	MULTNOMAH	26	12/22/87 PERMIT ISSUED	01/28/88	MOD
26	2995 GILSONITE INC	MULTNOMAH	09	09/03/87 PERMIT ISSUED	01/19/88	EXT
30	0078 J R SIMPLOT CO	UMATILLA	16	02/04/86 PERMIT ISSUED	01/11/88	RNW
34	2081 TAYLOR LUMBER & TREATING	WASHINGTON	32	11/09/87 PERMIT ISSUED	02/02/88	MOD
34	2660 QUENELL ENTERPRISES	WASHINGTON	22	01/11/88 PERMIT ISSUED	01/28/88	MOD
37	0160 COPELAND SAND & GRAVEL	PORT.SOURCE	24	12/11/87 PERMIT ISSUED	01/28/88	RNW
37	0191 MERIDIAN ROCK, INC	PORT.SOURCE	22	01/04/88 PERMIT ISSUED	01/28/88	RNW
37	0381 BRAXLING & BRAXLING LOG	PORT.SOURCE	01	10/22/87 PERMIT ISSUED	01/11/88	NEW
37	0382 WILDER CONSTRUCTION CO.	PORT.SOURCE	01	10/26/87 PERMIT ISSUED	02/02/88	NEW

TOTAL NUMBER QUICK LOOK REPORT LINES

22

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

January, 1988  
(Month and Year)

PERMIT ACTIONS COMPLETED

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

Indirect Sources

Washington	Sunset Esplanade, 2,200 spaces, File No. 34-8715	01/29/88	Final Permit Issued
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DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

January 1988  
(Month and Year)

PLAN ACTIONS COMPLETED - 18

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
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MUNICIPAL WASTE SOURCES - 18

Tillamook	Twin Rocks Sewer District CTC Development	2-2-88	Provisional Approval	
Harney	Burns N. Grant Sewer Improvements	2-2-88	Provisional Approval	
Tillamook	NTCSA - Lateral 0-4, Poysky Ave. (Mastenik) - Pinewood Subdivision	2-2-88	Provisional Approval	
Lincoln	Newport Cookson/Cooper Property	2-2-88	Provisional Approval	
Douglas	Elkton Community Sewerage System	1-29-88	Updated site approval	
Clackamas	Stafford School On-Site System Expansion (Preliminary design)	1-28-88	Verbal Comments	
Wasco	The Dalles Crates Way Improvements	2-2-88	Provisional Approval	
Jackson	Medford Chlorine Storage & Dispensing Facility	1-7-88	Approval	
Deschutes	Bend Aubrey Butte, Phase 5	2-2-88	Provisional Approval	
Douglas	Green Sanitary District Grange Road Service Connections (3)	2-2-88	Provisional Approval	
Lincoln	Waldport Port of Alsea Parking Lot Sewer	2-2-88	Provisional Approval	

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

January 1988  
(Month and Year)

PLAN ACTIONS COMPLETED

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

Municipal Waste Sources (cont'd)

Jackson	Drifters Mobile Home Park Wayne Sargent On-Site Sewage Disposal System Bottomless Sand Filter 2750 gpd	1-21-88	Provisional Approval to County
Malheur	Ontario Alcohol Recovery Center Sewer Extension	2-2-88	Provisional Approval
Clackamas	Kellogg Creek Misc. Plant Additions	1-25-88	Approval
Multnomah	Gresham STP Expansion C.O. #3	1-25-88	Approval
Coos	Coos Bay #1 Treatment Plant Expansion	1-12-88	Comments Letter
Multnomah	City of Portland East County Interceptors	1-13-88	Verbal Comments

Summary of Actions Taken  
On Water Permit Applications in JAN 88

10 FEB 88

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		3	16			1			18		6	17					
RW										1									
RWO	6	3		38	19		1	1		20	18		65	35					
MW				1									2						
MWO							1			20	2		2	1					
Total	6	4		42	35		2	2		41	38		75	53			223	186	29
Industrial																			
NEW		1	1	1	6	17			1	1	7	15	3	14	6				
RW																			
RWO	1	1		17	15		3			9	8	2	23	22					
MW				1	1								2	1					
MWO				5	3	1	1			7	4	1	1	2	1				
Total	1	2	1	24	25	18	4		1	17	19	18	29	39	7		163	133	389
Agricultural																			
NEW						1			56			374		1					
RW																			
RWO				1	1							1	1	1					
MW																			
MWO																			
Total				1	1	1			56			375	1	2			2	12	429
Grand Total	7	6	1	67	61	19	6	2	57	58	57	393	105	94	7		388	331	847

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-88.

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	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
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General: Suction Dredges

IND	700 GEN07 NEW	103469/A	FIFER, DAN AND VERNA		MOBILE SRC/ALL	08-JAN-88	31-JUL-91
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General: Subsurface Suction (potential)

AGR	800 GEN08 NEW	103455/A	BRINKMAN DAIRY INC.	MOLALLA	CLACKAMAS/NWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103457/A	NEFF, FRANZ A.	SILVERTON	MARION/WVR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103459/A	HUDDLE, KENNETH L.	REDMOND	DESCHUTES/CR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103461/A	KETOLA, FRANK & DONALD	LINCOLN CITY	LINCOLN/WVR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103463/A	TOHL, RICHARD	TILLAMOOK	TILLAMOOK/NWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103466/A	LAZY H DAIRY	CANBY	CLACKAMAS/NWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103470/A	POWDER CREEK DAIRY	BEAVER	TILLAMOOK/NWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103472/A	MOTSINGER, CHARLES	TILLAMOOK	TILLAMOOK/NWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103474/A	ALDER HILL FARM, INC.	ASTORIA	CLATSOP/NWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103473/A	EASTWAY DAIRY	ONTARIO	MALHEUR/ER	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103471/A	SHUMAKER FARMS	SCIO	LINN/WVR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103467/A	BOERSMA, PAUL	BONANZA	KLAMATH/CR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103464/A	MILES, HERBERT G.	REDMOND	DESCHUTES/CR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103462/A	JOHNSON RANCH CO.	JUNCTION CITY	LANE/WVR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103460/A	KEELER, DON	TEN MILE	DOUGLAS/SWR	12-JAN-88	31-JUL-92
AGR	800 GEN08 NEW	103458/A	ROCK CREEK JERSEYS	MOLALLA	CLACKAMAS/NWR	12-JAN-88	31-JUL-92

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CAT	PERMIT NUMBER	TYPE	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
AGR	800	GEN08	NEW	103456/A	DUYCK, EDWIN H. & ETHEL J.	CORNELIUS	WASHINGTON/NWR	12-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103480/A	VANDOMELEN, FLOYD	HILLSBORO	WASHINGTON/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103500/A	BURDON'S DAIRY	SHERIDAN	YAMHILL/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103502/A	KONYN DAIRY	EUGENE	LANE/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103504/A	TOBIASSON, WENDELL	COTTAGE GROVE	LANE/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103506/A	BLASER, FRANK & LOUIS	TILLAMOOK	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103509/A	DAVIDSON, BOB	BEND	DESCHUTES/CR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103507/A	MT. SHADOWS RANCH	GRANTS PASS	JOSEPHINE/SWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103505/A	SPRING HILLS FARMS	SCIO	LINN/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103503/A	BANSEN JERSEYS INC.	YAMHILL	YAMHILL/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103501/A	HUIZING, DOUWE	CANBY	CLACKAMAS/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103499/A	DESWART, JACK & JEANNE	TILLAMOOK	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103487/A	HUBER, WALTER C.	NEHALEM	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103489/A	ALLEN, ERNEST E.	NORWAY	COOS/SWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103490/A	OTT DAIRY, INC.	ST. PAUL	MARION/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103492/A	WHISPERING PINE DAIRY	TILLAMOOK	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103493/A	DYK, JONATHON E.	TILLAMOOK	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103494/A	HAGA, NEWTON	LANGLOIS	CURRY/SWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103496/A	DONALDSON, JOSEPH R.	CLOVERDALE	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103497/A	SCALA FARM INC.	KLAMATH FALLS	KLAMATH/CR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103498/A	HOLLAND'S DAIRY INC.	KLAMATH FALLS	KLAMATH/CR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103495/A	TOBISKA, DAN	COOS BAY	COOS/SWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103491/A	BROWN'S GOLDEN OAK GUERNSEY	SILVERTON	MARION/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103486/A	OPPEDYK, MIKE	NYSSA	MALHEUR/ER	15-JAN-88	31-JUL-92

PERMIT CAT NUMBER	TYPE	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
AGR	800	GEN08	NEW	103483/A	DEJAGER, ARTHUR	DAYTON	YAMHILL/WVR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103484/A	DILA DAIRY, INC.	NEHALEM	TILLAMOOK/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103485/A	MAST FARMS	MYRTLE POINT	COOS/SWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103482/A	DAVIS, TIM	BEND	DESCHUTES/CR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103481/A	QUIST, NUNON P.	CANBY	CLACKAMAS/NWR	15-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103534/A	GUNDEN, BOB	TILLAMOOK	TILLAMOOK/NWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103508/A	RIVER END DAIRY	NEHALEM	TILLAMOOK/NWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103475/A	HIGINBOTHAM FARMS, INC.	CENTRAL POINT	JACKSON/SWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103476/A	BOGE, MARTY N.	TILLAMOOK	TILLAMOOK/NWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103538/A	WIL-VIEW FARMS	WILSONVILLE	CLACKAMAS/NWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103539/A	HARRIS, STEVE	TILLAMOOK	TILLAMOOK/NWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103541/A	COLLIER, STEVE	ONTARIO	MALHEUR/ER	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103536/A	FLOM, DON	MYRTLE POINT	COOS/SWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103537/A	SHENKS DAIRY	WILLAMINA	YAMHILL/WVR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103535/A	DURRER, JAMES W.	TILLAMOOK	TILLAMOOK/NWR	28-JAN-88	31-JUL-92
AGR	800	GEN08	NEW	103545/A	ROVICS JR., JACK	GRAND RONDE	POLK/WVR	29-JAN-88	31-JUL-92

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NPDES

IND	100417	NPDES	RWO	OR000240-2	63810/A	ORE-IDA FOODS, INC.	ONTARIO	MALHEUR/ER	04-JAN-88	30-NOV-92
IND	100102	NPDES	MWO	OR000162-7	36535/B	NICKEL MOUNTAIN RESOURCES CO.	RIDDLE	DOUGLAS/SWR	05-JAN-88	31-MAY-90
IND	100418	NPDES	RWO	OR003113-5	70730/A	PORTLAND, CITY OF	PORTLAND	MULTNOMAH/NWR	07-JAN-88	31-JUL-92
IND	100419	NPDES	RWO	OR000077-9	47430/A	KOPPERS COMPANY, INC	PORTLAND	MULTNOMAH/NWR	08-JAN-88	30-NOV-92

PERMIT CAT NUMBER	TYPE	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
DOM 100090	NPDES	MWO	OR002925-4	20530/B	BINDANA INVESTMENTS COMPANY LIMITED	EUGENE	LANE/WVR	20-JAN-88	31-MAR-90
DOM 100420	NPDES	RWO	OR002695-6	46990/A	WINDSOR PARK PROPERTIES 3, A CALIFORNIA LIMITED PARTNERSHIP	CORVALLIS	BENTON/WVR	20-JAN-88	30-NOV-92

WPCF

DOM 100415	WPCF	NEW		102969/A	OREGON DEPT OF HUMAN RESOURCES		TILLAMOOK/NWR	06-JAN-88	31-OCT-92
DOM 100421	WPCF	RWO		4238/A	VIP'S RESTAURANTS, INC.	CORVALLIS	LINN/WVR	26-JAN-88	31-DEC-92

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

January 1988  
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Clackamas	Rossman's Landfill	1/14/88	Groundwater sampling plan approved.	
Wasco	North Wasco County Landfill	1/14/88	Plans approved.	

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

January 1988  
(Month and Year)

PLAN ACTIONS PENDING - 46

* 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 - 31

Malheur	Brogan-Jamieson	6/29/84	--	(R) Holding	HQ
Malheur	Adrian	11/7/85	7/10/86	(C) Add'l. info. rec'd.	HQ
Jackson	Ashland	12/6/85	12/6/85	(R) Plan received	HQ
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
Umatilla	Umatilla Tribal SW Service	8/25/86	8/25/86	(R) Plan received	HQ
Yamhill	River Bend	11/14/86	11/14/86	(R) Plan received	HQ
Douglas	Lemolo T.S.	12/10/86	12/10/86	(R) Plan received	HQ
Multnomah	St. Johns Lndfl.	12/17/86	10/28/87	(C) Add'l. info. requested.	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
Malheur	Harper TS	6/22/87	6/22/87	(N) Plan received	HQ
Malheur	Willowcreek Lndfl.	6/22/87	6/22/87	(C) Plan received	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Klamath	Klamath Falls Landfill	7/6/87	7/6/87	(R) Plan received	HQ
Wasco	Northern Wasco Transfer	7/24/87	7/24/87	(N) Plan received	HQ
Jackson	South Stage	7/29/87	7/29/87	(R) Plan received	HQ
Malheur	Harper Landfill	8/17/87	8/17/87	(C) Plan received	HQ
Gilliam	Waste Mgmt, Inc.	8/31/87	8/31/87	(N) Plan received	HQ
Lane	Short Mountain Landfill	9/16/87	9/16/87	(R) Revised operational plan	HQ
Morrow	Tidewater Barge Lines (Finley Butte Lndfl.)	10/15/87	10/15/87	(N) 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
Lincoln	Agate Beach Balefill	1/6/88	1/6/88	(R) Revised operational plan received	HQ
Jackson	Dry Creek Landfill	1/15/88	1/15/88	(R) Groundwater report received	HQ
Washington	Hillsboro TS	1/15/88	1/15/88	(N) Plans received	HQ

Demolition Waste Sources - 1

Washington	Hillsboro Landfill	1/29/88	1/29/88	(N) Expansion plans received	
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* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Industrial Waste Sources - 11

Douglas	I.P., Gardiner	2/20/86	12/9/86	(N) Add'l. info. received	HQ
Klamath	Weyerhaeuser, Klamath Falls	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Multnomah	Penwalt Corp.	4/2/86	7/14/86	(N) Add'l. info. requested	HQ
Linn	Willamette Industries, Inc. Lime Rejects Site Closure	7/3/86	7/3/86	(C) Plan received	HQ
Douglas	Roseburg Forest Products Co. (Riddle)	7/22/86	12/22/86	(R) Add'l. info. rec'd.	HQ
Coos	Rogge Lumber	7/28/86	6/18/87	(C) Additional info. submitted to revise previous application.	HQ
Douglas	Roseburg Forest Products Co. (Dixonville)	3/23/87	3/23/87	(R) Operational plan	HQ
Douglas	Louisiana-Pacific Round Prarie	9/30/87	9/30/87	(R) Operational plan	HQ
Coos	Weyerhaeuser Co. (North Spit Lndfl.)	10/30/87	10/30/87	(N) Plan received	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Plan received	HQ
Linn	James River, Lebanon	1/22/88	1/22/88	(C) Groundwater report received.	



* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Sewage Sludge Sources - 3

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
Clackamas	Cascade-Phillips Corp. (septage)	11/12/87	11/12/87	(N) Plan received	HQ

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

January 1988  
(Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		PLANNED
	No. <u>This Month</u>	No. <u>Fiscal Year to Date (FYTD)</u>	No. <u>in FY 88</u>
Treatment	0	0	0
Storage	0	0	7
Disposal	0	0	1

INSPECTIONS

	COMPLETED		PLANNED
	No. <u>This Month</u>	No. <u>FYTD</u>	No. <u>in FY 88</u>
Generator	0	30	45
TSD	2	11	29

CLOSURES

	PUBLIC NOTICES			CERTIFICATIONS ACCEPTED		
	No. <u>This Month</u>	<u>FYTD No.</u>	<u>Planned in FY88</u>	No. <u>This Month</u>	<u>No. FYTD</u>	<u>No. Planned in FY 88</u>
Treatment	0	0	0	0	0	0
Storage	0	1	3	0	4	4
Disposal	0	1	2	1	2	3

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
06-JAN-88	PESTICIDE SPILL CLEANUP DEBRIS/LABPACKING PROJ	RCRA SPILL CLEANUP	0.41 CUBIC YARDS
06-JAN-88	LAB PACK-POISON B	RCRA SPILL CLEANUP	0.81 CUBIC YARDS

2 Request(s) approved for generators in Idaho

06-JAN-88	MIXED METAL CHIPS	AIRCRAFT	100.00 CUBIC YARDS
06-JAN-88	PCB EQUIPMENT	PCB REMOVAL & CLEANUP ACTIVITY	2.16 CUBIC YARDS
11-JAN-88	PCB EQUIPMENT	PCB REMOVAL & CLEANUP ACTIVITY	0.81 CUBIC YARDS
19-JAN-88	CHROMIC & PHOSPHORIC ACID/SOLIDS	MOTOR VEHICLES & CAR BODIES	2.97 CUBIC YARDS
19-JAN-88	PCB TRANSFORMER	PCB REMOVAL & CLEANUP ACTIVITY	0.41 CUBIC YARDS
19-JAN-88	PCB CONTAMINATED SOIL	PCB REMOVAL & CLEANUP ACTIVITY	4.86 CUBIC YARDS
22-JAN-88	CARBON-LIME WASTE W/2,4-D	OTHER AGRICULTURAL CHEMICALS	16.20 CUBIC YARDS
22-JAN-88	SOIL CONTAMINATED/SULFURIC ACID	RCRA SPILL CLEANUP	1.89 CUBIC YARDS
25-JAN-88	SOIL, GRAVEL, ETC/PENTACHLOROPHENOL	WOOD PRESERVING	40.00 CUBIC YARDS
25-JAN-88	PCB CONTAMINATED SOLID	PCB REMOVAL & CLEANUP ACTIVITY	2.00 CUBIC YARDS
25-JAN-88	FLOOR DRY/INK REDUCER	TRUCKING, EXCEPT LOCAL	0.54 CUBIC YARDS
25-JAN-88	WASTE ASH	COLLEGES & UNIVERSITIES	1040.00 CUBIC YARDS

12 Request(s) approved for generators in Oregon

06-JAN-88	SOLIDS & ASBESTOS/LEAD	ALKALIES & CHLORINE	54.00 CUBIC YARDS
06-JAN-88	PCB CONTAMINATED SOLIDS	PCB REMOVAL & CLEANUP ACTIVITY	400.00 CUBIC YARDS
06-JAN-88	CONCENTRATED VANILLIN BLACK LIQUOR	PULP MILLS	25,516.26 CUBIC YARDS
11-JAN-88	BAGHOUSE FILTER BAGS	BLAST FURNACES & STEEL MILLS	12.00 CUBIC YARDS
11-JAN-88	DETERGENT CLEANER	SEMICONDUCTORS	0.27 CUBIC YARDS

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
19-JAN-88	HOT TANK SLUDGE	GENERAL AUTOMOTIVE REPAIR SHOP	1.89 CUBIC YARDS
22-JAN-88	CONCRETE & ASPHALT/LEAD	NON-SUPERFUND SITE CLEANUP	80.00 CUBIC YARDS
22-JAN-88	ROAD PAINT CONTAMINATED SOIL	RCRA SPILL CLEANUP	12.00 CUBIC YARDS
22-JAN-88	DUST FROM BAGHOUSES	SHIP BUILDING & REPAIRING	2.70 CUBIC YARDS
22-JAN-88	SLUDGE/NICKEL CHLORIDE	ALKALIES & CHLORINE	8.10 CUBIC YARDS
22-JAN-88	SOIL CONTAMINATED/CADMIUM & LEAD	NON-SUPERFUND SITE CLEANUP	250.00 CUBIC YARDS
25-JAN-88	FIRE EXTINGUISHERS/BROMOCHLOROMETHANE	HW TREAT/STORE/DISPOSE FCLTY	100.00 CUBIC YARDS
25-JAN-88	FIBER FILTERS/PLATING BATHS	AIRCRAFT PARTS	0.81 CUBIC YARDS
25-JAN-88	SPENT BAGS, REACTED ALUMINA	PRIMARY PRODUCTION OF ALUMINUM	200.00 CUBIC YARDS
25-JAN-88	LAB PACK - FLAMMABLE	ENV. SERVICES CONTRACTORS	0.81 CUBIC YARDS

15 Request(s) approved for generators in Washington

29 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

January 1988  
(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	1	4	-	1	5		
Closures	-	1	-	-	5		
Renewals	-	5	-	3	17		
Modifications	-	12	-	11	-		
Total	1	22	0	15	27	176	176
<u>Demolition</u>							
New	1	1	1	1	-		
Closures	-	-	-	-	-		
Renewals	-	-	-	1	1		
Modifications	1	2	-	1	1		
Total	2	3	1	3	2	12	12
<u>Industrial</u>							
New	3	7	3	7	6		
Closures	-	-	-	-	1		
Renewals	-	2	-	-	6		
Modifications	-	9	-	9	-		
Total	3	18	3	16	13	104	104
<u>Sludge Disposal</u>							
New	-	1	-	-	2		
Closures	-	1	-	-	1		
Renewals	-	-	-	-	-		
Modifications	-	6	-	6	-		
Total	0	8	0	6	3	17	17
Total Solid Waste	6	51	4	40	45	309	309

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

January 1988  
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*
Wasco	Verle Fleischman	1/11/88	Letter authorization issued.	
Wasco	Glen E. Chastoin	1/11/88	Letter authorization issued.	
Wasco	George Jackson	1/11/88	Letter authorization issued.	
Coos	Safeway Stores, Inc.	1/20/88	Letter authorization issued.	

SB7335.6

MAR.6 (5/79) SB7335.6

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

January 1988  
(Month and Year)

PERMIT ACTIONS PENDING - 45

* 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 - 27

Clackamas	Rossmans	3/14/84	2/11/87	(C) Applicant review (second draft)	HQ/RO
Malheur	Brogan-Jamieson	6/29/84	4/21/86	(R) Application filed	HQ
Baker	Haines	1/30/85	6/20/85	(R) Applicant review	HQ
Malheur	Adrian	11/7/85	11/7/85	(C) Application filed	RO
Jackson	Ashland	12/9/85	1/13/86	(R) Draft received	HQ
Jackson	So. Stage	12/30/85	8/24/87	(R) Draft received	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	7/9/87	(R) Draft received	HQ
Douglas	Lemolo Trans. Sta.	12/10/86	7/28/87	(R) Draft received	HQ
Multnomah	St. Johns Landfill	12/17/86	12/17/86	(C) Application filed	RO/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
Malheur	Harper Transfer	6/22/87	6/22/87	(N) Application filed	RO
Malheur	Willowcreek Lndfl.	6/22/87	6/22/87	(C) Application filed	RO
Klamath	Klamath Falls Landfill	7/6/87	7/6/87	(R) Application filed	RO

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 *
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Wasco	Northern Wasco Co. Transfer	7/24/87	11/16/87	(N) Applicant review	HQ
Malheur	Harper Landfill	8/17/87	8/17/87	(C) Application filed	RO
Gilliam	Oregon Waste Sys., Inc. Gilliam Cnty Lndfl.	8/31/87	1/22/88	(N) Applicant review	HQ
Grant	Hendrix Landfill	9/17/87	9/17/87	(R) Application filed	RO
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	10/21/87	(R) Application filed	RO
Marion	Ogden-Martin of Marion, Inc. (Brooks)	11/12/87	11/12/87	(R) Applicant review	HQ
Curry	Port Orford Lndfl.	12/14/87	12/14/87	(R) Application filed	RO
Washington	Hillsboro TS	1/15/88	1/15/88	(N) Application received	

Demolition Waste Sources - 2

Coos	Bracelin/Yeager (Joe Ney)	3/28/86	9/2/86	(R) Draft received	HQ
Washington	Hillsboro Lndfl.	1/29/88	1/29/88	(M) Application received	

Industrial Waste Sources - 13

Lane	Bohemia, Dorena	1/19/81	9/1/87	(R) Applicant review of second draft	HQ
Wallowa	Boise Cascade Joseph Mill	10/3/83	5/26/87	(R) Applicant comments received	HQ
Douglas	Int'l Paper (Gardiner)	2/20/86	2/20/86	(N) Application filed	RO
Klamath	Weyerhaeuser, Klamath Falls (Expansion)	3/24/86	11/25/86	(N) Add'l. info. requested	HQ



* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Multnomah	Penwalt	4/2/86	7/14/86	(N) Add'l. info. requested	HQ
Curry	South Coast Lbr.	7/18/86	7/18/86	(R) Application filed	RO
Linn	Western Kraft Lime storage	8/11/86	8/11/86	(C) 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
Linn	Freres Lumber (Lebanon)	7/6/87	1/13/88	(R) Applicant review	HQ
Columbia	Boise Cascade St. Helens Sludge	7/10/87	12/21/87	(R) Applicant review	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Application filed	RO
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO

Sewage Sludge Sources - 3

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
Clackamas	Cascade-Phillips Corp. Septage land appli- cation	11/12/87	11/12/87	(N) Application received	RO

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit)	January, 1988 (Month and Year)
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SUMMARY OF NOISE CONTROL ACTIONS

<u>Source Category</u>	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	8	65	11	90	221	224
Airports			1	9	2	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Noise Control Program</u> (Reporting Unit)	<u>January, 1988</u> (Month and Year)
--	--

FINAL NOISE CONTROL ACTIONS

<u>County</u>	<u>* Name of Source and Location</u>	<u>* Date</u>	<u>* Action</u>
Clackamas	Dick's Concrete Service, Milwaukie	1/87	In compliance
Multnomah	Albina Church of God, Portland	1/88	Referred to City's Noise Office
Multnomah	Fitzpatrick Wood Cutting, SE 136th and Holgate Portland	1/88	In compliance
Multnomah	Master Cleaners, Portland	1/88	In compliance
Multnomah	Mt. St. Joseph's Residence & Extended Care Facility, Portland	1/88	In compliance
Multnomah	Pacific Hoe, Portland	1/88	In compliance
Multnomah	Western Pacific Construction Materials Co., Skookum Dredge, Willamette River, Portland	1/88	In compliance
Washington	Allen Market, Beaverton	1/88	In compliance
Marion	Donald Feed Company, Donald	1/88	In compliance
Marion	Mushroom Plant, State Street	1/88	In compliance
Deschutes	Burlington Northern Railroad, Bend	1/88	Preempted by US FRA rules
Linn	Rainbow Acres Airport, North of Sweethome	1/88	Boundary approved

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY  
1988

CIVIL PENALTIES ASSESSED DURING MONTH OF JANUARY, 1988:

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Banks Lumber Co. Banks, Oregon	AQOB-NWR-87-113 Open burned industrial wood waste.	1/11/88	\$250	Paid 1/13/88.
Stach Construction Company, Inc. Medford, Oregon	AQOB-SWR-87-114 Open burned construction waste; used diesel to promote burning.	1/11/88	\$500	Paid 1/21/88
William V. Price Terrebonne, Oregon	AQ-WS-87-118 Advertising to sell new, uncertified wood stoves.	1/11/88	\$1,000	In default, 2/8/88.
The McCloskey Corporation (Oregon) Portland, Oregon	HW-NWR-87-98 Committed 10 violations of the hazardous waste management rules pertaining to container management and contingency planning.	1/11/88	\$3,000	Contested 2/2/88.

GB7328  
VAN.CP (1/88)

January, 1988  
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	1	1
Discovery	0	0
Settlement Action	3	4
Hearing to be scheduled	0	1
Department reviewing penalty	0	0
Hearing scheduled	3	4
HO's Decision Due	0	0
Briefing	0	0
Inactive	<u>4</u>	<u>4</u>
SUBTOTAL of cases before hearings officer.	11	14
HO's Decision Out/Option for EQC Appeal	0	0
Appealed to EQC	1	2
EQC Appeal Complete/Option for Court Review	3	2
Court Review Option Taken	0	0
Case Closed	<u>0</u>	<u>1</u>
TOTAL Cases	15	19

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

AGDP                 Air Contaminant Discharge Permit

AGL                   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

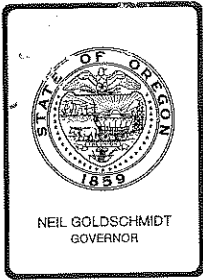
January 1988  
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	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	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
McINNIS ENTERPRISES, LTD., et al.	09/20/83	09/22/83		Prtys	56-WQ-NWR-83-79 WQ Civil Penalty of \$14,500	Hearing deferred.
McINNIS ENTERPRISES, LTD., et al.	10/25/83	10/26/83		Prtys	59-SS-NWR-83-33290P-5 SS license revocation	Hearing deferred.
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 action.
BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	Dept	23-HSW-85 Declaratory Ruling	EQC issued declaratory ruling July 25, 1986. Department of Justice to draft final order reflecting EQC action.
NULF, DOUG	01/10/86	01/13/86	05/05/86	Dept	01-AQFB-85-02 \$500 Civil Penalty	<u>EQC reduced penalty to \$100. 12-11-87. DOJ to draft final order.</u>
<del>VANDERVELDE, ROY</del>	<del>06/06/86</del>	<del>06/10/86</del>	<del>11/06/86</del>	<del>Prtys</del>	<del>05-WQ-WVR-86-39</del> <del>\$5,500 Civil Penalty</del>	<del>Case closed.</del>
RICHARD KIRKHAM dba, WINDY OAKS RANCH		01/07/87	03/04/87	Resp	1-AQ-FB-86-08 \$680 civil penalty	<u>EQC dismissed penalty.</u>

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January 1988  
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	Hrng Date	Resp Code	Case Type & No.	Case Status
MERIT USA, INC.	05/30/87	06/10/87	09/14/87	Prtys	4-WQ-NWR-87-27 \$3500 civil penalty (oil)	Merit appealed to EQC. <u>Cross appeal by Dept. EOC to review at 3-11-88 meeting.</u>
PACIFIC COATINGS, INC.	07/09/87	07/10/87	02/12/88	Prtys	5-AQ-NWR-87-40 \$500 civil penalty (odor)	<u>Hearing scheduled.</u>
<del>VANPORT-MFG.</del>	<del>09/14/87</del>	<del>09/16/87</del>		<del>Hrg</del>	<del>6-WQ-NWR-87-45</del> <del>\$800 civil penalty</del> <del>(turbidity)</del>	<del>Settlement Action:</del> <del>Case settled.</del>
THE WESTERN COMPLIANCE SERVICES, INC.	09/11/87	09/15/87		Prtys	7-HW-NWR-87-48 RCRA & PCB violations	Preliminary issues.
ROGER DEJAGER	10/13/87		03/18/88	Prtys	8-WQ-WVR-87-68	Hearing scheduled. \$1000 Civil Penalty
CITY OF KLAMATH FALLS			05/03/88		1-P-WQ-88 Salt Caves	<u>Klamath Falls appealed to EQC. Hearing scheduled.</u>
<u>Container-Care Portland</u>	<u>01/25/88</u>	<u>01/27/88</u>			<u>6-HW-NWR-87-83</u>	<u>Hearing to be scheduled.</u>
<u>Richard Doeflor</u>	<u>01/08/88</u>	<u>01/11/88</u>	<u>03/11/88</u>		<u>4-AQ-FB-87-05</u>	<u>Hearing scheduled.</u>
<u>Joe L. Heitzman</u>	<u>12/28/87</u>	<u>12/31/87</u>	<u>02/19/88</u>		<u>2-AQ-FB-87-09</u>	<u>Hearing scheduled.</u>
<u>Joe &amp; Louise Wheeler</u>	<u>12/30/87</u>	<u>01/04/88</u>			<u>3-AQ-FB-87-07</u>	<u>Settlement action.</u>
<u>James, Andy</u>	<u>01/08/88</u>	<u>01/08/88</u>			<u>5-HW-WVR-87-74</u>	<u>Settlement action.</u>



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item C, March 11, 1988, EQC Meeting

### TAX CREDIT APPLICATIONS

#### Director's Recommendations

It is recommended that the Commission issue tax credit certificates for the following pollution control facilities:

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-2276	Fink Sanitary Service	2 drop boxes
T-2335	Newberg Garbage Service Inc.	Drop box
T-2392	Gregory Affiliates, Inc.	Boiler, dutch oven, and particulate collector
T-2400	International Paper Co.	Modifications to No. 3 recovery furnace air and liquor supply systems
T-2401	International Paper Co.	Modifications to caustic plant
T-2402	International Paper Co.	Non-condensable gas systems

*Mike Hansen*  
for  
Fred Hansen

C. Nuttall:p  
(503) 229-6484  
February 16, 1988  
MP1232



EQC Agenda Item C  
March 11, 1988  
Page 2

Proposed March 11, 1988 Totals:

Air Quality	\$4,879,791.00
Water Quality	- 0 -
Hazardous/Solid Waste	167,142.00
Noise	- 0 -
	<hr/>
	\$5,046,933.00

1988 Calendar Year Totals not including Tax Credits Certified at this EQC meeting.

Air Quality	\$ 703,251.00
Water Quality	- 0 -
Hazardous/Solid Waste	- 0 -
Noise	- 0 -
	<hr/>
	\$ 703,251.00

MP1232

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Fink Sanitary Service, Inc.  
13826 N.E. Siskiyou Court  
Portland, OR 97230

The applicant owns and operates a garbage collection and recycling business at Portland, Oregon.

Application was made for tax credit for a solid waste recycling facility.

2. Description of Facility

The facility consists of one 10 yard, three bin, drop box for glass collection and one 20 yard drop box for cardboard located at Salty's Restaurant, 513 S.E. Marion Street, Portland, Oregon.

Claimed Facility Cost: \$3,780

Total cost of the facility is under \$20,000 and copies of invoice and cancelled check were 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 April 29, 1987 less than 30 days before installation commenced on May 8, 1987. However, according to the process provided in OAR 340-16-015(1)(b), the application was reviewed by DEQ staff and the applicant was notified that the application was complete and that installation could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on May 8, 1987 and the application for final certification was found to be complete on November 6, 1987 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. This reduction is accomplished by the use of a material recovery process.

It is estimated that the facility will recycle 72,000 pounds of glass and 36,000 pounds of cardboard annually. This material would otherwise be landfilled. The facility was installed to meet a requirement of the City of Portland that collectors provide recycling service to the public.

The facility is in compliance with all Department rules.

- 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 sole purpose of the facility is to convert waste products into a usable product.

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

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

Income from sale of glass and cardboard from this facility is estimated at \$2,600/year (\$1,440 glass and \$1,160 cardboard). Annual operating expenses including labor and equipment use were estimated at \$3,000. This produces a negative annual cash flow of \$400. A negative annual cash flow produces a return on investment of zero which makes the facility 100% eligible.

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

The only other alternatives available would be 55-gallon drums or compactors. The drums would significantly increase handling costs and capital costs on 2 compactors would be excessive.

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

- 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 \$400 above income 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 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 utilize material that would otherwise be solid waste by recycling.

The end product of the utilization is competitive with an end product in another state; and

The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,780 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2276.

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

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1. Applicant

Newberg Garbage Service Inc.  
P.O. Box 990  
Newberg, OR 97132

The applicant owns and operates a garbage collection and recycling business at Newberg, OR.

Application was made for tax credit for a solid waste recycling facility.

2. Description of Facility

The facility consists of a 22 yard, 3 section drop box for collection of glass. The drop box is located at the Newberg Transfer and Recycling Center.

Claimed Facility Cost: \$2,645

The total project cost was under \$20,000 and copies of invoice and cancelled check were 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 August 26, 1987 more than 30 days before installation commenced on October 1, 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 October 1, 1987 and the application for final certification was found to be complete on December 1, 1987 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 recycle.

Prior to installation of the facility, there was inadequate collection and storage facilities at the transfer station for container glass.

This facility was installed to compliment a system put in place in 1986 which provides the "Opportunity to Recycle" program for the City of Newberg. That system has previously been certified for tax credit (T-1847 - attached).

The facility is in compliance with all Department rules.

- 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.

All of the waste products are converted into a salable or usable commodity consisting of glass cullet.

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

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

Estimates are that this portion of the system (glass recycling) will produce an average annual income of \$1,110. Operating costs (labor and transportation) are estimated at \$1,645 annually. This produces a negative annual cash flow of \$535. With a negative annual cash flow, the return on investment is zero and percentage allocable is 100%.

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

Other alternatives such as storage building or smaller drop boxes were considered but had higher capital costs and increased operating costs.

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

Savings result in elimination of double handling of recycled glass. Based on this, the percentage allocable would be 100%.

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 utilize material that would otherwise be solid waste by recycling;

The end product of the utilization is competitive with an end product produced in another state; and

The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

- 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%.

Application No. T-2335

Page 4

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$2,645 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2335.

R.L.Brown:b

SB7339

(503) 229-6237

February 11, 1988



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Newberg Garbage Service  
P.O. Box 990  
Newberg, OR 97132

The applicant owns and operates a solid waste transfer and recycling center at Newberg, Oregon.

Application was made for tax credit for a solid waste recycling facility.

2. Description of Facility

The facility consists of a recycling center and storage area at the transfer station and drop off centers at four locations in Newberg. The claimed recycling system consists of the following:

Recycling boxes	\$29,240
Cardboard bailer	7,000
Cardboard storage building	5,300
Backhoe forks	721
15 - 1 1/2 yard cardboard bins	675
Recycling boxes/news print shed	6,940

Claimed Facility Cost: \$ 49,876  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed March 13, 1984 more than 30 days before installation commenced on August 17, 1984.
- 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 1, 1985, and the application for final certification was found to be complete on October 15, 1986 within 2 years of substantial completion of the facility.

4. Evaluation of Application

The sole purpose of the facility is recycling of materials that would otherwise be solid waste. The recycling center and drop off locations are operated in conjunction with an on-route collection of source separated recyclable materials and the service is in compliance with Department Recycling and Solid Waste Rules (OAR 340-60 and 61).

Percent allocable was determined by using OAR 340-16-030. Facility cost divided by average annual cash flow equal 14.44 (return on investment factor). The useful life of the facility was estimated at 10 years. Using Table One of the rule gives a return on investment of zero. Therefore, the facility is 100% eligible.

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. This reduction is accomplished by the use of a resource recovery process.
- c. The facility complies with DEQ statutes and rules.
- d. The sole purpose of the facility is to utilize material that would otherwise be solid waste by mechanical process for their useful chemical or physical properties.

The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and

The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

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

6. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$49,876 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1847.

Ernest A. Schmidt  
SF1404  
(503) 229-5157  
October 16, 1986

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Gregory Affiliates, Inc.  
Gregory Forest Products, Inc.  
4800 S.W. Griffith Drive  
Beaverton, OR 97005

The applicant owns and operates a veneer plant at Klamath Falls, Oregon.

Application was made for tax credit for a solid waste resource recovery facility.

2. Description of Facility

The facility consists of a Keeler Boiler S/N 14356 with Bigelow-Liptak dutch oven and a particulate collector manufactured by Fly Ash Arrestor Corp.

Claimed Facility Cost: \$160,717.40  
(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 8, 1985 more than 30 days before installation commenced on February 27, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on December 31, 1986 and the application for final certification was found to be complete on December 7, 1987 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.

This reduction is accomplished by the use of an energy recovery process.

The mill produces approximately 55 units of waste per day. Before installation of the facility, a maximum of 40 units per day was being sold at \$4 per unit. The other 15 units was accumulating on site. The new facility is presently utilizing 1.25 units per hour to produce steam (15,000 pounds/hour). The system is capable of utilizing twice this amount under full production.

HB 2023 (1987 Legislative Session) removed energy recovery from tax credit eligibility. This bill became effective September 27, 1987. It is the opinion of the Department of Justice that a facility completed before that date should retain eligibility for tax credit. This facility was completed and placed in operation on December 31, 1986.

The facility is in compliance with all Department rules. The equipment has been source tested and is within limits.

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 sole purpose of the facility is to convert wood waste into energy.

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

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

Based on one year of operation, costs (five-year average) were estimated at \$178,000. Value of steam produced by the facility was estimated at \$77,200 per year. This produces a negative annual cash flow of \$100,800. With a negative cash flow, return on investment is zero and percent allocable for this factor would be 100%.

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

Other alternatives include sale of hog fuel or landfill. Due to the amount of hog fuel produced in the area, sale was not possible. No suitable long-term landfill is available to the company. The percent allocable determined by using this factor would be 100%.

- 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 \$100,000 greater than value of the steam 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 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 solid waste.
- This reduction is accomplished by the use of a resource recovery process.
- c. The facility complies with DEQ statutes and rules.
- d. The sole purpose of the facility is to utilize material that would otherwise be solid waste by burning these materials for their heat content.

The end product of the utilization is a usable source of power.

The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

- e. The portion of the facility cost that is properly allocable to pollution control is 100%.
- f. The facility was completed prior to September 27, 1987, the date of removal of energy recovery facilities from tax credit eligibility.

Application No. T-2392

Page 4

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$160,717.40 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2392.

Robert L. Brown:b

SB7340

(503) 229-6237

February 11, 1988

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

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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 utilizing the Kraft process at Gardiner, Oregon.

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

2. Description of Facility

The claimed facility consists of modifications to the No. 3 recovery furnace's air and liquor supply systems to reduce total reduced sulfur (TRS) emissions.

Claimed Facility Cost: \$3,194,232 (\$3,194,832 actual cost less \$600 salvage from original facility)  
(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 April 19, 1985, more than 30 days before construction commenced on November 25, 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 August 31, 1986, and the application for final certification was found to be complete on February 1, 1988, 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 TRS emissions. The requirement is to comply with the recovery furnace 5 ppm TRS limitation contained in OAR 340-25-630 and the Air Contaminant Discharge Permit.

Excursions of TRS were occurring continually resulting in exceedances of the 5 ppm standard. These exceedances were due to the following:

- (1) Incomplete combustion of all sulfur-containing gases resulting from poor air distribution; and
- (2) Inconsistent black liquor temperature affecting the distribution of black liquor to the furnace.

To correct deficiencies noted in (1), secondary and tertiary air fans were added, ducting and air heaters from the fans to the recovery boiler were changed, the exhaust gas fan was replaced, and the air openings into the furnace were replaced. Corrective measures for deficiencies noted in (2) consisted of a new black liquor heater, associated piping and instrumentation, and the addition of liquor pumps to maintain a constant liquor feed to the furnace. The oil burner system was entirely revised to increase its reliability and minimize the duration of TRS excursions should upset smelt bed conditions occur.

The claimed facility has been inspected and has been found to be operating in compliance with Department Regulations and permit conditions. Monthly monitoring data indicate that TRS emissions have been reduced from an average of 4.95 ppm to 2.30 ppm as a result of the modification.

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. This analysis also took into account that the previous facility had never received tax credit.

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

Although the No. 3 recovery furnace is used to recover inorganic pulping chemicals and to generate steam, the claimed facility has little or no effect on either function.



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

There is no return on the investment in the facility due to insignificant or no change in recovery of the inorganic chemicals or the amount of steam generated resulting from the claimed facility.

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

This project was undertaken only after an engineering study by consultants to define the problem and the least cost method of correction. Subsequent to the study the project was placed on bid. The contract was given to the lowest bidder.

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

The applicant indicated that salvage of scrap metal from items removed from the existing No. 3 recovery furnace, during modification, would generate approximately \$600 of income. This amount was subtracted from the total cost of \$3,194,832 to arrive at an eligible facility cost of \$3,194,232.

- (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.

Based on these findings, factor no. 4 is the most applicable factor. The eligible cost of the facility (determined by factor no. 4) properly allocable to pollution control is 100% of \$3,194,232.

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 as defined in ORS 468.700.

- c. The facility complies with DEQ statutes and rules and permit conditions).
- d. The portion of the eligible facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,194,232 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2400.

W. J. Fuller:k  
AK247  
(503) 229-5749  
2-4-88

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

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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 utilizing the Kraft process at Gardiner, Oregon.

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

2. Description of Facility

The claimed facility consists of modifications to the caustic plant to reduce total reduced sulfur (TRS) emissions.

Claimed Facility Cost: \$1,228,995 (\$1,229,495 actual cost less \$500.00 salvage from original facility)  
(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 15, 1985, more than 30 days before construction commenced on November 25, 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 August 31, 1986, and the application for final certification was found to be complete on January 20, 1988, 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 Department Regulations to operate the lime kiln continuously below the 8 ppm TRS limit.

To achieve this level of control it was necessary to eliminate the need to use weak wash water in the lime kiln scrubber, improve lime mud washing and improve lime kiln oxidation efficiency. To accomplish this the following items were added:

1. #4 white liquor storage tank
2. Green liquor heater with temperature control
3. Auto advancing doctor blade on the mud filter
4. Pair of green liquor/weak wash lines
5. White liquor splitter

Additionally, extensive modification of 9 major components, with some change in service usage, occurred, including extensive piping change.

The facility has been inspected and has been found to be operating in compliance with Department Regulations and permit conditions. Monthly monitoring data indicate substantial reduction of TRS emissions. Prior to installation of the claimed facility TRS emissions ranged from 81.4 to 8.9 ppm. After installation of the claimed facility TRS emissions were in the magnitude of 5.1 to 1.4 ppm.

- b. Eligible Cost Findings

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

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

Although the caustic plant is used to recover white liquor for reuse in the digesters and lime for reuse in the slaker the claimed facility has little or no effect on these two functions.

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

There is no return on the investment in the facility due to insignificant or no change in the recovery of the cooking chemicals used in the digesters or the lime reclaimed for reuse in the slaker.

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

The project was undertaken only after an engineering study by technical consultants to determine methods to lower TRS emissions. It was determined that there was no other acceptable alternative.

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

The applicant indicated that salvage of scrap metal from items removed from the caustic plant, during modification, would generate approximately \$500 of income. This amount was subtracted from the total cost of \$1,229,495 to arrive at an eligible facility cost of \$1,228,995.

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 factor No. 4 is 100% of \$1,228,995.

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%.

Application No. T-2401  
Page 4

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,228,995 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2401.

W.J. Fuller:d  
AD2134  
(503) 229-5749  
February 12, 1988

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

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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 utilizing the Kraft process at Gardiner, Oregon.

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

2. Description of Facility

The claimed facility consists of a noncondensable gas system.

Claimed Facility Cost: \$456,564  
(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 28, 1985, less than 30 days before construction commenced on November 11, 1985. However, according to the process provided in OAR 340-16-015(1)(b), the application was reviewed by DEQ staff and the applicant was notified that preliminary certification was approved and that construction could commence.
- 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 23, 1986, and the application for final certification was found to be complete on January 23, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of air pollution. This prevention is accomplished by providing an alternate method for incineration of noncondensable gases in the event that the lime kiln is not operating. A previous system for which tax credit had not been received was inadequate and was replaced by the claimed facility.

The claimed facility has been inspected and has been found to be operating in compliance with permit conditions. Venting of noncondensable gases have been reported to be reduced from approximately 5 days/month to less than one hour/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.

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.

There is no alternative to a noncondensable gas system (incineration system) other than a second lime kiln which is not required for production reasons and would be more expensive.

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 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%.

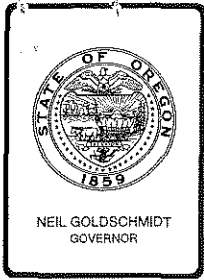
5. Summation

- 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 prevent a substantial quantity of air pollution and accomplishes this purpose by the efficient incineration of noncondensable gases.
- 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 \$456,564 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2402.

William Fuller:k  
AK249  
(503) 229-5749  
2-8-88



## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1334 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item D March 11, 1988 EQC Meeting

Request for Authorization to Conduct a Public Hearing on Amendments to Procedures for Issuance, Denial, Modification and Revocation of Permits (OAR 340-14-005 through 050), New Source Review Air Contaminant Discharge Permit Procedural Requirements (OAR 340-20-230), and Issuance of NPDES Permits (OAR 340-45-035)

### Background and Problem Statement

The Procedures for Issuance, Denial, Modification and Revocation of Permits contained in OAR 340-14-005 through 050 (Division 14) prescribe uniform procedures for obtaining permits from the Department of Environmental Quality. These regulations require the Department to send proposed permit provisions to applicants and other interested persons for comment. Interested persons may submit comments until 14 days after the date the proposed provisions were mailed. In deciding whether to issue a permit, the Department must consider the submitted comments. Although the Department follows certain written and unwritten procedures for holding public hearings on various proposed permit provisions, DEQ's general procedures in Division 14 contain no public hearing requirements or guidance.

In the December 1987 settlement of a law suit filed by the Sierra Club and the Oregon Environmental Council, the Department agreed to propose and recommend adoption of an amendment that specifies when the Department would hold public hearings on proposed permits. (Sierra Club et al. v Department of Environmental Quality, Multnomah County Circuit Court Case No. A8704-02706) The Sierra Club and the Oregon Environmental Council contended that the Department should have held a public hearing before issuing to Entek Manufacturing Company a five year permit setting limits on discharges of trichloroethylene. Prior to issuing the Entek permit, the Department provided the public with a chance to comment by letter, placed a notice in the local newspaper, sent news releases to the local media, prepared and distributed a fact sheet and placed an information packet in the local library. The Department decided not to hold a public hearing on the Entek permit because of time constraints and the belief that the public had been provided with ample opportunity to comment on proposed permit provisions.

AD2135

Although the Air Quality Division acted within its customary permitting procedures, its failure to hold a public hearing resulted in considerable controversy and a legal action against the Department. These results may have been avoided by the existence of uniform regulations requiring, under certain conditions, public hearings on proposed permits.

This proposed rule change is necessary both to provide procedural consistency in Department regulations and to comply with the terms of the settlement agreement in the Entek lawsuit. The settlement agreement in the Entek permit lawsuit (Entek settlement agreement) contains mutually agreed language on hearings procedures to be inserted into Division 14. It is included as Attachment 3. The settlement agreement provides that the Department will "propose and recommend adoption and promulgation of a new administrative regulation expanding citizen participation in its permit process...promptly and in any case within 60 days of" the execution of the settlement agreement. In addition to providing the materials supporting the proposed rule change, this Staff Report will also describe and clarify Department procedures for public participation in the permitting process. New Source Review and NPDES permit procedures are being amended to make them consistent with the amendment to Division 14. Revisions to OAR 340-14-005 through 050 General Permit Procedures and OAR 340-20-230 New Source Review Permit Procedures will also be revisions to the State Clean Air Act Implementation Plan.

The Commission has the authority to adopt the necessary rule revisions under ORS 468.020.

#### Evaluation and Alternatives

The existing rules and proposed rule revisions are included as Attachments 1 and 2 respectively.

#### **NATURE OF THE CHANGE**

#### **Procedures for Issuance, Denial, Modification and Revocation of Permits (340-14-005 through 050)**

##### **A. Addition of language contained in Settlement Agreement**

The amendment to OAR 340-14-025 would require the Department to hold a public hearing on proposed permit provisions if, within 14 days after mailing the provisions to interested persons, ten (10) persons or organizations representing at least ten persons submit written requests for a hearing. The Department would then, before taking final action on the

permit, be required to hold a public hearing on the proposed provisions at a reasonable place and time and on reasonable notice.

This proposed change would apply to permitting procedures within all divisions of the DEQ, except those procedures that have been specifically exempted or are governed by separate federal regulations adopted by the Commission. National Pollution Discharge Elimination (NPDES) permits are specifically exempted from Division 14 permitting procedures. Division 14 states minimum procedural requirements for the permitting process. These amendments are not intended to hamper the Department's ability to designate or allow for longer deadlines or more extensive public participation in permit issuance.

Persons applying for permits may be concerned that the amendment requiring a public hearing would lengthen the time between permit application and issuance. The Department would attempt to minimize any additional applicant waiting time by anticipating controversial permits and scheduling a hearing ahead of time, before written requests are received.

#### B. Addition of RCRA and UST permits to the section on Exceptions

RCRA permits, are governed by federal requirements that have been adopted by the Department. Consequently, they could be included under Exceptions to Division 14 at 340-14-007. Underground Storage Tank (UST) permits are governed by separate procedures designed to meet unique UST circumstances. There are approximately 23,000 existing underground storage tanks in Oregon that must be permitted by February, 1989. The UST permit is similar to a registration or certification, and involves no standards for discharge of pollutants. To facilitate administration of the UST program, the UST permit should also be specifically exempted from the requirements of Division 14.

#### C. Amendments requiring the Department to complete action on an application within 45 days of the closing of public comment or hearing record

By triggering a public hearing process which could extend beyond the existing 45 day deadline for final action on a complete application in 340-14-020(4)(b) and (5), the new public hearing requirement inserted at 340-14-025(3) would cause a procedural conflict. Also, contrary to the intent of the new public hearing requirement, the existing 340-14-020(5) would, without regard to the hearings process, cause automatic issuance of a temporary or conditional permit if the Department failed to complete action on a permit within 45 days of notifying the applicant that the application was complete. Because of these conflicts, it is necessary to amend 340-14-020(4)(b) and (5) and 340-14-025(3) (new subsection (4)) to require the Department to complete action on an application within 45 days of the closing of public comment referred to in 340-14-025(2) or the closing of the record of the public hearing required by the new 340-14-025(3). Under

these amendments, the applicant will still be notified that an application is complete. However, the 45 day time for final agency action on an application will be triggered by the closing of the public hearing or comment record.

#### New Source Review Permit Procedures (340-20-230(3)(b)(E))

The rules contained in 340-20-230 state procedural requirements for New Source Air Contaminant Discharge Permit applications. This amendment elaborates upon the standard of "significant interest" which causes the Department to provide an opportunity for a public hearing. Under this amendment, the Department would provide a public hearing "[u]pon determination that significant public interest exists, or upon written requests from ten (10) persons, or from an organization or organizations representing "at least ten persons"". Addition of this language would bring 340-20-230(3)(b)(E) into conformity with the new language in Division 14, and would make more definite a previously vague standard.

#### NPDES Permit Procedures (340-45-035(7))

The rules contained in 340-45-035 state procedural requirements for the issuance of National Pollution Discharge Elimination System (NPDES) Permits. This amendment would also further define "significant public interest", the trigger for public hearings on permit applications, as "written requests from (10) persons, or from an organization or organizations representing at least ten persons"". Addition of this language would make the public hearings standard in the NPDES regulations consistent with the public hearings standard in the Department's general permitting procedures.

#### Elimination of gender-specific language in OAR 340-14-005 through 050

This amendment exchanges masculine pronouns used in Division 14 for gender-neutral references. The meaning of affected sections is unchanged.

#### Results of the Changes

Under the proposed rule changes, the following permit application process under Division 14 would result:

1. An applicant submits an application for a permit at least 60 days before a permit is needed.
2. Within 15 days after filing the Department will preliminarily review the application for adequacy of information. If needed, the Department will

request more information, without which an application will be incomplete for processing.

3. If the Director determines that more facts regarding the application must be gathered, the applicant will be notified and a time table and procedures will be established. When adequate information has been gathered, the Department will notify the applicant that the application is complete for processing.

4. The Department will review the complete application and propose permit provisions. Proposed provisions will be sent to the applicant and interested persons for comment. To receive consideration, written comments must be received within 14 days after the proposed provisions were mailed.

5. If, within 14 days after mailing of the proposed provisions, ten persons or an organization or organizations representing at least ten persons requests in writing a public hearing, the Department shall provide such a hearing. The Department may also schedule a public hearing before receiving written requests, or if fewer than ten persons request a hearing.

6. Within 45 days after closing of the public comment period, or after closing of the public hearing record if a hearing was held, the Department shall take final action on a permit application, and promptly notify the applicant.

7. If the Department fails to take final action on an application within 45 days after closing of the public comment and hearing record, the applicant will receive a temporary or conditional permit which will expire upon final agency action upon the application.

8. If an application for a renewal of a permit is filed with the Department in a timely manner prior to the expiration date of the existing permit, the existing permit will not expire until the Department has taken final action on the renewal application.

9. An applicant may request a hearing before the Commission within 20 days of the mailing date of the notification of permit issuance.

#### **ALTERNATIVES**

The Commission could authorize a hearing on the proposed rules, authorize a hearing on a revised set of rules, or take no action.

The alternative of taking no action would constitute a breach of the Entek Settlement Agreement. The no-action alternative would fail to provide the Department, permit applicants and the public with uniform regulatory procedures for public hearings on permits and a consistent standard for measuring significant public interest.

As an alternative to placing the proposed amendment in the general permitting procedures, the Commission could consider adopting rules that would add the new public hearing requirement to each of the Department's permit regulations. This alternative would involve a more complex adoption of rules, and would not guarantee that the hearing requirement would be included in future permit regulations. This could arguably constitute a breach of the Entek Settlement Agreement.

The Commission could consider adopting the proposed public hearing amendment to Division 14 and take no action on any of the other proposed amendments. Under this alternative, the Commission would comply with the Entek Settlement Agreement, but not address resulting inconsistencies in other administrative rules.

As a final alternative, the Commission could consider adopting more extensive rules concerning public hearings on proposed permits. For example: Proposed rules could specify detailed procedures for maintenance of mailing lists, issuance of public notice, scheduling of hearings, and could provide longer time periods in which to complete specified acts. Adoption of more extensive rules may not be necessary as the proposed amendments would provide basic procedures designed to assure the public of an opportunity to participate in the permitting process. Internal guidelines could take the place of more extensive administrative rules.

Because of past inconsistency between Divisions in Department permitting procedures and the need for clear guidelines on facilitating public participation, the Department has drafted guidelines for public participation in the permitting process. These guidelines will serve as a reference for permit writers throughout the Department, and are appended to this report as Attachment 4.

#### Summary

1. The Department's General Permit Regulations do not contain language specifying procedures or requirements for public hearings.
2. The Settlement Agreement in Sierra Club et al. v Department of Environmental Quality requires the Department to propose and recommend adoption of a new administrative regulation expanding citizen participation in the permit process. Mutually agreed language provides that a public hearing will be held if, within 14 days after mailing of permit provisions, the Department receives written requests from ten (10) persons or organizations representing at least ten persons.
3. Additional amendments are necessary to maintain consistency between other Department permitting procedures affecting New Source Review,

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NPDES, UST and RCRA and the new public hearing rule, and to change gender specific references in Division 14.

Director's Recommendation

Based on the Summary, it is recommended that the Commission authorize a public hearing to take testimony on the proposed rule changes to procedures for issuance, denial, modification and revocation of permits (OAR 340-14-005 through 050) and related amendments to rules on issuance of New Source Air Contaminant Discharge Permits (OAR 340-20-230) and issuance of NPDES permits (OAR 340-45-035).

*Mike Hous*  
for  
Fred Hansen

Attachments: 1. Existing Rules  
2. Proposed Rule Revisions  
3. Entek Settlement Agreement  
4. Guidelines on Public Participation in Permitting  
5. Draft Statement of Need for Rulemaking  
6. Draft Public Notice

Sarah V. Armitage  
229-5581  
February 24, 1988



EXISTING RULES

ATTACHMENT 1  
Agenda Item D  
March 11, 1988 EQC MEETING

PROCEDURES FOR ISSUANCE,  
DENIAL, MODIFICATION AND  
REVOCAION OF PERMITS

340-14-005	Purpose
*** 340-14-007	Exception
*** 340-14-010	Definitions
340-14-015	Type, Duration and Termination of Permits
*** 340-14-020	Application for a Permit
*** 340-14-025	Issuance of a Permit
340-14-030	Renewal of a Permit
340-14-035	Denial of a Permit
340-14-040	Modification of a Permit
340-14-045	Suspension or Revocation of a Permit
340-14-050	Special Permits

NEW SOURCE REVIEW

340-20-220	Applicability
340-20-225	Definitions
*** 340-20-230	Procedural Requirements
340-20-235	Review of New Sources and Modifications for Compliance with Regulations
340-20-240	Requirements for Sources in Non-attainment Areas
340-20-241	Growth Increments

REGULATIONS PERTAINING TO  
NPDES AND WPCF PERMITS

340-45-005	Purpose
340-45-010	Definitions
340-45-015	Permit Required
340-45-020	Procedures for obtaining WPCF Permits
340-45-025	Procedures for obtaining WPCF Permits
340-45-030	Application for NPDES Permit
340-45-033	General Permits
*** 340-45-035	Issuance of NPDES Permits
340-45-040	Renewal or Modification of NPDES Permits
340-45-045	Transfer of a NPDES Permit
340-45-050	Denial of a NPDES Permit
340-45-055	Department Initiated Modification of a NPDES Permit
340-45-060	Suspension or Revocation of a NPDES Permit

LOCATIONS OF REVISIONS ARE DENOTED BY \*\*\* (REFER TO ATTACHMENT 2 OF THIS AGENDA ITEM FOR THE SPECIFIC REVISIONS)

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 14 — DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 14

Stat. Auth.: ORS Ch.

Hist.: DEQ 42, f. 4-5-72, cf. 4-15-72; DEQ 125, f. & cf. 12-16-76

**PROCEDURES FOR ISSUANCE,  
DENIAL, MODIFICATION, AND  
REVOCAION OF PERMITS**

**Purpose**

340-14-005 The purpose of these regulations is to prescribe uniform procedures for obtaining permits from the Department of Environmental Quality as prescribed by Oregon Revised Statutes (ORS) 449.083; Chapter 406, Oregon Laws 1971; and Chapter 648, Oregon Laws 1971.

Stat. Auth.: ORS Ch.

Hist.: DEQ 42, f. 4-5-72, cf. 4-15-72

**Exception**

\*\*\* 340-14-007 The procedures prescribed in this Division do not apply to the issuance, denial, modification and revocation of National Pollutant Discharge Elimination System (NPDES) permits issued pursuant to the Federal Water Pollution Control Act Amendments of 1972 and acts amendatory thereof or supplemental thereto. The procedures for processing and issuance of NPDES permits are prescribed in OAR Chapter 340, rules 340-45-005 through 340-45-065.

Stat. Auth.: ORS Ch.

Hist.: DEQ 53(Temp), f. & cf. 6-21-73; DEQ 58, f. 9-21-73, cf. 10-15-73

**Definitions**

\*\*\* 340-14-010 As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality. Department actions shall be taken by the Director as defined herein.

(2) "Commission" means Environmental Quality Commission.

(3) "Director" means Director of the Department of Environmental Quality or his authorized deputies or officers.

(4) "Permit" means a written permit issued by the Department, bearing the signature of the Director, which by its conditions may authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities or emit, discharge or dispose of wastes in accordance with specified limitations.

Stat. Auth.: ORS Ch.

Hist.: DEQ 42, f. 4-5-72, cf. 4-15-72

**Type, Duration, and Termination of Permits**

340-14-015 (1) Permits issued by the Department will specify those activities, operations, emissions and discharges which are permitted as well as the requirements, limitations and conditions which must be met.

(2) The duration of permits will be variable, but shall not exceed ten (10) years. The expiration date will be recorded on each permit issued. A new application must be filed with the Department to obtain renewal or modification of a permit.

(3) Permits are issued to the official applicant of record for the activities, operations, emissions or discharges of record and shall be automatically terminated:

(a) Within 60 days after sale or exchange of the activity or facility which requires a permit;

(b) Upon change in the nature of activities, operations, emissions or discharges from those of record in the last application;

(c) Upon issuance of a new, renewal or modified permit for the same operation;

(d) Upon written request of the permittee.

**Application for a Permit**

\*\*\* 340-14-020 (1) Any person wishing to obtain a new, modified, or renewal permit from the Department shall submit a written application on a form provided by the Department. Applications must be submitted at least 60 days before a permit is needed. All application forms must be completed in full, signed by the applicant or his legally authorized representative, and accompanied by the specified number of copies of all required exhibits. The name of the applicant must be the legal name of the owner of the facilities or his agent or the lessee responsible for the operation and maintenance.

(2) Applications which are obviously incomplete, unsigned, or which do not contain the required exhibits (clearly identified) will not be accepted by the Department for filing and will be returned to the applicant for completion.

(3) Applications which appear complete will be accepted by the Department for filing.

(4) Within 15 days after filing, the Department will preliminarily review the application to determine the adequacy of the information submitted:

(a) If the Department determines that additional information is needed it will promptly request the needed information from the applicant. The application will not be considered complete for processing until the requested information is received. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request;

\*\*\* (b) If, in the opinion of the Director, additional measures are necessary to gather facts regarding the application, the Director will notify the applicant of his intent to institute said measures and the timetable and procedures to be followed. The application will not be considered complete for processing until the necessary additional fact-finding measures are completed. When the information in the application is deemed adequate, the applicant will be notified that this application is complete for processing. Processing will be completed within 45 days after such notification.

\*\*\* (5) In the event the Department is unable to complete action on an application within 45 days after notification that the application is complete for processing, the applicant shall be deemed to have received a temporary or conditional permit, such permit to expire upon final action by the Department to grant or deny the original application. Such temporary or conditional permit does not authorize any construction, activity, operation or discharge which will violate any of the laws, rules, or regulations of the State of Oregon or the Department of Environmental Quality.

(6) If, upon review of an application, the Department determines that a permit is not required, the Department shall notify the applicant in writing of this determination. Such notification shall constitute final action by the Department on the application.

Stat. Auth.: ORS Ch.

Hist.: DEQ 42, f. 4-5-72, cf. 4-15-72

**Issuance of a Permit**

340-14-025 (1) Following determination that it is complete for processing, each application will be reviewed on its own merits. Recommendations will be developed in accordance with the provisions of all applicable statutes, rules and regulations of the State of Oregon and the Department of Environmental Quality.

(2) If the Department proposes to issue a permit, proposed provisions prepared by the Department will be forwarded to the applicant and other interested persons at the discretion of the Department for comment. All comments must be submit-

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CHAPTER 340, DIVISION 14 — DEPARTMENT OF ENVIRONMENTAL QUALITY

ted in writing within 14 days after mailing of the proposed provisions if such comments are to receive consideration prior to final action on the application.

\*\*\* (3) After 14 days have elapsed since the date of mailing of the proposed provisions, the Department may take final action on the application for a permit. The Department may adopt or modify the proposed provisions or recommend denial of a permit. In taking such action, the Department shall consider the comments received regarding the proposed provisions and any other information obtained which may be pertinent to the application being considered.

\*\*\* (4) The Department shall promptly notify the applicant in writing of the final action taken on his application. If the Department recommends denial, notification shall be in accordance with the provisions of rule 340-14-035. If the conditions of the permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the permit issued shall be attached to the notification.

\*\*\* (5) If the applicant is dissatisfied with the conditions or limitations of any permit issued by the Department, he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of issuance of the permit. Any hearing held shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch.  
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

#### Renewal of a Permit

340-14-030 The procedure for issuance of a permit shall apply to renewal of a permit. If a completed application for renewal of a permit is filed with the Department in a timely manner prior to the expiration date of the permit, the permit shall not be deemed to expire until final action has been taken on the renewal application to issue or deny a permit.

Stat. Auth.: ORS Ch.  
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

#### Denial of a Permit

340-14-035 If the Department proposes to deny issuance of a permit, it shall notify the applicant by registered or certified mail of the intent to deny and the reasons for denial. The denial shall become effective 20 days from the date of mailing of such notice unless within that time the applicant requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch.  
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

#### Modification of a Permit

340-14-040 In the event that it becomes necessary for the Department to institute modification of a permit due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes, the Department shall notify the permittee by regis-

tered or certified mail of its intent to modify the permit. Such notification shall include the proposed modification and the reasons for modification. The modification shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department. A copy of the modified permit shall be forwarded to the permittee as soon as the modification becomes effective. The existing permit shall remain in effect until the modified permit is issued.

Stat. Auth.: ORS Ch.  
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

#### Suspension or Revocation of a Permit

340-14-045 (1) In the event that it becomes necessary for the Department to suspend or revoke a permit due to non-compliance with the terms of the permit, unapproved changes in operation, false information submitted in the application or any other cause, the Department shall notify the permittee by registered mail of its intent to suspend or revoke the permit. Such notification shall include the reasons for the suspension or revocation. The suspension or revocation shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department.

(2) If the Department finds that there is a serious danger to the public health or safety or that irreparable damage to a resource will occur, it may, pursuant to applicable statutes, suspend or revoke a permit effective immediately. Notice of such suspension or revocation must state the reasons for such action and advise the permittee that he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 90 days of the date of suspension and shall state the grounds for the request. Any hearing shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch.  
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

#### Special Permits

340-14-050 The Department may waive the procedures prescribed in rule 340-14-025 and issue special permits of duration not to exceed 60 days from the date of issuance for unexpected or emergency activities, operations, emission or discharges. Said permits shall be properly conditioned to insure adequate protection of property and preservation of public health, welfare and resources. Application for such permits shall be in writing and may be in the form of a letter which fully describes the emergency and the proposed activities, operations, emissions or discharges.

Stat. Auth.: ORS Ch.  
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

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pension, or similar arrangement. For purposes of this section, income derived from mutual-fund payments, or from other diversified investments as to which the recipient does not know the identity of the primary sources of income, shall be considered part of the recipient's gross personal income but shall not be treated as income derived from persons subject to permits or enforcement orders under the Clean Air Act.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 15-1978, f. & ef. 10-13-78

**Public Interest Representation**

**340-20-210** At least a majority of the members of the Commission and the Director shall represent the public interest and shall not derive any significant portion of their respective incomes directly from persons subject in Oregon to permits or enforcement orders under the Clean Air Act.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 15-1978, f. & ef. 10-13-78

**Disclosure of Potential Conflicts of Interest**

**340-20-215** Each member of the Commission and the Director shall disclose any potential conflict of interest.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 15-1978, f. & ef. 10-13-78

**New Source Review**

**Applicability**

**340-20-220** (1) No owner or operator shall begin construction of a major source or a major modification of an air contaminant source without having received an Air Contaminant Discharge Permit from the Department of Environmental Quality and having satisfied OAR 340-20-230 through 340-20-280 of these rules.

(2) Owners or operators of proposed non-major sources or non-major modifications are not subject to these New Source Review rules. Such owners or operators are subject to other Department rules including Highest and Best Practicable Treatment and Control Required (OAR 340-20-001), Notice of Construction and Approval of Plans (OAR 340-20-020 to 340-20-032), Air Contaminant Discharge Permits (OAR 340-20-140 to 340-20-185), Emission Standards for Hazardous Air Contaminants (OAR 340-25-450 to 340-25-480), and Standards of Performance for New Stationary Sources (OAR 340-25-505 to 340-25-545).

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 25-1981, f. & ef. 9-8-81

**Definitions**

**340-20-225** (1) "Actual emissions" means the mass rate of emissions of a pollutant from an emissions source:

(a) In general, actual emissions as of the baseline period shall equal the average rate at which the source actually emitted the pollutant during the baseline period and which is representative of normal source operation. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(b) The Department may presume that existing source-specific permitted mass emissions for the source are equiv-

alent to the actual emissions of the source if they are within 10% of the calculated actual emissions.

(c) For any newly permitted emission source which had not yet begun normal operation in the baseline period, actual emissions shall equal the potential to emit of the source.

(2) "Baseline Concentration" means that ambient concentration level for a particular pollutant which existed in an area during the calendar year 1978. If no ambient air quality data is available in an area, the baseline concentration may be estimated using modeling based on actual emissions for 1978. The following emission increases or decreases will be included in the baseline concentration:

(a) Actual emission increases or decreases occurring before January 1, 1978; and

(b) Actual emission increases from any major source or major modification on which construction commenced before January 6, 1975.

(3) "Baseline Period" means either calendar years 1977 or 1978. The Department shall allow the use of a prior time period upon a determination that it is more representative of normal source operation.

(4) "Best Available Control Technology (BACT)" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each air contaminant subject to regulation under the Clean Air Act which would be emitted from any proposed major source or major modification which, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air contaminant. In no event, shall the application of BACT result in emissions of any air contaminant which would exceed the emissions allowed by any applicable new source performance standard or any standard for hazardous air pollutants. If an emission limitation is not feasible, a design, equipment, work practice, or operational standard, or combination thereof, may be required. Such standard shall, to the degree possible, set forth the emission reduction achievable and shall provide for compliance by prescribing appropriate permit conditions.

(5) "Class I area" means any Federal, State or Indian reservation land which is classified or reclassified as Class I area. Class I areas are identified in OAR 340-31-120.

(6) "Commence" means that the owner or operator has obtained all necessary preconstruction approvals required by the Clean Air Act and either has:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source to be completed in a reasonable time; or

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed in a reasonable time.

(7) "Construction" means any physical change (including fabrication, erection, installation, demolition, or modification of an emissions unit) or change in the method of operation of a source which would result in a change in actual emissions.

(8) "Emission Reduction Credit Banking" means to presently reserve, subject to requirements of these provi-

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sions, emission reductions for use by the reserver or assignee for future compliance with air pollution reduction requirements.

(9) "Emissions Unit" means any part of a stationary source (including specific process equipment) which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

(10) "Federal Land Manager" means with respect to any lands in the United States, the Secretary of the federal department with authority over such lands.

(11) "Fugitive emissions" means emissions of any air contaminant which escape to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.

(12) "Growth Increment" means an allocation of some part of an airshed's capacity to accommodate future new major sources and major modifications of sources.

(13) "Lowest Achievable Emission Rate (LAER)" means that rate of emissions which reflects: the most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event, shall the application of this term permit a proposed new or modified source to emit any air contaminant in excess of the amount allowable under applicable new source performance standards or standards for hazardous air pollutants.

(14) "Major Modification" means any physical change or change of operation of a source that would result in a net significant emission rate increase (as defined in definition (22)) for any pollutant subject to regulation under the Clean Air Act. This criteria also applies to any pollutants not previously emitted by the source. Calculations of net emission increases must take into account all accumulated increases and decreases in actual emissions occurring at the source since January 1, 1978, or since the time of the last construction approval issued for the source pursuant to the New Source Review Regulations for that pollutant, whichever time is more recent. If accumulation of emission increases results in a net significant emission rate increase, the modification causing such increases become subject to the New Source Review requirements including the retrofit of required controls.

(15) "Major Source" means a stationary source which emits, or has the potential to emit, any pollutant regulated under the Clean Air Act at a Significant Emission Rate (as defined in definition (22)).

(16) "Nonattainment Area" means a geographical area of the State which exceeds any state or federal primary or secondary ambient air quality standard as designated by the Environmental Quality Commission and approved by the Environmental Protection Agency.

(17) "Offset" means an equivalent or greater emission reduction which is required prior to allowing an emission increase from a new major source or major modification of a source.

(18) "Plant Site Emission Limit" means the total mass emissions per unit time of an individual air pollutant specified in a permit for a source.

(19) "Potential to Emit" means the maximum capacity of a source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a source.

(20) "Resource Recovery Facility" means any facility at which municipal solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing municipal solid waste for reuse. Energy conversion facilities must utilize municipal solid waste to provide 50% or more of the heat input to be considered a resource recovery facility.

(21) "Secondary Emissions" means emissions from new or existing sources which occur as a result of the construction and/or operation of a source or modification, but do not come from the source itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the source associated with the secondary emissions. Secondary emissions may include, but are not limited to:

(a) Emissions from ships and trains coming to or from a facility;

(b) Emissions from off-site support facilities which would be constructed or would otherwise increase emissions as a result of the construction of a source or modification.

(22) "Significant emission rate" means:

(a) Emission rates equal to or greater than the following for air pollutants regulated under the Clean Air Act:

Table 1: Significant Emission Rates for Pollutants Regulated Under the Clean Air Act

<u>Pollutant</u>	<u>Significant Emission Rate</u>
(A) Carbon Monoxide	100 tons/year
(B) Nitrogen Oxides	40 tons/year
(C) Particulate Matter*	.25 tons/year
(D) Sulfur Dioxide	40 tons/year
(E) Volatile Organic Compounds*	40 tons/year
(F) Lead	.06 tons/year
(G) Mercury	.01 ton/year
(H) Beryllium	.0004 ton/year
(I) Asbestos	.0007 ton/year
(J) Vinyl Chloride	.1 ton/year
(K) Fluorides	.3 tons/year
(L) Sulfuric Acid Mist	.7 tons/year
(M) Hydrogen Sulfide	.10 tons/year
(N) Total reduced sulfur (including hydrogen sulfide)	.10 tons/year
(O) Reduced sulfur compounds (including hydrogen sulfide)	.10 tons/year

NOTE: \*For the nonattainment portions of the Medford-Ashland Air Quality Maintenance Area, the Significant Emission Rates for particulate matter and volatile organic compounds are defined in Table 2.

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(b) For pollutants not listed above, the Department shall determine the rate that constitutes a significant emission rate.

(c) Any emissions increase less than these rates associated with a new source or modification which would construct within 10 kilometers of a Class I area, and would have an impact on such area equal to or greater than 1 ug/m<sup>3</sup> (24 hour average) shall be deemed to be emitting at a significant emission rate (see Table 2).

(23) "Significant Air Quality Impact" means an ambient air quality impact which is equal to or greater than those set out in Table 3. For sources of volatile organic compounds (VOC), a major source or major modification will be deemed to have a significant impact if it is located within 30 kilometers of an ozone nonattainment area and is capable of impacting the nonattainment area.

(24) "Significant impairment" occurs when visibility impairment in the judgment of the Department interferes with the management, protection, preservation, or enjoyment of the visual experience of visitors within a Class I area. The determination must be made on a case-by-case basis considering the recommendations of the Federal Land Manager; the geographic extent, intensity, duration, frequency, and time of visibility impairment. These factors will be considered with respect to visitor use of the Class I areas, and the frequency and occurrence of natural conditions that reduce visibility.

(25) "Source" means any building, structure, facility, installation or combination thereof which emits or is capable of emitting air contaminants to the atmosphere and is located on one or more contiguous or adjacent properties and is owned or operated by the same person or by persons under common control.

(26) "Visibility impairment" means any humanly perceptible change in visual range, contrast or coloration from that which would have existed under natural conditions. Natural conditions include fog, clouds, windblown dust, rain, sand, naturally ignited wildfires, and natural aerosols.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83; DEQ 18-1984, f. & ef. 10-16-84

**Procedural Requirements**

**340-20-230** (1) Information Required. The owner or operator of a proposed major source or major modification shall submit all information necessary to perform any analysis or make any determination required under these rules. Such information shall include, but not be limited to:

(a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(b) An estimate of the amount and type of each air contaminant emitted by the source in terms of hourly, daily, seasonal, and yearly rates, showing the calculation procedure;

(c) A detailed schedule for construction of the source or modification;

(d) A detailed description of the system of continuous emission reduction which is planned for the source or modification, and any other information necessary to deter-

mine that best available control technology or lowest achievable emission rate technology, whichever is applicable, would be applied;

(e) To the extent required by these rules, an analysis of the air quality and/or visibility impact of the source or modification, including meteorological and topographical data, specific details of models used, and other information necessary to estimate air quality impacts; and

(f) To the extent required by these rules, an analysis of the air quality and/or visibility impacts, and the nature and extent of all commercial, residential, industrial, and other source emission growth which has occurred since January 1, 1978, in the area the source or modification would affect.

(2) Other Obligations:

(a) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to these rules or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving an Air Contaminant Discharge Permit, shall be subject to appropriate enforcement action.

(b) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within 18 months of the scheduled time. The Department may extend the 18-month period upon satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

(c) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan and any other requirements under local, state or federal law.

(3) Public Participation:

(a) Within 30 days after receipt of an application to construct, or any addition to such application, the Department shall advise the applicant of any deficiency in the application or in the information submitted. The date of the receipt of a complete application shall be, for the purpose of this section, the date on which the Department received all required information.

(b) Notwithstanding the requirements of OAR 340-14-020, but as expeditiously as possible and at least within six months after receipt of a complete application, the Department shall make a final determination on the application. This involves performing the following actions in a timely manner:

(A) Make a preliminary determination whether construction should be approved, approved with conditions, or disapproved.

(B) Make available for a 30-day period in at least one location a copy of the permit application, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination.

(C) Notify the public, by advertisement in a newspaper of general circulation in the area in which the proposed source or modification would be constructed, of the applica-

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tion, the preliminary determination, the extent of increment consumption that is expected from the source or modification, and the opportunity for a public hearing and for written public comment.

(D) Send a copy of the notice of opportunity for public comment to the applicant and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: The chief executives of the city and county where the source or modification would be located, any comprehensive regional land use planning agency, any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the source or modification, and the Environmental Protection Agency.

\*\*\* (E) Upon determination that significant interest exists, provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification, alternatives to the source or modification, the control technology required, and other appropriate considerations. For energy facilities, the hearing may be consolidated with the hearing requirements for site certification contained in OAR Chapter 345, Division 15.

(F) Consider all written comments submitted within a time specified in the notice of public comment and all comments received at any public hearing(s) in making a final decision on the approvability of the application. No later than 10 working days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Department shall consider the applicant's response in making a final decision. The Department shall make all comments available for public inspection in the same locations where the Department made available preconstruction information relating to the proposed source or modification.

(G) Make a final determination whether construction should be approved, approved with conditions, or disapproved pursuant to this section.

(H) Notify the applicant in writing of the final determination and make such notification available for public inspection at the same location where the Department made available preconstruction information and public comments relating to the source or modification.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 18-1984, f. & ef. 10-16-84

**Review of New Sources and Modifications for Compliance With Regulations**

**340-20-235** The owner or operator of a proposed major source or major modification must demonstrate the ability of the proposed source or modification to comply with all applicable requirements of the Department of Environmental Quality, including New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants, and shall obtain an Air Contaminant Discharge Permit.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 25-1981, f. & ef. 9-8-81

**Requirements for Sources in Nonattainment Areas**

**340-20-240** New major sources and major modifica-

tions which are located in designated nonattainment areas shall meet the requirements listed below:

(1) **Lowest Achievable Emission Rate.** The owner or operator of the proposed major source or major modification must demonstrate that the source or modification will comply with the lowest achievable emission rate (LAER) for each nonattainment pollutant. In the case of a major modification, the requirement for LAER shall apply only to each new or modified emission unit which increases emissions. For phased construction projects, the determination of LAER shall be reviewed at the latest reasonable time prior to commencement of construction of each independent phase.

(2) **Source Compliance.** The owner or operator of the proposed major source or major modification must demonstrate that all major sources owned or operated by such person (or by an entity controlling, controlled by, or under common control with such person) in the state are in compliance or on a schedule for compliance, with all applicable emission limitations and standards under the Clean Air Act.

(3) **Growth Increment or Offsets.** The owner or operator of the proposed major source or major modification must demonstrate that the source or modification will comply with any established emissions growth increment for the particular area in which the source is located or must provide emission reductions ("offsets") as specified by these rules. A combination of growth increment allocation and emission reduction may be used to demonstrate compliance with this section. Those emission increases for which offsets can be found through the best efforts of the applicant shall not be eligible for a growth increment allocation.

(4) **Net Air Quality Benefit.** For cases in which emission reductions or offsets are required, the applicant must demonstrate that a net air quality benefit will be achieved in the affected area as described in OAR 340-20-260 (Requirements for Net Air Quality Benefit) and that the reductions are consistent with reasonable further progress toward attainment of the air quality standards.

(5) **Alternative Analysis:**

(a) An alternative analysis must be conducted for new major sources or major modifications of sources emitting volatile organic compounds or carbon monoxide locating in nonattainment areas.

(b) This analysis must include an evaluation of alternative sites, sizes, production processes, and environmental control techniques for such proposed source or modification which demonstrates that benefits of the proposed source or modification significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

(6) **Special Exemption for the Salem Ozone Nonattainment Area.** Proposed major sources and major modifications of sources of volatile organic compounds which are located in the Salem Ozone nonattainment area shall comply with the requirements of sections (1) and (2) of this rule but are exempt from all other sections of this rule.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 25-1981, f. & ef. 9-8-81; DEQ 5-1983, f. & ef. 4-18-83

**Growth Increments**

**340-20-241** The ozone control strategies for the Medford-Ashland and Portland Air Quality Maintenance Areas

DIVISION 45

REGULATIONS PERTAINING TO  
NPDES AND WPCF PERMITS

[ED. NOTE: Administrative Orders DEQ 53(Temp) and DEQ 58 repealed previous rules 340-45-005 through 340-45-030 (DEQ 42, filed 4-5-72 and eff. 4-15-72, repealing DEQ 1, filed and eff. 1-9-70).]

Purpose

340-45-005 The purpose of these rules is to prescribe limitations on discharge of wastes and the requirements and procedures for obtaining NPDES and WPCF permits from the Department.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

Definitions

340-45-010 As used in these rules unless otherwise required by context.

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

(2) "Department" means Department of Environmental Quality.

(3) "Director" means the Director of the Department of Environmental Quality.

(4) "Discharge or disposal" means the placement of wastes into public waters, on land or otherwise into the environment in a manner that does or may tend to affect the quality of public waters.

(5) "Disposal system" means a system for disposing of wastes, either by surface or underground methods, and includes sewerage systems, treatment works, disposal wells and other systems but excludes on-site sewage disposal systems of 5000 gallons per day or less, and systems which recirculate without discharge.

(6) "Federal Act" means Public Law 92-500, known as the Federal Water Pollution Control Act Amendments of 1972 and acts amendatory thereof or supplemental thereto.

(7) "General permit" means a permit issued to a category of qualifying sources pursuant to rule 340-45-033, in lieu of individual permits being issued to each source.

(8) "Industrial waste" means any liquid, gaseous, radioactive, or solid waste substance or a combination thereof resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resources.

(9) "NPDES permit" means a waste discharge permit issued in accordance with requirements and procedures of the National Pollutant Discharge Elimination System authorized by the Federal Act and of OAR Chapter 340, rules 340-45-005 through 340-45-065.

(10) "Navigable waters" means all navigable waters of the United States and their tributaries; interstate waters; intrastate lakes, rivers, and streams which are used by interstate travelers for recreation or other purposes or from which fish or shellfish are taken and sold in interstate commerce or which are utilized for industrial purposes by industries in interstate commerce.

(11) "Person" means the United States and agencies thereof, any state, any individual, public or private corporation, political subdivision, governmental agency, municipality,

copartnership, association, firm, trust, estate, or any other legal entity whatever.

(12) "Point source" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

(13) "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewerage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

(14) "Pre-treatment" means the waste treatment which might take place prior to discharging to a sewerage system including, but not limited to, pH adjustment, oil and grease removal, screening, and detoxification.

(15) "Process waste water" means waste water contaminated by industrial processes but not including non-contact cooling water or storm runoff.

(16) "Public waters" or "waters of the state" include lakes, bays, ponds, impounding reservoirs, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon, and all other bodies of surface or underground waters, natural or artificial, inland, or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters) which are wholly or partially within or bordering the state or within its jurisdiction.

(17) "Regional Administrator" means the Regional Administrator of Region X of the U. S. Environmental Protection Agency.

(18) "Sewage" means the water-carried human or animal waste from residences, buildings, industrial establishments, or other places, together with such ground water infiltration and surface water as may be present. The mixture of sewage as above defined with wastes or industrial wastes, as defined in sections (8) and (23) of this rule, shall also be considered "sewage" within the meaning of these rules.

(19) "Sewerage system" means pipelines or conduits, pumping stations, and force mains, and all other structures, devices, appurtenances, and facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal.

(20) "State" means the State of Oregon.

(21) "Toxic waste" means any waste which will cause or can reasonably be expected to cause a hazard to fish or other aquatic life or to human or animal life in the environment.

(22) "Treatment" or "waste treatment" means the alteration of the quality of waste waters by physical, chemical, or biological means or a combination thereof such that the tendency of said wastes to cause any degradation in water quality or other environmental conditions is reduced.

(23) "Wastes" means sewage, industrial wastes, and all other liquid, gaseous, solid, radioactive, or other substances which will or may cause pollution or tend to cause pollution of any waters of the state.

(24) "WPCF permit" means a Water Pollution Control Facilities permit to construct and operate a disposal system with no discharge to navigable waters. A WPCF permit is issued by the Department in accordance with the procedures of OAR Chapter 340, rules 340-14-005 through 340-14-050.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76; DEQ 22-1981, f. & ef. 9-2-81



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[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

**Permit Required**

**340-45-015** (1) Without first obtaining a permit from the Director, no person shall:

(a) Discharge any wastes into the waters of the state from any industrial or commercial establishment or activity or any disposal system.

(b) Construct, install, modify, or operate any disposal system or part thereof or any extension or addition thereto.

(c) Increase in volume or strength any wastes in excess of the permissive discharges specified under an existing permit.

(d) Construct, install, operate or conduct any industrial, commercial, or other establishment or activity or any extension or modification thereof or addition thereto, the operation or conduct of which would cause an increase in the discharge of wastes into the waters of the state or which would otherwise alter the physical, chemical, or biological properties of any waters of the state in any manner not already lawfully authorized.

(e) Construct or use any new outlet for the discharge of any wastes into the waters of the state.

(2) Without first obtaining an NPDES permit, no person shall discharge pollutants from a point source into navigable waters.

(3) Any person who has a valid NPDES permit shall be considered to be in compliance with the requirements of section (1) of this rule. No additional permit for the discharge is required.

(4) Although not exempted from complying with all applicable laws, rules, and regulations regarding water pollution, persons discharging wastes into a sewerage system are specifically exempted from requirements to obtain a WPCF or NPDES permit, provided the owner of such sewerage system has a valid WPCF or NPDES permit. In such cases, the owner of such sewerage system assumes ultimate responsibility for controlling and treating the wastes which he allows to be discharged into said system. Notwithstanding the responsibility of the owner of such sewerage systems, each user of the sewerage system shall comply with applicable toxic and pretreatment standards and the recording, reporting, monitoring, entry, inspection, and sampling requirements of the Commission and the Federal Act and federal regulations and guidelines issued pursuant thereto.

(5) Each person who is required by section (1) of (2) of this rule to obtain a permit shall:

(a) Make prompt application to the Department therefor;

(b) Fulfill each and every term and condition of any permit issued to such person;

(c) Comply with applicable federal and state requirements, effluent standards, and limitations including, but not limited to, those contained in or promulgated pursuant to Sections 204, 301, 302, 304, 306, 307, 402, and 403 of the Federal Act, and applicable federal and state water quality standards;

(d) Comply with the Department's requirements for recording, reporting, monitoring, entry, inspection, and sampling, and make no false statements, representations, or certifications in any form, notice, report, or document required thereby.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

**Non-Permitted Discharges**

**340-45-020** Discharge of the following wastes into any navigable or public waters shall not be permitted:

(1) Radioactive, chemical, or biological warfare agent or high-level radioactive waste.

(2) Any point source discharge which the Secretary of the Army acting through the Chief of Engineers finds would substantially impair anchorage and navigation.

(3) Any point source discharge to navigable waters which the Regional Administrator has objected to in writing.

(4) Any point source discharge which is in conflict with an areawide waste treatment and management plan or amendment thereto which has been adopted in accordance with Section 208 of the Federal Act.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

**Procedures for Obtaining WPCF Permits**

**340-45-025** Except for the procedures for application for and issuance of NPDES permits on point sources to navigable waters of the United States, submission and processing of applications for WPCF permits and issuance, renewal, denial, transfer, modification, and suspension or revocation of WPCF permits shall be in accordance with the procedures set forth in OAR Chapter 340, rules 340-14-005 through 340-14-050.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

**Application for NPDES Permit**

**340-45-030** (1) Any person wishing to obtain a new, modified, or renewal NPDES permit from the Department shall submit a written application on a form provided by the Department as set forth in Table 1. Applications must be submitted at least 180 days before a NPDES permit is needed. All application forms must be completed in full and signed by the applicant or his legally authorized representative. The name of the applicant must be the legal name of the owner of the facilities or his agent or the lessee responsible for the operation and maintenance.

(2) Applications which are obviously incomplete or unsigned will not be accepted by the Department for filing and will be returned to the applicant for completion.

(3) Applications which appear complete will be accepted by the Department for filing.

(4) If the Department later determines that additional information is needed, it will promptly request the needed information from the applicant. The application will not be considered complete for processing until the requested information is received. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request.

(5) An application which has been filed with the U. S. Army Corps of Engineers in accordance with Section 13 of the Federal Refuse Act or a NPDES application which has been filed with the U. S. Environmental Protection Agency will be accepted as an application filed under this section provided the application is complete and the information on the application is still current.

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Stat. Auth.: ORS Ch. 468

Hist.: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76; DEQ 22-1981, f. & ef. 9-2-81

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#### General Permits

**340-45-033** (1) The Director may issue general permits for certain categories of minor sources where individual NPDES or WPCF permits are not necessary in order to adequately protect the environment. Before the Director can issue a general permit, the following conditions must be met:

(a) There must be several minor sources or activities which involve the same or substantially similar types of operations;

(b) They discharge or dispose of the same or similar types of wastes;

(c) They require the same monitoring requirements, effluent limitations and operating conditions; and

(d) They would be more appropriately controlled under a general permit than an individual permit.

(2) Although general permits may include activities throughout the state, they may also be restricted to more limited geographical areas.

(3) Prior to issuing a general permit, the Department will follow the public participation procedures outlined in OAR 340-45-035(3) and (7). In addition the Department will make a reasonable effort to mail notices of pending actions to those persons known by the Department who are likely to be covered by the general permit.

(4) If a person covered by a general permit is dissatisfied with the conditions or limitations of the permit issued by the Director, he may request a hearing before the Commission or its authorized representative. Such a request for a hearing shall be made in writing to the Director within twenty (20) days following the date of issuance of the general permit.

(5) All persons operating a source or conducting an activity described in a general permit become permittees, unless the source or activity is specifically covered by an individual NPDES or WPCF permit.

(6) Any permittee covered by an individual NPDES or WPCF permit may request that the individual permit be cancelled or allowed to expire if the permitted source or activity is also covered by a general permit. As long as the source or activity is covered by an individual NPDES or WPCF permit, as well as a general permit, the conditions and limitations of the individual permit govern, until such time as it is cancelled or expires.

(7) Any permittee not wishing to be covered by a general permit may make application for an individual permit in accordance with WPCF permit procedures in OAR 340-14-020 or NPDES procedures in OAR 340-45-030, whichever is applicable.

(8) The Director may revoke a general permit as it applies to any person and require such person to apply for and obtain an individual NPDES or WPCF permit if:

(a) The covered source or activity is a significant contributor of pollution or creates other environmental problems;

(b) The permittee is not in compliance with the terms and conditions of a general permit; or

(c) Conditions or standards have changed so that the source or activity no longer qualifies for a general permit.

(9) In order for the Department to maintain a list of general permittees, the Director may require general permittees to register with the Department.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 28-1980, f. & ef. 10-27-80

#### Issuance of NPDES Permits

**340-45-035** (1) Following determination that it is complete for processing, each application will be reviewed on its own merits. Recommendations will be developed in accordance with provisions of all applicable statutes, rules, regulations, and effluent guidelines of the State of Oregon and the U. S. Environmental Protection Agency.

(2) The Department shall formulate and prepare a tentative determination to issue or deny an NPDES permit for the discharge described in the application. If the tentative determination is to issue an NPDES permit, then a proposed NPDES permit shall be drafted which includes at least the following:

(a) Proposed effluent limitations;

(b) Proposed schedule of compliance, if necessary; established in conformance with the Federal Act and regulations issued pursuant thereto;

(c) Other special conditions.

(3) In order to inform potentially interested persons of the proposed discharge and of the tentative determination to issue an NPDES permit, a public notice announcement shall be prepared and circulated in a manner approved by the Director. The notice shall tell of public participation opportunities, shall encourage comments by interested individuals or agencies, and shall tell of the availability of fact sheets, proposed NPDES permits, applications, and other related documents available for public inspection and copying. The Director shall provide a period of not less than 30 days following the date of the public notice during which time interested persons may submit written views and comments. All comments submitted during the 30-day comment period shall be considered in the formulation of a final determination.

(4) A fact sheet shall be prepared for each draft NPDES permit for a major industrial facility and each NPDES general permit. In addition, a fact sheet shall be prepared for every industrial NPDES permit which incorporates a variance and for every draft permit which the Director finds is the subject of widespread public interest or raises major issues. Fact sheets shall contain the following, where applicable:

(a) A brief description of the type of facility or activity;

(b) The type and quantity of wastes to be discharged;

(c) Applicable standards and guidelines used as a basis for effluent limits;

(d) An explanation of any proposed variances;

(e) A sketch, map, or detailed location of the discharge, where appropriate; and

(f) Information spelling out procedures for finalizing the permit and providing additional public input, including opportunity for public hearing.

(5) After the public notice has been drafted and the fact sheet and proposed NPDES permit provisions have been prepared by the Department, they will be forwarded to the applicant for review and comment. All comments must be submitted in writing within 14 days after mailing of the proposed materials if such comments are to receive consideration prior to final action on the application, unless the applicant requests additional time. The applicant may also waive his right for the 14 day review time in the interest of accelerating the issuance procedures.

(6) After the 14-day applicant review period has elapsed, the public notice and fact sheet shall be sent to any person upon request. The director shall add the name of any person or group upon request to a mailing list to receive copies of public notices and fact sheets. Any public notice and fact sheet under this section shall be prepared and circulated consistent with the requirements of regulations issued under the Federal Act. The fact sheet, proposed NPDES permit provisions, application, and other supporting documents will be available for public inspection and copying. The Director may, in his discretion,

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 340, DIVISION 45 — DEPARTMENT OF ENVIRONMENTAL QUALITY**

charge a reasonable fee for reproduction and distribution of the public notice, fact sheet, and other supporting documents.

\*\*\* (7) The Director shall provide an opportunity for the applicant, any affected state, or any interested agency, person, or group of persons to request or petition for a public hearing with respect to NPDES applications. If the Director determines that useful information may be produced thereby, or if there is a significant public interest in holding a hearing, a public hearing will be held prior to the Director's final determination. Instances of doubt shall be resolved in favor of holding the hearing. There shall be public notice of such a hearing.

(8) At the conclusion of the public involvement period, the Director shall make a final determination as soon as practicable and promptly notify the applicant thereof in writing. Any NPDES permit issued hereunder shall contain such pertinent and particular conditions as may be required to comply with the Federal Act or regulations issued pursuant thereto. If the Director determines that the NPDES permit should be denied, notification shall be in accordance with rule 340-45-050. If conditions of the NPDES permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the NPDES permit issued shall be attached to the notification. In any case, before the Director will issue an NPDES permit which applies effluent limitations in accordance with effluent guidelines rather than water quality standards, he will make a determination that the permitted discharge will not violate applicable water quality standards and will provide some justification for that determination. Such justification will include, but not necessarily be limited to:

(a) A description of the anticipated effect on water quality at the mixing zone boundary of the chemical and/or physical parameter(s) upon which the size and shape of the mixing zone are based; and

(b) A statement of anticipated effect of the discharge on aquatic life.

(9) If the applicant is dissatisfied with the conditions or limitations of any NPDES permit issued by the Director, he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of issuance of the NPDES permit. Any hearing held shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 71, f. 6-4-74, ef. 6-25-74; DEQ 126(Temp), f. & ef. 12-30-76 thru 4-28-77; DEQ 133, f. & ef. 5-2-77; DEQ 22-1981, f. & ef. 9-2-81

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

#### Renewal or Modification of NPDES Permits

340-45-040 The procedures for issuance of a NPDES permit shall apply to renewal of an NPDES permit and to a modification requested by the permittee.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

#### Transfer of a NPDES Permit

340-45-045 No NPDES permit shall be transferred to a third party without prior written approval from the Director.

Such approval may be granted by the Director where the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the NPDES permit and the rules of the Commission.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

#### Denial of a NPDES Permit

340-45-050 If the Director proposes to deny issuance of a NPDES permit, he shall notify the applicant by registered or certified mail of the intent to deny and the reasons for denial. The denial shall become effective 20 days from the date of mailing of such notice unless within the time the applicant requests a hearing before the Commission or its authorized representative. Such request for a hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

#### Department Initiated Modification of a NPDES Permit

340-45-055 In the event that it becomes necessary for the Department to institute modification of a NPDES permit due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes, the Department shall notify the permittee by registered or certified mail and shall at that time issue a public notice announcement in a manner approved by the Director of its intent to modify the NPDES permit. Such notification shall include the proposed modification and the reasons for modification. The modification shall become effective 20 days from the date of mailing of such notice unless within that time the permittee request a hearing before the Commission or its authorized representative or unless the Director determines that significant public interest merits a public hearing or a change in the proposed modification. Any request for hearing by the permittee or any person shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department. A copy of the modified NPDES permit shall be forwarded to the permittee as soon as the modification becomes effective. The existing NPDES permit shall remain in effect until the modified NPDES permit is issued.

Stat. Auth.: ORS Ch. 468

Hist: DEQ 53(Temp), f. & ef. 6-21-73 thru 10-18-73; DEQ 58, f. 9-21-73, ef. 10-25-73; DEQ 113, f. & ef. 5-10-76

[ED. NOTE: The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

#### Suspension or Revocation of a NPDES Permit

340-45-060 (1) In the event that it becomes necessary for the Director to suspend or revoke a NPDES permit due to non-compliance with the terms of the NPDES permit, unapproved changes in operation, false information submitted in the application, or any other cause, the Director shall notify the permittee by registered or certified mail of his intent to

PROPOSED RULE REVISIONS

See Attachment 1 of this Agenda Item for the full text and location of these revisions.

Revision 1

Exceptions  
340-14-007

The procedures prescribed in this Division do not apply to the issuance, denial, modification and revocation of the following permits: National Pollutant Discharge Elimination System (NPDES) permits issued pursuant to the Federal Water Pollution Control Act Amendments of 1972 and acts amendatory thereof or supplemental thereto, [The procedures for processing and issuance of NPDES permits are] as prescribed in OAR [Chapter 340, rules] 340-45-005 through 340-45-065; Resource Conservation and Recovery Act (RCRA) permits as prescribed by OAR Chapter 340, Division 106; and the Underground Storage Tank (UST) permits as prescribed by OAR 340-150-010 through 340-150-067.

Revision 2

Definitions  
340-14-010

As used in these regulations unless otherwise required by context:

- (1) "Department" means Department of Environmental Quality.  
Department actions shall be taken by the Director as defined herein.
- (2) "Commission" means Environmental Quality Commission.
- (3) "Director" means Director of the Department of Environmental Quality or [his] the Director's authorized deputies or officers.
- (4) "Permit" means a written permit issued by the Department, bearing the signature of the Director, which by its conditions may authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities or emit, discharge or dispose of wastes in accordance with specified limitations.

Revision 3

Application for a Permit  
340-14-020

(1) Any person wishing to obtain a new, modified, or renewal permit from the Department shall submit a written application on a form provided by the Department. Applications must be submitted at least 60 days before a permit is needed. All application forms must be completed in full, signed by the applicant or [his] the applicant's legally authorized representative, and accompanied by the specified number of copies of all required exhibits. The name of the applicant must be the legal name of the owner of the

facilities or [his] the owner's agent or the lessee responsible for the operation and maintenance.

(2) Applications which are obviously incomplete, unsigned, or which do not contain the required exhibits (clearly identified) will not be accepted by the Department for filing, and will be returned to the applicant for completion.

(3) Applications which appear complete will be accepted by the Department for filing.

(4) Within 15 days after the filing, the Department will preliminarily review the application to determine the adequacy of the information submitted:

(a) If the Department determines that additional information is needed it will promptly request the needed information from the applicant. The application will not be considered complete for processing until the requested information is received. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request;

(b) If in the opinion of the Director, additional measures are necessary to gather facts regarding the application, the Director will notify the applicant [of his intent to institute said measures] that said measures will be instituted, and the timetable and procedures to be followed. The application will not be considered complete for processing until the necessary additional fact-finding measures are completed. When the information in the application is deemed adequate, the applicant will be notified that this application is complete for processing. [Processing will be completed within 45 days after such notification.]

(5) In the event the Department is unable to complete action on an application within 45 days [after notification that the application is complete for processing,] of closing of public comment or closing of the hearing record under OAR 340-14-025(2) and (3), the applicant shall be deemed to have received a temporary or conditional permit, such permit to expire upon final action by the Department to grant or deny the original application. Such temporary or conditional permit does not authorize any construction, activity, operation or discharge which will violate any of the laws, rules, or regulations of the State of Oregon or the Department of Environmental Quality.

340-14-025.

(6) If, upon review of an application, the Department determines that a permit is not required, the Department shall notify the applicant in writing of this determination. Such notification shall constitute final action by the Department on the application.

#### Revision 4

#### Issuance of a Permit

340-14-025 (1)

(1) Following determination that it is complete for processing, each application will be reviewed on its own merits. Recommendations will be developed in accordance with the provisions of all applicable statutes, rules and regulations of the State of Oregon and the Department of Environmental Quality.

(2) If the Department proposes to issue a permit, proposed provisions prepared by the Department will be forwarded to the applicant and other

interested persons at the discretion of the Department for comment. All comments must be submitted in writing within 14 days after mailing of the proposed provisions if such comments are to receive consideration prior to final action on the application.

(3) If, within 14 days after mailing of the proposed provisions, the Department receives written requests from ten (10) persons, or from an organization or organizations representing at least ten persons, for a public hearing to allow interested persons to appear and submit oral or written comments on the proposed provisions, the Department shall provide such a hearing before taking final action on the application, at a reasonable place and time and on reasonable notice. Notice of such a hearing may be given, in the Department's discretion, either in the notice accompanying the proposed provisions or in such other manner as is reasonably calculated to inform interested persons.

(4) [(3) After 14 days have elapsed since the date of mailing of the proposed provisions, the Department may take final action on the application for a permit.] The Department shall take final action on the permit application within 45 days of the closing of public comment under OAR 340-14-025(2), or, if a public hearing is held under OAR 340-14-025(3), within 45 days of closing of such hearing's record. Regarding solid waste disposal permits under ORS 459.245, consideration of such public comment or record shall constitute good cause for extension of time to act on such applications. The Department may adopt or modify the proposed provisions or recommend denial of a permit. In taking such action, the Department shall consider the comments received regarding the proposed provisions and any other information obtained which may be pertinent to the application being considered.

(5) [4] The Department shall promptly notify the applicant in writing of the final action taken on [his] an application. If the Department recommends denial, notification shall be in accordance with the provisions of rule 340-14-035. If the conditions of the permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the permit issued shall be attached to the notification.

(6) [5] If the applicant is dissatisfied with the conditions or limitations of any permit issued by the Department, [he] the applicant may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of issuance of the permit.

Any hearing held shall be conducted pursuant to the regulations of the Department.

Revision 5  
New Source Review  
Procedural Requirements  
340-20-230 (3)(D)

Upon determination that significant interest exists, or upon written requests for a hearing from ten (10) persons or from an organization or organizations representing at least ten persons, provide opportunity for a public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source or modification,

alternatives to the source or modification, the control technology required, and other appropriate considerations. For energy facilities, the hearing may be consolidated with the hearing requirements for site certification contained in OAR Chapter 345, Division 15.

Revision 6

Issuance of NPDES Permits

340-45-035 (7)

The Director shall provide an opportunity for the applicant, any affected state, or any interested agency, person, or group of persons to request or petition for a public hearing with respect to NPDES applications. If the Director determines that useful information may be produced thereby, or if there is significant public interest in holding a hearing, or there are written requests for a hearing from ten (10) persons or from an organization or organizations representing at least ten persons. a public hearing will be held prior to the Director's final determination. Instances of doubt shall be resolved in favor of holding the hearing. There shall be public notice of such hearing.

SETTLEMENT AGREEMENT

This agreement is between the Sierra Club, a non-profit corporation; the Oregon Environmental Council, a non-profit corporation (collectively "Petitioners"); and the Oregon Department of Environmental Quality, an agency of the State of Oregon ("Respondent"), all of whom are parties to a lawsuit entitled Sierra Club, et al. v. Oregon Department of Environmental Quality, No. A8704-02706 (Multnomah County) (hereinafter "the lawsuit"). In full settlement of the lawsuit, and without admission of any fault or wrongdoing by any party, Petitioners and Respondent agree as follows:

1. Respondent will propose and recommend adoption and promulgation of a new administrative regulation expanding citizen participation in its permit process, in a form substantially similar to the text appended as Exhibit A and incorporated by reference into this agreement. Respondent will commence this rulemaking process, in accord with OAR 340-11-010 through 340-11-035, promptly and in any case within sixty days of Petitioners' signing this agreement.

2. Respondent will conduct a public hearing in conformity with OAR 340-20-230(3)(b)(E) on the appropriateness of any modification to Air Contaminant Discharge Permit No.



22-6024 ("the Permit"), on or before September 10, 1988, as follows:

(a) The hearing will be in a convenient location in Lebanon, Oregon; and

(b) Respondent will notify the public and interested persons and/or organizations, as follows:

(i) Respondent will advertise the time and place of the hearing in at least two newspapers of general circulation in the Lebanon/Albany/Corvallis area at least 15 days before the hearing, describing the permit, identifying the potential for modification, and explaining the opportunity for the public to appear at the hearing and to submit written comments, in conformity with OAR 340-20-230(3)(b)(C); and


(ii) Respondent will mail notice at least 30 days before the hearing to the chief executives of Lebanon and Linn County, to the Environmental Protection Agency, to each of Petitioners, and to each person and/or organization that has submitted comments regarding issuance of the Permit or otherwise is known by Respondent to have expressed interest in the Permit.

3. Petitioners will dismiss the lawsuit, with prejudice and without costs to any party, promptly and in any case within


twenty (20) days from the date of signing this settlement agreement.

WHEREFORE, Petitioners and Respondent have caused this Settlement Agreement to be signed on their behalf by their attorneys as of this 31st day of December, 1987.

JOLLES, SOKOL & BERNSTEIN, P.C.

  
\_\_\_\_\_  
Larry N. Sokol  
David Paul  
Of Attorneys for Petitioners  
Sierra Club and Oregon  
Environmental Council

DAVE FROHNMAYER  
Attorney General

  
\_\_\_\_\_  
Arden J. Olson  
Assistant Attorney General  
Of Attorneys for Respondent  
Department of Environmental  
Quality

340-14-025(3) [new section]

If, within 14 days after mailing of the proposed provisions, the Department receives written requests from ten (10) persons, or from an organization or organizations representing at least ten persons, for a public hearing to allow interested persons to appear and submit oral or written comments on the proposed provisions, the Department shall provide such a hearing before taking final action on the application, at a reasonable place and time and on reasonable notice. Notice of such a hearing may be given, in the Department's discretion, either in the notice accompanying the proposed provisions or in such other manner as is reasonably calculated to inform interested persons.

[Renumber Sections (3) - (5) to become (4) - (6).]

5091T/bw

**DEQ GUIDELINES ON PUBLIC PARTICIPATION  
IN THE PERMITTING PROCESS**

Permit writers should anticipate controversy and inform their division administrators when they think a permit is controversial. Permits involving hazardous waste, toxics, or solid wastes should always be analyzed for potential to generate controversy. When a permit is known to be controversial, a public hearing on proposed permit provisions should be scheduled as early as possible to avoid delays in action on the permit. Applicants of potentially controversial permits should be informed that the application process could take longer than they had expected.

When a permit is potentially controversial, permit writers must consult with Public Affairs to determine whether notice of the application and proposed action should be published in a local newspaper. Notices may be placed in the legal notice section of the newspaper or in a display ad in a newspaper. If a hearing is to be held, a news release should be sent to local news media. All efforts should be made to provide notice of public hearing 30 days prior to the hearing date. Public hearings should be conducted in accordance with Department procedures for all public informational hearings.

If the provisions of a controversial permit are complex or voluminous, the Department should prepare a fact sheet to supplement the standard "A Chance to Comment" notice. Where applicable, the fact sheets should contain a description of the location and type of facility or activity, the type and quantity of wastes or emission, and possible health effects, how the public can obtain more information, a description of the permit process, and standards and guidelines used as a basis for the permit action. When prepared, this fact sheet should be distributed along with the standard "A Chance to Comment" notice to interested parties and those on mailing lists. Mailing lists should be composed of addresses of those who have requested notice of intended actions on certain categories of permits. Efforts should also be made to identify other potentially affected or interested persons.

The Department's responsibility to provide information to the public may not be totally met by the notice and public hearing process. In very controversial situations, especially when public health is at issue, the Department should utilize additional information techniques, such as news releases, informational meetings, and information packets placed in public locations. All of the above should be accomplished with the assistance of a Department public affairs specialist.

ATTACHMENT 5  
Agenda Item D  
March 11, 1988 EQC MEETING

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 a rule.

Legal Authority

This proposal amends OAR 340-14-005 through 050, OAR 340-20-230 and OAR 340-45-035. It is proposed under the authority of ORS 468, including section 020 which authorizes the Commission to adopt such rules and standards as it considers necessary and proper in performing its functions.

Need for the Rule

The proposed rule provides objective criteria for the Department to use in determining when to hold a public hearing on proposed permit actions. This adoption is necessary to establish consistent procedures for public participation in the permit process, and also to fulfill the requirements of the settlement agreement in Sierra Club et al. v Department of Environmental Quality, Multnomah County Circuit Court No. A8704-02706. The proposed rule also contains several changes necessary to bring consistency to related permit regulations.

Principal Documents Relied Upon

Settlement agreement in Sierra Club et al. v Department of Environmental Quality.

LAND USE CONSISTENCY STATEMENT

This proposed rule does not affect land use as defined in the Department's coordination program approved by the Land Conservation and Development Commission.

FISCAL AND ECONOMIC IMPACT STATEMENT

The proposed rule may affect businesses, including small businesses, by causing delays in the permit application process. The economic effects of possible delays in Department permit action are not quantifiable, and delays caused by public hearings could also occur under the existing rules. Permit applicants may accrue travel costs, depending upon the locations of public hearings. The fiscal and economic impact of the proposed rules is not projected to be significantly different than under past practices as the Department has usually held public hearings when there was significant public interest.

Agenda Item D  
 March 11, 1988  
 EQC Meeting

*Oregon Department of Environmental Quality*

## **A CHANCE TO COMMENT ON...**

Proposed amendment of Procedures for Issuance, Denial, Modification and  
 Revocation of Permits  
**NOTICE OF PUBLIC HEARING**

Hearing Date: May 3, 1988  
 Comments Due: May 16, 1988

**WHO IS  
 AFFECTED:**

All persons who apply to the Department of Environmental Quality for permits. (with the exception of Resource Conservation and Recovery Act (RCRA) and Underground Storage Tank (UST) permits); third parties and members of the public concerned with participating in the permitting process.

**WHAT IS  
 PROPOSED:**

The Department of Environmental Quality is proposing to amend OAR 340-14-005 through 050 by adding the requirement that the Department hold a public hearing on proposed permit actions if it receives written hearing requests from ten (10) persons or an organization representing at least ten persons. The Department proposes to amend OAR 340-20-230 and OAR 340-45-035 by describing the hearing-triggering event of significant public interest as written requests from ten persons or an organization representing at least ten persons.

**WHAT ARE THE  
 HIGHLIGHTS:**

The proposed rule provides objective criteria for the Department to use in determining when to hold a public hearing on proposed permit actions. It adds RCRA and UST permits to the section on exceptions, and also brings consistency to two other rule Divisions on permits by adding a definition of significant public interest.

**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 Sarah Armitage at (503)229-5581.

A public hearing will be held before a hearings officer in:

Conference Room 4, Fourth Floor  
 Department of Environmental Quality,  
 811 SW 6th Avenue,  
 Portland

At: 2:00 pm  
 On: May 3, 1988

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 , 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. The adopted amendments to OAR 340-14-005 through 050 and OAR 340-20-230 will be submitted to the U.S. Environmental Protection Agency as revisions to the State Clean Air Act Implementation Plan. Commission's deliberation should come in June, 1988 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.

AD2135.2

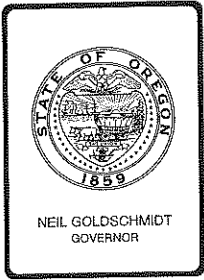


811 S.W. 6th Avenue  
 Portland, OR 97204

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.



## *Environmental Quality Commission*

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

### MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. E, March 11, 1988 EQC meeting

Request for Authorization to Hold Hearings on Proposed  
Amendments to Rules Contained in OAR 340-41-445, Water  
Quality Standards Not To Be Exceeded, Willamette Basin

### BACKGROUND-PROBLEM STATEMENT

The Tualatin River Basin, situated in northwestern Oregon near Portland, consists of a central plain completely surrounded by hills and mountains. The basin has experienced relatively high population growth over the past three decades increasing from about 60,000 in 1950 to nearly 270,000 today.

Water quality in the Tualatin River improved during the 1970s. These improvements were made possible because of increased flows from the newly constructed Scoggins reservoir and the formation of the Unified Sewerage Agency (USA) in Washington County. During this period, USA constructed two regional wastewater treatment plants at Durham and Rock Creek. These plants replaced numerous older facilities which were not providing an adequate level of wastewater treatment. The USA maintains and operates all the municipal treatment plants that discharge to the Tualatin River. Two of USA's plants, at Rock Creek and Durham, discharge to the Tualatin year-round. Four others, Banks, Gaston, Forest Grove, and Hillsboro-Westside, discharge to the Tualatin, or tributaries, from November through April.

Treatment requirements in the basin are quite stringent, but increased population and industrial growth have led to higher waste loads discharged to the Tualatin River. Because areas within the basin have the potential for further growth, this trend is expected to continue. Point source discharges, nonpoint urban and agricultural sources, and low summer flows contribute to water quality concerns in the river.

WC3070



The present water quality problems in the Tualatin River are low dissolved oxygen concentrations and nuisance algal growths. The dissolved oxygen content in the river downstream from the Rock Creek treatment plant routinely falls below the 6 mg/l standard during summer low flow.

Concentrations of chlorophyll a, an algal pigment, routinely exceed the action level indicating nuisance phytoplankton growth condition. OAR 340-41-150(2) states that if this level is exceeded DEQ must conduct such studies as are necessary to describe present water quality; determine the impact of the elevated levels on beneficial uses; determine the probable causes of exceedance and beneficial use impact; and develop a proposed control strategy for attaining compliance where technical and economically practicable.

The Federal Clean Water Act, under section 303, requires the establishment of total maximum daily loads (TMDLs) for "water quality limited" stream segments. A TMDL is the maximum amount of a pollutant that a water body can receive without violating water quality standards. Water quality limited segments are reaches that do not meet water quality standards, in either narrative or numerical form, even after technology-based effluent limits have been applied. For municipal waste, technology-based effluent limits are those limits achieved with the best conventional secondary treatment system.

In November 1985, the Department began an intensive assessment of pollution sources and water quality in the Tualatin basin. The dissolved oxygen violations were found to be due primarily to the discharge of ammonia from the Rock Creek Wastewater Treatment Plant (RCWTP). Phosphorus was found to be the key nutrient supporting the nuisance algal growths.

In December 1986, the Northwest Environmental Defense Center (NEDC) filed a suit in Federal District Court against the Environmental Protection Agency (EPA) to ensure that TMDLs are established and implemented for waters in Oregon identified as being water quality limited. This suit specifically identified the Tualatin River. Subsequently, NEDC filed a Notice of Intent to sue, naming 27 other water bodies requiring TMDLs to be established. The Department actively participated in negotiations among NEDC, EPA, and the U.S. Justice Department to develop an acceptable approach in establishing TMDLs.

In March 1987, the Environmental Quality Commission (EQC) approved the Department's proposed process and schedule for establishing TMDLs for identified water quality limited segments. In April 1987, the Department prepared an issue paper proposing TMDLs for total phosphorus and ammonia in the Tualatin River. These proposed loads would vary with flows as recorded at the USGS gauge at Farmington (River mile 33). The issue paper was distributed for public review and comment (Attachment D). Seven

respondents submitted written comments, and the Department responded to those comments (Attachment E).

On June 3, 1987, U.S. District Judge James Burns signed a consent decree that requires adoption of TMDLs, waste load allocations (WLAs) and load allocations (LAs) for the Tualatin River, nine other rivers, and one lake (Attachment F). The WLA is the portion of the TMDL allocated to point sources, and the LA is allocated to background and nonpoint sources.

#### AUTHORITY TO ACT

ORS 468.735 provides that the Commission, by rule, may establish standards of quality and purity for waters of the state. Water quality standards, contained in OAR chapter 340, were adopted by the Commission in December 1976. The Commission adopted revisions to these standards in September 1979, and July 1985; added the nuisance phytoplankton growth rule in March 1986; and amended the mixing zone policy and toxic substance standards in 1987.

#### RULE DEVELOPMENT

Control of both point and nonpoint sources of pollutants is needed to improve water quality and maintain the uses of the Tualatin River over the long term. The subjective nature of aesthetic problems resulting from algal blooms is complex. Nonetheless, decisions must be made which will protect the water quality of the Tualatin River.

To assist the Department in developing a water quality plan for the Tualatin, we appointed two advisory committees (Attachment G). The technical advisory committee (TAC) was composed of professionals in the water quality field and provided technical guidance to Department staff. A citizens advisory committee (CAC), representing a cross-section of interests in the Tualatin Basin, provided advice to Department staff on policy decisions.

Department staff, with input from the CAC and TAC, developed a citizens advisory committee report (Attachment C). This report describes the water quality problems in the Tualatin basin, the technical approach used to develop target levels for phosphorus and ammonia, and the proposed rule amendment. On February 8, 1988, the CAC voted to endorse the report and the proposed rule amendment.

The CAC report (Attachment C) describes the technical basis used to propose the ammonia and phosphorus standards. The Department, in cooperation with USA and the Lake Oswego Corporation, conducted routine and intensive assessments of water quality in the Tualatin Basin. In addition, the

Department conducted controlled laboratory experiments to complement the field investigations. These analyses are described in Attachment C.

Laboratory test results and field investigations confirmed that the dissolved oxygen violations are primarily caused by ammonia discharge from Rock Creek Waste Treatment Plant. These results were used to define 1.0 mg/l as the target level for ammonia. The development of the ammonia standard for the Tualatin was not controversial. USA is building facilities at the Rock Creek Waste Treatment Plant to reduce ammonia loads to the river, which are required to be in operation by November 1989.

In contrast, the development of a phosphorus standard for the Tualatin River was quite controversial. The proposed phosphorus standard was determined through analysis of controlled laboratory algal assays, an assessment of ambient Tualatin data in comparison with similar streams and the Willamette River, and by literature review. This process is described in Attachment C.

On the basis of both laboratory tests and ambient water quality data, phosphorus criteria levels in the Tualatin River should be set between 0.05 and 0.15 mg/l. Achieving these values will require reduction from both point and nonpoint source loadings of phosphorus. It is generally concluded that USA will have to reduce its overall effluent discharge to the Tualatin.

A cost summary has been provided by USA for meeting the requirements of phosphorus reduction. These costs are preliminary and are discussed in Attachment C. Cost estimates provided by USA for the total present worth of needed improvements range from 56 to 151 million dollars. The increase in user charges associated with these costs range from \$4.20 to \$10.75 per month.

Several target values for total phosphorus were suggested and reviewed. These values included 0.05 mg/l, 0.10 mg/l, and 0.15 mg/l. The relative advantages and disadvantages of these alternative target values are discussed in Attachment C, and summarized below:

A) 0.15 mg/l Target value

1) Advantages

Attainment would require the least effort.

Maximum algal growth would be reduced below existing levels.

2) Disadvantages

Target value exceeds EPA recommended criteria for rivers.

At concentrations immediately above 0-15 mg/l total P, chlorophyll a concentrations were observed in the Tualatin River to exceed 100 ug/l, indicating extreme nuisance growth conditions.

Based on a review of the Tualatin River data and data from other streams having similar basin characteristics, average chlorophyll a values would be expected to be in excess of the 15 ug/l cited in the nuisance phytoplankton growth rule.

B) 0.10 mg/l Target Level

1) Advantages

Consistent with EPA recommended criteria for rivers.

Based on a review of Tualatin River data and data from streams having similar basin characteristics, this level would be expected to result in average chlorophyll a concentrations near the 15 ug/l cited in the Nuisance Phytoplankton Growth Rule.

Based on ambient data analysis and algal assays, algal growth reduction would be statistically significant.

2) Disadvantages

Attainment would require greater point and nonpoint source control efforts, greater capital costs and longer time to implement.

Will result in loss of flow in the river during critical summer low flow if Rock Creek and Durham transport effluent out-of-basin.

C) 0.05 mg/l Target level

1) Advantages

Target value is consistent with EPA recommended criteria for streams flowing into impoundments.

Would greatly reduce algal growth in the Tualatin

2) Disadvantages

Attainment, if possible, would require the highest point and nonpoint source control efforts, greater costs, and longer time to implement.

Background concentration in Scoggins Creek, which supplies much of the flow in the Tualatin during the summer, exceeds 0.05 mg/l total phosphorus. Therefore, this target level may not be achievable.

Proposed Rule

The proposed rule is contained in Attachment A. The proposed rule establishes water quality standards for phosphorus and ammonia. The ammonia standard is 1.0 mg/l. The Department determined because of the inherent variability of water quality measurements that the phosphorus standard should be expressed as having a median value of 0.10 mg/l with less than 10% of the measurements exceeding 0.15 mg/l. The proposed rule also contains specific numerical definitions for the total maximum daily load (TMDL), wasteload allocation (WLA), and load allocation (LA) for phosphorus and ammonia. The staff report (Attachment C), endorsed by the citizens advisory committee, contained two tables illustrating what the TMDL, WLA and LA would be in the Tualatin River based on the various river flows. The proposed rule integrated these tables into the rule by providing a specific numeric definition for them.

The following relationships describe the TMDL, LA, and WLA, for phosphorus:

The TMDL is the product of the flow at Farmington (CFS), multiplied by the phosphorus standard of 0.10 mg/l, and multiplied 5.4. (Note: 5.4 is a conversion factor so that the units of measure [CFS, mg/l] are expressed as pounds per day [lbs/day].)

The LA is the product of the flow at Farmington (CFS), minus the point source flow (CFS), multiplied by the existing instream concentration of 0.07 mg/l for background and nonpoint sources, and multiplied by 5.4.

The WLA is the TMDL minus the LA.

The following relationships describe the TMDL, LA, and WLA for ammonia:

The TMDL is the product of the flow at Farmington (CFS), multiplied by the ammonia standard of 1.0 mg/l, and multiplied by 5.4.

Table 2  
Load Allocation (LA), Waste Load Allocation (WLA),  
and Total Maximum Daily Load (TMDL)  
for Ammonia in the Tualatin River

Flow in CFS at Farmington	LA upstream of Point sources	WLA (USA) 20 MGD	TMDL In the River
150	33	777	810
175	38	907	940
200	44	1036	1080
225	49	1166	1215
250	54	1296	1350

It will take time to plan, arrange financing, and implement control measures before the TMDLs can be achieved. The proposed rule would set a time period for compliance. During this period a permittee would be deemed in compliance with the proposed rule if it is meeting the terms and conditions of the compliance schedule. The permittee will provide the Department with a schedule for approval.

The draft hearings notice and draft proposed rules are attached. The proposed rule was modified during agency review to add language which converted tables describing TMDL, WLA and LA contained in the CAC endorsed report into numeric definitions for the wasteload and load allocation components of the TMDL.

The LA is the product of the flow at Farmington (CFS), minus the point source flow (CFS), multiplied by the existing instream concentration of 0.04 mg/l for background and nonpoint sources and multiplied by 5.4.

The WLA is the TMDL minus the LA.

The LA and WLA added together equal the TMDL. The proposed rule allows the Commission to reallocate the proposed WLA and LA as long as the TMDL is not exceeded. This would allow the Commission to adjust the allocations for changes that may occur in the loading patterns to the Tualatin system. In no case, except by rules amendment would the TMDL be altered.

Tables 1 and 2 illustrate the TMDL, WLA and LA for a range of example flows as measured at the Farmington gauge. Table 1 presents the TMDL, WLA, and LA for phosphorus, and Table 2 for ammonia.

Table 1  
Load Allocation (LA), Wasteload Allocation (WLA),  
and Total maximum Daily Load (TMDL)  
for Total Phosphorus in the Tualatin River

Flow in CFS at Farmington	LA upstream of Point sources	WLA (USA) 20 MGD	TMDL In the River
150	45	36	81
175	54	40	94
200	64	44	108
225	73	48	121
250	83	52	135

Alternatives and Evaluation

In order to comply with the consent decree between NEDC, and the U.S. EPA, the Department has drafted proposed rules (Attachment B) that would establish water quality standards for total phosphate as phosphorus and ammonia nitrogen. The proposed rule would also define a total maximum daily load (TMDL), wasteload allocation (WLA) and load allocation (LA) for both total phosphate and ammonia nitrogen. The TMDLs, LAs, and WLAs are based on the proposed water quality standards for total phosphate and ammonia nitrogen and on flow in the Tualatin River as measured at Farmington. The standards and the TMDLs, LAs, and WLAs would only be in effect between June 1 and September 15 of each year. In addition, the proposed rule provides for a time schedule to be submitted to the Department outlining how and when waste discharge permittees would comply with the rule. A permittee would be deemed in compliance with the rule if it is meeting its approved compliance schedule. Finally, the proposed rule would allow the LA and WLA to be reallocated among each other subject to Commission approval, but requires that the TMDL only be changed pursuant to the rule-making process.

The Department's proposed rules modify the rules endorsed by the citizens advisory committee by providing specific numerical definitions for the TMDL, LA, and WLA for both total phosphate and ammonia nitrogen, and including provisions for allowing the Commission to adjust the LA and WLA. The change was made because the Department believed that a clear definition for the TMDL, LA, and WLA was needed in order to comply with the consent decree and to provide flexibility in managing pollution control within the Tualatin Basin. The report that includes the proposed rule endorsed by the citizens advisory committee contains two tables describing the TMDLs, LAs and WLAs for total phosphate and ammonia nitrogen based upon the water quality standards for both parameters. However, the committee's endorsement did not include specific definitions for TMDLs, LAs, and WLAs.

The Commission has two alternatives concerning this proposal:

1. Authorize the Department to proceed to hearing with the rules as proposed;
2. Do not authorize the Department to go to hearing.

The Department believes that the rules proposed by the Department comply with the consent decree agreed to between NEDC and the U.S. EPA.



If the Commission does not authorize the Department to proceed to hearing with either proposed rules or a modification of the proposed rules, it will be impossible for the Department to comply with the terms of the consent decree. The consent decree requires that the TMDLs, LAs, and WLAs be established by the end of the 1988 State/EPA Agreement which concludes on July 1, 1988.

Based upon the above, the Department believes that the proposed rules should be authorized for public hearing.

Summation:

- 1) The Tualatin River is a tributary to the lower Willamette River. The Tualatin is a slow-moving river which drains diverse land uses, including developing urban areas and agriculture.
- 2) The Tualatin River is adversely affected by these land use activities and water quality standards are violated during summer low flow for dissolved oxygen and aesthetics due to nuisance algal growth.
- 3) The Department initiated an intensive evaluation of the Tualatin River in June 1986.
- 4) The Northwest Environmental Defense Center (NEDC) sued the Environmental Protection Agency in December 1986, over failure to establish total maximum daily loads (TMDLs) on water quality limited stream segments in Oregon.
- 5) In March 1987, the Commission approved the Department's process for developing TMDLs on water quality stream segments in Oregon.
- 6) The Department proposed TMDLs for ammonia and total phosphorus in April 1987, to address the dissolved oxygen and nuisance algal growth problems in the Tualatin.
- 7) The Department appointed a citizens and technical advisory committee to assist in developing appropriate standards for defining the TMDLs.
- 8) NEDC and EPA settled the suit by consent decree in June 1987; consequently, the Department is committed to developing TMDLs on water quality limited stream segments in Oregon.

- 9) After extensive review of laboratory algal assay results and Tualatin River data, the Department determined that a phosphorus concentration of 0.10 mg/l and an ammonia concentration of 1.0 mg/l are needed to protect the beneficial uses of the river.
- 10) With the assistance of a CAC and a TAC, the Department developed, identified, and reviewed potential options for meeting the proposed water quality standards.
- 11) On February 8, 1988, the CAC endorsed proposed rules to be presented to the Commission as a request for authority to hold hearings.
- 12) The Department has proposed rules that include a total phosphate and ammonia nitrogen standard for the Tualatin River between June 1 and September 15 of each year. The proposed rules also include a time limit for permittees to submit compliance schedules and a time limit for lead nonpoint source management agencies to submit compliance schedules. In addition to the rules endorsed by the CAC, the Department proposed rules include specific numerical definitions for TMDLs, IAs, and WLAs for both parameters and a provision that allows the Commission to reallocate the IA and WLA for each parameter. The TMDL, however, can only be changed by rule amendment.

Director's Recommendation

Based on the summation, the Department requests authorization from the Commission to proceed to public hearing to take testimony on the proposals to add a phosphorus standard and an ammonia standard to the rules establishing water quality standards for the Tualatin River and establish definitions for TMDL, WLA, and IA.

*Fred Hansen*  
*by KNP*  
Fred Hansen

ATTACHMENTS: (11)

- A. Proposed Rule Amendment
- B. Proposed Public Notice to Hold Hearing on Phosphorus and Ammonia Standards.
- C. Citizens Advisory Committee Endorsed Report
- D. April 1987 Issue Paper Proposing TMDLs for Phosphorus and Ammonia in the Tualatin River.
- E. Department's Response to Comments on Proposed TMDLs for the Tualatin River.
- F. U.S. District Court Consent Decree: NEDC vs. EPA.
- G. Tualatin Citizens and Technical Advisory Committee.
- H. Tualatin River Basin Fish and Water Quality.
- I. Summary Table, Tualatin Control Strategies.
- J. Review of Phosphate Detergent Bans.
- K. Strategic Management Planning Group.

**ATTACHMENT A**

Proposed Phosphorus and Ammonia Standards

"OAR 340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violations of the following standards in the waters of the Willamette River Basin."

(Note: Proposed new language is underscored)

(q) Total phosphate expressed as phosphorus (P):(A) Mainstem Tualatin River between Rock Creek, river mile 38, and the mouth, river mile 0.0, from June 1 to September 15:

- (i) The median concentration of total phosphate as P shall not exceed 0.10 mg/L and no more than 10% of samples shall exceed 0.15 mg/L:
- (ii) The total maximum daily load (TMDL) is defined as the product of the flow of the Tualatin River (cfs) at Farmington (RM 33), multiplied by the phosphorus standard of 0.10 mg/l, and multiplied by 5.4. (Note: 5.4 is a conversion factor so that the units of measure [CFS, mg/l] are expressed as pounds per day [lbs/day].)
- (iii) The load allocation (LA) is defined as the product of the flow of the Tualatin River (cfs) at Farmington (RM 33), minus the flow of effluent from the Rock Creek sewerage facility (cfs), multiplied by the existing instream concentration of 0.07 mg/l, and multiplied by 5.4.
- (iv) The WLA is defined as the sum of TMDL minus the LA.
- (v) As soon as practicable, but not later than 90-days after the adoption of this rule all permittees that discharge wastewater to the Tualatin River downstream from river mile 38 shall submit to the Department for review and approval an implementation schedule that demonstrates how they will meet the total phosphate standard as P and wasteload allocation. A permittee shall be deemed in compliance with this rule if it is meeting the terms and conditions of the approved implementation schedule.

- (vi) As soon as practicable, but no later than one year after the designation of a lead agency for a specific nonpoint source pollution control program, the lead agency shall submit to the Department for review and approval an implementation schedule that demonstrates how they will meet the total phosphate as P standard and load allocation. The lead agency shall be deemed in compliance with this rule if they are meeting the terms and conditions of the approved schedule.
  
- (vii) Any revisions or reallocations of either the wasteload allocation (WLA) or load allocation (LA) or both shall be approved by the Environmental Quality Commission. In no case, except by rule amendment, shall the total maximum daily load (TMDL) be altered.
  
- (r) Ammonia-Nitrogen expressed as Nitrogen (N):
  - (A) Tualatin Basin and its tributaries from June 1 to September 15:
    - (i) Ammonia Nitrogen expressed as nitrogen shall not exceed 1.0 mg/l.
    - (ii) The total maximum daily load (TMDL) is defined as the product of the flow (cfs) at Farmington (RM 33), multiplied by the ammonia standard of 1.0 mg/l, and multiplied by 5.4.
    - (iii) The load allocation (LA) is defined as the product of the flow (cfs) at Farmington (RM 33), minus the flow of effluent from the Rock Creek sewerage facility (cfs), multiplied by the instream concentration of 0.04 mg/l, and multiplied by 5.4.
    - (iv) The wasteload allocation (WLA) is defined as the TMDL minus the LA.
    - (v) A permittee will be deemed in compliance with a wasteload allocation (WLA) for ammonia-nitrogen if it is in compliance with a time schedule for achieving the WLA as set in a NPDES permit.
    - (vi) Any revisions or reallocations of either the wasteload allocation (WLA) or load allocation (LA) or both shall be approved by the Environmental Quality Commission. In no case, except by rule amendment, shall the total maximum daily load (TMDL) be altered.

ATTACHMENT B

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 March 13, 1987 meeting, 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 the Tualatin River.

(3) Principal Documents Relied Upon in this Rulemaking

Clean Water Act as amended in 1977.

Water Quality Criteria, 1968. Federal Water Pollution Control Administration.

Water Quality Criteria, 1972. National Academy of Sciences and National Academy of Engineering.

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.



(4) Fiscal and Economic Impact

Adoption and implementation of the proposed amendments to water quality standards in the Tualatin Basin would result in increased costs to local governments, small businesses, and individuals for treatment and control of point and nonpoint source wastes. Specifically, increased costs for wastewater treatment would be incurred by the Unified Sewerage Agency (USA) and those served by the USA to reduce phosphorus and ammonia loadings to the Tualatin River during the summer. These costs could breakdown into two categories: (1) capital construction costs for additional processes to reduce the two constituent loadings, and (2) increased operating costs.

In addition, increased costs could be incurred by a wide range of individuals and governmental entities for the improvement of management practices. These costs would relate to improving management practices to better control nonpoint sources to prevent degradation of water quality and maintain and protect the designated beneficial uses in the Tualatin River.

In summary, the fiscal and economic impacts are not well defined. However, USA has provided the Department with preliminary cost estimates for the total present worth of needed improvements to comply with the proposed standards. These cost estimates range from 50 to 150 million dollars. The increase in user charges associated with these costs range from \$4.20 to \$10.75 per month. Public comment on any fiscal and economic impact is welcome and may be submitted in the same manner as indicated for the testimony on this notice.

(5) Land Use Consistency

The Department has concluded that the proposal conforms with the statewide planning goals and guidelines.

Goal 6 (Air, Water, and Land Resources Quality):

This proposal is designed to improve and maintain water quality in the Tualatin River by eliminating the substandard dissolved oxygen problem mainly caused by ammonia loadings and by reducing the phosphorus loadings which supports nuisance algal blooms during the summer.

Goal 11 (Public Facilities):

Compliance with these proposed rules, if adopted, would require Unified Sewerage Agency of Washington County to provide additional sewerage facilities.

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.

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 and federal authorities.

Ed Quan:c  
229-6978  
WC3044  
2/18/88

*Oregon Department of Environmental Quality*

# **A CHANCE TO COMMENT ON...**

**WATER QUALITY WASTE DISCHARGE PERMIT**

Notice Issued:  
Hearing Date:  
Comments Due:

**WHO IS** All businesses, residents, industries, and local governments within  
**AFFECTED:** the Tualatin Drainage Basin, including Lake Oswego.

**WHAT IS** The Department proposed to add the following Water Quality Standards  
**PROPOSED:** contained in Oregon Administrative Rules (OAR) Chapter 340, Division  
41: (1) standards for phosphorus and ammonia for the Tualatin River;  
(2) compliance requirements for achieving the proposed standards; and  
(3) definitions for Total Maximum Daily Loads, Waste Load Allocations,  
and Load Allocations.

**WHAT ARE THE** During summer low flow in the Tualatin River downstream from the Rock  
**HIGHLIGHTS:** Creek wastewater treatment plant, the dissolved oxygen content  
routinely falls below the standards. In addition, the chlorophyll a  
content exceeds the action level indicating nuisance phytoplankton  
growth. Stream reaches where water quality standards are not being  
met, even after technology-based effluent limits have been applied, are



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.

said to be "water quality limited". For municipal waste, technology-based effluent limits are those limits achieved with the best conventional secondary treatment system. The Federal Clean Water Act requires total maximum daily loads (TMDLs) to be established on water quality limited segments. A TMDL is the amount of a pollutant loading that a water body can receive without violating water quality standards.

To address these water quality problems, the Department proposes to:

- (a) add language requiring the permittees for point source control and lead agencies designated for nonpoint source control to submit their implementation schedules to the Department for review and approval;
- (b) add a phosphorus standard of 0.10 mg/l for the lower Tualatin River that applies from June 1 through September 15; and add an ammonia standard of 1.0 mg/l for the Tualatin River that applies from June 1 to September 15; and
- (c) define the following terms in the section on definitions in the rules: Total Maximum Daily Loads (TMDLs), Waste Load Allocations (WLAs), and Load Allocations (LAs).

**HOW TO COMMENT:** Public Hearing(s)

WHAT IS THE  
NEXT STEP:

After the hearing record has been evaluated, the rules as proposed or revised will be presented for Commission approval in July 1988. The Commission may adopt the rule amendments as proposed, adopt modified rule amendments, or decline to adopt rule amendments and take no further action.

WC3043

**ATTACHMENT C**

**TUALATIN BASIN WATER QUALITY ASSESSMENT**

Prepared by the Department of Environmental Quality  
for the Tualatin Citizens Advisory Committee

(Endorsed by the Tualatin Citizens Advisory Committee on February 8, 1988.)

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## EXECUTIVE SUMMARY

### Definition of TMDL and Problem

During summer low flow in the Tualatin River downstream from the Rock Creek wastewater treatment plant, the dissolved oxygen content routinely falls below the standard. In addition, the chlorophyll a content exceeds the action level indicating nuisance phytoplankton growth. Stream reaches where water quality standards are not being met, even after technology-based effluent limits have been applied, are said to be "water quality limited." For municipal waste, technology-based effluent limits are those limits achieved with the best conventional secondary treatment system. The Federal Clean Water Act requires total maximum daily loads (TMDLs) to be established on water quality limited segments. A TMDL is the amount of a pollutant loading that a water body can receive without violating water quality standards.

Water quality in the Tualatin River is affected by both point and nonpoint sources of waste. A TMDL is divided into two components -- Waste Load Allocations (WLAs) and Load Allocations (LAs). The WLA places an upper limit on pollutant loads originating from point sources. There are two major point sources in the Tualatin Basin that discharge treated municipal effluent year-round. Load allocations place an upper limit on pollutant loads originating from natural background and nonpoint sources. A variety of land use activities contribute to the nonpoint source loads of pollutants. The land uses in the Tualatin drainage basin that have a major effect on water quality during summer include urban development and agriculture.

### TMDL Chronology

In November 1985, the Department began an intensive assessment of pollution sources and water quality in the Tualatin Basin. In December 1986, the Northwest Environmental Defense Center (NEDC) filed suit in Federal District Court against the Environmental Protection Agency (EPA) to ensure that TMDLs be established for the Tualatin River and other water quality limited segments in Oregon. In April 1987, the Department proposed TMDLs for phosphorus and ammonia in the Tualatin River. On June 3, 1987, a consent decree was signed by NEDC and EPA that requires the adoption of TMDLs for the Tualatin River.

### Problems To Be Addressed

Current water quality standards do not address pollutants that cause dissolved oxygen violations and nuisance algal blooms. The dissolved oxygen problem is caused by excess ammonia discharged to the Tualatin. Similarly, nuisance algal blooms result primarily from excess phosphorus discharged to the river.

The proposed standards for phosphorus and ammonia will address these water quality problems. In addition, these standards form the basis for establishing the TMDLs, WLAs, and IAs.

#### Proposed Phosphorus and Ammonia Standards

On the basis of both laboratory tests and ambient water quality data, phosphorus criteria levels in the Tualatin River should be set between 0.05 and 0.15 mg/L. Ammonia values should not exceed 1.0 mg/l. These limits should be in place during the critical summer low flow, i.e. June to September. Therefore, the Department proposes the following standards.

"OAR 340-41-445(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violations of the following standards in the waters of the Willamette River Basin" (Note: Proposed new language is underscored)

(q) Total phosphate expressed as phosphorus (P):

A) As soon as practicable, but not later than 90-days after the adoption of this rule the permittee shall submit to the Department for review and approval an implementation schedule that demonstrates how they will meet the phosphorus standard. A permittee shall be deemed in compliance with this rule if it is meeting the terms and conditions of the approved implementation schedule.

B) As soon as practicable, but no later than one year after the designation of a lead agency for a specific nonpoint source pollution control program, the lead agency shall submit to the Department for review and approval an implementation schedule that demonstrates how they will meet the phosphorus standard. The lead agency shall be deemed in compliance with this rule if they are meeting the terms and conditions of the approved schedule.

C) The median concentration of total phosphate as P shall not exceed 0.10 mg/L and no more than 10% of samples shall exceed 0.15 mg/L from June 1 to September 15 for the following:

(i) Mainstem Tualatin River between Rock Creek (RM 38) and the mouth (RM 0)

(r) Ammonia-Nitrogen content shall not exceed 1.0 mg/L from June 1 through September 15 in the Tualatin River and tributaries.

## BACKGROUND - PROBLEM STATEMENT

The dissolved oxygen content routinely falls below the standard of 6 mg/l during summer low flow in the Tualatin River downstream from Rock Creek wastewater treatment plant (RCWTP). The oxygen sag is due to the treatment plant discharge of ammonia which is oxidized in the river, a process that consumes oxygen. In addition, excessive algal growth during the summer affects the aesthetic value of the lower Tualatin River. Concentrations of chlorophyll *a*, an algal pigment, routinely exceed the action level that indicates when phytoplankton growth may create a nuisance condition. To address these problems, the Department proposes to adopt standards for phosphorus and ammonia and to establish Total Maximum Daily Loads (TMDLs) for these two constituents in the Tualatin River.

The Federal Clean Water Act requires that TMDLs be established for identified water quality limited stream segments. Water quality limited segments are those waters that do not meet water quality standards, in either numerical or narrative form, even after technology-based effluent limits have been applied. For municipal waste, technology-based effluent limits are those limit achieved with the best conventional secondary treatment system.

In December 1986, the Northwest Environmental Defense Center (NEDC) filed a suit in Federal District Court against the Environmental Protection Agency (EPA) to ensure that TMDLs are established and implemented for waters in Oregon identified as being water quality limited. Subsequently, NEDC filed a Notice of Intent to sue, naming 27 other water bodies requiring TMDLs be established. The Department actively participated in negotiations among NEDC, EPA, and the U.S. Justice Department to develop an acceptable approach in establishing TMDLs and WLAs (Waste Load Allocations) to settle the suit. On June 3, 1987, U.S. District Judge James Burns signed a consent decree that requires adoption of TMDLs, WLAs, and LAs (Load Allocations for background water quality and nonpoint sources) for the Tualatin River, nine other rivers, and one lake (Attachment F).

In March 1987, the EQC approved the Department's proposed process and schedule for establishing TMDLs for identified water quality limited segments. In April 1987, the Department prepared an issue paper proposing TMDLs for total phosphorus and ammonia in the Tualatin River. These proposed loads would vary with flows as recorded at the USGS gauge at Farmington (River Mile 33) (Attachment D). The issue paper was distributed for public review and comment. Seven respondents submitted written comments and the Department responded to those comments (Attachment E).

The proposed phosphorus TMDL is designed to reduce nuisance algal growth in the lower Tualatin River. Algal growth affects the aesthetic quality and beneficial uses of the lower Tualatin. Although phosphorus is not the only factor which stimulates algal growth, studies indicate that it can have a major effect on the abundance and type of algae produced. By reducing the load in the Tualatin, the

phosphorus load to Lake Oswego during the summer will also be reduced. However, the proposed limit is not designed to control algal growth in the lake.

The proposed ammonia limit will address the substandard oxygen conditions in the river. The Unified Sewerage Agency (USA) is currently installing improvements to correct the dissolved oxygen problem. The new facilities should be operational by November 1989.

The Tualatin River occasionally exceeds the 100 mg/l total dissolved solids (TDS) standard. There is no indication that these exceedances affect any of the recognized beneficial uses for the river. Because the TDS standard applies to the entire Willamette Basin, the upcoming Willamette Basin assessment provides an appropriate opportunity for reviewing this standard.

ORS 468.735 provides that the Commission, by rule, may establish standards of quality and purity for waters of the state. Water quality standards, contained in OAR chapter 340, were adopted by the Commission in December 1976. The Commission adopted revisions to these standards in September 1979, and July 1985; added the nuisance phytoplankton growth rule in March 1986; and amended the mixing zone policy and toxic substances standards in August 1987.

#### NEED FOR A TUALATIN BASIN NUTRIENT CONTROL PLAN

Control of both point and nonpoint sources of nutrients is needed to improve water quality and maintain the uses of the Tualatin River over the long term. The subjective nature of aesthetic problems resulting from algal blooms is complex. Nonetheless, decisions must be made which will protect the water quality of the Tualatin River.

#### Purpose of a Nutrient Control Plan

The long-term goal of a water quality management plan in the Tualatin basin is to preserve and enhance water quality and to provide for the beneficial uses of the water resource. Water quality standards included in the management plan consist of two parts: 1) a definition of recognized beneficial uses of the water resource, and 2) criteria to protect the uses. Aesthetics, contact recreation, aquatic life, water supply, and irrigation are major beneficial uses listed in OAR 340-4-442 for the Tualatin River. The goal of a nutrient control plan is to restore and maintain water quality in the Tualatin River to an attainable level which protects fish and aquatic life and provides for recreation in and on the water. Excessive algal growth affects aesthetics, reduces water clarity, and restricts contact recreation in the river. Algal blooms often elevate the pH level which causes eye irritations for swimmers (National Academy of Science and National Academy of Engineers, 1972).

### Justification For Phosphorus Standard.

Revisions in 1986 to the Water Quality Standards established a trigger level for chlorophyll a of 15 ug/L (0.015 mg/l). If this level is exceeded, OAR 340-41-150(2) states that DEQ must conduct such studies as are necessary to describe present water quality; determine the impact of the elevated levels on beneficial uses; determine the probable causes of exceedance and beneficial use impact; and develop a proposed control strategy for attaining compliance where technically and economically practicable. This strategy can include standards for other pollutant parameters and discharge load limitations. In addition, the rule states that the chlorophyll a trigger value may be modified to an appropriate value for that particular water body.

To assist the Department's evaluation of a phosphorus standard, a Technical Advisory Committee (TAC) was appointed by the Director. The Committee discussed algal growth from a variety of perspectives, including the use of chlorophyll a and Secchi disc measurements as potential water quality standards. Chlorophyll a and Secchi disc transparencies measure symptoms but are not primary determinants of algal growth. Both produce highly variable results because of the effect of other factors, especially light intensity. Furthermore, neither parameter is well suited for limits in waste discharge permits. The Department feels that both parameters should be included in an evaluation program and that action levels are appropriate. However, chlorophyll a and Secchi disc measurements are not practical parameters for regulatory standards. Thus the Department focused on phosphorus as the practical parameter for a standard.

The phosphorus TMDL is based on an ambient target concentration or standard. This concentration was determined through controlled laboratory algal assays, an assessment of ambient Tualatin data in comparison with similar streams and the Willamette River, and by literature review.

### Laboratory Algal Assays

The algal assay is the standard method for determining the potential of natural waters to support algal growth. The test may also be used to define critical limiting concentrations of nutrients. The assay is based on the premise that the maximum growth is proportional to the amount of a nutrient which is present and biologically available in minimum quantity relative to the growth requirements of the algae being tested. This concept has been thoroughly documented in the literature for critical requirements of phosphorus, nitrogen, and other crucial elements.

Three algal assays were conducted using Tualatin River water as a diluent. The first two assays tested the assumption that algal growth is limited by phosphorus at concentrations below 0.10 mg/l. In contrast, the third assay was designed to show what the algal productivity might be with different amounts of sewage effluent in the Tualatin River.

In the first two assays, differing amounts of phosphorus were removed from Durham sewage effluent and then the effluent was diluted with background Tualatin River water. These samples were then treated by spiking the low phosphorus samples with nitrogen; EDTA, a chelating agent which acts to increase micronutrients; and phosphorus. The samples spiked with phosphorus resulted in increased algal growth, while those spiked with nitrogen or EDTA did not result in increased algal growth.

These test results indicate that phosphorus, at concentrations below 0.10 mg/l, acted as a limiting nutrient for algal growth. Results of these assays are displayed in Figure 1. Figure 2 uses a family of lines to show the relationship between algal growth and total phosphorus. At total phosphorus concentrations below 0.15 mg/l, algal growth appears to decrease as total P decreases. The results also show that a target level of 0.10 mg/l total phosphorus would be required to effect a statistically significant reduction in algal growth in the Tualatin.

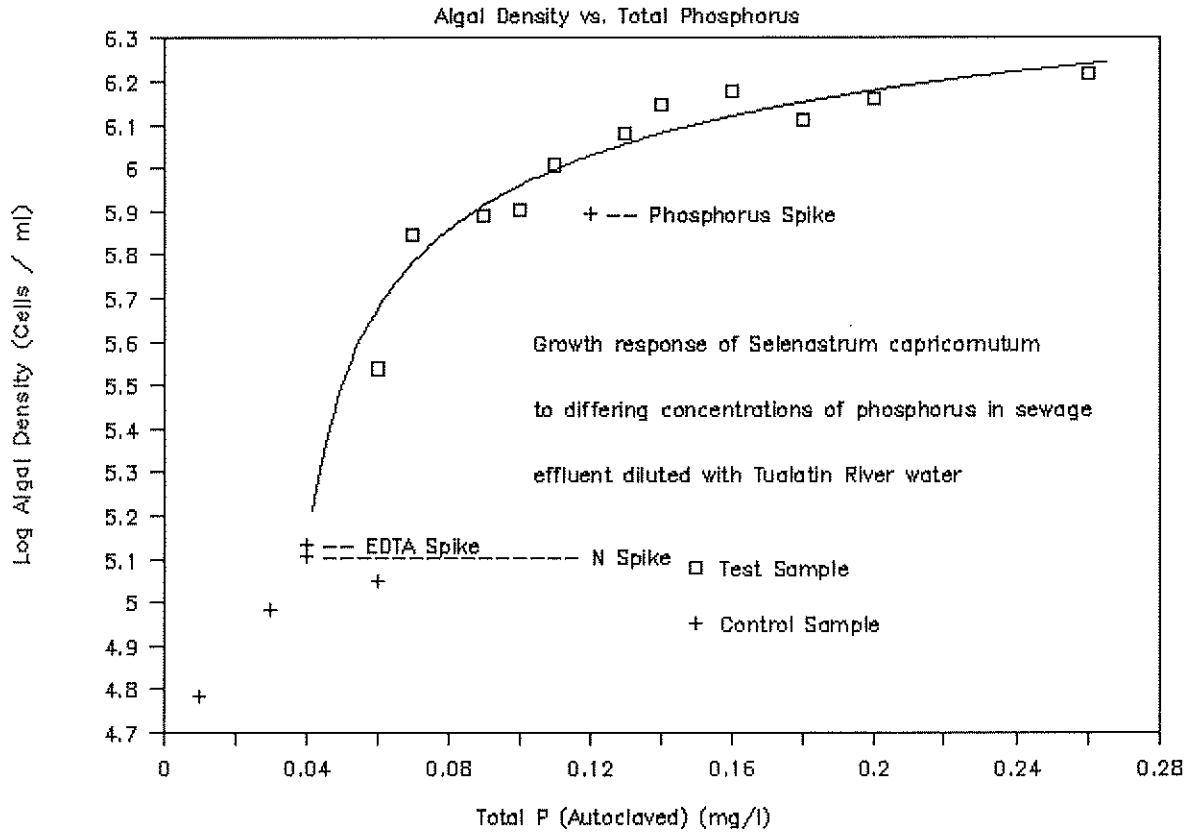
For the third assay, background Tualatin River water was spiked with differing volumes of treated effluent from the Durham treatment plant. This test was designed to show how different amounts of sewage in the Tualatin may affect algal growth. Test dilutions ranged from no effluent to 6 percent effluent; much less than the 25 percent effluent in the lower Tualatin at the time the samples were collected. The tested dilutions showed an apparent nitrogen limitation. This condition does not generally occur in the Tualatin because, unlike the test algae used in the assay, many of the algal species naturally present in the Tualatin can "fix" atmospheric nitrogen and would not be nitrogen limited. Although this test indicated a reduction in growth potential as effluent is removed, a similar pattern may not be seen under natural conditions where the algae can fix nitrogen.

### Discussion

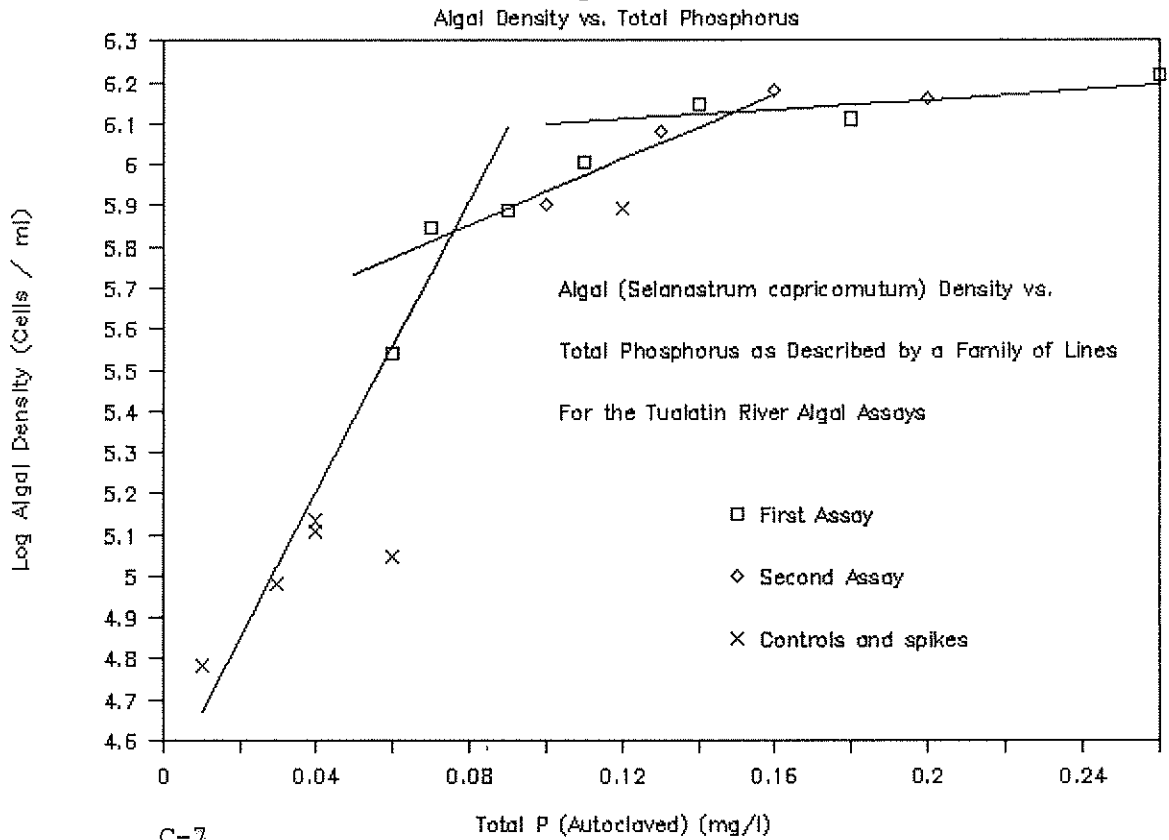
Algal assays have been used to determine regulatory target concentrations, to assess wasteload allocations, and to accurately determine the limiting nutrient status of waters. Many researchers have noted a high degree of correlation between laboratory algal assays and the trophic levels of waters. However, there are two major concerns in applying laboratory algal assays to field interpretations: growth conditions in the laboratory and the form of phosphorus measured. Optimum growth conditions are maintained in the laboratory throughout the 14-day test. These conditions would not always occur in the field. Therefore, algal assay results should be interpreted as the optimum growth potential.

The second concern with laboratory procedures is that the form of total phosphorus in the assay may be more biologically available than the total phosphorus measured in the field. Total phosphorus better represents the pool of phosphorus available for algal growth and is therefore used in algal assays and field investigations. In contrast, ortho-phosphorus does not include many forms of phosphorus that may be

### Figure 1



### Figure 2



readily available for algal growth. The analysis for total phosphorus calls for an unfiltered water sample, whereas the analysis for ortho-phosphorus requires that the sample be first filtered. Sample filtration removes other forms of phosphorus that may be associated with suspended matter. By autoclaving or sterilizing the unfiltered samples under steam heat and pressure prior to the tests, some component forms of total phosphorus break down, making them more biologically available. This could lead to an underestimate of the critical limiting concentration of phosphorus. Because the samples were not filtered, the available phosphorus in the assays should not be confused as representing dissolved ortho-phosphorus.

#### AMBIENT ASSESSMENT

Field data collection in the summer of 1987 focused on describing the relationship between algal growth and total phosphorus concentration in the Tualatin. Additional data is also available to compare the Tualatin to other streams (Yamhill and Marys Rivers) with similar basin characteristics and the Willamette River which receives these tributaries. This information is displayed in Figure 3. The expanded scale in Figure 4 shows the data points for each river. The two lines in the expanded scale represent the confidence interval for those data points presented. Results of the field investigations correspond well with the results of the algal assays. An apparent break point occurs near a phosphorus concentration of 0.15 mg/l. Above this point, algal growth is only slightly dependent on phosphorus concentration. Algal growth may be limited by self-shading or other factors when phosphorus is above 0.15 mg/l. Below this concentration algal growth is limited by phosphorus.

The 0.15 mg/l break appears to be the border between high enrichment or high algal growth, and moderate algal growth conditions (Figure 5). The method for describing the zones has been tested and documented in literature. The zones described are specific for the data presented. For example, phosphorus concentrations just above 0.15 mg/l supported algal growths which produced chlorophyll *a* of over 100 ug/l. These extreme nuisance algal blooms were not found to occur when phosphorus was below 0.15 mg/l. Therefore, 0.15 mg/l appears to be the maximum concentration below which nuisance growths can be prevented.

One reason for the dramatic response of algae in the high growth region is the ability of algae to store excess phosphorus. Under conditions of excess phosphorus, algae can store surplus phosphorus until physical conditions, such as available sunlight, permit growth to occur. One concern with a 0.15 mg/l total phosphorus target level is that it is very close to the 0.16 mg/l where extreme growths appear to occur. Caution should be used in interpreting 0.15 mg/l total phosphorus as the upper limit when little ambient data at this concentration is available.



Figure 5

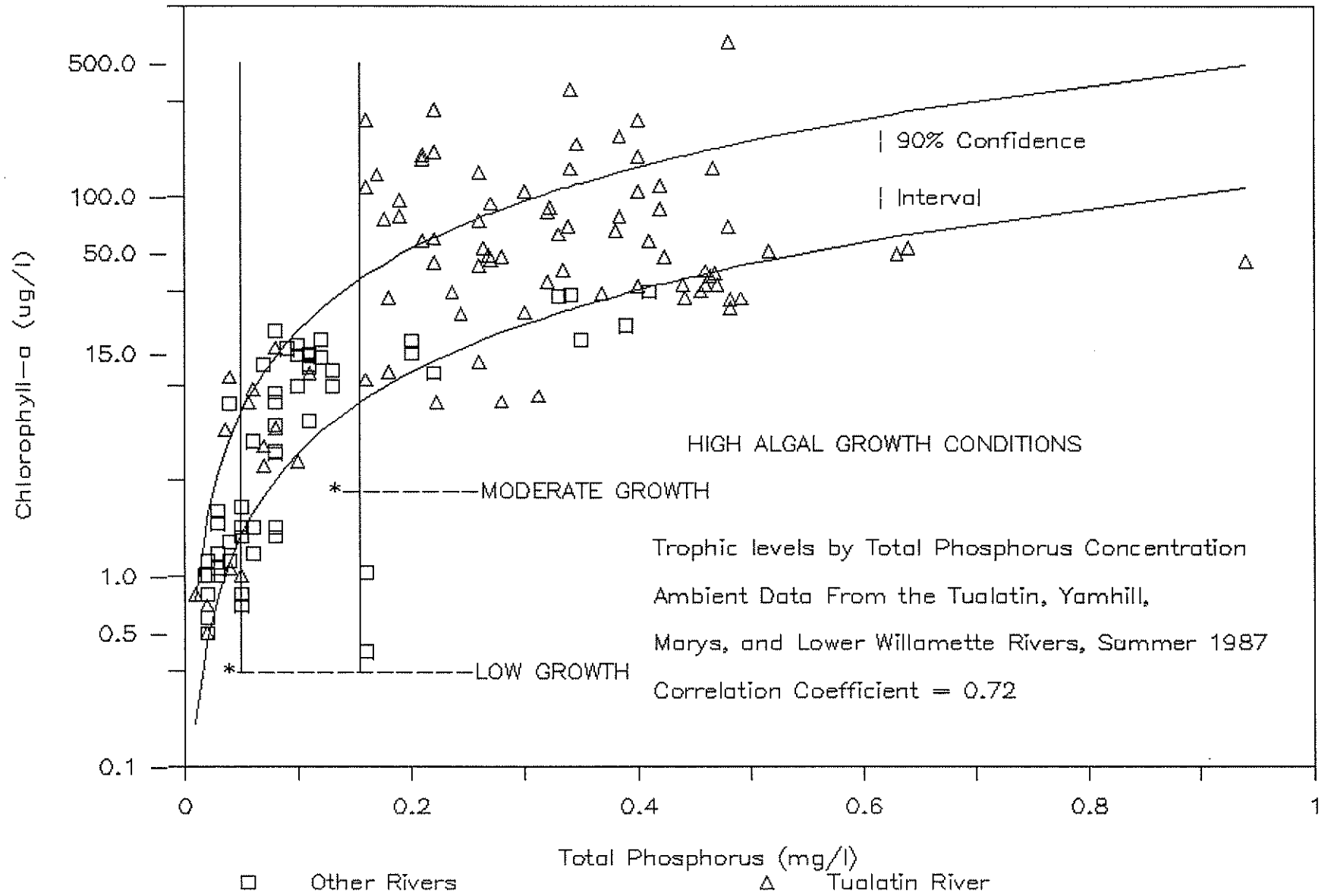


Figure 3

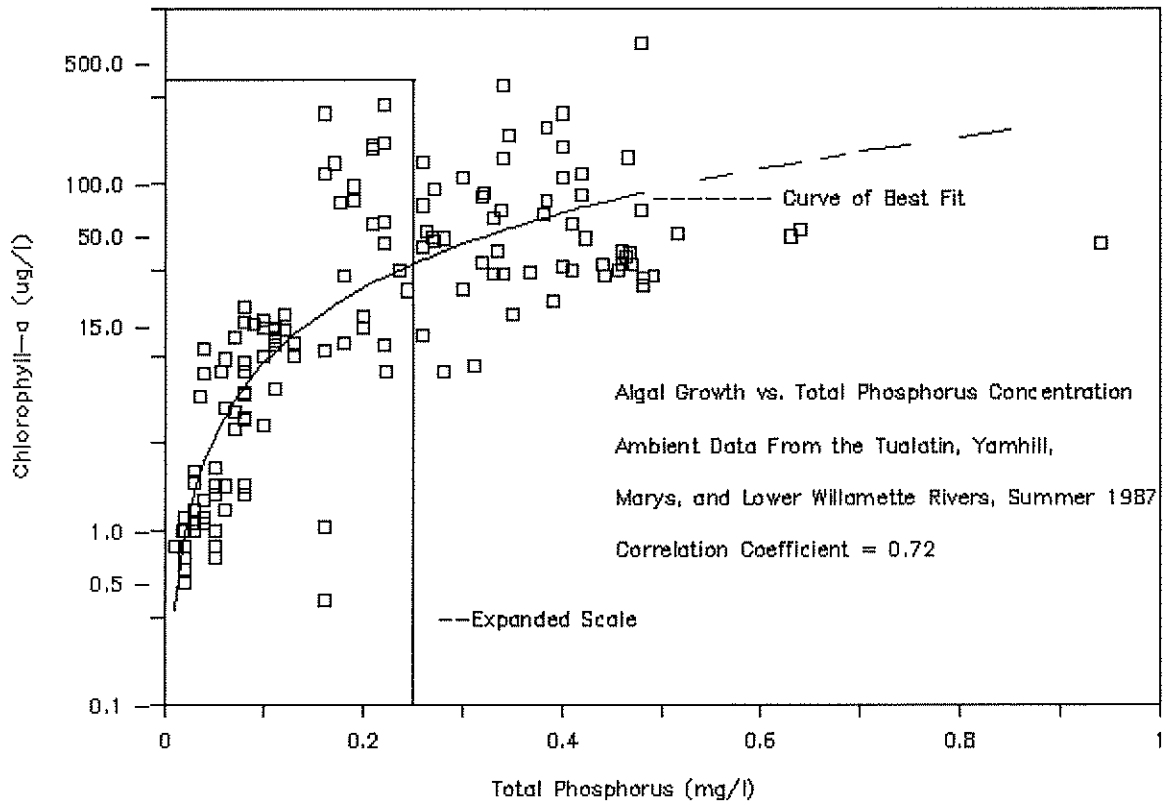
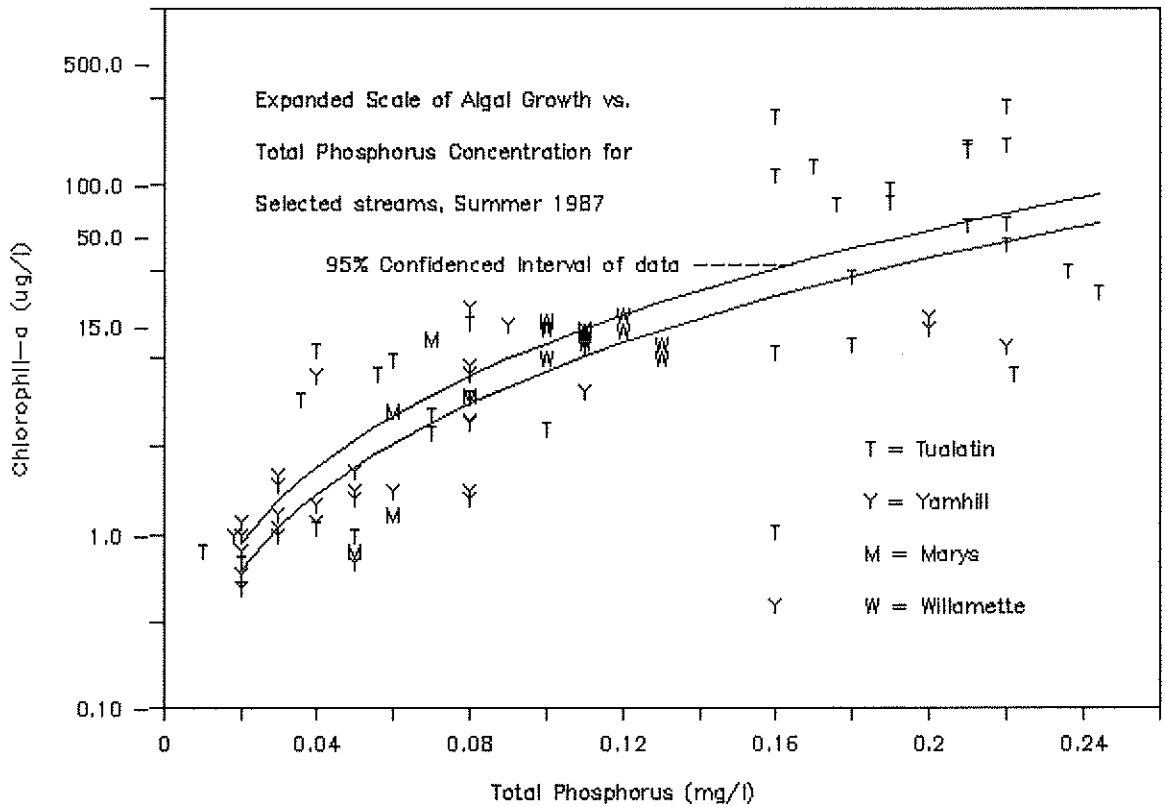


Figure 4



The variation in data points seen in Figures 4 and 5 is common for ambient data analysis. This natural variation makes it difficult to predict exactly the chlorophyll a concentration for a given phosphorus concentration. We can, however, as illustrated in Figures 4 and 5, define a range. Given similar physical conditions in the Tualatin River, we can be certain 90% of the time that the average chlorophyll a concentration will fall between the two lines in Figure 5. We can be confident that a 0.10 mg/l total phosphorus concentration will limit nuisance algal conditions as defined in the nuisance phytoplankton growth rule, providing that flow in the lower Tualatin River is not greatly reduced.

Much of the variation in the data occurs at total phosphorus concentration above 0.15 mg/l. As discussed earlier, this condition may be due to other physical factors controlling algal growth in the presence of excess phosphorus. The expanded view in Figure 4 covers a range of phosphorus concentrations where algal growth may be expected to be controlled. Confidence intervals drawn for this range indicate that a 0.10 mg/l target level will result in average chlorophyll a concentrations which meet the nuisance phytoplankton growth rule. A 0.15 mg/l total phosphorus target level would be expected to result in chlorophyll a concentrations in excess of the nuisance phytoplankton growth rule.

The 0.10 mg/l total phosphorus target concentration forms the basis for EPA's recommended criteria and is a generally accepted goal for the prevention of nuisance algal conditions in streams. The approach of using algal assays and empirical data analysis for eutrophication studies is well documented. The response of phosphorus control has been found to be predictable with respect to trophic change. Therefore, a total P median concentration of 0.10 mg/l and a 90th percentile (90% of points below) of 0.15 mg/l P are proposed for target concentrations to base the TMDL.

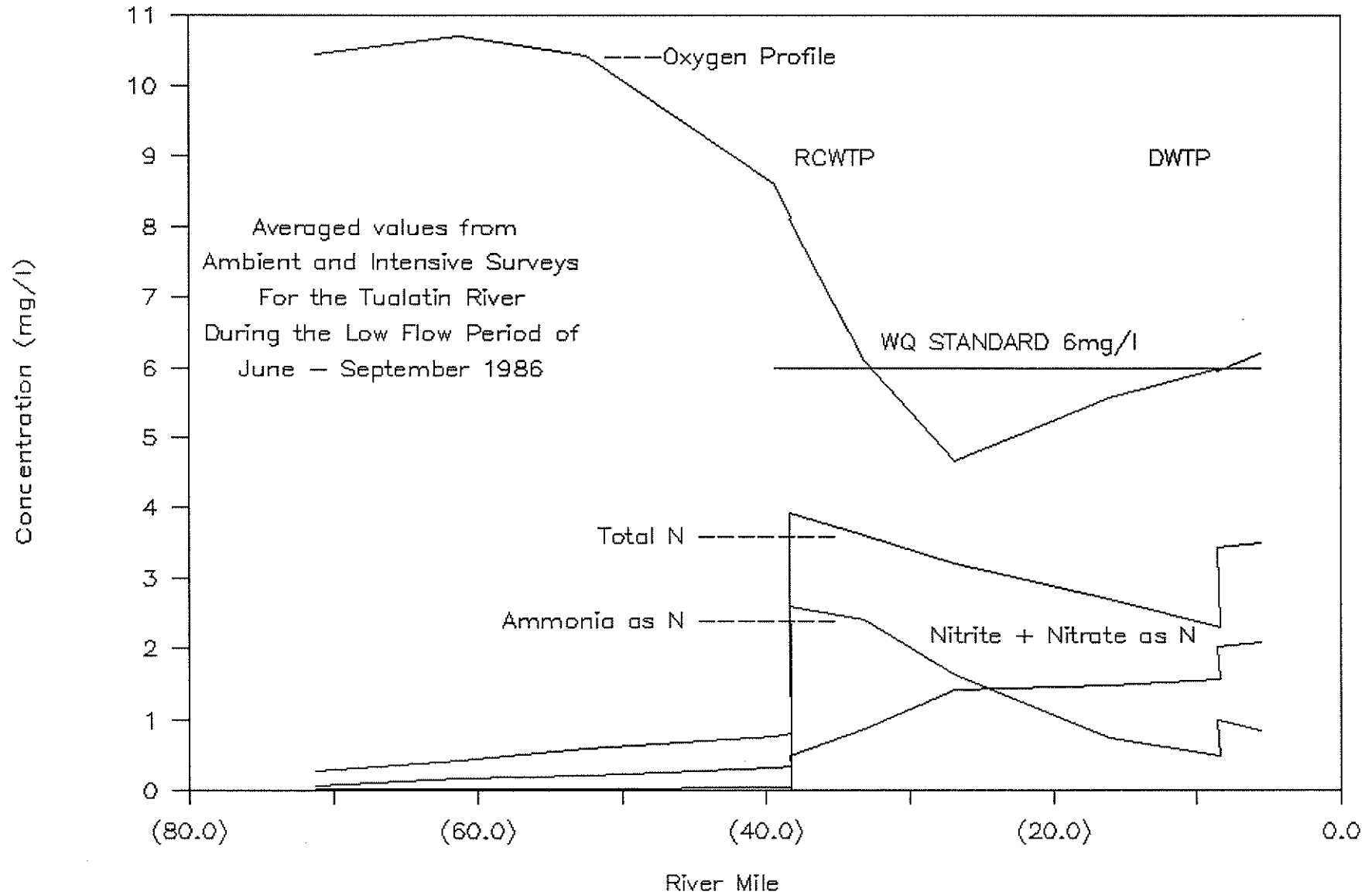
#### Justification For Ammonia Standard

An important aspect of the Tualatin River study was dissolved oxygen, a key parameter that directly affects fish and other aquatic life. The fish species that inhabit the Tualatin River system year-round or during a part of their life cycle are discussed in Attachment H.

The Tualatin River downstream from Rock Creek Waste Treatment Plant (RCWTP) routinely experiences violations of the dissolved oxygen standard during summer low flow due to ammonia nitrification. This treatment plant is the primary source of ammonia to the Tualatin River. The target concentration for ammonia was determined through intensive field investigations and controlled laboratory experiments.

Intensive surveys were conducted during the summer of 1986 to describe the oxygen demand in the Tualatin River. The dissolved oxygen profile and nitrogen species and loadings are shown in Figure 6. The oxygen sag below RCWTP is directly related to the conversion of ammonia to nitrate, a process which consumes oxygen.

Figure 6



C-12

Laboratory tests were conducted to quantify the components of the total oxygen demand. These components include the ultimate nitrogenous and organic demands, and sediment oxygen demands. Results of these tests verified the field investigations.

Results of these tests are used to propose 1.0 mg/l of ammonia below RCWTP, at Farmington, as the target concentration to base the TMDL. USA is building facilities at the treatment plant to reduce ammonia loads to the river which are required by RCWTP's NPDES permit to be in operation by November 1, 1989.

### Proposed Rule Change

The Technical Advisory Committee agreed that laboratory algal assays and intensive surveys conducted on the Tualatin River have confirmed phosphorus to be the controlling nutrient. Thus, phosphorus standards and controls are proposed for the Tualatin River to address algal growth problems and to protect the aesthetic quality and recreational uses of the river.

On the basis of both laboratory test and ambient water quality data, phosphorus criteria levels in the Tualatin should be set somewhere between 0.05 and 0.15 mg/L and the ammonia content should be 1.0 mg/l. The limits adopted should apply to the critical algal growth season from June to September. Because of the inherent variability of water quality measurements, the Department recommends the following standards be established for the Tualatin River to control phosphorus and ammonia levels in the river:

"OAR 340-41-445(2) No wastes shall be discharged and no Activities shall be conducted which either alone or in combination with other wastes or activities will cause violations of the following standards in the waters of the Willamette River Basin"

Note: proposed new language is underscored.

(q) Total phosphate expressed as phosphorus (P):

A) As soon as practicable, but not later than 90-days after the adoption of this rule the permittee shall submit to the Department for review and approval an implementation schedule that demonstrates how they will meet the phosphorus standard. A permittee shall be deemed in compliance with this rule if it is meeting the terms and conditions of the approved implementation schedule.

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C) The median concentration of total phosphate as P shall not exceed 0.10 mg/L and no more than 10% of samples shall exceed 0.15 mg/L from June 1 to September 15 for the following:

(i) Mainstem Tualatin River between Rock Creek (RM 38) and the mouth (RM 0)

(r) Ammonia-Nitrogen content shall not exceed 1.0 mg/L from June 1 through September 15 in the Tualatin River and tributaries.

#### Waste Load Allocation and Load Allocation

Eight National Pollution Discharge Elimination System (NPDES) permits and five Water Pollution Control Facilities Permits (WPCF) have been issued by the Department to municipal and industrial facilities in the Tualatin River. The WPCF permits do not allow discharge to the river. Two of the eight NPDES permits, one for Tektronix Inc., and another for Intel Corporation, allow industrial waste discharges to Beaverton Creek. The six remaining NPDES permits are for USA municipal waste treatment plants. Only two of the USA Plants, at Durham and Rock Creek, discharge during the critical summer low flows. These plants are the major point sources for phosphorus and ammonia loads and, therefore, are the focus of point source control options.

Because it will take time to plan, arrange financing, and implement control measures before the phosphorus standard can be achieved in the Tualatin River, the Department will assist the process by:

- o providing technical assistance to local agencies and individuals in establishing compliance schedules to achieve the standard;
- o modifying NPDES permits to incorporate compliance schedules and other conditions as appropriate; and
- o reporting to the EQC on the agreed upon compliance schedule.

Once a standard is established for the parameter of concern, the total maximum daily load can be determined and allocated among the point sources, nonpoint sources, and background. Point sources are assigned waste load allocations, while nonpoint sources and natural background are assigned load allocations.

The phosphorus load allocation for the Tualatin River is based on the ambient concentration of total phosphate as P in the mainstem Tualatin upstream from where point sources are known to exist. The median concentration in the upper Tualatin River during the summer of 1987 was 0.07 mg/l. This level was applied as the level to be met for the Tualatin River, and all tributaries entering the river above River Mile 35 to establish the upstream load allocation.

Table 1 shows, through a range of river flows measured at Farmington, the load allocation (LA) for background and upstream nonpoint sources, the waste load allocation (WLA) for USA point sources, and an estimate of the time-of-travel (TOT) for the Tualatin River between Elsner bridge and Highway 99 bridge.

Table 1

Load allocation (LA), wasteload allocation (WLA), and total maximum daily load (TMDL) in pounds per day of phosphorus in the Tualatin River at specific flows as measured at the Farmington gage.

Flow in CFS at Farmington	<u>LA</u> Upstream of WTP		<u>WLA</u> USA 20 MGD	<u>TMDL</u> : TOT (hours) In the: Elsner to River : to HGWY 99
150	45	+	36	= 81 : 77.6
175	54	+	40	= 94 : 70.3
200	64	+	44	= 108 : 64.8
225	73	+	48	= 121 : 59.5
250	83	+	52	= 135 : 54.8

**Notes:** The TMDL is based on 0.1 mg/l total P, is equal to the sum of the LA and WLAs. TOT is the estimated Time-of-Travel for the 4.7 miles from Elsner bridge to the Highway 99 bridge.

Under existing conditions of high phosphorus loads discharged to the Tualatin River, the river assimilates a large portion of the phosphorus load downstream from the point sources. The allocations presented in Table 1, however, assume no precipitation or other forms of assimilation of phosphorus in the river. Because background phosphorus concentrations are approaching the 0.10 mg/l target level, the proportion of phosphorus assimilated by the river would be expected to be much less when phosphorus loads are reduced in the future.

The time-of-travel estimates in Table 1 were determined by using Mannings equation with data on cross-sectional profiles under different flows and time-of-travel information collected by the United Sewerage Agency (USA) in July 1987. Travel time can affect the abundance of algae because phytoplankton, or suspended algae, are transported in the water column. The slower the travel time between two distant points, the more time algae will have to grow and multiply in that section of the river. Conversely, faster travel will not provide as much time for algae to proliferate within a section of river.

Under the range of river flows presented in Table 1, it takes between 2.3 and 3.3 days for water to travel the 4.7 miles between Elsner bridge and Highway 99 bridge. This time interval is adequate, given the proper ambient conditions, to support algal growth. Therefore, even though TOT may be reduced by increasing the flow, it would not be expected to diminish the need for some form of phosphorus control. Loss of a significant amount of flow, however, may act to increase the abundance of algae in the lower river.

Modelling by CH2M HILL, consultants to USA, show the potential influence of flows on the average chlorophyll a concentrations in the Tualatin River at Elsner (Figure 7). The model relates the estimated average chlorophyll a content for six concentrations of phosphorus to flow. The higher algal growth (higher chlorophyll a content) occurs during lower river flows because of the longer residence time of water. However, the relationship of algal growth to flow would be dampened if the average chlorophyll a content represented the entire lower river with the associated long residence time at all flows.

Similar concerns have been raised regarding the effect of introducing cooler temperature water through flow augmentation and what effect this may have on algal growth. In general, lowering water temperatures below the optimum growth temperature for algae will slow the algal growth rate. However, given the slow-moving nature of the Tualatin River, it is unlikely that augmented flows of colder waters could be sustained to effectively drop the summer river water temperatures to the point of reducing the algal growth rate.

Many potential load allocations exist that could achieve the required TMDL. A procedure has been developed that allows for adjustments in the TMDL and WLAs if ambient conditions in the Tualatin change. Ambient conditions could change if additional dilution water becomes available for USA, if background concentrations of phosphorus are reduced, or if effective nonpoint source controls are implemented.

The procedure for assessing various options is described in Attachment I. Table 2 was developed using the procedures outlined in that attachment. Table 2 illustrates a potential distribution of phosphorus loads assuming that further nonpoint source controls are implemented and some flow augmentation is available.



TUALATIN RIVER CHLOROPHYLL-a VS. FLOW  
 SUMMER AVERAGE CHLOR-a, JUNE-SEPTEMBER

C-17

CHLOR-a  
 ug/l

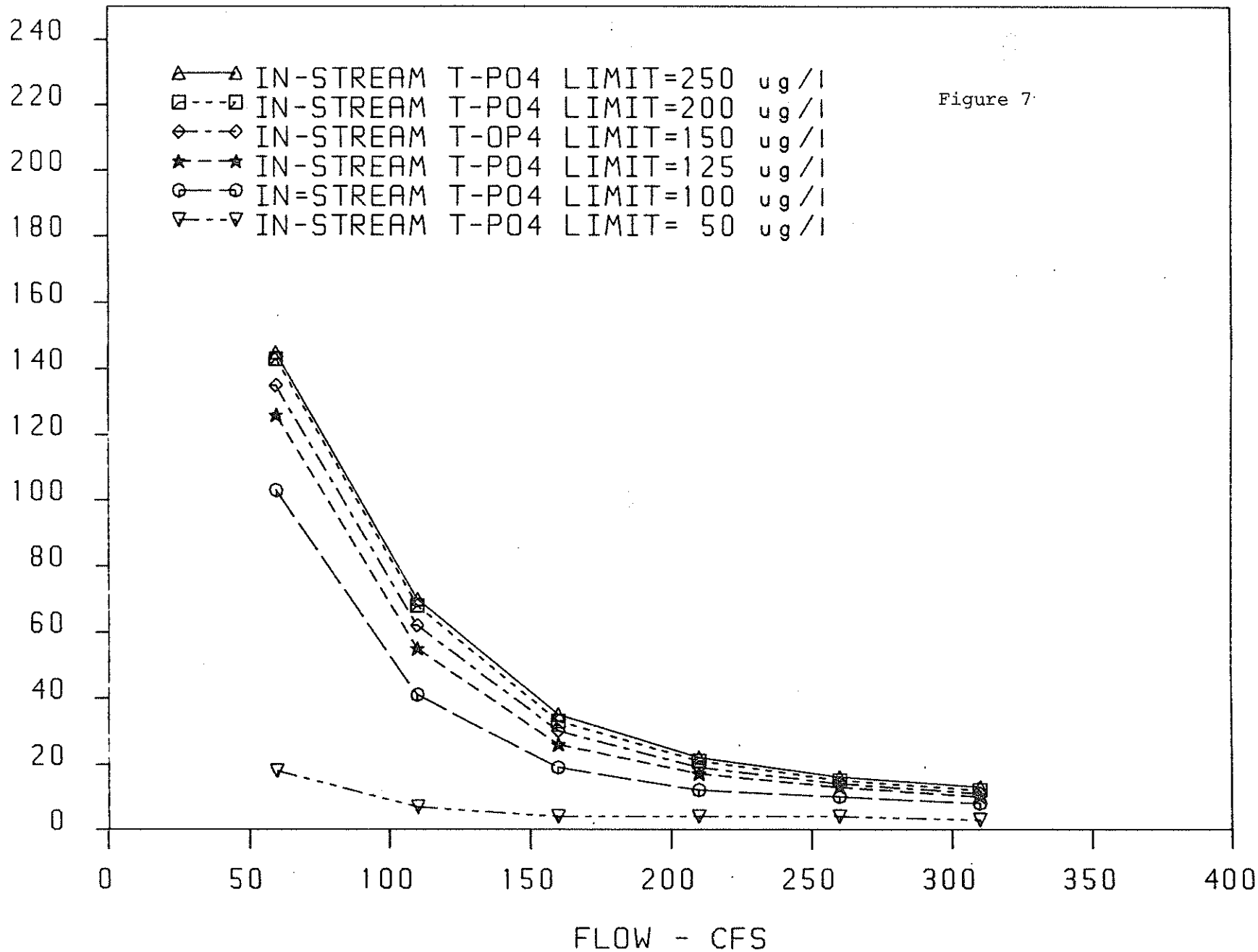


Table 2

Estimated flow dependent potential load allocation (LA), waste load allocation (WLA) and TMDL, in lbs/day of P, assuming that further NPS controls are implemented for the Tualatin River Basin

Flow, (CFS) Farmington	Dairy Creek	Rock Creek	Upper Tualatin*	Fanno Creek	USA WLA	TMDL** In the River
175	13	8	38	2	46	94
200	13	8	43	2	55	108
225	13	8	49	2	63	122
250	13	8	54	2	72	136

\* Tualatin at Rood Road includes Dairy Creek Drainage

\*\* The TMDL is the sum of RCWTP + Fanno Creek + Rock Creek + Upper Tualatin.

Table 3 shows the ammonia TMDL, WLA, and LA for a range of flows in the Tualatin as measured at Farmington. The LA represents the maximum load in the Tualatin River above Rock Creek (RM 38) and is based on existing ambient river concentrations. The waste load allocation applies to USA point sources. The TMDL is the sum of LA and WLA.

Table 3

Load Allocation (LA), Waste Load Allocation (WLA) and Total Maximum Daily Load (TMDL) in pounds per day of ammonia in the Tualatin River.

Flow in CFS at Farmington	<u>LA</u> Upstream of WTP	<u>WLA</u> USA	<u>TMDL</u>
150	33	777	810
175	38	907	945
200	44	1036	1080
225	49	1166	1215
250	54	1296	1350

Note: WTP = Waste Treatment Plant  
USA = Unified Sewerage Agency

**POINT SOURCE MANAGEMENT OPTIONS**

Some management alternatives have been presented by USA to the citizens and technical advisory committees for the Tualatin Project. USA developed and evaluated the options listed in Table 4. Table 4 summarizes a range of the alternatives and estimated capital and operational costs for summer months only for the USA plants to meet the phosphorus TMDL requirements (36 lbs/day). These costs are based on USA's current treatment capacity of 40 MGD. However, this table does not necessarily contain all the potential options available for point source control which could be considered and implemented for the basin. Because of increased growth in Washington County, USA's wastewater flows from Durham and RCWTP are projected to increase to a total of about 60 MGD by the year 2005. In addition, USA's future expansions will need about 40 million dollars worth of improvements to Durham and RCWTP to provide for the projected flows.

Table 4

Options and associated costs for USA plants to meet a 36 lbs/day waste load allocation

Option	flow MGD	Capitol Cost \$ Mill	O&M Cost \$ Mill	Present Worth \$ Mill	Increase In User Charge \$ / Mo.	Total User Charge
Land irrigation both plants	40	62	3.7	100	7.00	18.75
	60	94	5.6	150	10.00	21.75
Out of basin to Columbia	40	82	2.4	104	7.31	19.06
	60	120	3.4	151	10.75	22.50
RCWTP Columbia DWTP to Will.	40	48	1.3	56	4.20	15.95
	60	61	1.9	79	5.70	17.45
RCWTP Columbia DWTP High lime	40	55	2.2	75	5.30	17.05
	60	72	3.6	106	7.50	19.25
*High Lime Both irrigate > 40	40	54	2.6	78	5.60	17.35
	60	85	4.5	128	9.10	20.85

\* Does not include sludge disposal costs. A 40 MGD high lime plant will use about 40 to 50 tons of raw lime a day and produce 80 tons or 200 cubic yards of chemical sludge in addition to the 175 cubic yards of biological sludge

**NONPOINT SOURCE MANAGEMENT OPTIONS**

Nonpoint source pollution results from diverse land use activities that are not regulated as point sources. In practical terms, nonpoint

sources do not result from a discharge at a specific location (e.g. a pipe) but generally from diffuse runoff associated with urban, agricultural, and numerous other land use activities.

The Department has been investigating nonpoint pollution sources for a number of years, including identification of problems, development of needed controls, and implementation of controls. Problem identification efforts have ranged from intensive monitoring of waterways during storm events to the more general assessments of adverse impact based on professional judgement. The control programs

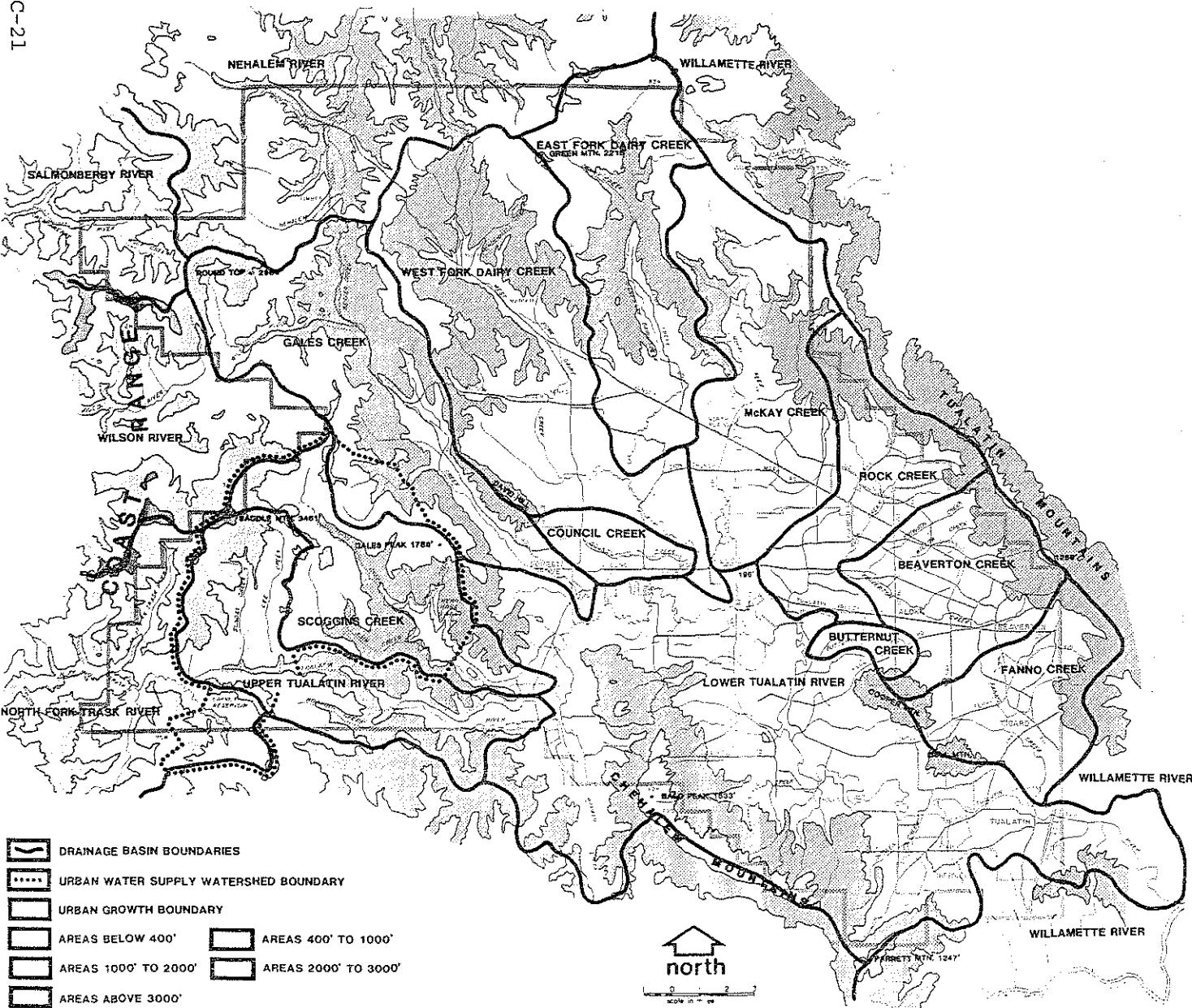
were based on resource management systems that utilized best management practices (BMPs) as the means to prevent or correct the problems. BMPs are defined as a conservation practice or a system of conservation practices which, when installed, protects water quality from a particular nonpoint source activity. Practices were consequently developed for various nonpoint source categories such as agriculture, forestry, and urban runoff.

Once the practices were identified, the Department worked with specific state and local agencies to determine which agency would be responsible for implementing the control program. For forestry the State Department of Forestry was designated as the agency responsible for implementing the BMPs on state and private lands. The Washington County Soil and Water Conservation District was designated as the agricultural nonpoint source control management agency.

During the past 18 months, the Department has reviewed the nonpoint source issues in the Tualatin Basin in an attempt to assess the pollution loadings from these sources. This review has indicated that a renewed effort is needed to control nonpoint source pollution in Washington County. Phosphorus concentration in the mainstem Tualatin above RCWTP is near the 0.10 mg/l target concentration. This concentration is used to define the TMDL and associated load allocations. Therefore, nonpoint source control strategies will greatly affect the options available to USA.

Land use patterns are a major factor influencing water quality and nonpoint loads of pollution. Figure 8, from the 1982 Washington County Comprehensive Plan, defines the major subbasins in the Tualatin Basin. Fanno Creek, Beaverton Creek, Butternut Creek, lower Rock Creek, and sections of the lower Tualatin River are predominantly urban basins. Upper Rock Creek, sections of the lower Tualatin, and the Dairy Creek system are predominantly influenced by agriculture. Gales, Scoggins, and the upper Tualatin drainages are dominated by forest practices.

The ambient river sampling program conducted by both USA and DEQ was designed to determine the load of pollutants discharged by the major subbasins to the mainstem Tualatin. Figure 9 provides a schematic of the phosphorus discharge from the major basins and the existing loads in the Tualatin during summer low flow conditions. Both agriculture and urban dominated basins are sources of phosphorus which should be



WASHINGTON COUNTY  
COMPREHENSIVE PLAN



Figure 8

**DRAINAGE BASIN  
BOUNDARIES**

SOURCE: WASH CO PLANNING DEPT, 1982,  
USGS TOPOGRAPHIC MAPS,  
VARIOUS SCALES & DATES

THIS MAP IS COMPILED FROM ORIGINAL MATERIALS AT  
DIFFERENT SCALES. FOR MORE DETAILS PLEASE  
REFER TO THE SOURCE MATERIALS OR THE WASHINGTON  
COUNTY PLANNING DEPARTMENT.

FIGURE V-4

WASHINGTON COUNTY PLANNING DEPARTMENT  
APRIL, 1982

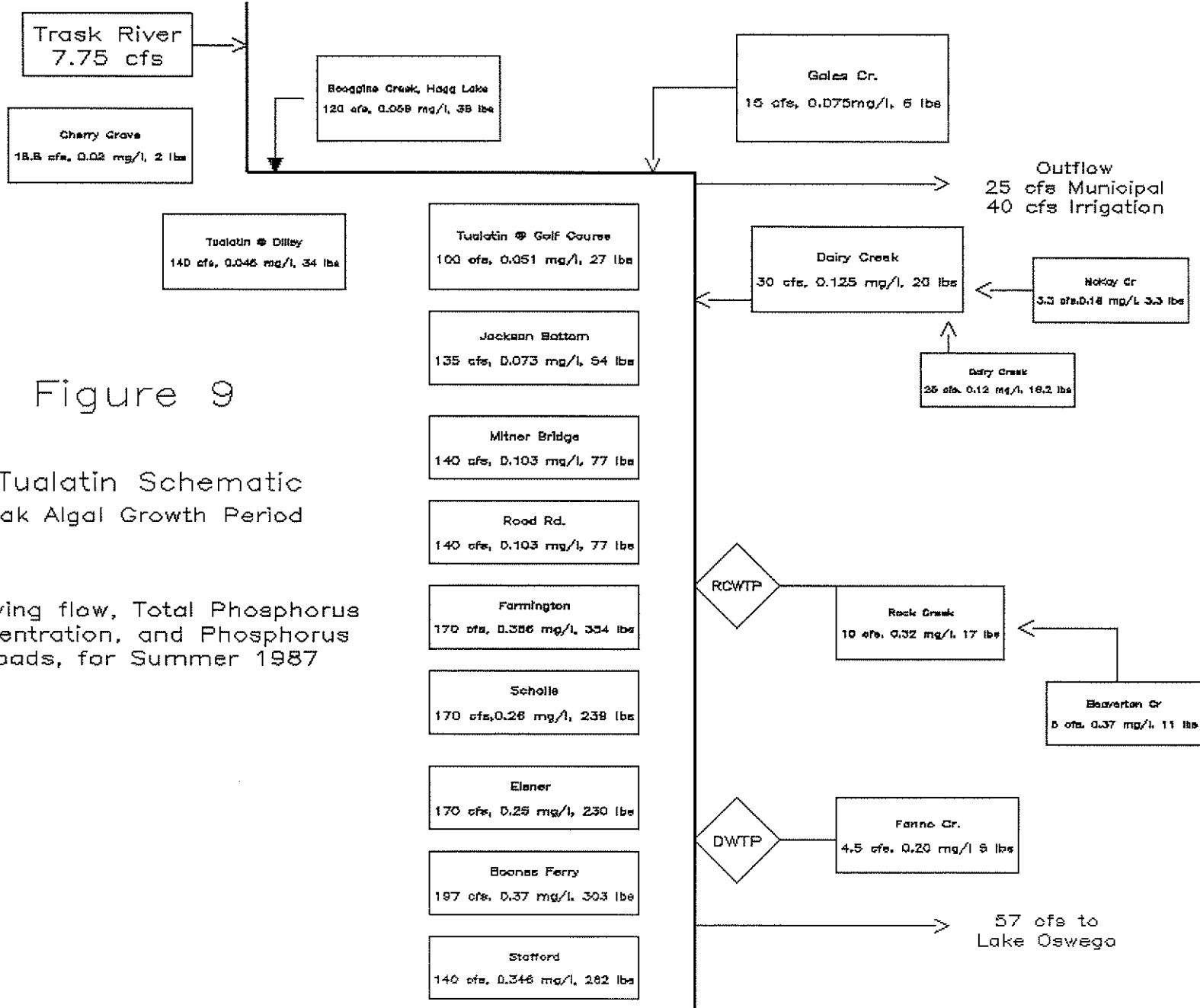


Figure 9

Tualatin Schematic Peak Algal Growth Period

Showing flow, Total Phosphorus Concentration, and Phosphorus Loads, for Summer 1987

reduced by nonpoint source controls. Agricultural dominated subbasins show higher phosphorus concentrations than forest dominated basins. However, urban basins have 2 to 3 times the phosphorus concentration as rural basins. Some of the sources of phosphorus associated with urban runoff include lawn fertilizers, detergents used outdoors, phosphorus adsorbed to eroded soil, air borne dust particles that settle, and domestic animal waste. This large increase in phosphorus content illustrates the need for urban nonpoint source controls.

Land management practices and land use planning will play a major role in the overall water quality protection program for the Tualatin River. At this time only very general methodologies exist for estimating pollutant loads from changing land use patterns. These approaches need to be refined and applied to the Tualatin Basin to quantify the effect of land management practices and land use planning decisions on water quality.

Nonpoint source control strategies need to address the contaminant contribution from urban runoff and agriculture. Strategies may include: defining and controlling undefined sources; applying best management practices within resource management systems; applying off-site controls, or on-site controls, or both. The selection of one or more strategies depends on the nature of the problem.

For example, 20 to 30 pounds per day of phosphorus enters the mainstem Tualatin between the Jackson Bottom Bridge and Minter Bridge. This large load increase indicates potential sources of phosphorus that could be defined and controlled. Similar opportunities may exist for limiting nutrient discharge from other activities of concern. The overall nonpoint source control program needs to address urban drainage and rural agriculture practices. The most immediate need is to designate lead agencies and establish control programs for urban nonpoint source pollution.

There are many methods that have been shown to be effective in controlling nutrient loads in urban watersheds. These methods fall under two general categories: on-site, usually small and associated with a single development; and off-site which are usually larger and associated with subbasins. Phosphorus control is predictable and effective. The costs are dependent on the amount of phosphorus removed and the method used. The selection of a method, and therefore costs, will be site specific.

Wetlands are effective in removing nutrients from both urban and agricultural runoff. The role of natural and "engineered" wetlands in reducing nonpoint source pollution need to be assessed.

The nonpoint source control options could also include:

- o County enforcement of zoning ordinances in riparian areas;
- o Adoption of rules requiring erosion controls at new developments (both residential and/or commercial); and

- o Work with Soil & Water Conservation District to identify specific contributions in agricultural areas and describe the BMPs needed to address the problems.

Table 5 presents a range of nonpoint source management practices and associated costs. The associated costs were obtained from available literature. The actual costs associated with any nonpoint source control option will be site specific. Furthermore, associated costs will vary according to the pollutant removal efficiency required of the project. Therefore, no generalized cost per unit area estimates are presented.

Table 5  
Selected Urban and Rural Management Nonpoint Source Control  
Management Practices and Associated Costs

Management Practice	Associated price Range cited in Available Literature
<b>URBAN PRACTICES</b>	
Wet-Pond Detention Basin on-site Construction	\$ 500 - 1500 / Acre
Wet-Pond Detention Basin off-site construction	\$ 100 - 250 / Acre
Wetlands	Land acquisition or cost of protection
Dry Detention Ponds	\$ 200 - 5000 each
<b>RURAL/AGRICULTURE PRACTICES</b>	
Conservation Tillage	\$ 5 - 15/Acre
Filter Strips	\$ 0.14 - 0.17 / ft
Grassed waterways	\$ 72 - 200 /Acre
Contour Plowing	Little Associated Costs
Intensive Animal Waste Management	\$ 40 - 100 / Animal Unit
Fencing Livestock off Creek	\$ 0.15 - 2.33 / ft.
Off-site, Small rural Ownerships	\$ 75 - 100 / Acre



## SUMMARY of ADVANTAGES/DISADVANTAGES of TARGET CONCENTRATIONS

Many options relating to target levels and control options have been discussed and reviewed by staff and the two advisory committees. The advantages and disadvantages of the various options are summarized below.

Target values are used to define the TMDLs. The proposed target value for ammonia was not controversial. However, several target values for phosphorus were suggested and reviewed. These target values ranged from 0.05 to 0.15 mg/l P. It is generally accepted that under all target values, the Durham Waste Treatment Plant (DWTP) will not discharge directly to the Tualatin, and that nonpoint source controls will be necessary.

### A. 0.15 mg/l P target value (0.15 mg/l median concentration)

#### 1. Advantages

- o Assuming flow augmentation and NPS controls are in place, this target level may be achievable with existing technology (for RCWTP only).
- o Would reduce pollutant loads to levels below that now occurring in the Tualatin River.
- o Would require minor capital improvements for point source controls and short-term implementation.

#### 2. Disadvantages

- o As a median value, high algal bloom conditions would be expected to occur 50% of the time, and therefore, may not noticeably reduce algal growth conditions over present conditions.
- o Unlikely that EPA would accept this target level because laboratory assays and ambient data do not support this concentration.

### B. 0.15 mg/l target value not to be exceeded. This is the upper limit in which phosphorus directly controls algal growth.

#### 1. Advantages

- o Target level can be attained by enhanced treatment at RCWTP and with NPS controls in place, and with Durham effluent exported out of the basin.
- o Would result in increased water clarity and prevent elevated pH levels.
- o With alternative treatment options such as further chemical removal of phosphorus, biological phosphorus

removal, effluent irrigation, and wetlands polishing, there may be room for future growth in the service area.

- o May result in large acreages of new wetlands with associated benefits to populations of wildlife.

## 2. Disadvantages

- o Total P concentrations slightly above a 0.15 mg/l target value resulted in chlorophyll a concentrations above 100 ug/l, indicating extreme nuisance algal growth conditions. Natural variation in phosphorus concentrations, or the ability of algae to store surplus phosphorus, could readily result in nuisance algal conditions with a 0.15 mg/l target concentration.
- o On the basis of data from the Tualatin and similar rivers, and including the Willamette River, a 0.15 mg/l phosphorus content would be expected to result in an average chlorophyll a concentration in excess of the 15 ug/l (0.015 mg/l) cited in the nuisance phytoplankton growth rule.

C. 0.10 mg/l P target value (as proposed, median 0.10 mg/l and not more than 10% > 0.15 mg/l):

## 1. Advantages

- o Would result in a trophic level change in the Tualatin and would significantly reduce algal growth.
- o Would increase water clarity and eliminate the pH violations.
- o This value is consistent with algal assay data, ambient data, and EPA recommended criteria for streams.
- o RCWTP can achieve this level at 20 mgd design flows by using alternative technology (biological treatment and wetlands polishing).

## 2. Disadvantages

- o Will require increased costs associated with alternative technology, e.g. biological treatment, wetlands polishing, and partial irrigation of RCWTP effluent to achieve.
- o Will require greater capital improvements and a longer time to implement, compared to higher target concentrations.

- o May, with out-of-basin effluent transport, result in loss of river flow (flows from treatment plants and dilution water from Scoggins reservoir).
- o May require a more aggressive nonpoint source control program, with associated higher costs, than the 0.15 mg/l target levels.

D) 0.05 mg/l target value as a median concentration:

1. Advantages

- o EPA recommended target for streams supplying lakes or reservoirs and may, to a certain extent, address problems in Lake Oswego.
- o Would result in trophic level change in the Tualatin and reduce algal growth.

2. Disadvantages

- o Would require very extensive nonpoint source controls throughout the basin because the major source of summer flow in the Tualatin is from Scoggins reservoir, which now exceeds this limit.
- o Would require no point source discharges.

SUMMARY OF ADVANTAGES/DISADVANTAGES OF POINT AND NONPOINT SOURCE CONTROL OPTIONS

Nutrient control strategies include both point and nonpoint source controls. Advantages and disadvantages associated with each are described below.

USA Control Options

Point sources will be a major factor in determining the success of this project. Options may be categorized into three areas: out-of-basin transport, alternative technology, and advanced treatment.

A. Out-of-Basin transport of sewage effluent:

1. Advantages

- o Removes the major source of nutrients to the river during the critical summer low flow period.

2. Disadvantages

- o Will require intensive nonpoint source controls and associated costs.

- o Further reduces summer critical low flows in the Tualatin.
  - o Water rights issues need to be clarified.
- B. Alternative Technology: (Includes but is not limited to the following potential control measures: biological phosphorus removal; further chemical removal of phosphorus; wetlands polishing; and effluent irrigation.)
1. Advantages
    - o Could be a component to a long-term solution.
    - o Avoids some of the water quantity problems.
    - o Potential for beneficial re-use of the effluent.
  2. Disadvantages
    - o May require additional flow augmentation and have higher costs associated with intensive NPS controls than the options for out-of-basin transport of effluent.
    - o May have increased cost associated with sizable irrigation fields, or wetlands which need to be purchased and maintained.
- C. Advanced (High-Lime) Treatment:
1. Advantages
    - o Provides a significant reduction in the phosphorus loading to the Tualatin.
    - o Keeps USA's treatment plant flows in the Tualatin.
  2. Disadvantages
    - o High operating costs at the treatment facility.
    - o Increased sludge handling and disposal problems.

#### Nonpoint Source Control Options

Nonpoint source control options would be varied and site-specific. Best management practices may be applicable in agricultural areas. Both off-site and on-site mitigation can be effective for pollution control in urban streams. The protection and enhancement of wetlands will play a key role in nonpoint source control strategies.

A. Advantages of nonpoint source controls:

- o Will equitably distribute problem-solving efforts in the Tualatin Basin.
- o It is generally accepted that nonpoint source controls are a necessary component of the nutrient control program.
- o Addresses water quality problems throughout the basin rather than just the mainstem Tualatin.
- o Have been shown to be both efficient and cost effective in other areas of the country.
- o Will contribute positively to stormwater management in the basin.

B. Disadvantages of nonpoint source controls:

- o Effective measures are largely site-specific; therefore, specific control measures are not well defined at this time.
- o Attainable target levels are not yet well defined.
- o Will require substantial effort to describe specific sources and control options and to define attainable objectives.
- o DEQ's authority not as well defined as with point sources. Effective management will require cooperative efforts with other responsible agencies.

SUMMARY OF ADVANTAGES/DISADVANTAGES OF OTHER OPTIONS

Other options have been suggested as components or alternative strategies for addressing the nuisance algal growths in the Tualatin. These include flow augmentation, removing the "Lake Oswego Diversion Dam", a phosphate detergent ban, and extending the application of the proposed phosphorus standard to cover the months of March through May.

Flow augmentation is a viable component to the nutrient control strategies. However, it can not be considered as the total solution. Unused stored water in Scoggins reservoir could be used to increase flows during critical periods. The potential exists to increase flows from the Trask River, from construction of another dam, or possibly from other measures.

A. Flow Augmentation

1. Advantages

- o As the river flows increase, the TMDL can be increased; therefore, flow augmentation may be a key component of the control strategy
- o Existing opportunities are available to construct additional storage projects.

## 2. Disadvantages

- o Not directly under the control of any single agency, and will require cooperation of many agencies to build more storage projects.
- o Water rights concerns need to be clarified.

Suggestions have been made that removal of the Lake Oswego Diversion Dam would reduce algal growth by reducing the residence time of water in the lower Tualatin. There is, however, no confirmed data to show that modifications to the dam would eliminate the need for a phosphorus control strategy. The phosphorus TMDL is based on a target concentration where phosphorus acts to limit algal growth. Data suggests this value is near 0.10 mg/l. No information has been presented which indicates this value should change if the diversion dam is modified.

## B. Removal of the Lake Oswego Diversion Dam

### 1. Advantages

- o Inexpensive and can be accomplished in a matter of weeks.
- o Reduces the detention time of water in the lower Tualatin River.

### 2. Disadvantages

- o Does not remove need for a nutrient control program and there is no indication that it would influence the proposed target level for phosphorus.
- o May reduce the recreational opportunities that now depend on the pooled water conditions and beneficial uses upstream from the dam.
- o Will require Lake Oswego to employ other means to divert water from the Tualatin River to the lake.

Several states have controlled the use of phosphate detergents either totally or partially to reduce phosphorus loadings from domestic sources. In response to proposed legislation (SB 1028) the Department compiled a review of phosphate detergent bans (Attachment J). There

are mixed results on the effectiveness of phosphate detergent bans. In some cases, results show a reduction in influent phosphate concentration. However, others debate the need for such bans when treatment plant technologies can effectively remove phosphorus.

### C. Phosphate Detergent Ban

#### 1. Advantages

- o Would reduce the influent phosphorus load to the USA wastewater treatment plants, and therefore, may reduce the chemical and sludge production.
- o The primary purpose of phosphate in detergent is to soften the water. Since most of Oregon's water is already soft, a phosphate detergent ban would not be expected to reduce the effectiveness of the detergent.

#### 2. Disadvantages

- o Would not eliminate the need for additional phosphorus removal from the wastewater treatment plants.
- o Would not be beneficial under options which do not include discharge to the Tualatin.

Suggestions have been made to develop an appropriate phosphorus standard to cover the spring (from March through May). This standard would reduce phosphorus loading to Lake Oswego. The reason is that the water level in Lake Oswego is typically lowered during winter to allow residents along the lake perimeter to perform maintenance and other repairs to their property. The lake is then refilled during the spring.

### D. Develop and apply a springtime phosphorus standard from March to June.

#### 1. Advantages

- o Would reduce a large load of phosphorus from entering Lake Oswego before the algal growth season starts.

#### 2. Disadvantages

- o Would require USA to provide phosphorus control over a longer time span.
- o Would require extensive nonpoint source control basin-wide

## PUBLIC PARTICIPATION

Public participation played a major role in the Tualatin project. The goal was to keep the public informed and involved at each step of the decision-making process. A variety of techniques were used, each designed to reach a wide spectrum of citizens. These techniques included fact sheets, mailings, informational presentations to interested groups, a citizens advisory committee, public comments on proposed load limits, open houses, a citizens' Riverwatch program, and the news media.

The Director appointed a Citizens Advisory Committee and a Technical Advisory Committee to assist the Department in the Tualatin project (Attachment G). The Citizens Advisory Committee represented a cross-section of interests in the Tualatin Basin. This committee discussed public policy concerns relating to the establishment of TMDLs. The Technical Advisory Committee, a group of water quality professionals, assisted DEQ in identifying and reviewing strategies from a technical standpoint. Both committees held monthly meetings and have met once jointly. Members of the public were invited to express their views during the open forum portion of the CAC meetings.

The Department used several methods to provide information to the public and to allow an opportunity for the public to share their views. DEQ staff made several presentations to concerned residents, service clubs, and special interest groups.

A mailing list of interested persons was developed. Everyone on the mailing list received two fact sheets that described the status of the Tualatin project and were notified of the chance to comment on proposed load limits for the Tualatin. In addition, they were invited to a series of informational open houses.

Open houses were held in several locations throughout the Tualatin Basin to give citizens a chance to talk to the Department's technical staff about problems in the basin. Exhibits were set up on two weekends at three different parks near the river. Two week-night open houses were held in coordination with the Unified Sewerage Agency. Table 6 summarizes the attendance at the Open Houses. Most of the over 140 people who attended had not participated in other public meetings. DEQ distributed a survey form which asked people at the open houses to share their ideas on how to best manage water quality in the basin. This survey was also made available to the public at large on request.



Table 6  
Summary of attendance at DEQ open house  
events for the Tualatin Project

Open House Location	Date	Time	Estimated Attendance
Tualatin City Park	8/22	10am - 2pm	50+
Cook Park	8/22	2pm - 6pm	25
Henry Hagg Lake	8/29	10am - 5pm	30
Tigard High School	9/24	3pm - 9pm	25
Rock Creek STP	9/28	3pm - 9pm	10

Responses to the survey indicated that boating, fishing, river viewing, and swimming are the most popular uses of the lower Tualatin River. However, most individuals responding felt the river was not fully supporting these uses. Major concerns cited in the responses included visual appearance, algal growth, and lack of flow.

This survey was not a scientific survey designed to measure the community opinion. Results, however, do indicate that options which included nonpoint source controls, improved waste treatment, and flow augmentation were the most acceptable to individuals who attended the open houses. The respondents perceived the out-of-basin effluent transport option as simply moving water quality problems from the Tualatin to another stream. Loss of recreational opportunities in the pool upstream from the Lake Oswego diversion dam was the primary concern about removing the dam.

The River Watch Program was established at the request of concerned citizens who live along the lower Tualatin River. A core group provided observations of river conditions during late summer in 1987. These citizens are concerned about the aesthetics of the river, and were able to observe the river on a regular basis. The information gathered by the River Watchers was compared to the testing done by the DEQ laboratory during the same period. Their observations also gave DEQ an idea of the recreational uses along the lower River.

A total of 111 reports, from nine individuals, were received between late July and September 1987. The River Watchers recorded their perceptions on the aesthetic conditions of the lower Tualatin River as follows: good to moderate, 9%; adequate, 21%; and poor to bad, 70%. Cloud cover and rain were associated with improved aesthetic conditions by all reporters. Poor conditions were most often described as algal mats, green water, floating scum, night-time odors,

and debris. Boating, fishing, swimming, and general recreation were listed as the most popular uses of the lower Tualatin River.

These efforts at communicating with the public have given DEQ a better understanding of the uses of the river and the concerns that residents share. The interest shown by citizens reinforce DEQ's recognized need to improve water quality in the river.

In addition to the extensive public involvement effort, the Department chaired a Tualatin River Basin subcommittee of the State's Strategic Water Management group. This effort provided a forum to coordinate the Tualatin study with the many state agencies working in the basin (Attachment K). The subcommittee met several times during the study to review progress and comment on the information developed. The Department also made several presentations to the full Strategic Water Management Group throughout the course of the study.

ATTACHMENT D

# A CHANCE TO COMMENT ON...

## TOTAL MAXIMUM DAILY LOADS

Date Prepared: 4/09/87  
Notice Issued: 4/13/87  
Comments Due: 5/13/87

**WHAT IS  
PROPOSED:**

The Oregon Department of Environmental Quality (DEQ) is proposing total maximum daily loads (TMDLs) for ammonia and phosphorus in the Tualatin River. These loads are based on flows in the Tualatin River and are as follows:

Maximum Allowable Pollutant Loads  
for the Lower Tualatin River

Tualatin River at Farmington, Discharge (cfs)	Maximum Ammonia Load in River (lbs/day)	Maximum Total Phosphorus Load in River (lbs/day)
100 - 150	540	80
150 - 200	810	120
200 - 250	1080	160
250 - 300	1350	200
300 - 350	1620	240
350 - 400	1880	280

**WHAT ARE THE  
HIGHLIGHTS:**

The Federal Clean Water Act, under Section 303, requires the establishment of TMDLs for "water quality limited" stream segments. "Water quality limited" stream segments are reaches where water quality standards are not or would not be met after the implementation of technology based effluent limitations.

The stretch of the Tualatin River below Rock Creek currently violates the dissolved oxygen standard during summer low flow. The dissolved oxygen depression in the river is due primarily to the oxidation of ammonia discharged from Rock Creek Waste Treatment Plant.

Algal growth affects the aesthetic value of the lower Tualatin River and Lake Oswego. Chlorophyll a concentrations occasionally exceed the action level used to indicate when



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.

phytoplankton growth may create a nuisance condition. Although phosphorus is not the only factor which stimulates algal growth, studies indicate that it can have a major effect on the abundance and type of algae produced.

The Department believes that ammonia and phosphorus are two critical parameters that are directly related to water quality problems in the basin.

**HOW IS THE  
PUBLIC AFFECTED:**

Residents and industries of Washington County served by municipal treatment plants which discharge to the Tualatin River, industries which discharge in the Tualatin drainage, and recreationalists who use the Tualatin River.

**INFORMATION  
AVAILABLE**

For additional information, contact DEQ Public Affairs at 229-5766. A report is attached which summarizes the approach used to determine the TMDLs. An Environmental Quality Commission (EQC) staff report, which provides background information on the issues of TMDLs, is also available on request.

**HOW TO COMMENT:**

Written comments should be presented to DEQ by May 13, 1987 at the following address:

Mr. Neil Mullane  
Manager, Planning & Monitoring Section  
Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Avenue  
Portland, OR 97204                      Telephone: 229-5284

**WHAT IS THE  
NEXT STEP:**

The Department will review and evaluate all comments and make appropriate revisions. The Department will forward a copy of the staff report, which will include the comments and responses, to each commenter.

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## PROPOSED TOTAL MAXIMUM DAILY LOADS FOR THE TUALATIN RIVER

### OVERVIEW

Areas where water quality standards are not or would not be met after the implementation of technology-based effluent limitations are said to be "water quality limited". A management tool specified in the Federal Clean Water Act (CWA) for use on "water quality limited" segments is a total maximum daily load (TMDL). For pollutants of concern, a loading capacity must first be defined. The loading capacity is the greatest amount of pollutant loading that a water can receive without violating water quality standards. Obviously, the loading capacity is also dependent upon the flow characteristics of the receiving water.

The purpose of this document is to present available technical information needed to develop TMDLs for the Tualatin River. A framework will be established for determining appropriate loading capacities. This approach will ensure that acceptable water quality conditions will be achieved or maintained and that a sound technical rationale is applied. The data base for developing TMDLs may never be adequate, but will improve over time. Consequently, it is important that the approach also provides a basis for conducting subsequent technical analyses, if future information might suggest a modification to the TMDL.

### APPLICABLE WATER QUALITY STANDARDS AND PARAMETERS OF CONCERN

Currently, a number of water quality parameters have criteria values which have been adopted as regulatory standards for the Tualatin Basin. Included are temperature, turbidity, dissolved oxygen, pH, fecal coliform bacteria, and dissolved chemical substances. A comparison of Tualatin ambient monitoring data to the water quality standards has focused attention on two parameters: dissolved oxygen and chlorophyll a.

According to the standards, the dissolved oxygen concentration of the Tualatin River "shall not be less than 6 mg/L". The stretch of the Tualatin River below Rock Creek currently violates the dissolved oxygen standard during summer low flow. This is illustrated by data collected in 1986 which is presented in Figure 1. The dissolved oxygen depression in the river is due primarily to the nitrification of ammonia.

Concerns have also been raised about nuisance algal growth in the lower Tualatin River. A Nuisance Phytoplankton Growth Rule (OAR 340-412-150) was adopted by the Commission on March 14, 1986. According to this rule, waterbodies where phytoplankton growth may create a nuisance condition are to be identified using chlorophyll a values. The average concentration is established at 15 ug/L chlorophyll a. Figure 2 summarizes 1986 chlorophyll a data for the Tualatin River. The average monthly concentration of chlorophyll a measured in the Tualatin River at Stafford Road during 1986 by the Department was 18 ug/L. As can be seen from Figure 2, the June concentration at Stafford Road was 25 ug/L.

The violation of water quality standards is a major determinant in identifying where TMDLs should be established. However, the parameter

Figure 1

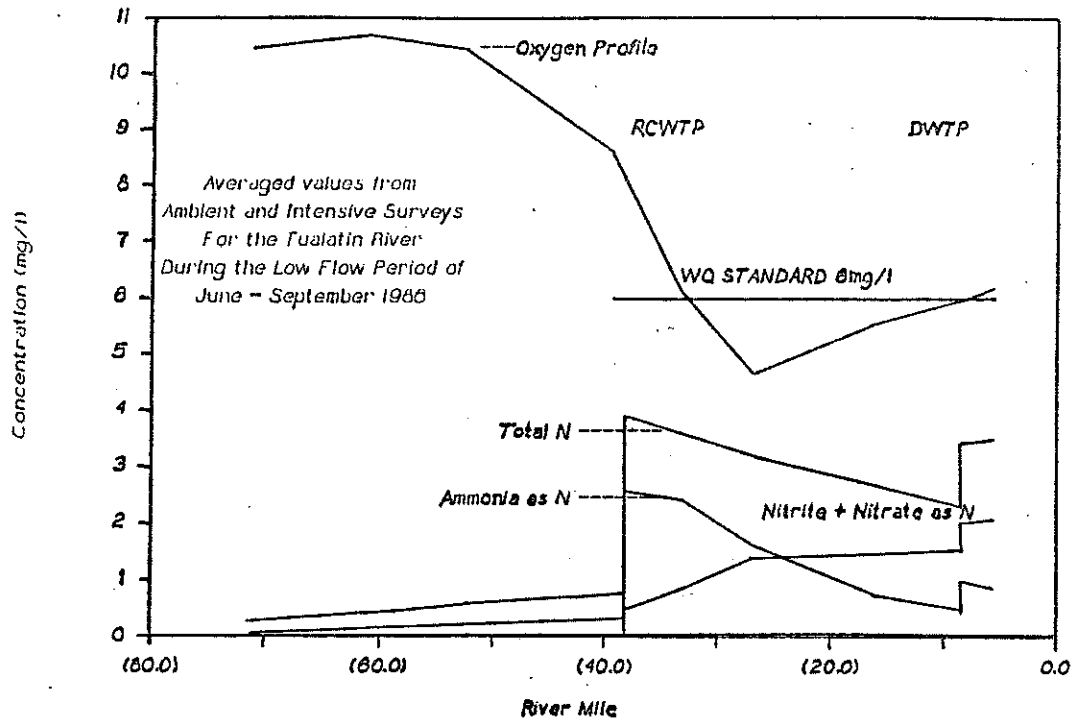


Figure 2

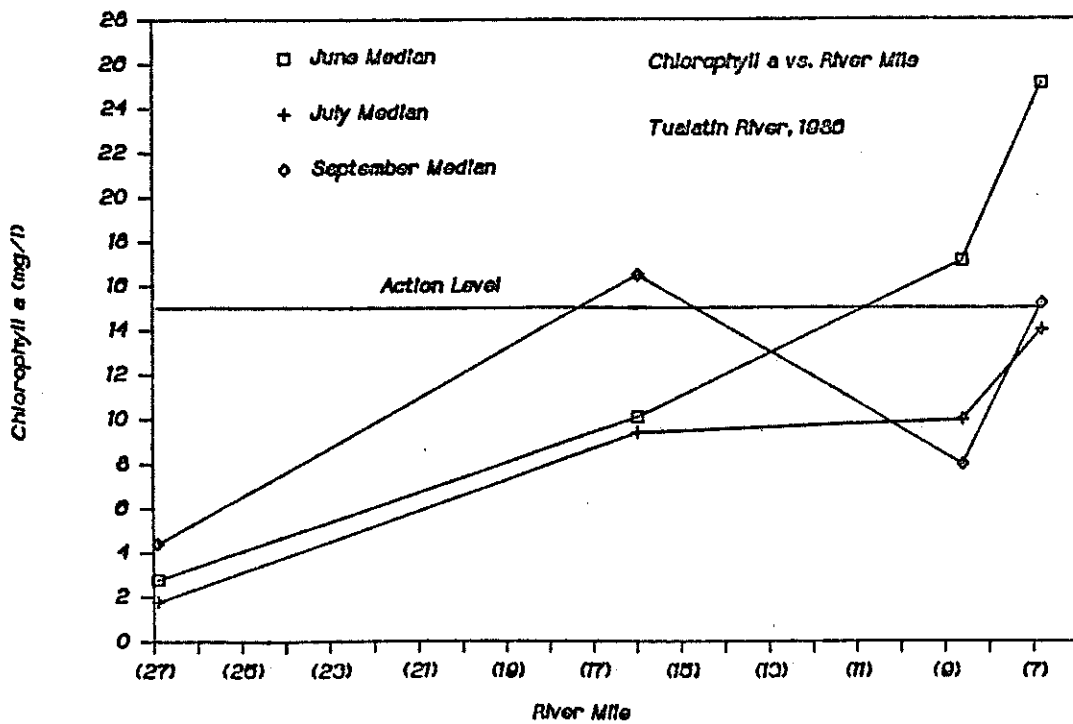




Figure 1

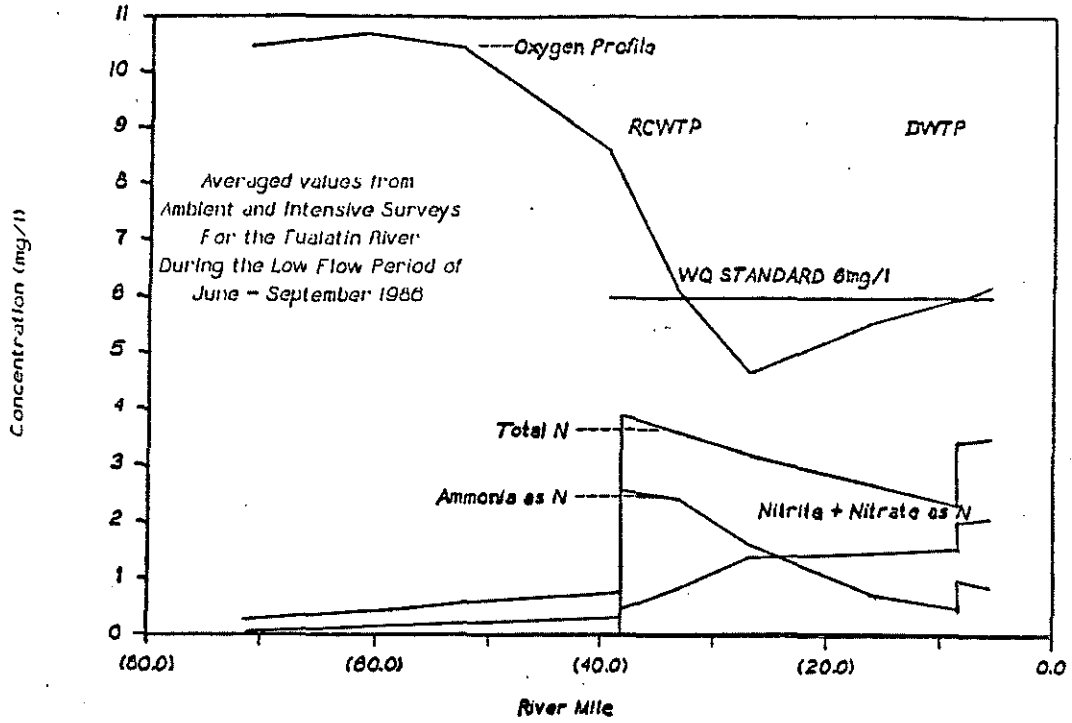
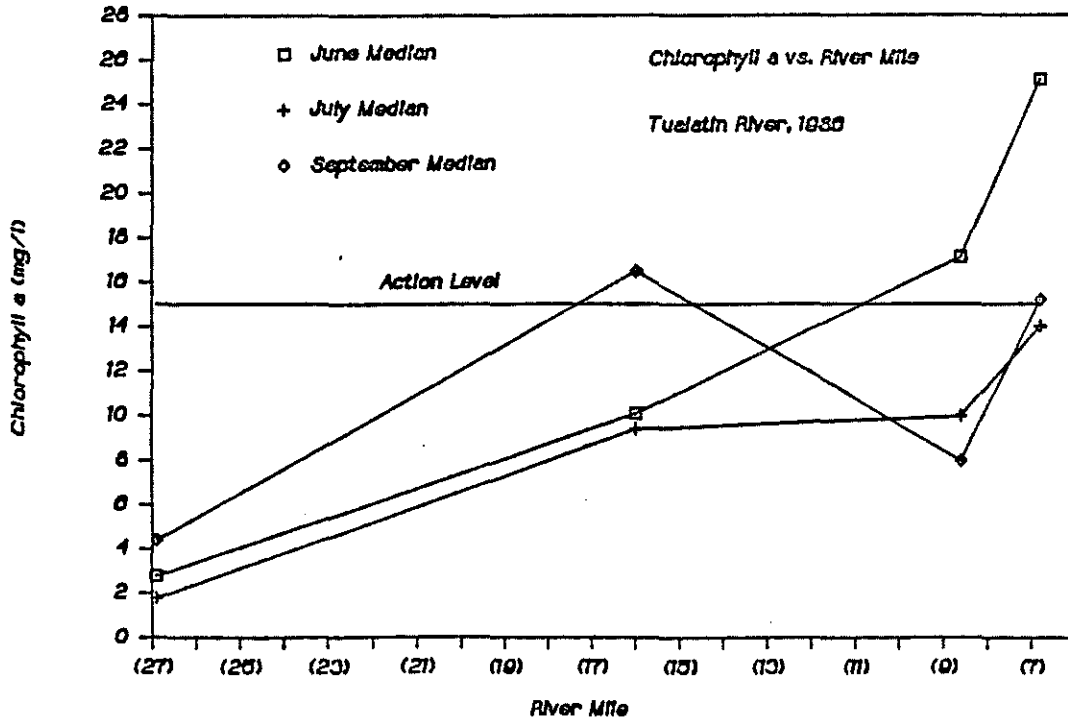


Figure 2



which violates the standard is not necessarily the pollutant for which the TMDL will be developed. A TMDL can be calculated for a particular pollutant not specifically addressed in the standards, if a concentration limit for that pollutant is necessary to prevent the violation of a standard for another parameter.

Dissolved oxygen and chlorophyll a are the parameters which currently exceed Tualatin River water quality standards. However, other pollutants contribute to these standards violations. High levels of ammonia in the Tualatin, through nitrification, ultimately lead to the violation of the dissolved oxygen standard. Although phosphorus is not the only factor which stimulates algal growth, studies indicate it can have a major effect on the abundance and type of algae produced. This can lead to an exceedance of the chlorophyll a value. Thus, an upper limit for phosphorus in the Tualatin should be established.

Section 304(a)(1) of the CWA requires the Environmental Protection Agency (EPA) to publish and periodically update ambient water quality criteria. These criteria are not rules and they do not have a regulatory impact. Rather, these criteria present scientific data and guidance. The information can sometimes be used as a starting point to derive regulatory requirements based on considerations of the water quality effects.

No explicit state water quality standards or EPA criteria exist for phosphorus or ammonia nitrification, the two pollutants currently of greatest concern in the Tualatin. However, it is still possible to establish TMDLs for these parameters. A potential approach is to develop criteria for new substances of concern and for which standards have not been adopted. These numbers are then referred to as "water quality guidance values". The guidance values are used pending completion of the administrative rulemaking process. This process also includes a technical evaluation of parameter specific information.

#### TECHNICAL APPROACH

The use of water quality guidance values is recommended for Oregon. Guidance values encourage a more thorough analysis of the supporting data which ultimately leads to a standard. Guidance values also offer an opportunity to utilize site specific information for key parameters on individual stream segments where a particular problem has been identified. Guidance values also can provide another means to ensure that significant issues have been identified and addressed prior to proposing a TMDL as a formal rule.

One major objective of this report is to propose a technical framework for developing TMDLs. Three types of information will be used to determine appropriate guidance values. These are:

1. Ambient water quality monitoring data.
2. Laboratory assay studies.
3. Mathematical descriptions of key water quality processes.

Obviously, the ambient water quality monitoring data is the most important set of information needed to determine loading capacities. The goal of the water quality management program is to protect beneficial uses through the attainment of water quality standards. The ambient monitoring data is a direct reflection of conditions in the river. Hence, the ambient information represents a logical starting point to examine relationships between the water quality parameters of concern.

In several cases, ambient monitoring data may reveal some general patterns. However, additional testing under controlled conditions can be used to further refine the analysis. Cases where laboratory assays are useful include studies of sediment oxygen demand and algal growth. For instance, algal assays can be used to indicate maximum growth under different nutrient concentrations with other factors held constant. Thus, laboratory assay studies can also provide valuable information needed to define guidance values.

The last set of information to be considered in developing TMDLs is a quantitative description of key water quality processes. Mathematical equations coupled with monitoring data can aid in determining waste assimilation rates. This, in turn, provides further technical support used to determine guidance values.

In summary, water quality guidance values will be used for phosphorus and ammonia as a basis to develop TMDLs in the Tualatin. A value of 0.15 mg/L total phosphorus is proposed to address algal growth concerns. To ensure the attainment of the dissolved oxygen standard, a value of 1.0 mg/L ammonia is proposed. The technical information used to derive these values is presented in the next two sections.

#### AMMONIA

The dissolved oxygen standard for the lower Tualatin River is 6 mg/L. To determine a target ammonia concentration which leads to the attainment of the dissolved oxygen standard, several factors must be considered. Re-aeration and photosynthesis add dissolved oxygen to a river. Carbonaceous oxidation, benthic demands, algal respiration, and nitrogenous oxidation diminish D.O. levels.

One objective of the Department's Tualatin study is to gather data to determine a TMDL for oxygen demand in the lower river. Table 1

One major objective of this report is to propose a technical framework for developing TMDLs. Three types of information will be used to determine appropriate guidance values. These are:

1. Ambient water quality monitoring data.
2. Laboratory assay studies.
3. Mathematical descriptions of key water quality processes.

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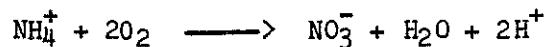
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summarizes dissolved oxygen and nitrogen data collected during three cooperative USA/DEQ intensive surveys in 1986. A preliminary analysis of this information using a water quality model has been used to examine the influence of various reaction rates.

Table 1. Summer 1986 Tualatin River Ambient Water Quality  
 Average Concentrations in mg/L

	Rood Rd. RM 38.7	Farmington RM 33.5	Scholls RM 27.1	Elsner RM 16
Organic Nitrogen	0.40	0.41	0.23	0.48
Ammonia	0.05	2.41	1.64	0.74
NO <sub>2</sub> +NO <sub>3</sub>	0.33	0.85	1.41	1.47
Total Nitrogen	0.78	3.61	3.28	2.70
Dissolved Oxygen	8.6	6.1	4.7	5.6

An initial estimate of a target concentration for ammonia can be made. From the 1986 data, it appears reasonable to assume that the depletion rate of dissolved oxygen caused by carbonaceous oxidation, benthic demand, and algal respiration is roughly equal to the addition of oxygen to the river due to reaeration and photosynthesis. A simplified analysis can then be conducted using the stoichiometric equation which describes the nitrification process:



Important factors considered in this analysis which reflect the actual nitrification dynamics of the Tualatin River were travel times, reaction rates, and stoichiometric coefficients.

The 1986 intensive survey data provided enough information to develop preliminary calculations. The Tualatin River from river mile (RM) 38 to river mile 8 was evaluated using this simplified approach. The rationale for analyzing this segment is as follows: USA's Rock Creek treatment plant provides a major source of ammonia at RM 38. At RM 8, the Tualatin begins to act more as a lake than as a river during summer low flow. In addition, the lowest D.O. concentrations in the Tualatin were observed at Scholls (RM 27).

Key equations describing nitrification were programmed on an IBM-PC using LOTUS. Coefficients were estimated from the 1986 data. To attain a dissolved oxygen concentration of at least 6 mg/L in the Tualatin River at RM 8, the maximum ammonia concentration at RM 38 should not exceed 1 mg/L.

It is recognized that this preliminary modeling approach has some limitations. Improved techniques are currently being developed as part of the Tualatin Basin Study. However, the simplified model provides a rational framework for determining target ammonia concentrations needed to attain the dissolved oxygen standard in the Tualatin River. Assumptions, coefficients, and reaction rates will continue to be assessed as the project continues.

### PHOSPHORUS

The development of a standard to address nuisance algal growths is a complicated task. First of all, EPA's Technical Guidance Manual for Performing Waste Load Allocations states: "In certain cases, there may be a concern with the actual levels of biomass concentration, although normally this will not be the target of a WLA analysis for streams and rivers. As discussed in the chapter, there is no general value for chlorophyll concentration which describes acceptable versus unacceptable conditions in terms of general aesthetics." For the purpose of developing a TMDL, a chlorophyll a value of 15 ug/L is used as a target. This is consistent with OAR 340-41-150.

Many studies suggest that phosphorus is a major factor leading to excessive algal growth. Most of these studies also indicate that a reduction of phosphorus can influence the abundance of algae. However, it is not clear that a particular phosphorus concentration results in a predictable chlorophyll concentration. Nor can one conclude that a given phosphorus reduction will lead to a known and predictable decrease in algae.

To begin, EPA's latest available criteria document (the 1986 Gold Book) was reviewed. According to this publication, a desired goal for the prevention of plant nuisances in streams or other flowing waters is 0.10 mg/L total P. However, there are also natural conditions that would dictate the consideration of either a more or less stringent phosphorus level. For instance, phosphorus may not be the limiting nutrient, which would substantially diminish the need for phosphorus controls.

EPA's 1986 Gold Book cited a number of specific exceptions which can occur to reduce the threat of phosphorus as a contributor to nuisance aquatic growths. One of these exceptions stated: "In some waters, phosphorus control cannot be sufficiently effective under present technology to make phosphorus the limiting nutrient." EPA's Gold Book discussion on phosphorus concluded with "No national criterion is presented for phosphate phosphorus for the control of eutrophication." In other words, development of criteria for phosphate phosphorus is a site specific concern. To treat the development of a phosphorus target level for the Tualatin as a site specific problem is appropriate.

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1976). The report presented two specific conclusions important to algal growth issues in the Tualatin. First, "the concentrations of phosphorus in the streambed sediments, and of phosphorus in the waters at Hillsboro indicate that ambient levels of phosphorus are high enough to support algal blooms." The Hillsboro site used in the study was above the Rock Creek STP. Secondly, "algal assays using natural river waters and the test algae species Selenastrum capricornutum, suggest that additions of sewage effluents to the Tualatin River can stimulate and support (at least potentially) from two to six times the algal biomass when effluents are not present."

In response to ambient levels at Hillsboro being high enough to support algal blooms, there are very few waters of the state which will not support algal growth of some form (from the perspective of a fish, this is a fortunate phenomena -- algae is a primary producer on the food chain). However, the second conclusion regarding increased productivity with increased concentrations is very important. This conclusion is based on the results of algal assays, a test to assess the effects of the addition of nutrients upon biomass and the growth of algae in the river.

Figure 3 summarizes the productivity results of the PSU study. The information is displayed relative to phosphorus concentrations in Tualatin River samples. Although more detailed and conclusive tests need to be made, a relationship between phosphorus and algal productivity can be seen. Improved techniques are currently being developed as part of the Tualatin study. Other factors must also be considered, such as the role of nitrogen and carbon.

The phosphorus/algae analysis is continued by using site specific Tualatin ambient monitoring information. Figure 4 displays total phosphorus and chlorophyll a data for the Tualatin River. At concentrations greater than 0.15 mg/L total phosphorus, 95 percent of the exceedances of the chlorophyll a target level (15 ug/L) were observed. A TMDL based on a guidance value of 0.15 mg/L total phosphorus should eliminate most of the chlorophyll a exceedances. The chlorophyll a value is expressed as a 3-month average. Thus, the remaining five percent exceedances should keep the 3-month average in the Tualatin River below 15 ug/L with a margin of safety.

Again, additional information will continue to be collected and assessed as the Tualatin study progresses. The evaluation described provides a framework for future analysis of site specific information on the Tualatin. The Department is currently forming a technical advisory committee to provide input on the Tualatin project. One of the first tasks will be to review the Department's technical evaluation and to make recommendations.

#### ALLOWABLE POLLUTANT LOADINGS

Once target concentrations have been determined for parameters of concern, a TMDL can then be identified. Some states have chosen to specify just one TMDL value per pollutant. This is computed from some critical flow



Figure 3 Tualatin Algal Assay Summary.

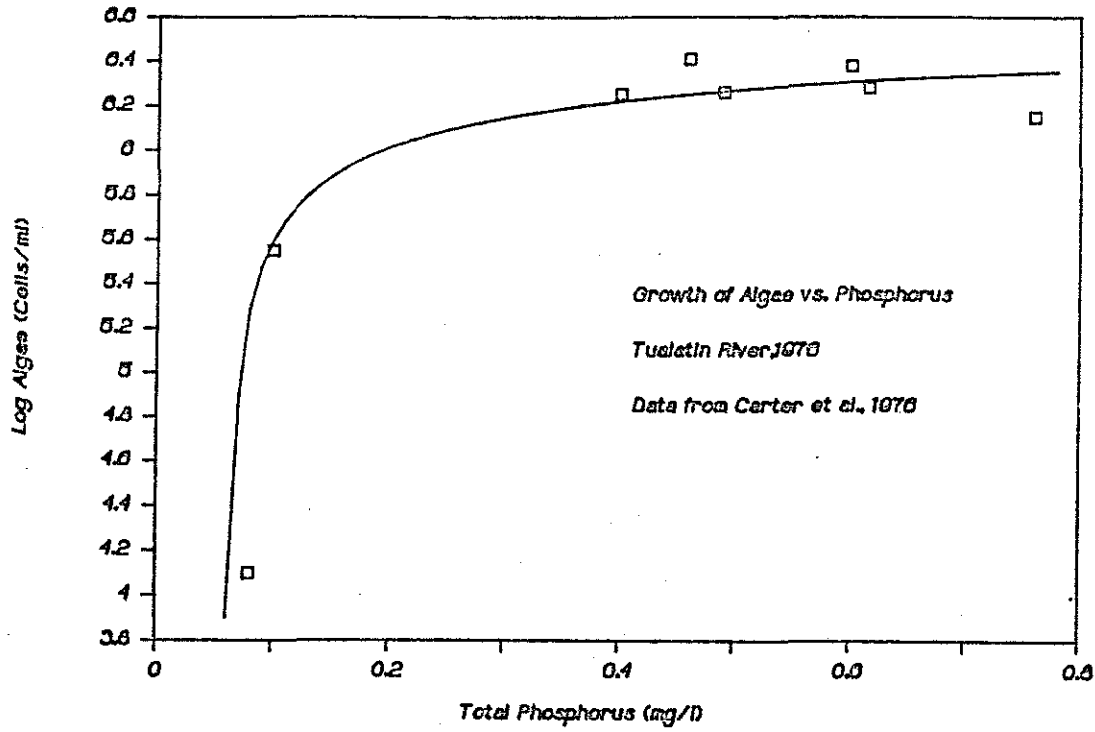


Figure 4 Analysis of Tualatin River  
Phosphorus and Chlorophyll a

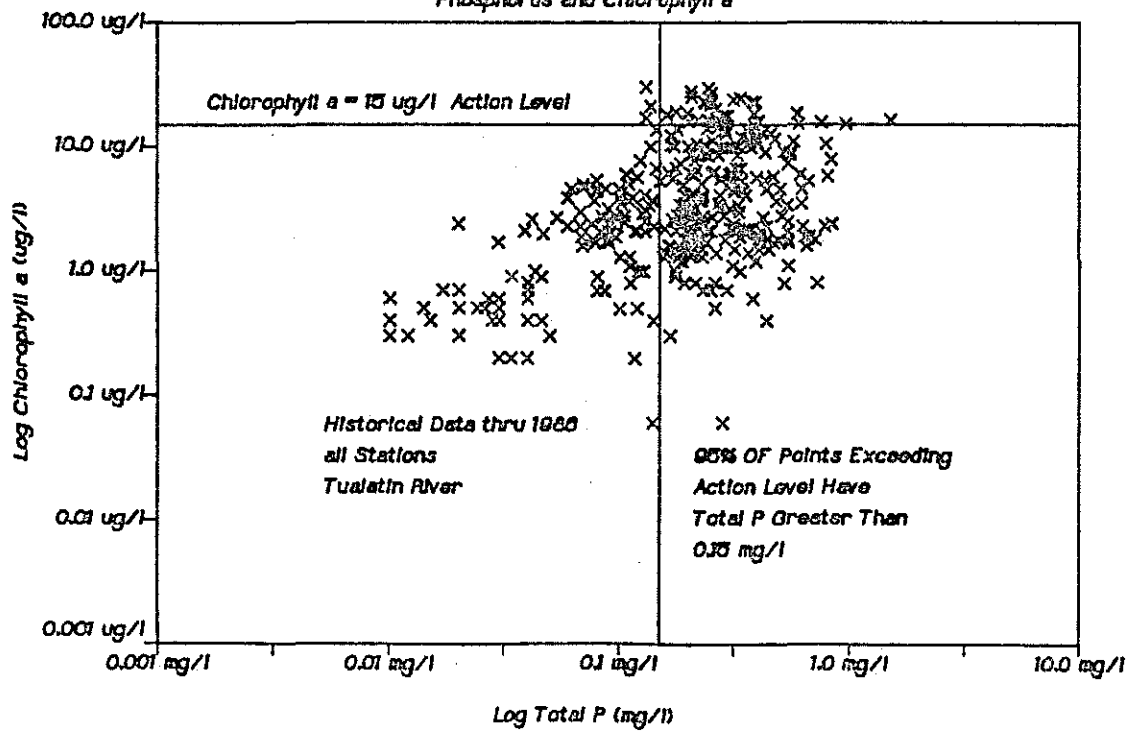


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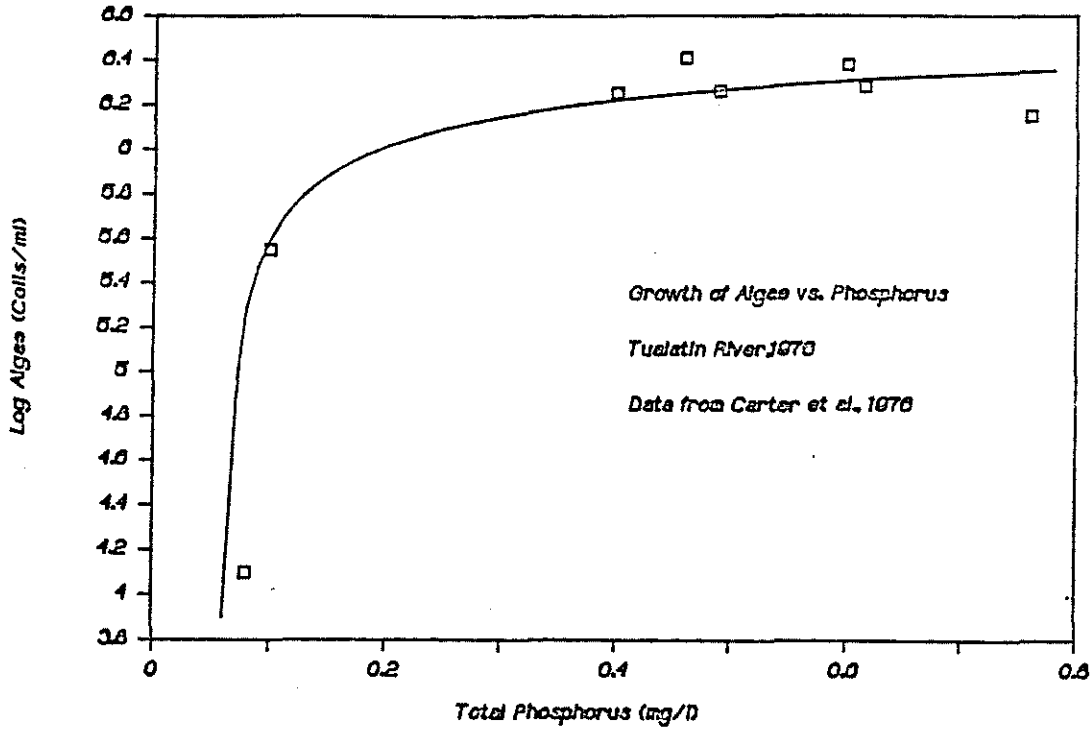
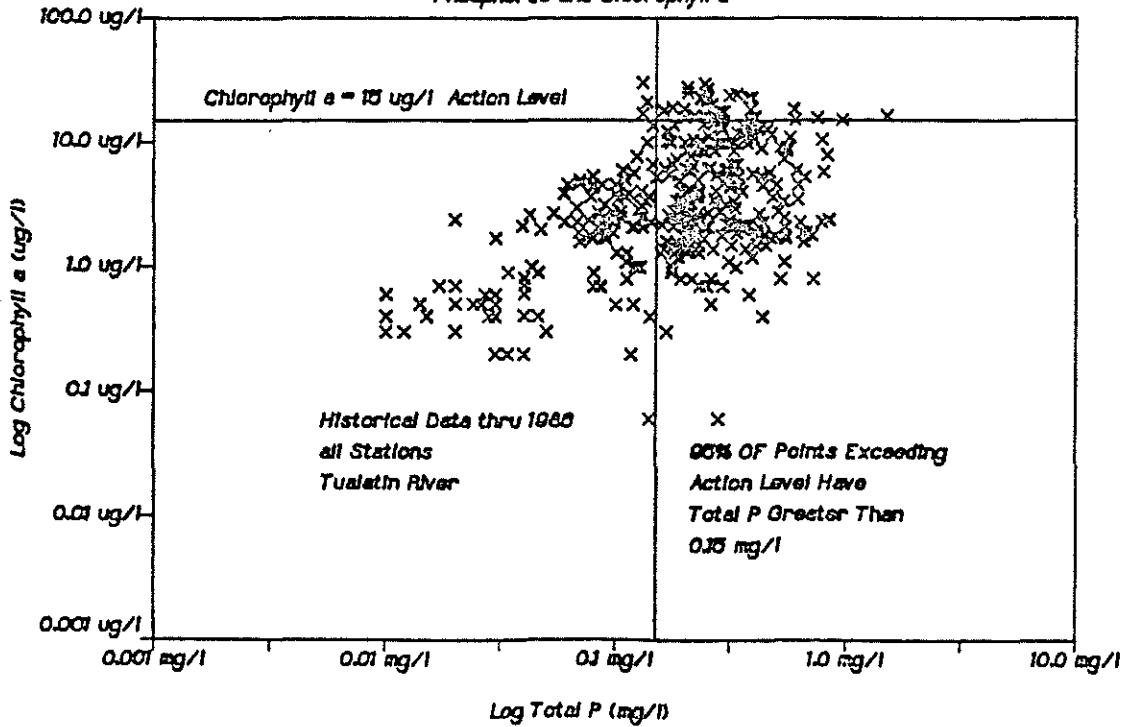


Figure 4 Analysis of Tualatin River

Phosphorus and Chlorophyll a



condition, such as the minimum average 7-day flow with a recurrence interval of 10 years (7Q10). Identifying this design flow can sometimes be as difficult as determining the target concentration. However, nothing could be found in the Federal regulations or statutes which indicates that other options cannot be employed.

The recommended approach for Oregon is to identify a set of loads for varying flow conditions. This technique will better address the dynamic nature of rivers in a manner which will meet water quality goals. This approach will also allow a variety of options to be pursued without violating water quality standards. Alternatives could include specifying permit conditions in terms of receiving water flows. Another option might be identifying the use of upstream reservoir storage capacity to increase stream flows.

By using varying flow conditions and the target concentrations, maximum allowable pollutant loads have been calculated. These loads are presented in Table 2. Flows are based on the Tualatin River at Farmington gage operated by Oregon Water Resources Department.

Table 2. Maximum Allowable Pollutant Loads  
for the Lower Tualatin River

Tualatin River at Farmington, Discharge (cfs)	Maximum Ammonia Load in River (lbs/day)	Maximum Total Phosphorus Load in River (lbs/day)
100 - 150	540	80
150 - 200	810	120
200 - 250	1080	160
250 - 300	1350	200
300 - 350	1620	240
350 - 400	1880	280

ATTACHMENT E



The seven commentators who responded to the "Chance to Comment Notice" are:

1. **John R. Churchill.** Mr. Churchill is a resident of Lake Oswego and is active in his concerns regarding the Tualatin River. He was a co-plaintiff in a lawsuit filed against the Environmental Protection Agency which preceded the establishment of TMDLs for the Tualatin River and other water quality limited streams in Oregon. Additionally, Mr. Churchill has founded the "Tualatin Riverkeeper Association." The group's primary objective is to provide opportunities for Tualatin area residents to work together on behalf of the public interest of the Tualatin River.
2. **Stan Geiger.** Mr. Geiger is the consultant for the Lake Oswego Corporation which is cooperating in the Tualatin Basin Study with DEQ and the Unified Sewerage Agency (USA). Mr. Geiger also serves as chair of the Tualatin Study Technical Advisory Committee (TAC).
3. **Lake Oswego Corporation (LOC).** The Lake Oswego Corporation manages Lake Oswego for adjacent property owners. Lake Oswego is connected by a canal to the Tualatin River. The corporation is concerned about the nuisance algal growths occurring in the lake. These algal blooms appear to be supported by nutrients derived from the Tualatin River. The Lake Oswego Corporation is represented by Stan Geiger on the TAC and Gerd Hoeren on the CAC.
4. **Northwest Environmental Defense Center (NEDC).** The NEDC is a litigation oriented environmental organization. NEDC filed a complaint on December 12, 1986, against the Environmental Protection Agency (EPA) alleging that EPA failed to perform certain mandatory functions of the Clean Water Act. The complaint was settled by a consent decree which preceded the establishment of TMDLs on the Tualatin River and other water quality limited streams in Oregon. NEDC is represented by Larry Everson on the TAC and by J. Douglas Smith on the CAC.
5. **Washington County.** Washington County lies almost entirely within, and comprises most of, the Tualatin River Basin. The county has been rapidly urbanizing over the last decade. This urban growth has increased the demand on the river to assimilate waste. Washington County is represented by Bonnie Hays, Chair of the CAC.
6. **Unified Sewerage Agency (USA).** USA operates all the sewage treatment plants within the Tualatin River Basin. These plants are the major point sources for phosphorus and ammonia in the Tualatin Basin. The TMDLs and subsequent Waste Load Allocations (WLA) will directly affect the amount of effluent discharged by these plants to the Tualatin. USA is actively involved in all phases of the Tualatin study and is represented by Stan LeSieur on the TAC and by Gary Krahmer on the CAC.
7. **The United States Environmental Protection Agency (EPA).** EPA is responsible for ensuring that the provisions of the Clean Water Act are fulfilled. This includes the establishment of TMDLs and Waste Load Allocations on water quality limited streams, such as the Tualatin. By agreement, the state of Oregon has the lead responsibility for designating the water quality limited stream segments in the state and promulgating the TMDLs and WLA.

Table 1  
Summary of Major Concerns with  
the Proposed Tualatin TMDL's

Major Concern								
Issue		Commentor						
Ammonia Concerns		1	2	3	4	5	6	7
Effort Focused on the Ammonia TMDL Are the Concentrations Toxic Location of the Critical DO problem					x		x	x x
Chlorophyll <u>a</u> vs. Phosphorus								
Application of the Nuisance Phytoplankton Growth Rule					x	x	x	
Lake Like Nature of the Tualatin		x	x		x		x	x
Appropriate Chlorophyll <u>a</u> Level		x	x		x		x	x
Data Analysis Methodology			x				x	
Empirical Basis for Standard			x					
Phosphorus Concentration		x	x	x	x			
Alternative Methods			x				x	
Additional TMDLs								
TMDL for Suspended Solids					x			
TMDL for Additional River Reaches					x			
Other Concerns								
Flow Gauge to Base the TMDLs			x					
Minimum Stream Flows							x	
Diversion Dam and Water Quality							x	
River Sections Related to Point Source Discharge							x	
Has All the Information Been Used						x		
Role of the TAC							x	
Need to Set a Standard							x	
Economics, are TMDLs Achievable, Effective, and Practicable					x	x	x	
Nonpoint Source Control					x		x	

1. John R. Churchill
2. Stan Geiger
3. Lake Oswego Corporation
4. Northwest Environmental Defense Center (NEDC)
5. Washington County
6. Unified Sewerage Agency
7. U. S. Environmental Protection Agency

**Summary of Public Comments Received on  
Proposed Tualatin River Total Maximum Daily Loads (TMDLs)**

The comments received can be summarized in four general categories. These categories are: Ammonia Concerns, Phosphorus v. Chlorophyll a, Additional TMDLs, and Other Concerns.

**SECTION 1 AMMONIA CONCERNS**

The nitrification of ammonia to nitrate in the Tualatin River below Rock Creek Wastewater Treatment Plant consumes a significant amount of dissolved oxygen, a key parameter for aquatic life. This nitrification process results in substandard dissolved oxygen concentrations in the lower Tualatin River.

Ammonia exists in two basic forms, un-ionized ( $\text{NH}_3$ ) ammonia and the ionized ( $\text{NH}_4^+$ ) ammonium ion. The principal form potentially toxic to fish is the un-ionized ammonia. Acutely toxic concentrations may result in loss of equilibrium and death to fish. Chronic toxicity levels may result in reduced growth and hatching success or impaired morphological development. Information on toxicity to phytoplankton indicates that algae are more tolerant of ammonia than fish.

The ammonia TMDL issues discussed by commentators are:

- a. How much effort should be focused on the ammonia problem?
- b. Are concentrations of un-ionized ammonia toxic to aquatic life? and
- c. At what point in the Tualatin River is the ammonia TMDL designed to attain the dissolve oxygen standard?

**1. Focus of Effort**

Two commentators questioned the amount of effort being focused on ammonia and dissolved oxygen problems. The Unified Sewerage Agency (USA) believes that continued efforts may be needed to evaluate alternative management options, such as the removal of the Lake Oswego diversion dam. Removal of the dam may affect the assimilative capacity of the river and, therefore, affect the TMDL for ammonia. The Northwest Environmental Defense Council (NEDC) suggested that it is possible that the ammonia-driven dissolved oxygen problems will be solved as a matter of course due to the necessities of the phosphorus control strategy. Therefore, NEDC felt that DEQ should focus on other issues.

**RESPONSE**

The Department of Environmental Quality (DEQ) does not want to preclude any management options for the Tualatin River Basin. Therefore, it will continue to evaluate options that may affect the ammonia TMDL. The relationship between ammonia load and oxygen depletion in the Tualatin has



been well described, and DEQ does not feel it is necessary to focus its effort on this issue. Therefore, DEQ will continue to focus its efforts in developing a management strategy for controlling nutrients and algal growth in the Tualatin Basin.

## 2. Ammonia Toxicity

The Environmental Protection Agency (EPA) questioned if levels of un-ionized ammonia were examined for compliance with EPA water quality guidance values.

### RESPONSE

Levels of un-ionized ammonia have been examined for compliance with EPA water quality guidance values. Existing levels do not exceed what may be considered acute levels (One-hour average concentration). The Tualatin River below the Rock Creek Wastewater Treatment Plant (RCWTP) occasionally exceeds what may be considered chronic toxicity levels (4-day average). The planned expansion of RCWTP includes a nitrification process which will reduce ammonia concentrations in the Tualatin to below EPA guidance levels.

## 3. Critical Dissolved Oxygen Location

The EPA requested clarification as to where in the river the ammonia TMDL was designed to achieve the dissolved oxygen standard.

### RESPONSE

Summer data for 1986 indicate that critical dissolved oxygen (DO) concentrations occur near Scholls. However, substandard DO concentrations were observed throughout the lower section of the Tualatin River. The TMDL is designed to achieve the DO standard throughout the lower section of the river.

## SECTION 2 CHLOROPHYLL a v. PHOSPHORUS

A major concern of the Tualatin project is the nuisance algal growths occurring in the lower river. Chlorophyll a is widely used as an indicator of algal biomass. The Nuisance Phytoplankton Growth Rule uses chlorophyll a concentrations to indicate when algal biomass may create nuisance conditions.

Most of the comments received focused on the chlorophyll a and total phosphorus relationship. Major concerns were:

- a. The application of DEQ's Nuisance Phytoplankton Growth Rule;
- b. The selection of an appropriate chlorophyll a concentration for evaluating management options;
- c. The effect of the "lake-like" nature of the lower Tualatin River on management strategies;

- d. The data analysis used to propose a target level for phosphorus concentration; and
- e. The lack of an empirical basis relating phosphorus concentration to river aesthetics.

In addition, commentors provided suggestions for:

- f. Alternative phosphorus concentrations, and
- g. Alternative analytical methods

### 1. Nuisance Phytoplankton Rule

The Nuisance Phytoplankton Growth Rule uses chlorophyll a levels to indicate possible nuisance algal growth conditions. From this rule, the 15 ug/l Chlorophyll a action level was used as a basis for proposing the phosphorus target concentration. Three commentors questioned whether the action level stated in the rule has the meaning of a water quality standard, rather than a guideline as originally intended.

#### RESPONSE

See section 2 below

### 2. Chlorophyll a Target Concentration

The Nuisance Phytoplankton Growth Rule uses a 10 ug/l chlorophyll a action level to indicate nuisance algal growth for thermally stratified lakes, ponds, and reservoirs. In rivers the action level is 15 ug/l chlorophyll a. The lower Tualatin River is a slow moving thermally stratified river. Because of the stratification occurring in the river, many commentors questioned whether the 10 ug/l would not be more appropriate than the 15 ug/l action level used for proposing the phosphorus target level.

Alternatively, the Unified Sewerage Agency (USA) noted that chlorophyll a target levels have been set higher elsewhere in the United States and that average chlorophyll a concentrations in the range of 25 to 40 ug/l may be realistic for the Tualatin.

#### RESPONSE

The nuisance phytoplankton growth rule is not a standard. No explicit water quality standard exists for nuisance algal growth, chlorophyll a, or nutrients which support the nuisance conditions. However, it is still necessary to establish a TMDL to address the nuisance algal conditions in the lower river. In the absence of a standard DEQ elected to use "water quality guidance values" to propose the TMDL for phosphorus.

It is not essential that DEQ base the phosphorus TMDL on the Nuisance Phytoplankton Growth Rule. The Technical Advisory Committee (TAC) has been asked to provide recommendations on alternative criteria for assessing

ambient algal growth conditions or to suggest alternative chlorophyll a concentrations suitable for the lower Tualatin. In the absence of alternative suggestions, the guidance value will be used pending the DEQ rule making process.

DEQ does not feel constrained by the chlorophyll a action levels, and is incorporating other criteria in developing a strategy for algal growth in the lower river. This process will include a series of algal assays to quantify the role of nutrient concentration on algal growth, intensive surveys to assess ambient conditions, and a "River Watch" program to provide input on aesthetic perceptions and use of the river. Results of these investigations will be used along with the ambient chlorophyll a data to develop a management strategy for the Tualatin.

### 3. Tualatin Lake

The lake-like nature of the lower river was mentioned by five commentors. The lake-like nature is important because it may affect the chlorophyll a action level used in analysis. Also, the EPA recommends lower phosphorus concentrations for lakes than for rivers.

#### RESPONSE

The lake-like nature of the lower Tualatin river is a concern for two reasons. First, the chlorophyll a action level is 10 ug/l for stratified lakes, ponds or impoundments and 15 ug/l for streams. Second, the EPA recommends a phosphorus concentration of 0.025 mg/l for lakes and 0.100 mg/l for rivers. Because the lower Tualatin river is a stratified impoundment, 10 ug/l, rather than 15 ug/l appears to be the appropriate action level. Data from the algal assays indicate that the EPA recommended 0.100 mg/l phosphorus level is appropriate for the lower Tualatin.

The lake-like nature of the Tualatin refers to the stratification that occurs. Stratification is not a unique condition for the Tualatin River and does not classify the lower river as a lake. Other rivers, such as the Willamette River in the Portland harbor, stratify during the summer. Physical characteristics, such as a large mean depth/hydraulic residence time ratio and the fact that the river remains in its channel are characteristic of river ecosystems. Because of these physical characteristics the TAC recommended that it is not appropriate to manage the lower river as a lake.

### 4. Analytical Methods

Several commentors expressed concern with the methods used by DEQ to analyze the ambient data relating algal growth to phosphorus concentration. This data was used to generate Figure 4 in the public notice comment (Figure 6, of the EQC report) which illustrates the proposed target level for phosphorus. The concerns dealt primarily with the exceedance of extreme values. These concerns are:

- o That DEQ should focus on those data points which exceeded the chlorophyll a action level;

- o That no exceedances, rather than 5% exceedances as used in Figure 4, is a better criterion for establishing a chlorophyll a Target concentration for phosphorus; and

- o That DEQ should address the frequency in which total Phosphorus concentrations greater than 0.15 mg/l results in exceedance of the nuisance phytoplankton growth rule.

There was agreement that algal assays, as described in Figure 3 of the notice, provide a useful method for describing the dependence of algal growth on phosphorus concentration. One commentor suggested that additional data points were required in the typical range of phosphorous concentrations found in the Tualatin River. Another commentor noted that the assay results presented in Figure 3 of the notice indicated a lower phosphorus target concentration than that proposed by DEQ.

#### RESPONSE

Several concerns were raised regarding Figure 4 of the public comment notice. These concerns focused primarily on the data points which exceeded the 0.15 ug/l chlorophyll a action level. The purpose of the procedure illustrated by Figure 4 was to determine a phosphorus concentration that would allow the Tualatin to attain the chlorophyll a target level.

Phytoplankton growth rates, and thus chlorophyll a rates, are dynamic and thus highly variable. Because of this variability the chlorophyll a action level is based on the "average chlorophyll a concentrations". There are many factors that drive algal growth, and thus chlorophyll a concentrations. Many of these factors such as sunlight conditions and temperature are natural occurrences. It was felt that an exceedance of 5% represented natural occurrences.

A major aspect in the analysis of sampling data was to determine further information needs. One area requiring additional information is the analytical description of the algal growth-phosphorus relationship. The current sampling program is designed to generate the information needed to refine this description.

Algal assays, as mentioned by many commentors, are a useful tool for describing the dependence of algal growth on nutrient concentration. One commentor noted that the algal assay illustrated in Figure 3 of the notice indicated phosphorus concentration lower than 0.15 mg/l would be required to reduce algal growth. The intent of Figure 3 was to illustrate a method and the results were not used in proposing a phosphorus target level for several reasons. The data for this figure was collected from different areas along the course of the river. As a river progresses downstream, its productivity and ability to support algal growth increases. Therefore parameters which increase as the river progresses may be associated with increased algal growth. To use this data to suggest a limiting concentration of a nutrient may, therefore, be misleading.

A series of algal assays is being conducted by DEQ to quantify the relationship between nutrient concentration and algal growth. The first two of these assays have been completed. Results indicate that a total phosphorus concentration of 0.100 mg/l would be required to significantly reduce algal growth in the lower Tualatin river.

#### 5. Aesthetics - Phosphorus Concentration

One commentor noted that the Nuisance Phytoplankton Growth Rule was based on aesthetics; however, there is no empirical basis for targeting acceptable conditions for the Tualatin River. It was suggested that it is necessary to have a better understanding of what constitutes the publics' opinion of acceptable water quality conditions.

#### RESPONSE

The chlorophyll a action level is based on aesthetics and is therefore somewhat subjective. However, chlorophyll a has been widely accepted as a measurement of algal biomass and used as an indicator of nuisance conditions

As discussed in section 2 part 2, DEQ does not feel constrained by the chlorophyll a action level and will incorporate other criteria in developing a management plan to address algal growth. The citizens' "River Watch" program and DEQ's "Open Houses" will be used to gather information on the publics' perception of water quality in the Tualatin River.

#### 6. Lower Phosphorus Values Are Needed

Several commentors concluded that lower phosphorus values would be required to limit algal growth in the Tualatin. Suggested total phosphorus concentrations were as low as 0.05 mg/l. Most of the comments were based on the EPA suggested criteria for phosphorus. The EPA suggested criteria for total phosphorus target levels to limit algal growth are:

- o For Streams or other flowing waters, < 0.10 mg/l,
- o For Streams entering lakes or reservoirs, < 0.05 mg/l, and
- o For the waters in lakes or reservoirs. < 0.025 mg/l

#### RESPONSE

Most comments suggesting the need for a lower phosphorus value were based on EPA recommended phosphorus values. The listed guidance values are not criteria and do not have regulatory authority. However, these values are based on the best available scientific information, and EPA can be expected to be critical of any values that deviate from recommended values. Data from the Department's algal assays on Tualatin River water appear to confirm the EPA recommended phosphorus value of 0.10 mg/l for rivers.

There are conditions stated by EPA which justify the selection of phosphorus concentrations which differs from the EPA suggested values. For example, there are natural conditions that would dictate the use of either

more or less stringent phosphorus levels. However, there does not appear to be a technical justification for selecting a higher phosphorus value under the conditions listed by EPA.

The Department is continuing to evaluate the relationship between algal growth and phosphorus concentration in the Tualatin. Algal assays and intensive field investigations will be used to define the phosphorus target concentration.

## 7. Alternative Analytical Methods

Many commentors suggested that DEQ include additional methods of data analysis for assessing algal growth. These methods included:

- o Length of exposure/Travel time;
- o Frequency of exceedance; and
- o Vollenwieder graphical analysis.

USA commented that numerous factors affect algal growth. These factors can be included in length of exposure analysis. This type of analysis would require analytical models which incorporate the effect of light, light penetration, turbulence, other nutrients, as well as phosphorus on algal growth.

USA also encouraged DEQ to consider the probability aspects surrounding the frequency occurrence between exceedances of the chlorophyll a target level and the associated total phosphorus concentrations. USA noted that "provisions in the Guidelines for Deriving Numerical National Water Quality Criteria ..., EPA 1985, states a frequency of exceedance of 1 out of 3 years on an average as a reasonable recovery level for determining standards. The guidelines document further states that "most water bodies could tolerate these kind of stresses."

Two commentors suggested the phosphorus TMDL should be calculated from the approach formulated by Vollenweider and subsequently expanded by Rast and Lee. This method would be consistent with EPA suggested methods for phosphorus control in lakes. One Commentor pointed out that this method may not be directly applicable to the Tualatin River. Physical conditions for growth are different in a river than the lake, e.g. suspended inorganic sediment load directly proportional to discharge in the river will have shading effects on algae resulting in decreased growth. These differences between lake and river result primarily from differences in mean depth and hydraulic residence time [Vollenwieder Method].

## RESPONSE

A primary goal of this project is to define a target concentration of phosphorus that will limit the nuisance algal growths that occur in the lower Tualatin. Length of exposure can have an effect on the abundance and transport of algae in a river system. There is, however, no confirmed information that variation in the time of exposure in the Tualatin will

eliminate the nuisance algal growths. Therefore there is still a need for a nutrient control program. Length of exposure is being evaluated by CH2M-Hill the consultants to USA.

The Department is incorporating frequency of exceedance information into the TMDL assessment.

The Vollenweider graphical analysis for phosphorus loads, was reviewed by DEQ and the TAC. Although results indicated a phosphorus concentration approaching the EPA recommended level of 0.10 mg/l would be required to reduce algal growth in the Tualatin the Department and the TAC felt that the Vollenweider method was not applicable for the Tualatin study.

### SECTION 3 ADDITIONAL TMDLS

NEDC commented that TMDLs should be established for suspended solids and for additional reaches, or sections, of the Tualatin River.

#### **1. TMDL for Suspended Solids**

NEDC noted that most of the pollutants from nonpoint sources would be associated with suspended solids. Therefore, a suspended solids TMDL should serve as a surrogate parameter for a wider range of more critical but analytically difficult pollutants.

#### **RESPONSE**

DEQ and the Tualatin TAC are reviewing the need for a TMDL on suspended solids.

#### **2. Additional Reaches**

NEDC commented that the elimination of excessive growth of algae in the lower reach of the Tualatin will require that TMDLs be established for phosphorus in the upstream reaches and tributaries of the Tualatin.

#### **RESPONSE**

DEQ agrees that a basin wide management approach, including an assessment of nonpoint sources, is required to address algal growth in the Tualatin River. One aspect of the study will be to assess the need for nonpoint source load allocations. If applicable, load allocations could be defined for additional river sections and tributaries of the Tualatin.

### SECTION 4 OTHER CONCERNS

This section covers a broad category of concerns, or specific questions, discussed in the comments received. These concerns include:

- a. The use of the river flow at Farmington, rather than at West Linn as a reference point for flow related TMDLs;

- b. The need to maintain minimum stream flows;
- c. The effect of artificial impediments on TMDLs and water quality;
- d. River segments as they relate to point source discharge;
- e. Whether all the available information been used in the Departments analysis;
- f. Role of the Technical Advisory Committee (TAC);
- g. The need to set a Nuisance Algal Growth Standard, not a trigger or action level that initiates a study;
- h. Economics related to the study results; and
- i. Nonpoint source control.

#### 1. Farmington Gauge

One commentor questioned why the Tualatin River at Farmington was used as a reference point, rather than the Tualatin at West Linn.

#### RESPONSE

There are several reasons why the Farmington gauge was used rather than the West Linn gauge to base the flow dependent TMDL. The Farmington gauge measures river flow as the Tualatin enters the lower section of the river. The gauge is near the Rock Creek treatment plant and therefore accurately measures the dilution available for the treated effluent. The gauge has been recently calibrated. The West Linn gauge, according to the Water Resource Department, has not been recently calibrated. Additionally the West Linn gauge does not measure the flow diverted to Lake Oswego. Because it is more accurate and measures the flow entering the critical stretch of the Tualatin, the Farmington gauge provides a better reference for basing the flow dependent TMDLs. The West Linn gauge is used for verification of the Farmington gauge and the water withdrawal along the lower river.

#### 2. Minimum Stream Flows

USA commented that strict limits should not be applied until it is shown that the minimum stream flow of 250 cfs can not be maintained.

#### RESPONSE

The TMDLs are tied to flow. For any flow range the TMDL can be calculated using a consistent target level. This approach eliminates the need to base the TMDL on a minimum stream flow. Therefore DEQ does not feel the need to define a minimum, or critical streamflow for the TMDL.



### 3. Artificial Impediments

USA commented that the Tualatin is no longer a natural river and that the TMDL does not consider the impact of the artificial impediments to water travel in the TMDL. USA suggests that removal of the Lake Oswego diversion dam could increase the assimilative capacity of the river.

#### RESPONSE

The artificial impediment that USA is concerned with is the Lake Oswego diversion dam. This dam, when the splashboards are in place, slows the rate in which water moves through the lower section of the Tualatin River. The possibility of changes to the diversion dam, and their potential effect on water quality are being reviewed by the DEQ, the TAC and the CAC.

However, it is questionable whether the phosphorus TMDL would vary as a result of changes in the Lake Oswego Diversion dam. The TMDL is based on an ambient target level. The target level is designed to lower phosphorus concentration in the Tualatin to the point where it becomes the limiting nutrient for algal growth. Data suggests that this point is near 0.10 mg/l phosphorus. It is questionable that increased stream velocity caused by removing the splashboards from the dam would increase the target level for phosphorus.

Increased velocity may affect nuisance algal growth conditions by transporting algae out of the system faster. There is, however, no confirmed data to show that this will eliminate nuisance algal growths and the need for a nutrient control plan

### 4. River Segments

Two commentors questioned where the TMDLs are intended to apply. USA wondered whether different TMDLs would be appropriate if the point source discharges entered some other section of the river

#### RESPONSE

The TMDLs are intended to apply to the lower Tualatin River where nuisance algal growths and dissolved oxygen depletion occur. The TMDLs are based on ambient concentrations of phosphorus which would limit algal growth and ammonia which would prevent substandard dissolved oxygen concentrations from occurring. The TMDL would, therefore, not change by moving the point of effluent discharge.

### 5. Full Analysis

Washington County asked whether the proposed loads were based upon a full analysis of the available data.

## **RESPONSE**

A major aspect of the 1986 sampling program was to determine where further information was needed to assess water quality in the Tualatin River. The current sampling program is designed to fulfill the information requirements. Additionally, the Oregon Strategic Water Management Group has formed a Tualatin Basin Planning Subcommittee. One task of this subcommittee is to obtain from various agencies information that may be useful to DEQ. The DEQ is currently assessing this information and will incorporate it into the Tualatin Basin planning process.

### **6. Technical Advisory Committee**

USA requested that the TAC be asked to review the TMDL analysis and propose revisions.

## **RESPONSE**

The role of the TAC is to provide a critical review of the technical aspects of the study. The scope of the TAC includes reviewing and proposing any necessary revisions for TMDLs and the WLA method.

### **7. Nuisance Algal Growth Standard**

USA commented that it is necessary to set a nuisance algal standard for the Tualatin rather than rely on a study trigger, guidance value, or target level. However, measurements of algal productivity are not practical parameters for regulatory standards. The Department will focus on phosphorus as the parameter for a standard.

## **RESPONSE**

DEQ agrees that the TMDLs should be based on a water quality standard. Standards for the Tualatin will be defined by the water quality management plan for the Tualatin River.

### **8. Economics and Study Results**

Washington County and USA commented that it is critical that the TMDLs be as sound as possible, because major economic decisions will be based on them. NEDC noted the TMDL must be set at a level that will generate confidence that real water quality improvements will result from the investments.

## **RESPONSE**

The TMDLs for the Tualatin River will be determined using the best available scientific information. From comments by both the TAC and the CAC, the WLA designed to achieve the TMDL should include economic considerations. Economics will, therefore, play a key role in determining how the WLA distributes the TMDL to the various users.

## 9. Nonpoint Source Control

USA and NEDC suggested that a phosphorus and algae control strategy should include nonpoint sources.

### RESPONSE

Nonpoint sources contribute significant loads of pollutants to the Tualatin River. It is clear that nonpoint sources will have to be addressed in any equitable management plan for the Tualatin. Both the TAC and the CAC have suggested that the WLA method adopted include an equitable nonpoint source load allocation component.

## TOTAL MAXIMUM DAILY LOAD COMMENTS

Attached are the comments received by the Department on the proposed TMDLs for Phosphorus and Ammonia on the Tualatin River.

Attachment 1	Comments of John R. Churchill
Attachment 2	Comments of Stan Geiger
Attachment 3	Comments of the Lake Oswego Corporation
Attachment 4	Comments of the Northwest Environmental Defense Center
Attachment 5	Comments of Washington County
Attachment 6	Comments of Unified Sewerage Agency
Attachment 7	Comments of the U.S. Environmental Protection Agency

**ATTACHMENT 1**

RECEIVED

MAY 12 1987

Water Quality Division  
Dept. of Environmental Quality

Mr. Neil Mullane  
Water Quality Division  
DEQ  
Portland, Oregon 97204

Dear Mr. Mullane

Re. TMDLs on Tualatin River

The EPA Guidelines for concentration of phosphorus is .05 for Lakes and 1 for flowing streams. If DEQ varies from these guidelines the burden of proof for deviation rests with the DEQ.

Lake Oswego and the river for several miles above the lake diversion is classified as a lake and comes under the lake classification. The level of phosphate concentration should be .05 at the diversion into Lake Oswego. All the data that DEQ has presented to the public in this review supports that conclusion. The exercise in using plots is misleading to the public as the critical points, any first year water quality student knows, is the distribution of the high values. They cause the violation of critical water quality criteria as found in the literature.

It would appear that in the analysis that DEQ is incorrectly using 15ug/l to establish the average concentration and should be using the value of 10 ug/l.

Sincerely

  
John R. Churchill

Co- Plaintiff NRDC/Churchill vs EPA  
788 Cabana Lane Lake Oswego, Or 97034

ATTACHMENT 2

## RESPONSE TO ODEQ TOTAL MAXIMUM DAILY LOADS NOTICE

PREPARED BY N. STAN GEIGER  
SCIENTIFIC RESOURCES, INC.  
12425 S.W. 57TH AVENUE  
PORTLAND, OREGON 97219  
503-245-4068

RECEIVED  
MAY 13 1987

Water Quality Division  
Dept. of Environmental Quality

### TMDL: MEANS TO WHAT END?

#### 1.0 TMDL'S AND SOCIAL CRITERIA FOR ACCEPTABLE TUALATIN RIVER QUALITY

The various news articles that have appeared in local papers since late last fall regarding the Tualatin River give the impression that there is consensus over 1) the degraded quality of the river, and, 2) what we would like to see it become. This supposed consensus is the context for deciding what the total maximum daily load (TMDL) for "pollutants" will be for the Tualatin. I submit that we have no empirical basis for the target desirable condition for the Tualatin in the component of the TMDL discussion relating to the linkage between phosphorus (or algae nutrients generally)-algae growth-and human sensory acceptability of the water. We are vigorously debating the means to producing 'cleaner' water when we have not in fact reached a consensus on an empirically verifiable, socially meaningful target water quality condition.

On the one hand we are using generalized guidance developed elsewhere in the form of USEPA algae nutrient guidelines (USEPA 1986), or DEQ water quality standards for chlorophyll a (OAR 340-41-150), and on the other, subjective descriptions of unacceptable water quality to influence and determine rule-making regarding so-called "pollutant" loading to the Tualatin River. An examination of the articles that have appeared in local papers since last fall netted a variety of interesting, typical, but non-empirical, water quality assessments: "open sewer" (Churchill 1987, Tippens 1987), "unusable water" (Smith 1987), "the Tualatin River is polluted" (Kennedy 1987), "the greening of the waters" (Hayes 1985), "excessive algae growth" (Smith 1986a), "algae flareups" (Mullane 1987), "algae in the river that reduces the oxygen level and the bacteria that the algae feeds on" [?] (Kengala 1987), "growth of algae that pollutes the river" (Harrington 1987), or, by inference characterizing the Tualatin River as unacceptable because it is composed of "one-third sewage effluvia" (Smith 1986b). Nearly all of these descriptions and assessments are subjective and some are inaccurate, e.g. Kengala 1987 and Harrington 1987. Admittedly, each of these people may not have been quoted accurately by reporters as evidenced by this quote of J. Smith: "The Lake Corp has spent 'around a hundred grand' [fact] over the years on copper phosphate [sulfate], an agent that kills the waste nutrients nitrogen and phosphorus, which form algae [complete non-fact]" (Donelson and Wurth 1986).

Both the assessment of river and lake condition and the kind of water that we would like to have are, I think perceptively, described as largely aesthetic judgments. According to G. Krahmer of the Unified Sewerage Agency,



"There's no problem with the treated sewage we discharge; it's aesthetics" (Harrington 1987). C. Schaefer, in a separate article (Donelson 1986) said "the problem with algae is 'mostly aesthetic', but if left unchecked algae can prove to be a danger to fish and fowl of the lake." Schaefer, Oswego Lake Warden, on the staff of the Lake Oswego Corporation, is particularly aware of aesthetic judgments regarding acceptable lake water quality from his responses to the variety of complaints about lake water summer after summer from Oswego Lake lakeshore residents. C. Young of the Department of Environmental Quality, noted that "algae in the Tualatin River creates an aesthetic problem for recreational use and causes shifts in the amount of oxygen in the water, causing 'stress' for bass in the river" (Ostergren 1987). "Aesthetics" is a word with a long, noble tradition. We cannot dispose of the obligation to define what is acceptable for (the majority?) of people who use waters of the Tualatin River Basin by suggesting the problem is one of "aesthetics". After all, there are ways to perform scientific aesthetic analyses.

What people think about the quality of the Tualatin River is what will determine future regulatory action that most likely will have expensive consequences. The review of the rhetoric and comment in past news articles suggests that river water quality, and for that matter lake water quality, is unacceptable. Verbal assessments reviewed above, however, lack empirical underpinnings. Target water quality conditions are equally as vaguely phrased, suggestive but without empirical substance. I submit that establishing TMDL's for the so-called "pollutant" phosphorus without establishing a watershed-based social-empirical acceptable target water quality condition is irresponsible.

A search of the news articles also netted an attempt to define a target water quality condition for the Tualatin. Tippen (1987) asserted that the Tualatin could be a "pristine stream again". The "revitalized Tualatin River", he said, "could sustain richness of fish life and accommodate a full range of recreational activities, even swimming" (Tippen 1987). Targeting a "pristine" condition for the Tualatin River is somewhat like targeting Lake Tahoe clarity for Oswego Lake. Both are inappropriate target conditions because they are not in touch with actual possibilities for water quality in the Tualatin River Basin. "Pristine" actually derives from the Latin word meaning 'prior', suggesting that we can return to a pre-civilization condition. Even if we knew for certain what they condition was, and there is some evidence to suggest that it was not all that desirable, we may not want that as our target objective. Tippen, at least attempted to give substance to what he thought "pristine" meant by referring to fish and recreational use. It may be argued, however, that there is already a richness of fish use in the Tualatin. At least no one to date has demonstrated how the fishery would improve with so-called improvements in water quality, even though present ammonia levels may be toxic as well as the major reason for oxygen depletion in the lower river. As to a 'full range of recreational activities', large woody debris in the Tualatin may be a more formidable obstacle to recreational use than water quality. And with respect to swimming in the 'greened water', many do and appear to enjoy it. In a recent survey of Lake Oswego Corporation shareholders recreational use of Oswego Lake, 320 respondents out of a total of 700 households surveyed indicated they spend 19,217 hrs swimming in Oswego Lake during one year (Scientific Resources Inc. November 1986). These respondents indicated that if the lake's water quality was improved they would swim even more, but conditions are obviously not preventing many people from

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enjoying water that is heavily influenced by the Tualatin River and its various component "effluvia".

A brief assessment of our knowledge of the empirical linkage between impaired human (or fish) use—chlorophyll a levels—algae growth—nutrients (phosphorus, nitrogen, etc.) would appear to be imperative as a precursor to the discussion of TMDL's. You may prefer the use of another term than "empirical" but my preference for it relates to its denoting something capable of being verified or disproved by observation or experiment. My suspicion is that we do not have the critical "empirical" link that can as yet give credibility to the TMDL-setting process underway for the Tualatin River.

The present standard in Oregon for determining the presence of "nuisance phytoplankton growth" is the indirect measure of the algae pigment chlorophyll a. It is stated in OAR 340-41-150 that phytoplankton may impair the recognized beneficial uses when chlorophyll a levels exceed 0.01 mg/l in natural lakes which thermally stratify, or 0.015 mg/l in natural lakes which do not thermally stratify, and reservoirs, rivers and estuaries. The primary rationale for this standard was to provide Oregon with an "indicator of waters where nuisance phytoplankton conditions may be found" (Hansen 1986). Both in Hansen (1986) and in the DEQ TMDL Notice of April 9, 1987 (ODEQ 1987) there are what I see to be critical caveats regarding the linkage in question. In ODEQ 1987 there is a quote from EPA's Technical Guidance Manual for Performing Waste Load Allocations: ". . .there is no general value for chlorophyll concentration which describes acceptable versus unacceptable conditions in terms of general aesthetics." In Hansen (1986) the same caveat is provided: "To date, there has not been a single numeric value for a parameter(s) which describe when a use would be impaired due to nutrients or nuisance aquatic growth. . . .Nutrient and nuisance aquatic growth standards are admittedly subjective as no one has numerically defined when a nuisance condition [is present] that would affect a use." The one reference to any study of this relationship in Hansen (1986) was to the work of C. N. Sawyer (1947) who related the "greenness" of water to chlorophyll a concentrations. Are we really willing to make judgments for Oregon on the basis of what an investigator discovered about the aesthetics of "greenness" in the Midwest in 1947?

The irony of our situation with respect to the TMDL-setting process for the Tualatin River is that we are seemingly without a tight empirical linkage on both sides of the chlorophyll a standard: on one hand we lack for the Tualatin River a well-defined relationship between the pigment and phosphorus concentrations, and on the other, we lack an empirical relationship between chlorophyll a concentrations and perceptions of nuisance or unacceptable conditions which interfere with a specified beneficial use. In the interest of good science we would do well to remedy the latter deficiency by gathering relevant data as we are attempting to remedy the former through bioassays and more intensive sampling this summer. I would suggest that we make an honest attempt to relate chlorophyll a levels during this growing season in the lower Tualatin (or upper for that matter) to human perception of unacceptability and interference with beneficial use. Why should we be constrained by paper standard which is not linked to perceptions of people who are using the river and also making judgments about cleaning up the Tualatin River?

## 2.0 IMPROVING AND PROTECTING THE QUALITY OF OSWEGO LAKE

Schaedel, in his report on Garrison Lake water quality (1986) provided the first systematic analysis of phosphorus loading for an Oregon lake. In his analysis, he used a modified version of the Vollenweider Total Phosphorus Loading and Mean Depth/Hydraulic Residence Time Relationship. While information is being obtained on the hydrology, chemistry and biology of Oswego Lake, there is sufficient information available to approximate an acceptable total phosphorus loading rate for the lake. The major source of water for the lake is Tualatin River water provided by means of Oswego Canal. In addition, there are four tributaries to the lake. Of the total surface water entering Oswego Lake approximately 85.2% is via Oswego Canal, 12.8% via the four tributaries (and storm drains), and the remainder of around 2.0% as precipitation. Existing water rights for withdrawal by the Lake Corporation from the Tualatin River, approximately at river mile 6.2, are 57 cfs from May 30 through October 1, and 97 cfs from October 2 through April 30. Table 1 provides a monthly listing of discharge into the lake through the Canal from 1976 through 1984, along with monthly quantities of water entering the lake through the Canal for nine-year averages and for the current yearly water withdrawal pattern including one month Canal closure for lake drawdown.

The growth of algae in Oswego Lake is conditioned by availability of light, water temperature and various nutrients and gases required for growth. Algae growth in the lake as in the river occurs throughout the year but physical conditions for that growth are different in the river than in the lake e.g. suspended inorganic sediment load directly proportional to discharge in the river will have shading effects on algae resulting in decreased growth. The residence time for water and its constituents (such as nutrients) in the lake is much longer than that of the river where water will move from Gaston out to the Willamette in a matter of days, presumably even during summer low flow conditions. Oswego Lake has a flushing rate of approximately 6.8 times/yr. It will take approximately 1.7 months for replacement of lake volumes, however, changes in nutrient concentrations take considerably longer e.g. on the order of 2-3 yrs following sustained reductions.

These differences between lake and river with respect to algae growth result primarily from differences in mean depth and hydraulic residence time. With the same loading rate but small "mean depth/hydraulic residence time" (MD/HRT) value, river algae growth would be expected to be much less than with the lake with a much larger MD/HRT value (Figure 1). The two systems, however, are not strictly comparable in this way. Concentrations of total phosphorus in the river that may relate to a certain acceptable chlorophyll a concentrations could produce higher and unacceptable chlorophyll a concentrations in Oswego Lake. (Ironically, acceptable chlorophyll a concentrations may be aesthetically unacceptable for users of river water whereas unacceptable chlorophyll a concentrations in the lake may be aesthetically acceptable—just because lake algae often differ from river algae.)

Application of the loading analysis used by Schaedel to Oswego Lake for three scenarios of total phosphorus concentrations in the Tualatin River showed the target concentration of 0.150 mg/l total phosphorus to be unacceptable for improving and protecting the quality of Oswego Lake water.

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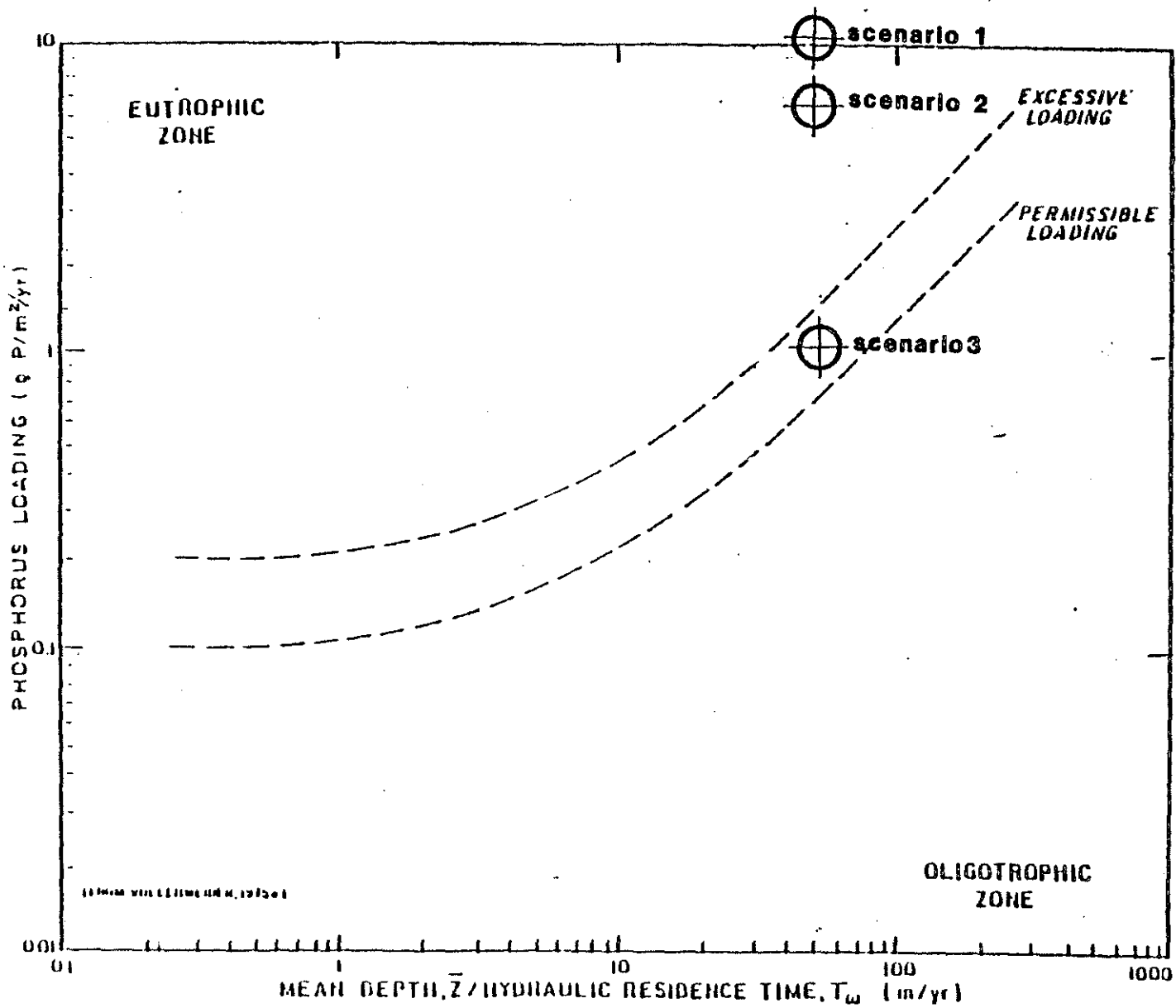
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TABLE 1. DISCHARGE INTO OSWEGO LAKE VIA OSWEGO CANAL (USGS DATA)

AVERAGE MONTHLY DISCHARGE (cfs) - TUALATIN RIVER AT OSWEGO CANAL NEAR LAKE OSWEGO, OR

WATER YR.	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1976	59.0	60.3	84.7	11.9	109.0	91.2	49.7	48.9	49.8	56.1	53.5	50.3
1977	48.5	46.1	46.5	52.7	57.7	67.0	54.6	54.6	40.7	55.7	53.0	55.3
1978	46.6	47.4	72.4	9.7	52.2	63.4	56.8	49.0	58.5	53.7	48.0	46.0
1979	38.5	33.7	46.9	36.4	19.3	21.6	47.3	49.0	56.1	49.0	51.7	54.9
1980	58.7	38.0	43.6	6.3	3.3	3.3	94.9	57.3	65.4	58.9	62.3	49.3
1981	44.9	47.9	93.5	77.7	81.1	76.5	78.1	74.5	93.5	64.9	63.6	69.6
1982	55.0	70.1	101.0	57.3	115.0	69.5	84.1	50.0	76.1	50.2	52.0	52.1
1983	51.5	49.2	132.0	31.6	128.0	98.7	78.1	34.5	59.5	64.2	67.1	68.1
1984	46.5	100.0	103.0	95.7	107.0	104.0	91.2	71.5	66.8	76.1	77.0	80.4
MEAN (cfs)	49.9	54.7	80.4	42.1	74.7	66.1	70.5	54.4	62.9	58.8	58.7	58.4
STD. DEV.	6.4	19.0	28.8	29.6	41.8	31.9	17.4	11.6	14.4	8.0	8.9	10.9
MIN. (cfs)	38.5	33.7	43.6	6.3	3.3	3.3	47.3	34.5	40.7	49.0	48.0	46.0
MAX. (cfs)	59.0	100.0	132.0	95.7	128.0	104.0	94.9	74.5	93.5	76.1	77.0	80.4

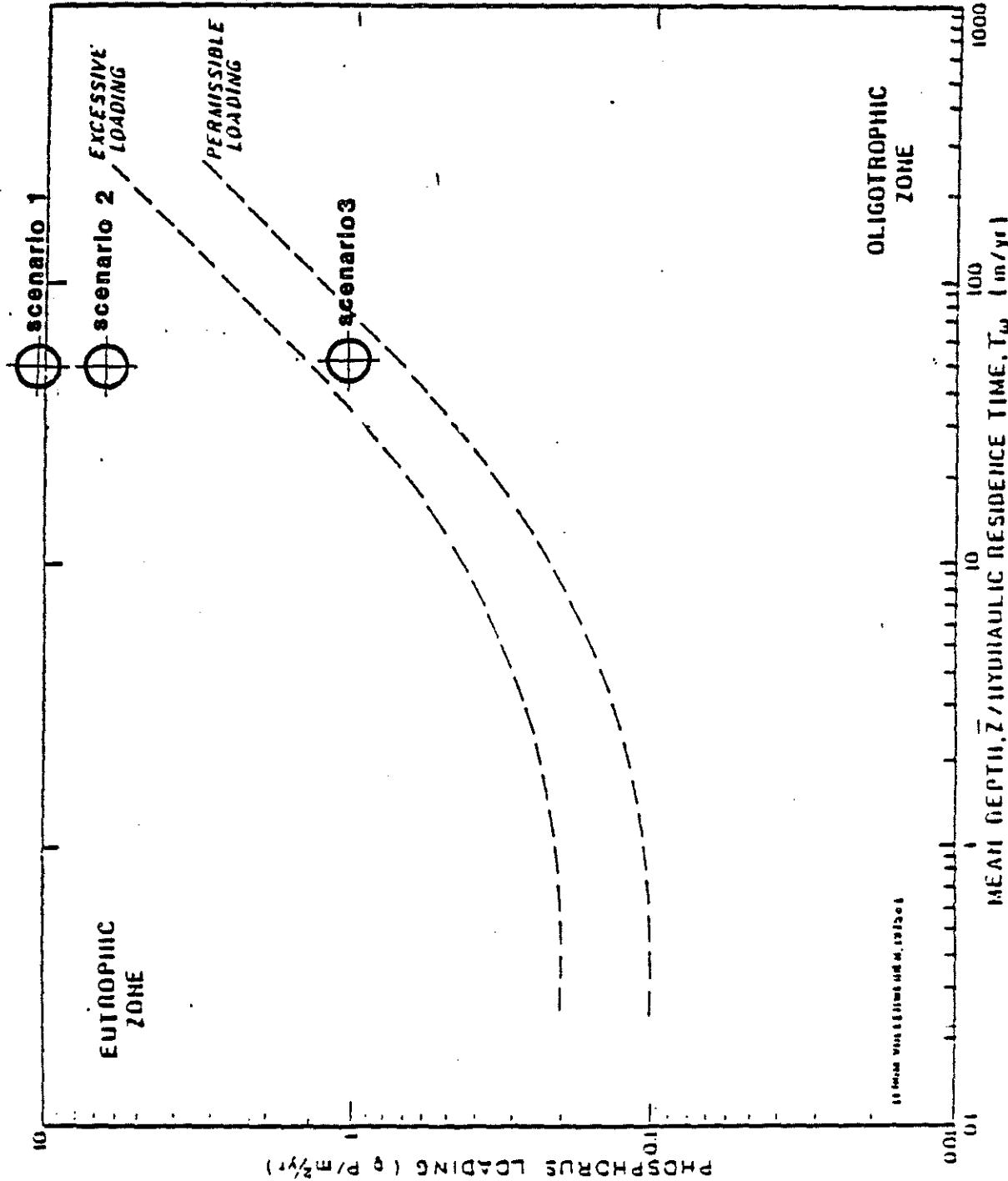
NINE-YR MON AV QUANT (CUM)	4E+06	4E+06	6E+06	3E+06	5E+06	5E+06	5E+06	4E+06	5E+06	4E+06	4E+06	4E+06	54356760.945 CU M
1982 MON. AV. QUANT (CUM)	4E+06	5E+06	8E+06	4E+06	8E+06	5E+06	6E+06	4E+06	6E+06	4E+06	4E+06	4E+06	61604292.096 CU M
PERMIT DIVER+DRWDN (CUM)	7E+06	7E+06	7E+06	55113	7E+06	7E+06	7E+06	7E+06	4E+06	4E+06	4E+06	4E+06	67787476.992 CU M
TOTP SRI REC. TR CONCENT.	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020 MG/L
SRI REC. QUANT (MG)	1E+08	1E+08	1E+08	9E+06	1E+08	1E+08	1E+08	1E+08	8E+07	9E+07	9E+07	8E+07	1355749539.8 MG
TOTP DEC REC. CONCENT.	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150 MG/L
TOTP RECCM. QUANT (MG)	1E+09	1E+09	1E+09	7E+07	1E+09	1E+09	1E+09	1E+09	6E+08	6E+08	6E+08	6E+08	10168121548.8 MG
TOTP 10-YR AV (MG/L)	0.219	0.329	0.254	0.272	0.197	0.160	0.127	0.303	0.261	0.229	0.218	0.267	0.236 MG/L
TOTP 10Y AV. QUANT. (MG)	3E+08	1E+09	2E+09	3E+08	1E+09	2E+08	7E+08	1E+09	1E+09	1E+09	1E+09	1E+09	12630530311.3 MG
TOTP 10Y PRMT QUANT (MG)	2E+09	2E+09	2E+09	1E+08	1E+09	1E+09	9E+08	2E+09	1E+09	1E+09	9E+08	1E+09	1570848272.5 MG
SOLP 10-YR AV (TR-ELSNEE)	0.158	0.204	0.111	0.099	0.143	0.109	0.096	0.162	0.144	0.12	0.123	0.123	
SOLP MON. AV. QUANT. (MG)	5E+08	8E+08	7E+08	3E+08	7E+08	5E+08	5E+08	7E+08	7E+08	5E+08	5E+08	5E+08	7168787907 MG



Modified Vollenweider Total Phosphorus loading and Mean Depth/Hydraulic Residence Time Relationship.

FIGURE 1

Ref: After Rust and Lee, 1978



Modified Vollenweider Total Phosphorus Loading and Mean Depth/Hydraulic Residence Time Relationship.

Ref: After Rabst and Lee, 1970

FIGURE 1



The three scenarios chosen for analysis included:

- 1) Withdrawal from the Tualatin via Oswego Canal as now permitted using 10 year averages for total phosphorus concentrations at the Elsner Rd. Unified Sewerage Agency sampling site;
- 2) Withdrawal as now permitted using proposed river concentrations of 0.150 mg/l total phosphorus; and
- 3) Withdrawal as now permitted using SRI recommended target river concentrations of 0.020 mg/l total phosphorus.

The relative position of these three scenarios with respect to the probable trophic status of Oswego Lake is shown in Figure 1. As indicated, scenarios 1 and 2 would each result in an excessively eutrophied lake. Concentrations of 0.020 mg/l total phosphorus in the Tualatin River would result in a lake condition intermediate between permitted and excessive. Table 2 has been provided for supporting data used in the analysis.

Presumably, if the lower Tualatin is considered a stratified reservoir (Tualatin Lake?) during summer growth conditions, a lower chlorophyll a standard of 0.010 mg/l would apply there and will require proportional reduction in river total phosphorus concentrations. However, if the same type of loading analysis is applied to 'Tualatin Lake' as was applied above to Oswego Lake, it is likely that total phosphorus concentrations much lower than 0.150 mg/l will be required to change that 'Lake' from excessively to moderately eutrophied. The lower river system is being presently maintained as a reservoir during May - October for diversion of river water through the Canal, with the approval of the Water Resources Department. The lower river should be classified as a stratified reservoir and protected as such.

### 3.0 CONCLUDING MISCELLANEOUS OBSERVATIONS AND QUESTIONS

The word "pollutant" is used with respect to total phosphorus and ammonia in the Notice. It seems inappropriate to consider total phosphorus a pollutant when it is in fact a precious resource wasted out of the Tualatin River Basin. As indicated in Section 1.0 the word has also been applied to algae. What is the USEPA definition of "pollutant", and shouldn't this definition be a part of the ODEQ discussion?

Why should the Tualatin River at Farmington be used as the reference point with respect to ammonia and phosphorus loads? We are addressing problems of the Tualatin River Basin; shouldn't concentrations at the USGS West Linn NASQN site be used as the target?

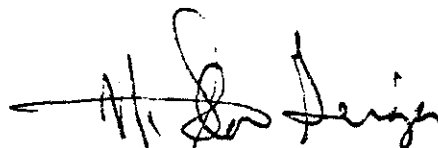
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12 May 1987

NOTES ①

9/11/87

OSWEGO

LAKE MORPHOLOGY / HYDROLOGY

Lake Watershed  $18,130,000 \text{ m}^2$  (4031 ac) (7 mi<sup>2</sup>)

Lake Surface Area  $1.611 \times 10^6 \text{ m}^2$  (398 ac)

Lake Volume  $12,459,554 \text{ m}^3$  (10,100 ac-ft)

Mean Depth 7.79 m

lake recalculated

Hydraulic Res. Time.

Retention Ratio (Vol of Lake ÷ Vol of Watershed @ 1/yr)

$$\frac{11,700,000 \text{ m}^3}{\frac{5.44 \times 10^7 \text{ m}^2 \times 4.02 \times 10^7 \text{ [us]}}{1.55 \times 10^6 \text{ m}^2 \text{ [s]}}} = \boxed{0.1769}$$

Flushing Ratio (Tot Vol out of Lake ÷ Vol of Lake)

$$\frac{66,000,000 \text{ m}^3}{11,700,000 \text{ m}^3} = \boxed{6.79} \text{ /yr.}$$

av. Annual Discharge from Watershed (cfs)

$$0.0187 \times 7.0 \text{ mi}^2 \times 37.6 \text{ in} = 11.465 \text{ cfs}$$

$\uparrow$   $\uparrow$   $\uparrow$   
 av. precip watershed av. ann precip

$(3.62 \times 10^8 \text{ cf/yr})$   
 $(1.02 \times 10^7 \text{ m}^3/\text{yr})$

av. Precip Assum  $\sim 37.6 \text{ in/yr}$  ( $1.55 \times 10^6 \text{ m}^3/\text{yr}$ )

av. Evap Assum  $\sim 35 \text{ in/yr}$ .

Permitted withdrawal via Canal from Thal. Ponds

57 cfs JUN 1 - OCT 1 ; 97 cfs remainder :

NOTES ①

9/11/87

OSWEGO

LAKE MORPHOLOGY / HYDROLOGY

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Mean Depth 7.79 m

lake  
residence

Hydraulic Res. Time.

Retention Ratio (Vol of Lake ÷ Vol of Watershed ÷ Lake/yr)

$$\frac{11,700,000 \text{ m}^3}{\left( \frac{5.44 \times 10^7 \text{ m}^3}{1.55 \times 10^6 \text{ m}^2} \right) \left( \frac{4.02 \times 10^7 \text{ m}^3}{1.55 \times 10^6 \text{ m}^2} \right)} = \boxed{0.1769}$$

Flushing Ratio (Tot Vol out of Lake ÷ Vol of Lake)

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$\uparrow$  watershed       $\uparrow$  av ann precip       $\left( \frac{3.62 \times 10^8 \text{ cft}}{1.02 \times 10^7 \text{ m}^3/\text{yr}} \right)$

av. Precip Assum  $\sim 37.6 \text{ in/yr}$  ( $1.55 \times 10^6 \text{ m}^3/\text{yr}$ )

av. Evap Assum  $\sim 35 \text{ in/yr}$ .

Permitted withdrawal via Canal from Trout River

57 cfs JUN 1 - OCT 1 ; 97 cfs remainder :

## NOTES ②

1. Withdrawal from Tullahoma as now permitted 57/97  
using 10 year total P concent. for Tullahoma, at Elser.

Canal	$15.7 \times 10^9$ mg	
Waterbed	$6.1 \times 10^8$ mg	< assume 0.06 mg/l TOTP
Precip	$4.2 \times 10^7$ mg	< assume 0.028 mg/l TOTP
$\Sigma$	$1.64 \times 10^{10}$ mg	

$$y = \frac{1.64 \times 10^{10} \text{ mg}}{1.611 \times 10^6 \text{ m}^2} = 10,150 \text{ mg/m}^2/\text{yr}$$

$$11.7 \times 10^6 \text{ m}^3 / \left( \begin{array}{l} 6.77 \times 10^7 \text{ m}^3 [E] \\ + 1.55 \times 10^6 \text{ m}^3 [P] \end{array} \right) \times \begin{array}{l} 15.2\% \\ 12.8\% \end{array} = 0.147$$

← mean depth

$$7.79 \text{ m} / 0.147 \leftarrow \text{hydraulic res. time}$$

$$x = 52.9$$

\* extremely eutrophic scenario

2. Withdrawal as now permitted using proposed  
purer concentration of 0.150 mg/l.

Canal	$10.2 \times 10^9$ mg
Waterbed	$6.1 \times 10^8$ mg
Precip	$4.2 \times 10^7$ mg
$\Sigma$	$1.08 \times 10^{10}$ mg

$$y = \frac{1.08 \times 10^{10} \text{ mg}}{1.611 \times 10^6 \text{ m}^2} = 6,736 \text{ mg/m}^2/\text{yr}$$

$$x = 52.9$$

\* unacceptably eutrophic scenario

## NOTES ③

3. Withdrawal as now permitted using SRI  
 proposed river concentration of 0.020 TOTP

Canal	$1.36 \times 10^9$ mg	$\leftarrow$ assume 50% reduction in <u>pollutants</u> within watershed
Watershed	$3.05 \times 10^8$ mg	
Precip	$4.2 \times 10^7$ mg	
$\Sigma 1.71 \times 10^9$		

⑤  $1.71 \times 10^9 \text{ mg} / 1.611 \times 10^6 \text{ m}^2 = 1060 \text{ mg/m}^2/\text{yr}$

⑧ = 52.9

This would be a loading  
 that would put the lake in mid  
 range between permissible as  
 excessive — meatrophs



## NOTES ③

3. Withdrawal as now permitted using SRI  
 proposed river concentration of 0.020 TOTP

Canal	$1.36 \times 10^9$ mg	← assume 50% reduction in canal within watershed
Watershed	$3.05 \times 10^8$ mg	
Precep	$4.2 \times 10^7$ mg	
$\Sigma 1.71 \times 10^9$		

⑤  $1.71 \times 10^9 \text{ mg} / 1.611 \times 10^6 \text{ m}^2 = 1060 \text{ mg/m}^2/\text{yr}$

⑧ = 52.9

This would be a loading  
 that would put the lake in mid  
 range between phenols as  
 excessive — neutrophils

ATTACHMENT 3



# LAKE OSWEGO CORPORATION

P.O. Box 203 Lake Oswego, Oregon 97034

May 12, 1987

Mr. Neil Mullane  
Manager, Planning & Monitoring  
Department of Environmental Quality  
811 SW 6th  
Portland, OR 97204

Dear Mr. Mullane:

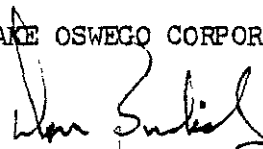
The Lake Oswego Corporation would like to take this opportunity to comment on DEQ's proposed TMDLs for the Tualatin River. We question the impact of the standard you are establishing.

Our Water Quality consultant, Stan Geiger, has made a scientific analysis. His comments are attached. We support his position that a standard of 0.020 mg/l is necessary to make a significant difference in the water quality of the Tualatin River and Lake Oswego. We encourage DEQ to adopt a TMDL in the range of 0.050 to 0.020 mg/l.

DEQ's renewed efforts to address the improvement of the water quality in the Tualatin River are appreciated by the members of the Lake Oswego Corporation.

Cordially,

LAKE OSWEGO CORPORATION

  
Don Burdick, President  
Board of Directors

DB/g

RECEIVED  
MAY 13 1987  
DEPARTMENT OF ENVIRONMENTAL QUALITY

*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

## RESPONSE TO ODEQ TOTAL MAXIMUM DAILY LOADS NOTICE

PREPARED BY N. STAN GEIGER  
SCIENTIFIC RESOURCES, INC.  
12425 S.W. 57TH AVENUE  
PORTLAND, OREGON 97219  
503-245-4068

RECEIVED  
MAY 13 1987

Water Quality Division  
Dept. of Environmental Quality

### TMDL: MEANS TO WHAT END?

#### 1.0 TMDL'S AND SOCIAL CRITERIA FOR ACCEPTABLE TUALATIN RIVER QUALITY

The various news articles that have appeared in local papers since late last fall regarding the Tualatin River give the impression that there is consensus over 1) the degraded quality of the river, and, 2) what we would like to see it become. This supposed consensus is the context for deciding what the total maximum daily load (TMDL) for "pollutants" will be for the Tualatin. I submit that we have no empirical basis for the target desirable condition for the Tualatin in the component of the TMDL discussion relating to the linkage between phosphorus (or algae nutrients generally)-algae growth-and human sensory acceptability of the water. We are vigorously debating the means to producing 'cleaner' water when we have not in fact reached a consensus on an empirically verifiable, socially meaningful target water quality condition.

On the one hand we are using generalized guidance developed elsewhere in the form of USEPA algae nutrient guidelines (USEPA 1986), or DEQ water quality standards for chlorophyll *a* (OAR 340-41-150), and on the other, subjective descriptions of unacceptable water quality to influence and determine rule-making regarding so-called "pollutant" loading to the Tualatin River. An examination of the articles that have appeared in local papers since last fall netted a variety of interesting, typical, but non-empirical, water quality assessments: "open sewer" (Churchill 1987, Tippens 1987), "unusable water" (Smith 1987), "the Tualatin River is polluted" (Kennedy 1987), "the greening of the waters" (Hayes 1985), "excessive algae growth" (Smith 1986a), "algae flareups" (Mullane 1987), "algae in the river that reduces the oxygen level and the bacteria that the algae feeds on" [?] (Kengala 1987), "growth of algae that pollutes the river" (Harrington 1987), or, by inference characterizing the Tualatin River as unacceptable because it is composed of "one-third sewage effluvia" (Smith 1986b). Nearly all of these descriptions and assessments are subjective and some are inaccurate, e.g. Kengala 1987 and Harrington 1987. Admittedly, each of these people may not have been quoted accurately by reporters as evidenced by this quote of J. Smith: "The Lake Corp has spent 'around a hundred grand' [fact] over the years on copper phosphate [sulfate], an agent that kills the waste nutrients nitrogen and phosphorus, which form algae [complete non-fact]" (Donelson and Wurth 1986).

Both the assessment of river and lake condition and the kind of water that we would like to have are, I think perceptively, described as largely aesthetic judgments. According to G. Krahmer of the Unified Sewerage Agency,

"There's no problem with the treated sewage we discharge; it's aesthetics" (Harrington 1987). C. Schaefer, in a separate article (Donelson 1986) said "the problem with algae is 'mostly aesthetic', but if left unchecked algae can prove to be a danger to fish and fowl of the lake." Schaefer, Oswego Lake Warden, on the staff of the Lake Oswego Corporation, is particularly aware of aesthetic judgments regarding acceptable lake water quality from his responses to the variety of complaints about lake water summer after summer from Oswego Lake lakeshore residents. C. Young of the Department of Environmental Quality, noted that "algae in the Tualatin River creates an aesthetic problem for recreational use and causes shifts in the amount of oxygen in the water, causing 'stress' for bass in the river" (Ostergren 1987). "Aesthetics" is a word with a long, noble tradition. We cannot dispose of the obligation to define what is acceptable for (the majority?) of people who use waters of the Tualatin River Basin by suggesting the problem is one of "aesthetics". After all, there are ways to perform scientific aesthetic analyses.

What people think about the quality of the Tualatin River is what will determine future regulatory action that most likely will have expensive consequences. The review of the rhetoric and comment in past news articles suggests that river water quality, and for that matter lake water quality, is unacceptable. Verbal assessments reviewed above, however, lack empirical underpinnings. Target water quality conditions are equally as vaguely phrased, suggestive but without empirical substance. I submit that establishing TMDL's for the so-called "pollutant" phosphorus without establishing a watershed-based social-empirical acceptable target water quality condition is irresponsible.

A search of the news articles also netted an attempt to define a target water quality condition for the Tualatin. Tippen (1987) asserted that the Tualatin could be a "pristine stream again". The "revitalized Tualatin River", he said, "could sustain richness of fish life and accommodate a full range of recreational activities, even swimming" (Tippen 1987). Targeting a "pristine" condition for the Tualatin River is somewhat like targeting Lake Tahoe clarity for Oswego Lake. Both are inappropriate target conditions because they are not in touch with actual possibilities for water quality in the Tualatin River Basin. "Pristine" actually derives from the Latin word meaning 'prior', suggesting that we can return to a pre-civilization condition. Even if we knew for certain what they condition was, and there is some evidence to suggest that it was not all that desirable, we may not want that as our target objective. Tippen, at least attempted to give substance to what he thought "pristine" meant by referring to fish and recreational use. It may be argued, however, that there is already a richness of fish use in the Tualatin. At least no one to date has demonstrated how the fishery would improve with so-called improvements in water quality, even though present ammonia levels may be toxic as well as the major reason for oxygen depletion in the lower river. As to a 'full range of recreational activities', large woody debris in the Tualatin may be a more formidable obstacle to recreational use than water quality. And with respect to swimming in the 'greened water', many do and appear to enjoy it. In a recent survey of Lake Oswego Corporation shareholders recreational use of Oswego Lake, 320 respondents out of a total of 700 households surveyed indicated they spend 19,217 hrs swimming in Oswego Lake during one year (Scientific Resources Inc. November 1986). These respondents indicated that if the lake's water quality was improved they would swim even more, but conditions are obviously not preventing many people from

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enjoying water that is heavily influenced by the Tualatin River and its various component "effluvia".

A brief assessment of our knowledge of the empirical linkage between impaired human (or fish) use—chlorophyll a levels—algae growth—nutrients (phosphorus, nitrogen, etc.) would appear to be imperative as a precursor to the discussion of TMDL's. You may prefer the use of another term than "empirical" but my preference for it relates to its denoting something capable of being verified or disproved by observation or experiment. My suspicion is that we do not have the critical "empirical" link that can as yet give credibility to the TMDL-setting process underway for the Tualatin River.

The present standard in Oregon for determining the presence of "nuisance phytoplankton growth" is the indirect measure of the algae pigment chlorophyll a. It is stated in OAR 340-41-150 that phytoplankton may impair the recognized beneficial uses when chlorophyll a levels exceed 0.01 mg/l in natural lakes which thermally stratify, or 0.015 mg/l in natural lakes which do not thermally stratify, and reservoirs, rivers and estuaries. The primary rationale for this standard was to provide Oregon with an "indicator of waters where nuisance phytoplankton conditions may be found" (Hansen 1986). Both in Hansen (1986) and in the DEQ TMDL Notice of April 9, 1987 (ODEQ 1987) there are what I see to be critical caveats regarding the linkage in question. In ODEQ 1987 there is a quote from EPA's Technical Guidance Manual for Performing Waste Load Allocations: ". . .there is no general value for chlorophyll concentration which describes acceptable versus unacceptable conditions in terms of general aesthetics." In Hansen (1986) the same caveat is provided: "To date, there has not been a single numeric value for a parameter(s) which describe when a use would be impaired due to nutrients or nuisance aquatic growth. . . .Nutrient and nuisance aquatic growth standards are admittedly subjective as no one has numerically defined when a nuisance condition [is present] that would affect a use." The one reference to any study of this relationship in Hansen (1986) was to the work of C. N. Sawyer (1947) who related the "greenness" of water to chlorophyll a concentrations. Are we really willing to make judgments for Oregon on the basis of what an investigator discovered about the aesthetics of "greenness" in the Midwest in 1947?

The irony of our situation with respect to the TMDL-setting process for the Tualatin River is that we are seemingly without a tight empirical linkage on both sides of the chlorophyll a standard: on one hand we lack for the Tualatin River a well-defined relationship between the pigment and phosphorus concentrations, and on the other, we lack an empirical relationship between chlorophyll a concentrations and perceptions of nuisance or unacceptable conditions which interfere with a specified beneficial use. In the interest of good science we would do well to remedy the latter deficiency by gathering relevant data as we are attempting to remedy the former through bioassays and more intensive sampling this summer. I would suggest that we make an honest attempt to relate chlorophyll a levels during this growing season in the lower Tualatin (or upper for that matter) to human perception of unacceptability and interference with beneficial use. Why should we be constrained by paper standard which is not linked to perceptions of people who are using the river and also making judgments about cleaning up the Tualatin River?

## 2.0 IMPROVING AND PROTECTING THE QUALITY OF OSWEGO LAKE

Schaedel, in his report on Garrison Lake water quality (1986) provided the first systematic analysis of phosphorus loading for an Oregon lake. In his analysis, he used a modified version of the Vollenweider Total Phosphorus Loading and Mean Depth/Hydraulic Residence Time Relationship. While information is being obtained on the hydrology, chemistry and biology of Oswego Lake, there is sufficient information available to approximate an acceptable total phosphorus loading rate for the lake. The major source of water for the lake is Tualatin River water provided by means of Oswego Canal. In addition, there are four tributaries to the lake. Of the total surface water entering Oswego Lake approximately 85.2% is via Oswego Canal, 12.8% via the four tributaries (and storm drains), and the remainder of around 2.0% as precipitation. Existing water rights for withdrawal by the Lake Corporation from the Tualatin River, approximately at river mile 6.2, are 57 cfs from May 30 through October 1, and 97 cfs from October 2 through April 30. Table 1 provides a monthly listing of discharge into the lake through the Canal from 1976 through 1984, along with monthly quantities of water entering the lake through the Canal for nine-year averages and for the current yearly water withdrawal pattern including one month Canal closure for lake drawdown.

The growth of algae in Oswego Lake is conditioned by availability of light, water temperature and various nutrients and gases required for growth. Algae growth in the lake as in the river occurs throughout the year but physical conditions for that growth are different in the river than in the lake e.g. suspended inorganic sediment load directly proportional to discharge in the river will have shading effects on algae resulting in decreased growth. The residence time for water and its constituents (such as nutrients) in the lake is much longer than that of the river where water will move from Gaston out to the Willamette in a matter of days, presumably even during summer low flow conditions. Oswego Lake has a flushing rate of approximately 6.8 times/yr. It will take approximately 1.7 months for replacement of lake volumes, however, changes in nutrient concentrations take considerably longer e.g. on the order of 2-3 yrs following sustained reductions.

These differences between lake and river with respect to algae growth result primarily from differences in mean depth and hydraulic residence time. With the same loading rate but small "mean depth/hydraulic residence time" (MD/HRT) value, river algae growth would be expected to be much less than with the lake with a much larger MD/HRT value (Figure 1). The two systems, however, are not strictly comparable in this way. Concentrations of total phosphorus in the river that may relate to a certain acceptable chlorophyll a concentrations could produce higher and unacceptable chlorophyll a concentrations in Oswego Lake. (Ironically, acceptable chlorophyll a concentrations may be aesthetically unacceptable for users of river water whereas unacceptable chlorophyll a concentrations in the lake may be aesthetically acceptable--just because lake algae often differ from river algae.)

Application of the loading analysis used by Schaedel to Oswego Lake for three scenarios of total phosphorus concentrations in the Tualatin River showed the target concentration of 0.150 mg/l total phosphorus to be unacceptable for improving and protecting the quality of Oswego Lake water.



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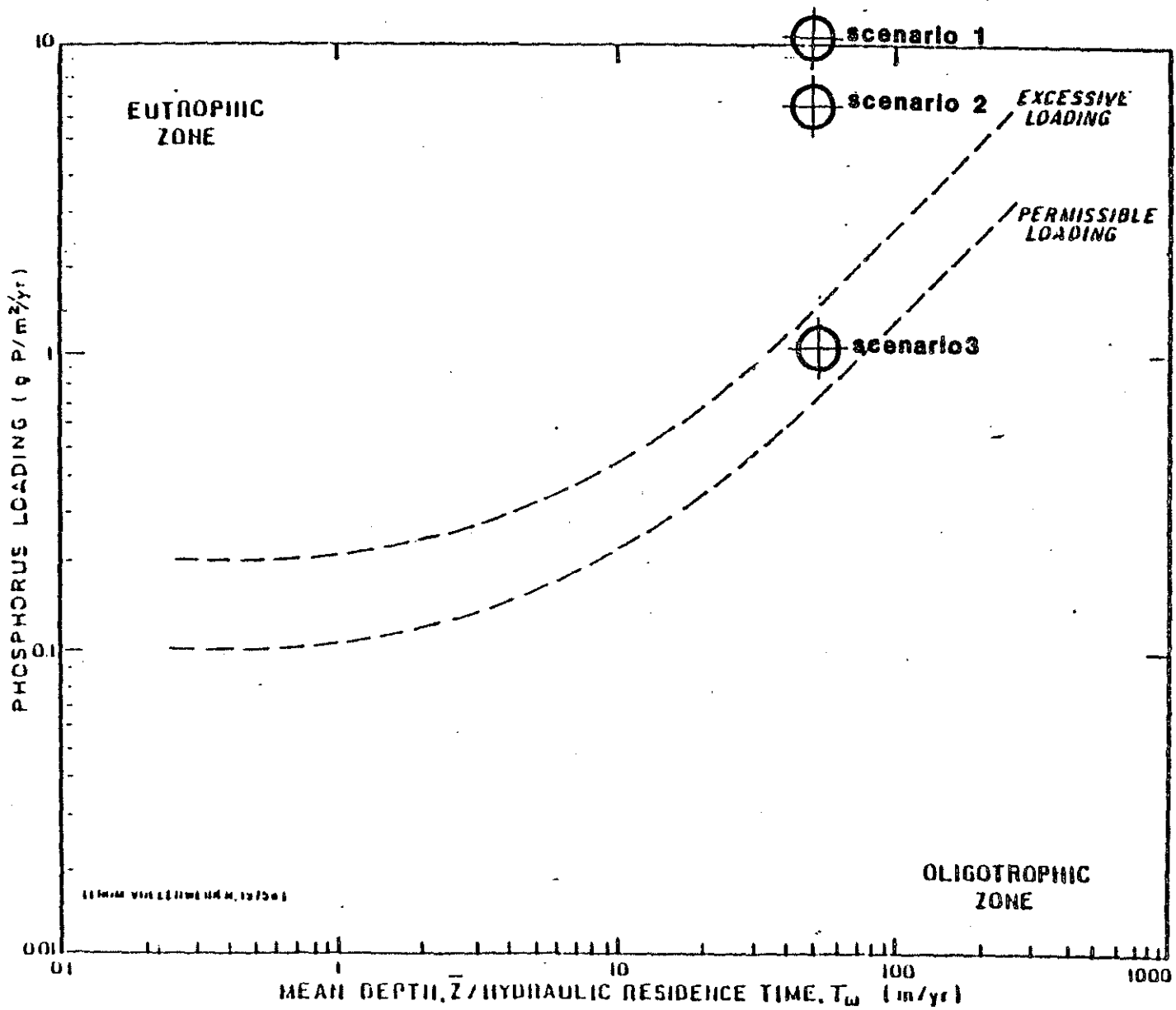
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TABLE 1. DISCHARGE INTO OSWEGO LAKE VIA OSWEGO CANAL (USGS DATA)

AVERAGE MONTHLY DISCHARGE (cfs) - TUALATIN RIVER AT OSWEGO CANAL NEAR LAKE OSWEGO, OR

WATER YR.	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1976	59.0	60.3	84.7	11.9	109.0	91.2	49.7	48.9	49.8	56.1	53.5	50.3
1977	48.6	46.1	46.5	52.7	57.7	67.0	54.6	54.6	40.7	55.7	53.0	55.3
1978	46.6	47.4	72.4	9.7	52.2	63.4	56.8	49.0	58.5	53.7	48.0	46.0
1979	38.6	33.7	46.9	36.4	19.3	21.6	47.3	49.0	56.1	49.0	51.7	54.9
1980	58.7	38.0	43.6	6.3	3.3	3.3	94.9	57.3	65.4	58.9	62.3	49.3
1981	44.9	47.9	93.5	77.7	81.1	76.5	78.1	74.5	93.5	64.9	63.6	69.6
1982	55.0	70.1	101.0	57.3	115.0	69.5	84.1	50.0	76.1	50.2	52.0	52.1
1983	51.5	49.2	132.0	31.6	128.0	98.7	78.1	34.5	59.5	64.2	67.1	68.1
1984	46.5	100.0	103.0	95.7	107.0	104.0	91.2	71.5	66.8	76.1	77.0	80.4
MEAN (cfs)	49.9	54.7	80.4	42.1	74.7	66.1	70.5	54.4	62.9	58.8	58.7	58.4
STD. DEV.	6.4	19.0	28.8	29.6	41.8	31.9	17.4	11.6	14.4	8.0	8.9	10.9
MIN. (cfs)	38.6	33.7	43.6	6.3	3.3	3.3	47.3	34.5	40.7	49.0	48.0	46.0
MAX. (cfs)	59.0	100.0	132.0	95.7	128.0	104.0	94.9	74.5	93.5	76.1	77.0	80.4

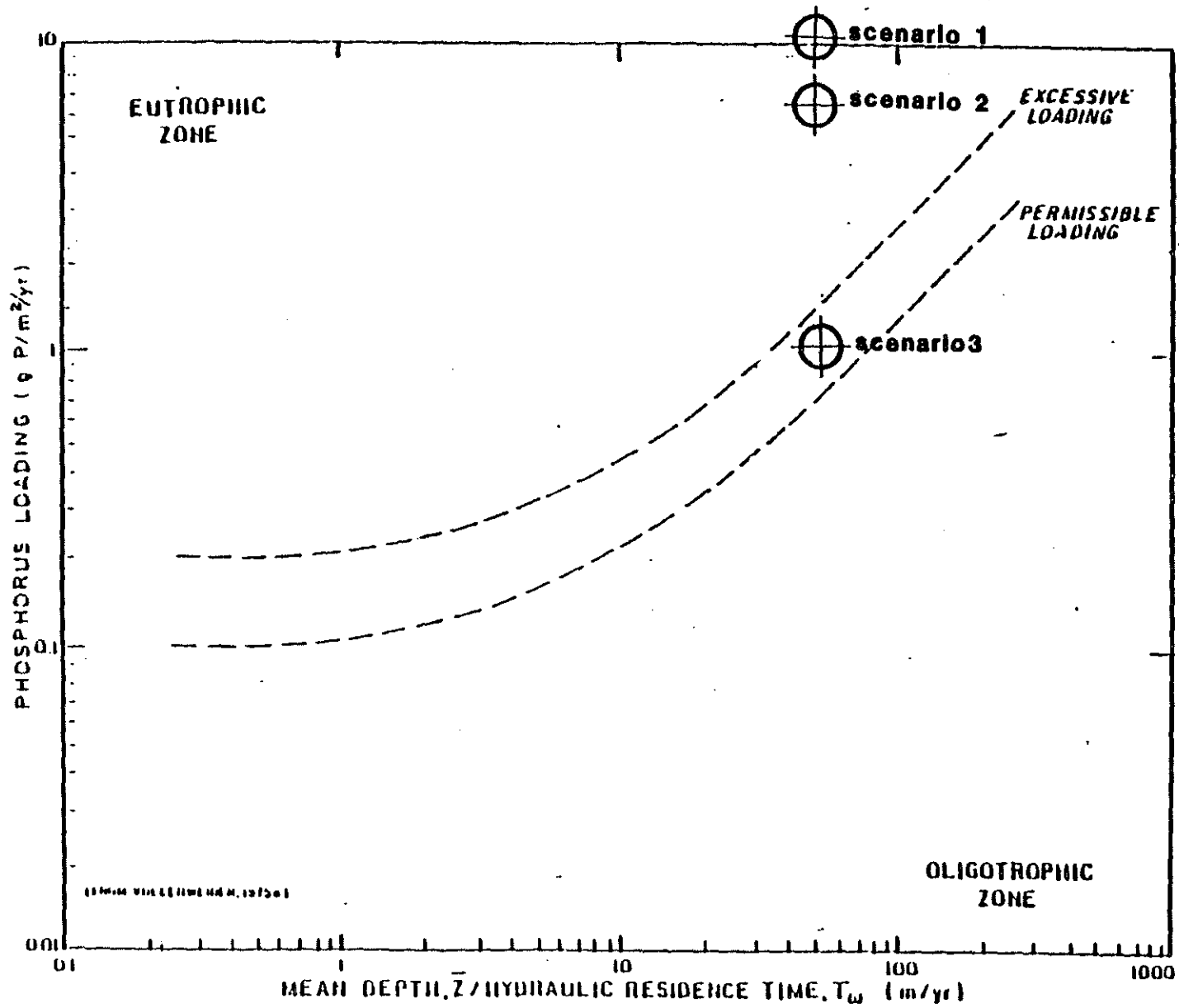
NINE-YR MON AV QUANT (CUM)	4E+06	4E+06	6E+06	3E+06	5E+06	5E+06	5E+06	4E+06	5E+06	4E+06	4E+06	4E+06	54356760.945 CU M
1982 MON. AV. QUANT (CUM)	4E+06	5E+06	8E+06	4E+06	8E+06	5E+06	6E+06	4E+06	6E+06	4E+06	4E+06	4E+06	61604292.096 CU M
PERMIT DIVER+DRWDN (CUM)	7E+06	7E+06	7E+06	455113	7E+06	7E+06	7E+06	7E+06	4E+06	4E+06	4E+06	4E+06	67787476.992 CU M
TOTP SRI REC. TR CONCENT.	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020 MG/L
SRI REC. QUANT (MG)	1E+08	1E+08	1E+08	9E+06	1E+08	1E+08	1E+08	1E+08	8E+07	9E+07	9E+07	8E+07	1355749539.8 MG
TOTP DEC REC. CONCENT.	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150 MG/L
TOTP RECCM QUANT (MG)	1E+09	1E+09	1E+09	7E+07	1E+09	1E+09	1E+09	1E+09	6E+08	6E+08	6E+08	6E+08	10168121548.8 MG
TOTP 10-YR AV (MG/L)	0.219	0.329	0.254	0.272	0.197	0.160	0.127	0.303	0.261	0.229	0.218	0.267	0.236 MG/L
TOTP 10Y AV. QUANT. (MG)	3E+08	1E+09	2E+09	9E+08	1E+09	2E+08	7E+08	1E+09	1E+09	1E+09	1E+09	1E+09	12630530311.3 MG
TOTP 10Y PRMT QUAN (MG)	2E+09	2E+09	2E+09	1E+08	1E+09	1E+09	9E+08	2E+09	1E+09	1E+09	9E+08	1E+09	15708482772.5 MG
SOLP 10-YR AV (TR-ELSHER)	0.168	0.204	0.111	0.099	0.143	0.109	0.096	0.162	0.144	0.12	0.123	0.123	
SOLP MON. AV. QUANT. (MG)	5E+08	8E+08	7E+08	3E+08	7E+08	5E+08	5E+08	7E+08	7E+08	5E+08	5E+08	5E+08	7168787907 MG



Modified Vollenweider Total Phosphorus Loading and Mean Depth/Hydraulic Residence Time Relationship.

FIGURE 1

Ref. After Bast and Lee, 1978



Modified Vollenweider Total Phosphorus Loading and Mean Depth/Hydraulic Residence Time Relationship.

FIGURE 1

Ref. After Rust and Lee, 1970

The three scenarios chosen for analysis included:

- 1) Withdrawal from the Tualatin via Oswego Canal as now permitted using 10 year averages for total phosphorus concentrations at the Elsner Rd. Unified Sewerage Agency sampling site;
- 2) Withdrawal as now permitted using proposed river concentrations of 0.150 mg/l total phosphorus; and
- 3) Withdrawal as now permitted using SRI recommended target river concentrations of 0.020 mg/l total phosphorus.

The relative position of these three scenarios with respect to the probable trophic status of Oswego Lake is shown in Figure 1. As indicated, scenarios 1 and 2 would each result in an excessively eutrophied lake. Concentrations of 0.020 mg/l total phosphorus in the Tualatin River would result in a lake condition intermediate between permitted and excessive. Table 1 has been provided for supporting data used in the analysis.

Presumably, if the lower Tualatin is considered a stratified reservoir (Tualatin Lake?) during summer growth conditions, a lower chlorophyll a standard of 0.010 mg/l would apply there and will require proportional reduction in river total phosphorus concentrations. However, if the same type of loading analysis is applied to 'Tualatin Lake' as was applied above to Oswego Lake, it is likely that total phosphorus concentrations much lower than 0.150 mg/l will be required to change that 'Lake' from excessively to moderately eutrophied. The lower river system is being presently maintained as a reservoir during May - October for diversion of river water through the Canal, with the approval of the Water Resources Department. The lower river should be classified as a stratified reservoir and protected as such.

### 3.0 CONCLUDING MISCELLANEOUS OBSERVATIONS AND QUESTIONS

The word "pollutant" is used with respect to total phosphorus and ammonia in the Notice. It seems inappropriate to consider total phosphorus a pollutant when it is in fact a precious resource wasted out of the Tualatin River Basin. As indicated in Section 1.0 the word has also been applied to algae. What is the USEPA definition of "pollutant", and shouldn't this definition be a part of the ODEQ discussion?

Why should the Tualatin River at Farmington be used as the reference point with respect to ammonia and phosphorus loads? We are addressing problems of the Tualatin River Basin; shouldn't concentrations at the USGS West Linn NASQN site be used as the target?

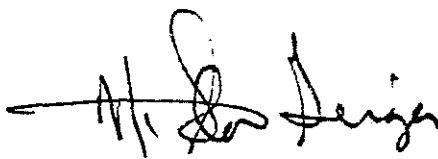
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12 May 1987



NOTES ①

9/11/87

OSWEGO  
LAKE MORPHOLOGY/HYDROLOGY

Lake Watershed  $18,130,000 \text{ m}^2$  (4031 ac) (7 mi<sup>2</sup>)  
 Lake Surface Area  $1.611 \times 10^6 \text{ m}^2$  (398 ac)  
 Lake Volume  $12,459,554 \text{ m}^3$  (10,100 ac-ft)  
 Mean Depth 7.79 m

lake  
residence

Hydraulic Res. Time.

Retention Rate (Vol of Lake ÷ Vol of Watershed per yr)

$$11,700,000 \text{ m}^3 / \left( \frac{5.44 \times 10^7 \text{ m}^3}{1.55 \times 10^6 \text{ m}^2} \right) \left( \frac{1.02 \times 10^7 \text{ m}^3}{1.55 \times 10^6 \text{ m}^2} \right) = \boxed{0.1769}$$

Flushing Rate (Tot Vol out of Lake ÷ Vol of Lake)

$$66,000,000 \text{ m}^3 / 11,700,000 \text{ m}^3 = \boxed{6.79 \text{ /yr.}}$$

av. Annual Discharge from Watershed (cfs)

$$0.0187 \times 7.0 \text{ mi}^2 \times 37.6 \text{ in} = 11.465 \text{ cfs}$$

$\uparrow$  av. precip  
 $\uparrow$  watershed

$(3.62 \times 10^8 \text{ cft/yr})$   
 $(1.02 \times 10^7 \text{ m}^3/\text{yr})$

av. Precip assume  $\sim 37.6 \text{ in/yr}$  ( $1.55 \times 10^6 \text{ m}^3/\text{yr}$ )

av. Evap assume  $\sim 35 \text{ in/yr}$ .

Permitted withdrawal via Canal from Trout River

57 cfs JUVI - OCT 1, 97 cfs for remainder

NOTES ①

9/11/87

OSWEGO

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Lake Watershed  $18,130,000 \text{ m}^2$  (4031 ac) (7 mi<sup>2</sup>)

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lake  
residence

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Retention Rate (Vol of Lake ÷ Vol of Water into Lake/yr)

$$\frac{11,700,000 \text{ m}^3}{\frac{5.44 \times 10^7 \text{ m}^3 \left[ \frac{4.02 \times 10^7 \text{ [L/yr]} \right]}{1.55 \times 10^6 \text{ m}^2 \text{ [L]}}} = \boxed{0.1769}$$

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Permitted withdrawal via Canal from Trout River

57 cfs NOV 1 - OCT 1, 97 cfs for remainder

## NOTES ②

1. Withdrawal from Tuleton as now permitted using 10 gpd/ft<sup>2</sup> & consent. for Tuleton at Elmer. 57/97

Canal	$15.7 \times 10^9$ mg	
Washed	$6.1 \times 10^8$ mg	< assume 0.06 mg/l TOTP
Precip	$4.2 \times 10^7$ mg	< assume 0.028 mg/l TOTP
$\Sigma$	$1.64 \times 10^{10}$ mg	

$$\textcircled{y} = 1.64 \times 10^{10} \text{ mg} / 1.611 \times 10^6 \text{ m}^2 = 10,150 \text{ mg/m}^2/\text{yr}$$

$$11.7 \times 10^6 \text{ m}^3 / \left( \begin{array}{l} 6.77 \times 10^7 \text{ m}^3 [\text{K}] + 1.02 \times 10^7 \text{ m}^3 [\text{WS}] \\ + 1.55 \times 10^6 \text{ m}^3 [\text{P}] \end{array} \right)^{2.07} = 0.147$$

$\leftarrow$  mean depth  
 $7.79 \text{ m} / 0.147 \leftarrow$  hydraulic free time  $\rightarrow$

$$\textcircled{x} = 52.9$$

\* extremely eutrophic scenario

2. Withdrawal as now permitted using proposed pipe concentration of 0.150 mg/l.

Canal	$10.2 \times 10^9$ mg
Washed	$6.1 \times 10^8$ mg
Precip	$4.2 \times 10^7$ mg
$\Sigma$	$1.08 \times 10^{10}$ mg

$$y = 1.08 \times 10^{10} \text{ mg} / 1.611 \times 10^6 \text{ m}^2 = 6,736 \text{ mg/m}^2/\text{yr}$$

$$x = 52.9$$

\* unacceptably eutrophic scenario

## NOTES ③

3. Withdrawal as now permitted using SRI  
 proposed river concentration of 0.020 TOTP

Canal	$1.36 \times 10^9$ mg	$\leftarrow$ assume 50% reduction in source within watershed
Watershed	$3.05 \times 10^8$ mg	
Precep	$4.2 \times 10^7$ mg	
$\Sigma 1.71 \times 10^9$		

$$\textcircled{y} = 1.71 \times 10^9 \text{ mg} / 1.611 \times 10^6 \text{ m}^2 = 1060 \text{ mg/m}^2/\text{yr}$$

$$\textcircled{x} = 52.9$$

This would be a loading  
 that would put the lake in mid  
 range between pennsylvanian  
 exposure - mesotrophic

## NOTES ③

3. Withdrawal as now permitted using SRI  
 proposed river concentration of 0.020 TOTP

Canal	$1.36 \times 10^9$ mg	← assure 50% reduction in source within watershed
Watershed	$3.05 \times 10^8$ mg	
Precep	$4.2 \times 10^7$ mg	
$\Sigma 1.71 \times 10^9$		

⑤  $1.71 \times 10^9 \text{ mg} / 1.611 \times 10^6 \text{ m}^2 = 1060 \text{ mg/m}^2/\text{yr}$

⑧ = 52.9

This would be a loading  
 that would put the lake in mid  
 range between permissible as  
 excessive — meatophy

**ATTACHMENT 4**



May 11, 1987

Northwest Environmental Defense Center

10015 S.W. Terwilliger Blvd., Portland, Oregon 97219  
(503) 244-1181 ext.707

RECEIVED  
MAY 13 1987

Mr. Neil Mullane  
Manager, Planning and Monitoring Section  
Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Avenue  
Portland, OR 97204

Water Quality Division  
Dept. of Environmental Quality

Dear Neil:

The following are comments from the Northwest Environmental Defense Center (NEDC) on the Department's proposed total maximum daily loads (TMDL's) for ammonia and phosphorus in the Tualatin River. Our detailed comments have to deal with: the relation between streamflow and TMDL's; the need for TMDL's at other locations than only the lower river; unnecessary concern devoted to ammonia and dissolved oxygen; the concentration basis proposed for phosphorus TMDL's; and the need for TMDL's for other parameters. Our general comment is that the Department is moving in a welcome direction for effective water quality planning and management in Oregon and should be encouraged to continue in this direction. This newly proposed TMDL-based water quality planning/management process offers the hope of finding real solutions to previously intractable pollution problems and finally realizing real water quality improvements from the efforts and dollars we invest. For its part, NEDC intends to participate constructively and helpfully with the Department in this process. Our specific comments on the proposed Tualatin River TMDL's are as follows:

1. The proposed concept of flow dependent TMDL's for the Tualatin River is a good idea. This approach focuses on acceptable pollutant concentration levels without the additional confusion of trying to predict streamflows that are presently beyond the Department's ability to directly control. It builds naturally into the water quality planning/management process an ability for the Department to effectively still deal with water quality issues in the face of uncertainties about the availability of present and future streamflows. It explicitly recognizes the fundamental interconnection between water quality and available quantity, and allows for the reality of Oregon's administrative separation of the two issues. The result should be that pollution abatement considerations in minimum streamflow decisions before the Water Resources Commission can now be presented, along with the other competing considerations, in concrete identifiable economic terms. All in all, the proposed concept has to be regarded as a major constructive contribution to the rational management, protection and enhancement of Oregon's waters.

2. TMDL's should also be developed and established for the middle and upper reaches and the individual tributaries of the Tualatin River. The TMDL's proposed in the Department's 4/13/87 hearing notice are for the lower Tualatin River only. Certainly upstream and tributary pollutant loadings will impact downstream pollutant concentrations and thereby the waste loadings available for allocation downstream. The primary source and impact of excessive ammonia loadings may be confined to the lower Tualatin, and the primary impact of excessive phosphorus loadings may be most clearly obvious in the lower reach of the river. All of the sources of excessive phosphorus and other pollutant loadings, however, are not confined only to this lower reach. The Department's water quality data, reported from the ongoing Tualatin River study and before, indicate clearly that upstream sources (urban and agricultural runoff, among others) provide at least adequate concentrations of algal growth stimulating phosphorus before the river leaves its middle reach. The elimination of excessive growth of algae in the lower reach of the Tualatin will require that TMDL's be established for phosphorus in the upstream reaches and tributaries as well as the lower reach.

3. The Department should focus its water quality planning/management strategy and TMDL/WLA/LA development efforts on phosphorus, and pay not so much attention to ammonia and dissolved oxygen. It is NEDC's impression that the Department's concentration on the lower reach of the Tualatin is in part the result of its insistent focus on dissolved oxygen and nitrification dynamics, and the location of sewage treatment plant sources of ammonia and resulting DO deficit problems. This is a lingering residual holdover from the Department's historical preoccupation with dissolved oxygen as the primary criterion of water quality in Oregon and the regulation of oxygen demanding discharges as the state's primary pollution abatement objective.

There was a time when the state's major water pollution control challenge was getting the BOD from three Oregon City paper mill discharges under control. At that time, excessive uncontrolled discharges of BOD and resulting deficits of dissolved oxygen were generally recognized as the primary water pollution problem in the state, and no where more particularly than in the Willamette River and its tributaries. At that time, the universal application of minimal sewage treatment technologies to gain control of oxygen demanding discharges, from municipalities and industries alike, was the accepted pollution control strategy objective of the state. That time was fifteen or twenty years ago. The major BOD wars of yesterday have been won. The Department of Environmental Quality should publicly announce its victory and move on to today's problems.

The water quality problems of today are in large measure the outgrowth of yesterday's success. The BOD removing treatment technologies have allowed the discharge of ever increasing volumes of wastewater effluents, and associated urban and industrial developments, free of the DO deficit



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The water quality problems of today are in large measure the outgrowth of yesterday's success. The BOD removing treatment technologies have allowed the discharge of ever increasing volumes of wastewater effluents, and associated urban and industrial developments, free of the DO deficit

penalties which would have been experienced in the past. Unfortunately, the treatment technologies which so effectively remove oxygen demand from these wastewaters do not so effectively remove some other classes of pollutants, principally among which are the algal growth stimulating nutrients — phosphorus and nitrogen. Because of their ubiquitous presence in municipal wastewater effluents and in the runoff from developed lands, excessive concentrations of these nutrients (particularly phosphorus) have become the primary water quality control challenge in Oregon today.

Certainly this is most obvious in the Tualatin River Basin, but it is increasingly the general case as well. The critical water pollution realities in Oregon might be viewed as having moved in the past two decades from the old problems of deficit (dissolved oxygen) to new problems of excess (algal growth). The Department needs to adjust its water quality management strategies to these new realities. Its proposed TMDL-based planning/management approach is such a welcome adjustment.

Today's water quality problems and their answers are both different and more complex than those of decade ago. Enforcement of additional treatment requirements on a few major municipal or industrial point source discharges may still be a necessary component of today's strategy; no longer though will it be sufficient as the complete strategy. Too much of the excessive phosphorus concentrations in the Tualatin River derive from sources that are disperse and nonpoint. To focus so persistently on ammonia and dissolved oxygen is to perpetuate beyond understandable fetish a sort of Departmental nostalgia for the simpler days of major point source regulation. Alternatively, a phosphorus and algae control focus would expand the strategy to explicitly address the critical disperse nonpoint sources, while still including the point sources within their appropriate perspective.

As a practical matter, it seems by now obvious that any conceivably effective phosphorus control strategy will require the relocation of present treatment plant discharges to land application, to agricultural irrigation, or somewhere other than the Tualatin River. Present ammonia discharges to the river will be eliminated as a matter of course because of the necessities of the phosphorus control strategy. The continuing study of nitrification and dissolved oxygen dynamics and ammonia discharge restrictions in the Tualatin is therefore consuming unnecessary energies and resources to resolve a problem that in practice will not exist.

4. The phosphorus concentration basis for phosphorus TMDL's should be much lower than the proposed 0.15 mg/l. All of the data that has been presented (see Figures 2, 3, 4 in the Notice for Comment), and the similar data from rivers and lakes elsewhere, indicate that EPA's national criteria recommendations (EPA Gold Book: Quality Criteria for Water) for phosphate-phosphorus are as well applicable to the Tualatin River. The applicable EPA Gold Book recommendations for total phosphorus are as follows:

for streams or other flowing waters, P-total < 0.10 mg/l;  
for streams entering lakes or reservoirs, P-total < 0.05 mg/l;  
for the waters in lakes or reservoirs, P-total < 0.025 mg/l.

For lakes or reservoirs, the recommended phosphorus control criterion is an annual phosphorus loading limitation based on the geometry and time of hydraulic residence of the specific lake or reservoir. Thus, to the extent that reservoir geometries and residence times will vary from reservoir to reservoir, the phosphorus criterion to control nuisance algal growth will be site specific. In those rare exceptions where phosphorus is not or cannot be made to be the algal growth limiting nutrient, the phosphorus criterion would be site specific (i.e., there would presumably not be one on phosphorus but on the nutrient that was in this case limiting).

Nowhere in the EPA recommendations is there any indication of remaining site specific mystery about the chemistry or biology of nuisance algal growth and its relationship to phosphorus concentrations or loadings. Werner Stumm, one of the world's preeminent authorities on algal growth and aquatic chemistry, recently summarized the state of our understanding (Environmental Science & Technology, p. 1013, November 1985): "our power to predict the effect of phosphate loadings on lakes (of different morphology and hydraulic residence time) is remarkably quantitative and suited to generalization." Commenting on Stumm's analysis in a subsequent (April 1986) issue of ES&T, Fred Lee and Anne Jones stated unequivocally: "We strongly agree." (Fred Lee is the principal author of the modified Vollenweider approach to phosphate loading recommendations in the EPA Gold Book.)

All of this is to argue with the Department's extrapolation of the obvious need to consider physical site specific geometry into a professed need to reinvent the chemistry and biology of algal growth and phosphorus control requirements through additional laboratory assays or field algal biomass surveys on a site specific basis. On page 6 of the Notice for Comment is the Department's assertion that "it is not clear that a particular phosphorus concentration results in a predictable chlorophyll concentration. Nor can one conclude that a given phosphorus reduction will lead to a known and predictable decrease in algae." The authorities in this field have argued precisely to the contrary, that our ability to predict is "remarkably quantitative and suited to generalization." What in fact is not clear and what indeed cannot be concluded is that a total phosphorus concentration of 0.15 mg/l will result in any acceptable control of nuisance algal growth. But then, no one prior to this current proposal has suggested that it would. The only relevant "site specific" question about the lower Tualatin River is whether it is actually a river or is in fact a lake. If it is a river, the EPA recommendation is that the maximum allowable phosphorus (total) concentration should be 0.10 mg/l. At the point where the river is diverted through the Oswego Canal to Lake Oswego, the maximum allowable phosphorus (total) should be 0.05 mg/l. If the lower Tualatin is or for all practical purposes behaves as a lake, the maximum allowable phosphorus (total) concentration should be 0.025 mg/l (or the

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phosphorus TMDL should be calculated from the approach formulated by Vol-lenweider and subsequently expanded and modified by Rast and Lee). Nowhere is there any recommendation that a concentration of 0.15 mg/l could be acceptable. What is at question is where in the spectrum of recommended total phosphorus concentrations between 0.1 and 0.025 mg/l is the appropriate level for the lower Tualatin River. For the middle and upper reaches of the river, the appropriate total phosphorus concentration would seem straightforwardly to be no greater than 0.10 mg/l.

The available Tualatin-specific data confirms that algal growth and its direct dependence on phosphorus concentrations in the Tualatin River is not different from other bodies of water elsewhere. The Tualatin algal assay data in Figure 3 (from Carter et al) demonstrates that algal biomass is directly dependent on total phosphorus concentrations between about 0.05 and 0.10 mg/l, thereafter becoming independent of (no longer limited by) phosphorus. From this figure, the only conclusion possible is that the maximum allowable total phosphorus in the Tualatin River should be not greater than 0.05 mg/l.

The exact meaning intended to be conveyed by the chlorophyll-a versus phosphorus concentration data displayed in Figure 4 is less clear, since this figure is reported to include all historical data through 1986 for all sampling stations on the Tualatin River and there are no indications as to time or location of any of the individual data points. Figure 2, for example, demonstrates that chlorophyll-a concentrations vary substantially with time and location along the river. Some odd statistical inferences are nevertheless drawn on page 7 of the Notice for Comment from the hodge-podge of data in Figure 4. It is observed, for example, that "At concentrations greater than 0.15 mg/l total phosphorus, 95 percent of the exceedances of the chlorophyll-a target level (15 ug/l) were observed. A TMDL based on a guidance value of 0.15 mg/l total phosphorus should eliminate most of the chlorophyll-a exceedances." (underline added). The fact that only 5 percent of all the data from all locations at all times still exceeds the 15 ug/l chlorophyll-a target when phosphorus concentrations are 0.15 mg/l or less becomes seemingly translated as a "margin of safety" for the proposed 0.15 mg/l phosphorus "guidance value." This is nonsense.

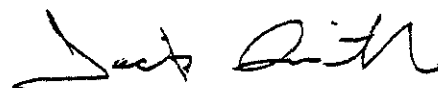
A more appropriate phosphorus "guidance value" inferential from the data in Figure 4 might be that phosphorus concentration below which none of the available chlorophyll-a data exceeds the target level. The appropriate phosphorus "guidance value" to avoid exceeding the 15 ug/l chlorophyll-a target would thereby appear from Figure 4 to be about 0.10 mg/l. All of this, of course, assumes the lower Tualatin River to be in fact a river and that the chlorophyll-a "target levels" in OAR 340-41-150 have the stature and meaning of actual water quality standards, rather than their intended meaning as the "triggers" to initiate studies from which might result, among other things, actual water quality standards. The lower Tualatin, though, seems in the critical summer months to behave in most ways more like a stratified pond than a river. For thermally stratified lakes, the

chlorophyll-a guidance given by OAR 340-41-150 is not 15 ug/l; for thermally stratified lakes, it is 10 ug/l. If an envelope is drawn to encompass all the data points in Figure 4, the line at the upper bound of this envelope will intersect the 10 ug/l chlorophyll-a level at a total phosphorus concentration of about 0.05 mg/l. A total phosphorus concentration limit of 0.05 mg/l would thus be consistent with the data presented in both Figures 3 and 4 and with EPA's recommended criterion for phosphorus in "any stream at the point where it enters any lake or reservoir."

5. TMDL's should be established also for suspended solids. There is of course no specific water quality standard for suspended solids in Oregon. There is however a standard for turbidity, to which suspended solids can be without great difficulty related. Equally important, most of the pollutants (for which TMDL's will likely be considered in the Tualatin) from nonpoint sources will be adsorbed to or otherwise associated with the particulate fraction in stormwater runoff from these sources. A suspended solids TMDL can thus serve as a surrogate parameter for a wider range of more critical but analytically difficult pollutants, much in the way that non-pathogenic but analytically simple E. coli. serve as the surrogate or "indicator" organisms for actual pathogens. With few exceptions, nonpoint source control practices will be ultimately designed for and their effectiveness measured by suspended solids control. Suspended solids would be an efficient regulatory parameter, violations and sources being readily identifiable in the field or by aerial photo-imagery without extensive sampling and laboratory analytical programs. This simple and effective tool should be added to the Department's water quality management process.

NEDC regards the concerns detailed above to be crucial to the potential success of the Department's new water quality planning/ management process for the Tualatin, and in particular to the continuing and enthusiastic participation of the citizens of the Tualatin River Basin. The allowable concentrations — "guidance values" if you insist — particularly for phosphorus must be established at a level that will generate some confidence that real water quality improvements will result from everyone's effort and investment. If this process begins with phosphorus "guidance values" that are demonstrably guaranteed to perpetuate the present problems, then citizen interest in the process will fairly soon and understandably be discouraged. We sincerely pray that this will not be the case.

Respectfully submitted,



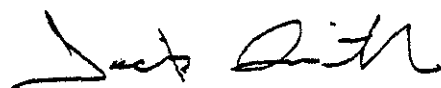
J. Douglas Smith, President

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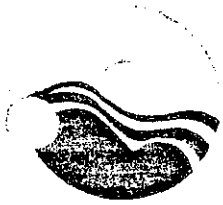
Respectfully submitted,



J. Douglas Smith, President

ATTACHMENT 5





WASHINGTON  
COUNTY,  
OREGON

May 12, 1987

Neil Mullane, Manager  
Planning and Monitoring Section  
Department of Environmental Quality  
P. O. Box 1760  
Portland, Oregon 97204

RECEIVED  
MAY 15 1987

After 5:00 PM  
Please call (503) 845-1234

Dear Mr. Mullane:

SUBJECT: TMDL's for the Tualatin River

On behalf of the Washington County Board of Commissioners, I would like to take this opportunity to comment on the proposed Total Maximum Daily Loads for the Tualatin River. This Board is very concerned about the existing and future water quality of the Tualatin River as a resource for all citizens.

With regard to the proposed TMDL's contained in your Department's Notice dated April 13, 1987, our comments are as follows:

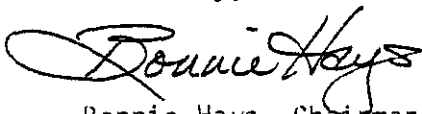
1. Technical review of this proposal indicates lack of clarity as to whether the loads are based upon a full analysis of available data. The phosphorus loads are based upon the existing Oregon Administrative Rule which contains a level of chlorophyll-a to trigger a study. In short, do the loads indicate pollution, or do they simply restate earlier values set for other purposes?
2. The Tualatin River is no longer a natural river; it has not been so for many years. The TMDL's do not consider the impact of artificial impediments to the river, such as the diversion dam creating Oswego Lake. Removal of this dam could greatly increase the assimilative capacity of the Tualatin.
3. Last but not least, we are concerned with the potential economic impacts of implementing these TMDL's. We believe that efforts in sanitary sewage treatments, urban and agricultural regulation, and a change in the Oswego diversion dam would be necessary to have a significant impact on algae and

Neil Mullane  
May 12, 1987  
Page 2

dissolved oxygen in the Tualatin River. All these tasks would be very costly. It is critical that TMDL's be as sound as possible, because major decisions on public facilities will depend upon these levels. This in turn has a major impact on the economic development of Washington County and the region.

Thank you for the opportunity to comment on proposed TMDL's for the Tualatin River.

Sincerely,

A handwritten signature in cursive script that reads "Bonnie Hays".

Bonnie Hays, Chairman  
Washington County Board of Commissioners

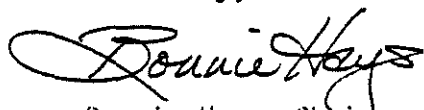
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Neil Mullane  
May 12, 1987  
Page 2

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Thank you for the opportunity to comment on proposed TMDL's for the Tualatin River.

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Bonnie Hays, Chairman  
Washington County Board of Commissioners

BH:js

ATTACHMENT 6



## Unified Sewerage Agency of Washington County

150 N. First Avenue  
Hillsboro, Oregon 97124  
503 648-8621

May 12, 1987

Neil Mullane, Manager  
Planning and Monitoring Section  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
PO Box 1760  
Portland, Oregon 97204

RECEIVED  
MAY 15 1987

Water Quality Director  
Department of Environmental Quality

Dear Mr. Mullane:

**SUBJECT: Total Maximum Daily Loads (TMDLs)**

The Unified Sewerage Agency would like to go on public record with the following comments regarding the Department's program to establish TMDLs for the Tualatin River. Our major comments can be summarized as follows:

1. "Is Nuisance Phytoplankton Growth Rule" target level of chlorophyll-a a water quality standard, a guideline, or something else?
2. Target levels for chlorophyll-a may be and have been set at higher levels elsewhere in the United States.
3. The  $\text{NH}_4$  loading appears reasonable, based upon the existing water quality standard.
4. Frequency relationships between the exceedance of chlorophyll-a levels and the phosphorus concentrations should be developed and included in the establishment of the TMDLs.
5. Travel time impacts due to removal of the diversion dam need to be addressed.
6. We believe there is a data gap in using Figure 3 and caution needs to be used with Figure 3 and Figure 4 to establish preliminary standards and TMDLs.
7. Once TMDLs are set, can they be obtained from existing technology and are they economically practicable.

Application of the Nuisance Phytoplankton Growth Rule (OAR 340-412-150).

The rule, according to DEQ, is for the characterization (identification) of nuisance phytoplankton conditions of waterbodies using a chlorophyll-a as an indicator. This is not a standard, but rather an identification procedure. Has the 15 ug/l chlorophyll-a evolved from this characterization rule to a standard for the Tualatin River? We recognize that target levels are recommended as goals in order to translate or correlate information into standards, but those goals must be founded on some process of determination. DEQ has begun to call this a standard (Pg. 3, P2), which it is not, only a goal and perhaps only an identification guideline.

Neil Mullane, DEQ  
May 12, 1987  
Page 2

The TMDL document uses many undefined terms in regard to chlorophyll-a and phosphate levels. Page 3 refers to "water quality standards." Elsewhere in the document, algae-related indicators are referred to as "water quality guidance values" or "target levels." The document states, at page 6, that there is no national criterion for phosphate phosphorus, and that development of such criteria is a site specific concern.

This would suggest that it is appropriate to address the Tualatin River specifically, to determine what levels of algae, indicated by chlorophyll-a, are unacceptable. It is necessary to complete the TMDL process on the Tualatin River to set a nuisance algae standard, not a study trigger, guidance value, or target level. This will be difficult, because it will be in part an aesthetic judgment. The Clean Water Act, Section 303(d) requires that TMDLs be set when water quality standards cannot be met. Such a standard must be set prior to completing the TMDL process including Waste Load Allocations, in order to ensure a valid TMDL.

#### Basis for Chlorophyll-a Standard

Recent work done by CH2M-Hill with water quality standards for Lake Mead, Nevada, has resulted in the use of average summer values of chlorophyll-a at 30 ug/l as target levels from which to develop total phosphorus correlations, subsequent water quality standards, and TMDLs. We feel some disclosure as to how the 15 ug/l chlorophyll-a target level was developed is necessary. We also feel that summer average values of chlorophyll-a in the range of 25 to 40 ug/l may be just as realistic for the Tualatin. We would like to see some kind of frequency analysis done on both the monthly average chlorophyll-a data and 3-month average chlorophyll-a data. The distribution and probabilities of algae blooms are contingent on several environmental factors other than total phosphorus as noted by DEQ several times.

The lack of a standard as a basis for the algae-related TMDL in the document creates a question as to the basis of the TMDL. The 15 ug/l chlorophyll-a value taken from the nuisance algae rule is an assumption that that value equals an observed water quality problem in the river. As the basis for Phosphorus Loads, it has also become a conclusion. There is a serious flaw in the logic of this analysis. The document indicates that "more detailed and conclusive tests need to be made." (Page 6)

The discussion on Page 7, Paragraph 5, highlights the uncertainty generated by a TMDL based on a target level rather than a water quality standard. There is a relationship between phosphorus and algae production. But without a decision that 15 ug/l chlorophyll-a, or some other value is a standard, the phosphate load which will lead to that level of algae, has little meaning. This paragraph has a further flaw in that it correlates phosphorus and chlorophyll-a at points in time, rather than based on productivity which is the conclusion of the PSU study.

Neil Mullane, DEQ  
May 12, 1987  
Page 2

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Recent work done by CH2M-Hill with water quality standards for Lake Mead, Nevada, has resulted in the use of average summer values of chlorophyll-a at 30 ug/l as target levels from which to develop total phosphorus correlations, subsequent water quality standards, and TMDLs. We feel some disclosure as to how the 15 ug/l chlorophyll-a target level was developed is necessary. We also feel that summer average values of chlorophyll-a in the range of 25 to 40 ug/l may be just as realistic for the Tualatin. We would like to see some kind of frequency analysis done on both the monthly average chlorophyll-a data and 3-month average chlorophyll-a data. The distribution and probabilities of algae blooms are contingent on several environmental factors other than total phosphorus as noted by DEQ several times.

The lack of a standard as a basis for the algae-related TMDL in the document creates a question as to the basis of the TMDL. The 15 ug/l chlorophyll-a value taken from the nuisance algae rule is an assumption that that value equals an observed water quality problem in the river. As the basis for Phosphorus Loads, it has also become a conclusion. There is a serious flaw in the logic of this analysis. The document indicates that "more detailed and conclusive tests need to be made." (Page 6)

The discussion on Page 7, Paragraph 5, highlights the uncertainty generated by a TMDL based on a target level rather than a water quality standard. There is a relationship between phosphorus and algae production. But without a decision that 15 ug/l chlorophyll-a, or some other value is a standard, the phosphate load which will lead to that level of algae, has little meaning. This paragraph has a further flaw in that it correlates phosphorus and chlorophyll-a at points in time, rather than based on productivity which is the conclusion of the PSU study.

Neil Mullane, DEQ  
May 12, 1987  
Page 3

#### Basis for NH<sub>4</sub>/Dissolved Oxygen Standard

The TMDL document states, at Page 5, Paragraph 2, "...depletion rate of dissolved oxygen caused by carbonaceous oxidation, benthic demand, and algae respiration is roughly equal to the addition of oxygen to the river due to reaeration and photosynthesis."

Although this may in fact be valid, it is really an assumption and must be understood as a method of developing a simplified analysis approach to evaluating the relationship between dissolved oxygen in the river and the nitrification process. We suggest that the evaluation of allowable discharge loading levels (resulting in river NH<sub>4</sub> concentrations of similar magnitude) without this assumption of a balance between the other DO impacting processes be pursued." USA requests that DEQ supply it with their current set of reaction rates used in their model for evaluation in the WQRRS model developed by CH2M-Hill for USA. We concur with the process of continued upgrading of DEQ's model coefficients as more data become available.

#### Chlorophyll-a/Phosphorus Methodology

At Page 6, Paragraph 4, the document states: "However, there are also natural conditions that would dictate the consideration of either a more or less stringent phosphorus level." We agree with this statement and encourage DEQ to consider the probability aspects surrounding the frequency of occurrence between chlorophyll-a above the target level and the associated total phosphorus concentrations. Since the recommendations which are proposed utilize 3-month averages of chlorophyll-a, that is the set of data which must be used along with the associated value for total phosphorus. We feel there is a substantial likelihood of having chlorophyll-a concentrations less than the target level with total phosphorus greater than 0.15 mg/l (refer to Figure 4 of DEQ document). This concept of frequency should be pursued since it is suggested in the EPA guidelines for establishing numerical water quality standards.

There has been no development, to our knowledge, of a frequency or probability relationship between chlorophyll-a greater than the target level (15 ug/l) and total phosphorus (P<sub>t</sub>) greater than 0.15 mg/l. From the scattergram, Figure 4, it is apparent there is a significant likelihood that the P<sub>t</sub> could be greater than 0.15 mg/l and that the associated 3-month average chlorophyll-a would not be necessarily above the designated target level.

Provisions in the "Guidelines for Deriving Numerical National Water Quality Criteria...", USA EPA 1985, suggest a frequency of exceedance of 1 out of 3 years on an average as a reasonable recovery level for determining standards. The guidelines document goes on further to say that most water bodies could tolerate these kinds of stresses.

Figure 4 was not developed on the basis of an exceedance curve of extreme values, and therefore it is impossible to estimate quantitatively what the results of such an approach would be. The following analogy is a representation of the idea cast in a somewhat different but similar framework:



Neil Mullane, DEQ  
May 12, 1987  
Page 4

There appear to be 3 values shown in Figure 4 which are above the chlorophyll-a target level but less than 0.15 mg/l of  $P_t$ . These values have been discussed as representing 5 percent of the total sampled values above the target level of chlorophyll-a. Therefore, the total number of samples above the target level of chlorophyll-a should be given by  $3/0.05 = 60$  samples (3 below  $P_t = 0.15$  mg/l and 57 above  $P_t = 0.15$  mg/l). By inspection of Figure 4 only, it appears there may be as many as 5 times that many samples which have values of  $P_t$  greater than 0.15 mg/l with associated chlorophyll-a values less than the target level. This would suggest a total of 357 samples in all with  $P_t$  greater than 0.15 mg/l.

If the concept of exceedance of extreme values could be directly applied to the samples in Figure 4, then it seems the  $P_t$  limit is predictive to a level of 3 out of 360 or a probability of less than 1 percent of that set of samples with  $P_t$  greater than 0.15 mg/l and chlorophyll-a greater than the target level.

Page 8, Figure 3 of the State's document concerns any conclusions drawn from the growth curve related to algae. There are no data points between 0.1 mg/l and 0.4 mg/l, which is the common range of concentrations of total phosphorus in the Tualatin River during the summer. Should several more points be available in this range, more confidence might be derived from this growth relationship. From inspection, the data and curve appear to have a good correlation, but a different shaped curve could be just as likely with additional data. Since the Tualatin field data program shows phosphorus in the range of 0.1 to 0.4 mg/l, we feel this is where more information for Figure 3 could be developed.

Several factors affect algae growth besides phosphorus (pg. 7, paragraph 3). There are in fact several possibilities such as available light, light penetration, other nutrients (carbon, nitrogen), turbulence and mixing, toxicity, heat, and sediments. The composite of several of these factors is incorporated in the concept of length exposure (travel time).

#### Lake Oswego Diversion Dam/Travel Time

From preliminary modeling work that the Agency has done, we have observed a significant increase in the projected dissolved oxygen levels of the Tualatin River with the removal of the Lake Oswego diversion dam. This is due to the reduction in detention time that occurs in the lower portion of the river. This reduction in detention time should also have an effect on maintaining a lower temperature in the river which would be desirable for the river designation as a cold water fishery. Because of lower temperature and shorter detention time, the potential for growth of chlorophyll-a should also be reduced. However, we have not modeled this at this time.

The impacts of travel time on the river have been directly addressed by DEQ through Table 2 which demonstrates the capability of a greater discharge (therefore higher velocities and travel times) allowing higher TMDLs. This same phenomenon can also be related to potential changes in the river hydraulics subject to the diversion dam operation. We have discussed and supported the issue of examining the impacts of both flow augmentation and the diversion dam on the resultant travel times and water quality in the river.

Neil Mullane, DEQ  
May 12, 1987  
Page 4

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Neil Mullane, DEQ  
May 12, 1987  
Page 5

The Agency strongly suggests that final TMDLs incorporate revised analysis for time of travel based upon removal or substantial modification of the Lake Oswego diversion dam. This may affect both dissolved oxygen and algae-related parameters in the river. It should be addressed in the context of the assimilative capacity of the river, not exclusively in the Waste Load Allocation process.

#### Applicability of the TMDL

Are the proposed TMDLs intended to apply from river mile 0 to the head waters of the Tualatin River? Or if point discharges were moved to different points, do the TMDLs change? i.e., a point discharge below Lake Oswego Dam. TMDLs should be tied to identified Water Quality Limited Segments. The proposal lists only "Tualatin River at Farmington." Perhaps this point is intended to represent the water quality limited portion of the river.

The Agency supports the idea of the table which shows how the TMDLs will change with changes in river flow. However, when the TMDLs are divided into wasteload allocation, it should be understood that requiring treatment to meet very strict limits (i.e., those below river flow of 250 cfs) should not be applied to any point or nonpoint discharge until it is shown that this minimum flow cannot be maintained. DEQ's first effort should be to work with other state agencies to insure that minimum flow levels are maintained.

The TMDL document refers numerous times to the need for additional data and further analysis. The ongoing Tualatin River Study can be expected to provide both items. The algae/chlorophyll-a/phosphorus component of the TMDL suffers from shortcomings in its original assumptions, incorporation of data, and analysis of available data. It is suggested that the Technical Advisory Committee be asked to review the TMDL analysis and propose revisions; and that DEQ and EPA staff revise the proposed TMDLs (assimilative capacity) based upon additional data and analysis as it becomes available.

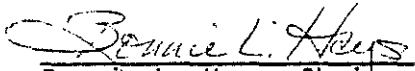
The Agency also feels it is very important that a use obtainable study be conducted to insure that once these criteria are established, the designated water quality goals can be achieved. If the study does not demonstrate that this will occur, perhaps the designation or target number should be changed to match the world the way it really is. If, technically, this water quality goal can be achieved, can it be met within reasonable economics considerations?

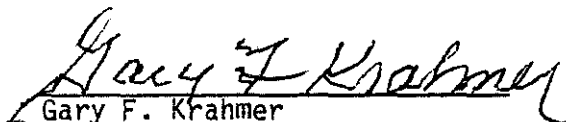
The Agency has major concerns that it, along with other individuals and organizations that are controlling pollution discharges, will be required to spend major amounts of money to improve or eliminate their discharges to the Tualatin River. Once these improvements are completed and operational, you may see no major improvement in the river water quality. Earlier studies done by others would suggest that if all point sources were eliminated from the Tualatin River, there would still continue to be an algae growth problem in the Tualatin River. It is totally unfair to require this level of control over discharge unless the water quality improvement will be achieved.

Neil Mullane, DEQ  
May 12, 1987  
Page 6

The Agency acknowledges that economic considerations are not to be considered in setting the assimilation capacity component of the TMDLs. However, because of the very substantial economic impact of maximum loads on the Agency, and its ratepayers, it is essential that the basis for these numbers be technically sound. For example, the difference between .15 mg/l and .2 mg/l phosphate translates into millions of dollars to construct facilities. This cost would be borne by existing USA ratepayers and would be faced by prospective new industries within the Agency. It is urged that sound assumptions and technical analysis be followed throughout the TMDL process.

Sincerely,

  
\_\_\_\_\_  
Bonnie L. Hays, Chairman  
USA Board of Directors

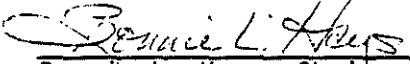
  
\_\_\_\_\_  
Gary F. Krahmer  
USA General Manager


bjc

Neil Mullane, DEQ  
May 12, 1987  
Page 6

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Sincerely,

  
\_\_\_\_\_  
Bonnie L. Hays, Chairman  
USA Board of Directors

  
\_\_\_\_\_  
Gary F. Krahmer  
USA General Manager

bjc

ATTACHMENT 7



U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

MAY 13 1987

REPLY TO  
OFFICE

WD-139

RECEIVED  
MAY 13 1987

Department of Environmental Quality

Neil Mullane, Manager  
Planning and Monitoring Section  
Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, Oregon 97204

Dear Mr. Mullane:

Thank you for the opportunity to comment on your proposed total maximum daily loads (TMDLs) for ammonia and phosphorus for the Tualatin River. Our comments are as follows:

1. Because of the lake-like nature of the lower Tualatin River, would not a 10 ug/L chlorophyll a action level be more appropriate to use in developing the TMDL for phosphorus?
2. Have levels of un-ionized ammonia been examined for compliance with water quality standards?
3. Why does the proposed TMDL for nitrogen focus on maintaining a dissolved oxygen concentration of at least 6 mg/L in the Tualatin River at RM 8 when the dissolved oxygen sag appears to be located near RM 27?

We are delighted with your progress in implementing a process for establishing TMDLs on your water quality limited waterbodies. If you have any questions regarding our comments, please call me at (206) 442-1354 or Sally Marquis at (206) 442-8293.

Sincerely,

Tom Wilson, Chief  
Office of Water Planning

ATTACHMENT F



RECEIVED

*Copies to Strang, Quanta  
Hensberg, Rich + Lee*  
U. S. DISTRICT COURT  
DISTRICT OF OREGON

**FILED**

**JUN 3 1987**

1 Reth S. Ginsberg, Attorney  
2 United States Department of Justice  
3 Land and Natural Resources Division  
4 Environmental Defense Section  
5 P.O. Box 23986  
6 Washington, D.C. 20026-3986  
7 (202) 633-2689

BY ROBERT M. CHRIST, CLERK  
DEPUTY.

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON

8 NORTHWEST ENVIRONMENTAL DEFENSE  
9 CENTER (NEDC) and JOHN R. CHURCHILL,

Plaintiffs,

v.

11 LEE THOMAS, in his official  
12 capacity as Administrator of  
13 the Environmental Protection  
14 Agency,

Defendant.

Civil No. 86-1578-BU

CONSENT DECREE

16 WHEREAS, on December 12, 1986, the Northwest Environ-  
17 mental Defense Center ("NEDC") filed a complaint, as amended on  
18 March 20, 1987 in the above-captioned case against Lee Thomas, in  
his official capacity as Administrator of the Environmental  
Protection Agency ("EPA");

19 WHEREAS, NEDC alleges that EPA has violated sections  
20 303 and 505 of the Clean Water Act ("CWA") by failing to perform  
certain mandatory duties, and EPA denies all liability under the  
CWA, the Administrative Procedure Act ("APA"), or common law;

21 WHEREAS, by entering into this decree, EPA in no way  
22 agrees with NEDC's allegations that Oregon's failure to make  
23 the requisite submissions under CWA section 303 constitutes a  
"constructive submission" that no submissions are necessary, and  
24 that EPA had subsequently issued a constructive approval of the  
same,

25 WHEREAS, it is the intent of EPA to see that the goals  
26 set forth under CWA section 303 are accomplished, including the  
designation of water quality limited segments ("WQLS") and the  
establishment of total maximum daily loads ("TMDL"), including  
both waste load allocations ("WLA") and load allocations ("LA");

1 WHEREAS, the parties agree that in accordance with the  
2 statutory intent of the CWA, the primary responsibility for  
accomplishing the goals under section 303 lies with the States;

3 WHEREAS, the State of Oregon and EPA will annually  
4 incorporate elements of this agreement into the State's com-  
prehensive water quality program through the State/EPA ("SEA")  
negotiation process;

5 WHEREAS, EPA will not award CWA funds to Oregon for the  
6 development of TMDLs, including WLA's and LAS if the elements of  
this agreement are not identified in the SEA;

7 WHEREAS, promulgation of the TMDL/WLA/LA constitutes  
8 "new information" and EPA understands that it is the intent of  
9 the State of Oregon to modify, N.P.D.E.S. permits on the basis of  
the respective permit reopener clauses and 40 C.F.R. § 122.62(a)(2);

10 WHEREAS, the parties wish to resolve this action without  
11 litigation, and have, therefore, agreed to entry of this Consent  
Decree, without the admission or adjudication of any issue of  
fact or law.

12 NOW, THEREFORE, it is hereby ordered, adjudged, and  
13 decreed as follows:

14 1. The Court has jurisdiction over this matter and the  
parties to the decree.

15  
16 2. That the following terms shall have the meanings  
provided below:

- 17 A. "EPA" means the United States Environmental  
18 Protection Agency.
- 19 B. "NEDC" means the Northwest Environmental Defense  
Center.
- 20 C. "Loading Capacity" is that which is defined at  
21 40 C.F.R. § 130.2(e).
- 22 D. "Water Quality Limited Segments" ("WQLS") is that  
which is defined at 40 C.F.R. § 130.2(i).
- 23 E. "Total Maximum Daily Loads" is that which is  
24 defined at 40 C.F.R. § 130.2(h).
- 25 F. "State/EPA Agreement" is that which is  
26 defined at 40 C.F.R. 122.2.

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G. Waste load allocation ("WLA") is that which is defined at 40 C.F.R. § 130.2(g)

H. Load allocation ("LA") is that which is defined at 40 C.F.R. § 130.2(f).

I. "New Information" is that which is defined at 40 C.F.R. § 122.62(a)(2).

3. That in accordance with the current State/EPA agreement, the State of Oregon has lead responsibility for the designation of Water Quality Limited Segments and the promulgation of Total Maximum Daily Loads pursuant to CWA section 303, 33 U.S.C. § 1313.

4. That, in the event the State of Oregon fails to undertake the following regulatory actions according to the schedule set out below, EPA will notice in the federal register proposed agency action in accordance with 33 U.S.C. § 1313(d)(2) no later than ninety days following Oregon's inaction. The regulatory actions and the dates by which they will be completed by the State of Oregon are as follows:

A. submission of the loading capacity as defined at 40 C.F.R. § 130.2(e) for the following Water Quality Limited Segments as set forth below:

<u>Water Body</u>	<u>Date</u>
Tualatin River	5/87
Yamhill River	8/87
Bear Creek	11/87
South Umpqua River	11/87
Coquille River	2/88
Pudding River	2/88
Garrison Lake	2/88
Klamath River	4/88
Umatilla River	4/88
Calapooia River	6/88
Grande Ronde River	6/88

B. adoption of TMDLs WLA's/LA's on those WQLS which are identified in paragraph A and subsequent listings of WQLS provided by the State of Oregon in water quality reports prepared in accordance with CWA section 305(b), at the rate of 20% annually, but in no event less than 2 annually.

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C. determination by August, 1988 as to whether the remaining water bodies listed in the plaintiffs' second notice letter of intent to sue dated January 6, 1987, and not identified in EPA's approval on February 20, 1987, of Oregon's January 5, 1987 submission to EPA of Water Quality Limited Segments, are water quality limited.

5. That EPA understands that it is the intent of the State of Oregon to initiate modification of the Rock Creek N.P.D.E.S. permit on the basis of the permit reopener clause and 40 C.F.R. § 122.62(a)(2) within 90 days of promulgation of the phosphorus TMDL/WLA/LA for the Tualatin River.

6. That, it is the intent of the State of Oregon and EPA to reevaluate, in accordance with CWA § 305(b), the waters of the State of Oregon under CWA § 303(d).

7. That defendant will pay plaintiff reasonable costs, including attorney's fees, incurred to date.

8. That this consent decree will expire upon completion of the obligations set forth in paragraph 4 as to the waters identified in subsections (a) and (c) of paragraph 4.

IT IS SO ORDERED.

6-3-87 James M. Burns  
JAMES M. BURNS  
UNITED STATES DISTRICT JUDGE

Plaintiffs and Defendant consent to the entry of this Consent Decree without further notice or hearing.

Respectfully submitted,

NORTHWEST ENVIRONMENTAL DEFENSE  
CENTER and JOHN R. CHURCHILL  
Plaintiffs

LEE THOMAS, ADMINISTRATOR  
U.S. Environmental Protection  
Agency  
Defendant

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By: Jeffrey M. Strang  
JEFFREY M. STRANG  
5525 SW Kelly Avenue  
Portland, OR 97201  
(503) 245-7641

By: Beth S. Ginsberg  
BETH S. GINSBERG, Attorney  
U.S. Department of Justice  
Land & Natural Resources Div.  
Environmental Defense Section  
P.O. Box 23986  
Washington, D.C. 20026-3986  
(202) 633-2689

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(503) 228-6474

By: Monica Kirk  
MONICA KIRK  
U.S. Environmental Protection  
Region X, Office of Regional  
Counsel  
100 Sixth Avenue  
Seattle, WA 98101  
(206) 442-1505

ATTACHMENT G

TUALATIN CITIZEN'S  
ADVISORY COMMITTEE

Ms. Bonnie Hays, Committee Chair  
Washington County Board of  
Commissioners Chair

Mr. Gary Krahmer  
General Manager of Unified  
Sewerage Agency

Mr. Gerd Hoeren  
Lake Oswego Corporation Treasurer

Mr. Larry Cole  
Beaverton Mayor

Mr. Lloyd Baron of  
Water Resource Future Needs  
Committee Chair

Mr. Gene Siebel  
Manager, Wolf Creek Highway Water  
District District

Mr. Cal Krahmer  
Manager, Tualatin Valley  
Irrigation District

Ms. Rosalie Morrison  
City of Rivergrove Liaison

Mr. Roy Bowden  
Association of Northwest  
Steelheaders, President

Dr. Jack Smith  
Northwest Environmental  
Defense Center, President

Ms. Adele Newton  
Washington County League  
of Women Voters

Mr. Frank Deaver  
Tektronix Environmental  
Services Manager

Mr. William Young  
Lake Oswego Mayor

Mr. John McGhehey  
Raw Materials Manager,  
Stimson Lumber Co.

Mr. Jim Fisher  
Fisher Farms

Ms. Darlene Hooley  
Clackamas County Commissioner

TUALATIN RIVER TECHNICAL  
ADVISORY COMMITTEE

Mr. Stan Geiger (Chair)  
Aquatic Ecologist, Consultant

Mr. Jay Massey  
ODFW, District Fisheries Biologist

Dr. Lolita Carter  
Tualatin Researcher

Mr. Nick Pearson  
U.S. Soil Conservation Service

Mr. Bruce Eddy  
American Fisheries Society

Mr. Tom McCue  
Tektronix

Mr. David Dickens, Coordinator  
NW Oregon Resource Conservation  
and Development Area

Mr. Stan LeSieur  
Assistant General Manager, USA

Dr. Victor Kaczynski  
Director, Environmental Services  
CH2M Hill, USA Consultant

Mr. Larry B. Everson  
Fisheries Biologist,  
NEDC Consultant

Mr. Clayton Gardner  
State Watermaster,  
Washington County

Mr. Tom Vanderplatt  
Engineer  
Tualatin Valley Irrigation District

ATTACHMENT H



## TUALATIN RIVER BASIN FISH AND WATER QUALITY

(Revised - July 17, 1987)

## 1.0 DESCRIPTION OF FISH POPULATIONS

The Oregon Department of Fish and Wildlife (ODFW) is the state resource agency responsible for management of the fish resources in the Tualatin River Basin. Fish management is directed by state statutes and administrative rules. Administrative rules involved include Goals of Fish Production and Management, Fish Management Policy, and a Wild Fish Management Policy. Administrative Rules direct ODFW to develop species management plans, and river basin and subbasin fish management plans. At the present time, species plans have been completed for coho salmon, steelhead, trout, and warm water game fish (last two still in draft form). ODFW has also completed a Willamette River fish Management Plan. All these plans guide fish management in a Tualatin Basin.

ODFW has also begun preparing subbasin fish management plans. At the present time, only one plan has been completed. A Tualatin River plan will be developed in the next two to three years.

Salmonids. The Tualatin is managed for wild and hatchery stocks of coho and steelhead. An estimated 2,000 adult coho use the Tualatin and spawn primarily in the upper mainstem, and in the Gales and Dairy Creek systems. Coho counts are made at Willamette Falls approximately, 2 miles below the mouth of the Tualatin, and estimates are made of the number of fish entering the Tualatin. Winter steelhead spawn primarily in Gales and Dairy Creek systems. As mitigation for Scoggins Dam, 60,000 coho smolts are stocked annually in the mainstem Tualatin. Coho fry and presmolts are also released in Gales, McKay and Rock Creeks to supplement wild production. Coho were introduced into the Tualatin Basin by the state around 1920 and the system has been supplemented with hatchery coho stocks periodically since that time. There are probably no native coho in the Basin, but there is considerable wild production.

Winter steelhead spawn primarily in the upper mainstem Tualatin and in the Gales and Dairy Creek systems. Gales Creek is managed primarily for steelhead. Catchable rainbow are no longer stocked in the creek and ODFW is recommending a late trout opening to protect steelhead smolts. A total of 25,000 winter steelhead smolts reared at Gnat Creek Hatchery are released annually in Gales Creek. As mitigation for Scoggins Dam, 10,000 winter steelhead are also stocked annually in the mainstem Tualatin. the salmon and trout enhancement program (STEP) releases steelhead fry annually in the Gales, McKay, and Rock Creek systems.

There are two strains of cutthroat trout in the basin, migratory and resident. The migratory strain migrates, but is not sea-run. The adults normally migrate upstream into tributaries from September to November and spawn from January to May. After spawning, the adults move downstream to larger streams (i.e., lower East Fork Dairy, mainstem Dairy Creek, or mainstem Tualatin) in late May and early June and remain there until fall. These migratory cutthroat are found in the flat gradient sections of Tualatin River tributaries in good numbers during late April and early May and in September and October. Resident cutthroat trout remain in their native stream.

The East and West Forks of Dairy Creek are managed for native trout production. This management designation means that ODFW will not stock any salmon, steelhead, or trout to compete with the native cutthroat. Also, involved under this management designation is protection of fish habitat. Considerable work is accomplished each year by ODFW to protect habitat on East and West Dairy Creeks. Most habitat protection is accomplished working through the Forest Practices Act, State and Corps of Engineers fill and removal laws, and the County Planning Department.

Catchable sized rainbow trout are stocked in standing water, primarily Hagg Lake. Since 1975, the lake has been managed to provide trout angling. Annual stocking at Hagg includes 60,000 rainbow fingerling and 40,000 catchable rainbow. Tributaries of Hagg Lake still produce native cutthroat that add to the trout fishery. Yellow and brown bullhead, small mouth and largemouth bass, and yellow perch have been illegally introduced into the lake. All the warm water species are now reproducing. Smallmouth and largemouth bass and yellow perch are providing some angling. Coarse scale suckers and red sided shiners are also present in the lake. The suckers probably escaped chemical treatment in 1974 and red sided shiners were probably introduced with some of the illegal introductions of warmwater fish. ODFW completed a fish management plan for Henry Hagg Lake in 1986. Catchable rainbow are also stocked in Dorman Pond on Gales Creek. Rainbow are no longer stocked in the mainstem Tualatin because of the lack of public access.

The period for migration of salmonids in the Tualatin is from late August through the end of May. This period embraces the upstream migration of migratory cutthroat trout, coho salmon and steelhead trout. Cutthroat migration may begin anytime in late August or early September coincident with river temperature cooling and promoted by increases in river flow brought on by early rains.

Warm-water Fish. Warmwater game fish found in the Basin include largemouth and smallmouth bass, bluegill, warmmouth bass, black and white crappies, yellow and brown bullheads, and yellow perch. Channel catfish were introduced into the lower Tualatin by ODFW in 1977.

Non-game Fish. There are also squawfish, coarse scale suckers, carp, reidsided shiner, dace, and sculpins in the Tualatin and tributaries. Non-game fish are found primarily in the lower portions of the mainstem and tributaries, except for dace and sculpins that are found throughout the drainage.

## 2.0 DESCRIPTION OF FISH USE

An analysis of punch cards over the period 1981 - 1985 showed a range of 193-288 (average 281/year) winter steelhead were caught in Gales Creek. From steelhead stocked in the Tualatin, an analysis of the punch cards showed from 3 to 99 fish were caught annually over the five year period 1981 - 1985 (average 51/year).

There is a popular cutthroat trout fishery in the basin from late April through May. Popular streams for native cutthroat trout angling include the upper mainstem, and Dairy, East Dairy, West Dairy, and McKay Creeks.

Angler use at Henry Hagg Lake has been estimated from Bureau of Reclamation figures obtained from visitors at the lake in 1979. That year, there was a total of 465,855 user days recorded at the lake, of which 214,000 were angler days. User days, in other years, has ranged from 290,000 to 538,000 of which angler days ranged from 133,000 to 247,000.

There is a moderate warm-water fishery in the lower Tualatin, based on observations by ODFW. Private ownership of river banks has restricted access to the river.

## 3.0 CHANGES IN THE FISHERY

Primary changes in anadromous fish production includes increased stocking of steelhead fry and smolts and coho, both production coho and STEP hatchbox fry, to supplement wild production. Also, the fishery at Hagg has changed with the introduction of various warmwater game fish.

## 4.0 DESCRIPTION OF FISH MANAGEMENT/MONITORING PROGRAMS

Fish Enhancement and Protection. The major fish management activity conducted by ODFW in the Tualatin Basin is fish habitat protection, both for salmonids and warmwater game fish. Habitat protection is accomplished working through Division of State Lands (DSL) and Corps of Engineers (COE) 404 fill and removal permits and through city and county planning departments. The goals of this continuous fish habitat protection work is to keep stream channels in tact, maintain water quality, and limited damage to wetlands. Problems encountered include stream channel changes, stream channelization, placing streams in culverts, destruction of wetlands (filling, draining, etc.), and erosion control.

ODFW also works with the State Department of Forestry through the Forest Practices Act to protect and enhance fish habitat on forest land. Activities on forest land includes ensuring that adequate buffers are left along streams to prevent water temperature increases and for erosion control. Some work also involves channel changes and stream protection at road crossings. The objective of the STEP program is to gain public involvement in all appropriate phases of salmon and trout enhancement. Projects include habitat assessment and improvement and streamside incubation. ODFW STEP biologist assist in developing project proposals and provide technical advise in fish culture methods and habitat improvement techniques. Several STEP projects are underway in the Tualatin Basin.

Oregon Riparian Tax Incentive Program is also administered by ODFW. This program provides tax breaks for landowners who protect Riparian areas or complete fish habitat improvement projects.

There are at least five obstacles to fish passage in the Basin: Portland Iron and Steel (now Lake Oswego Corporation) Dam at river mile 3.8 which has a fish ladder; Lee Falls at river mile 74.7, a 12-foot high falls which has a fish ladder; Haines Falls at river mile 76.9, a 16-foot falls which does not have a fish ladder; Balm Groves Dam on Gales Creek, a private dam with fish passage facilities; and Bateman Creek culvert, and Oregon Department of Transportation (ODOT) culvert with a fish ladder. ODFW inspects all fish ladders periodically, performs maintenance on public ladders, and requests maintenance as required by statute at private ladders. ODFW has an easement from the Lake Oswego Corporation (LOC) for construction, operation, and maintenance of the fishway at their diversion dam. There are no restrictions on operation of the fishway relative to the diversion of Tualatin River flow into Lake Oswego. The fishway at the diversion dam is useful for periods when either flashboards are installed to raise water levels in the river for continued diversion, or spills are extremely low at the dam. The dam is passable, especially for steelhead, at higher seasonal flows occurring throughout much of their upstream passage, late August through May. The fish ladder at Lee Falls was built by and is maintained by ODFW. Haines Falls on the upper Tualatin does not have a fish ladder. Steep gradient, boulder bottom, small size of stream, and numerous falls on tributaries make providing passage for salmon and steelhead at Haines Falls unfeasible. Fish passage facilities at Balm Grove Dam and Bateman Creek culvert are inspected by ODFW, but maintenance is completed by the owners as required by state statute.

As described earlier in this report, ODFW has stocking programs for coho salmon, winter steelhead and rainbow trout in the Tualatin Basin. However, fish stocking activities are minor compared to fish habitat protection and enhancement work in the Basin.

Management of warmwater game fish in the Basin, as mentioned above, primarily involves protection of habitat on streams. At Hagg Lake, however, the warmwater species are receiving a lot of attention. Frequent sampling of warmwater species is underway to observe development of the introduced species. Also, a habitat improvement plan to improve habitat for the warmwater fish is being developed by ODFW.

Water Quality Standards for Fish Protection. The Oregon Department of Environmental Quality has established standards for certain aspects of water quality that are designed to protect fish, particularly salmonids. These standards are as follows (OAR 340-41-442):

Dissolved Oxygen	Shall not be less than 6.0 mg/l
Turbidity (JTU)	No more than a 10% cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity.
TDS	100 mg/l
Temperature	No measurable increase shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream of a discharge when stream temperatures are 64 F or greater; or more than 0.5 F increase due to a single-source discharge when receiving temperatures are 63.5 F or less; or more than 2 F increase due to all sources when receiving stream temperatures are 62 F or less.
pH	Shall not fall out of the range 6.5 to 8.5

ODEQ water quality standards also include provisions for Willamette Basin streams that are salmonid fish producing waters relating specifically to temperatures.

No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 58 F or greater; or more than 0.5 F increase due to a single-source discharge when receiving water temperatures 57.5 F or less; or more than 2 F increase due to all sources

combined when stream temperatures are 56 F or less, except for specifically limited duration activities which may be authorized by ODEQ or ODFW.

Instream Flow Requirements. Minimum stream flows for the Tualatin River and major tributaries were originally adopted by the State Water Resources Board in 1966 and have been modified in 1968, 1970, 1972, 1975, 1976, 1980, and 1980 (Water Policy Review Board, 1985).

## 5.0 IDENTIFIED AND SUSPECTED FISHERY PROBLEMS

Lack of Tualatin River Fish Management Plan - As addressed on the first page of this report, there is no subbasin fish management plan completed for the Tualatin River Basin. Consequently, there are no goals or specific objectives for judging management programs in the basin. A fish management plan will be completed for the Tualatin Basin in the next two to three years. ODFW has just begun developing subbasin plans for rivers in the state, but only one (South Umpqua) has been completed at the present time. Fish management in the Tualatin Basin is direct, identical to all other rivers in the state except one, by state statutes, administrative rules, specifies, plans, and on the Tualatin by a river basin fish management plan (Willamette Plan).

Lack of Fish Screen on Oswego Lake Canal. -- The canal diverting water from the Tualatin River into Lake Oswego has an unscreened entrance. Fish in the Tualatin River can easily move down the canal into the private lake. Fish entering the lake have no exit, most of the time, except through the LOC hydro turbines.

Other Factors Influencing the Resource -- Low flows, high water temperature, and low DO can impact fish production. Consumptive water uses deplete summer and fall flows in some Tualatin Basin streams and limit salmonid production. High water temperatures resulting from deplete flows and low stream gradient also influence salmon and steelhead production. Low DO in some areas of the lower Tualatin may also impact fish production.

The Evidence for Fish Toxicity Problems -- Both ODFW and ODEQ are notified by people in the basin who observe fish kills or conditions that appear to be harming fish or crayfish. The Northwest Region of DEQ and the ODFW District Fish Biologist, Jay Massey, have notes on reported toxicity problems. A brief summary of reports received indicate the range of problems:

- |      |  |
|------|--|
| 1972 | Rock Creek, Sherwood. 200 YP, BG, and C killed in 0.5 mi. of the creek caused by sulfuric acid discharge from Nichel-Silver Battery Co. (ODFW 1972 summary). |
| 1973 | Davis Creek, Cornelius 100 BG and B killed in 15 ac pond as a result of pest.-aerial spraying.   |

- 1973 Private Pond, Beaverton. 1,100 BBH killed from over-fertilization.
- 1976 Butternut Creek, Beaverton. 1,000 game and non-game killed from overspray along 1 mi. of the creek; Cytrol and Princep used in spray.
- 1982 Ash Creek (Fanno trib), discharge of an unknown chemical resulted in death of 30-50 suckers.
- 1982 Fanno Creek, upper. 50 cutthroat killed from the release of chlorine into the creek from draining swimming pool at the Raleigh Hills Racquet Club.
- 1983 McFee Creek, irrigation runoff from nursery containing unknown chemical (milky effluent) killed crayfish, bullhead below point of effluent.
- 1983 McKay Creek, water off of silage entered the creek resulting in 2,000 fish being killed, 25 percent of which were cutthroat, remainder included red sided shiners, cottids (crayfish crawled out and remained on bank.)

DEQ has performed studies and collected data related to fish and toxics in the Tualatin system. A variety of studies by Sutherland (see references) provide information on metals and chlorination problems. More recently ODEQ collected data on priority pollutants found in water, fish and crayfish tissue and in sediment in the Basin (1984). ODEQ has also collected fish annually from the basin and analyzed tissue for particular priority pollutants from the past several years. Levels of ammonia in the river below the Rock Creek STP may have been toxic to fish; however, there have been no report of fish kills in the lower Tualatin.

Lack of Access to the Tualatin -- Due to private ownership of river bank on the Tualatin, there is limited access to the River. ODFW has stopped stocking rainbow trout in the River because of the limited public access.

#### 6.0 "WHAT-IF" ANALYSIS OF WQ IMPACTS ON FISHERY

If nutrients are reduced from nonpoint or sewerage treatment input, how will this affect the warm-water fishery?

(The technical Advisory Committee did not reach a consensus on this issue)

## 7.0 SUPPORTING DOCUMENTS AND DATA

Hutchison, James M. and Warren W. Aney, 1964. The Fish and Wildlife Resources of the Lower Willamette Basin, Oregon, and Their Water Use Requirements. A report with Recommendations to the Oregon State Water Resources Board. Oregon State Game Commission, Basins Investigation Section, Portland, Oregon.

Willis, Raymond A., Melvin D. Collins, and Roy E. Sams, 1960. Environmental Survey Report Pertaining to Salmon and Steelhead in Certain Rivers of Eastern Oregon and the Willamette River and Its Tributaries. Part II, Survey Reports of the Willamette River and its Tributaries. Fish Commission of Oregon, Research Division, Clackamas, Oregon.

Oregon Department of Fish and Wildlife, 1984. Oregon Administrative rules. Chapter 635, Division 7, Fish Management and Hatchery Operations (635-07-5-1 - 635-07-830).

Oregon Department of Fish and Wildlife, 1986. Fish Management Plan for Henry Hagg Lake.

United States Department of Interior, Fish and Wildlife Service, 1979. Fish and Wildlife Coordination Act Report on the Tualatin Second Phase Project.

United States Department of Interior, Bureau of Reclamation, 1963. Tualatin Project Oregon.

Oregon State Game Commission, 1968. Tualatin River Basin, Master Plan for Angler Access and Associated Recreational Uses. Lands Division.

Water Policy Review Board, State of Oregon, 1985. In the matter of Formulating an Integrated, Coordinated Program for the Use and Control of the Water Resources of the Lower Willamette River Basin.

Oregon Department of Fish and Wildlife, 1986. Oregon Steelhead Management Plan, Anadromous Fish Plan, Part III.

Oregon Department of Fish and Wildlife, Fish Division, 1982. Comprehensive Plan for Production and Management of Oregon's Anadromous Salmon and Trout, Part II Coho Salmon Plan.

Oregon Department of Fish and Wildlife, Fish Division, 1987. Draft Statewide Trout Management Plan.

Massey, Joy B., 1985. Fish Resource Assessment, West Fork Dairy Creek. Statement to the Water Policy Review Board, McMinnville, Oregon. Oregon Department of Fish and Wildlife.



ATTACHMENT I

Summary Table, Tualatin River Control Strategies

Option	Phosphorus Concen- tration at Farmington	Order of Magnitude Cost Est.	Option Description
1	112	\$158,000,000	High lime treatment, year 2005 flow
2	116	\$31,000,000	Out-of-Basin to Columbia, Summer only
3	116	\$40,000,000	Effluent Irrigation
4	93	\$75,100,000	Partial Irrigation, NPS control, Flow augmentation, Wetlands
5	102	\$90,000,000	Out-of-Basin to Columbia, Flow Augmentation from Columbia
6	122	\$235,000,000	Upper Tualatin Reservoir, year 2005 Flow
7	105	\$207,000,000	Upper Reservoir, NPS controls, year 2005 flows
8	119	\$52,000,000	Enhanced Treatment, NPS control, Scoggins flow augmentation, 20 mgd WTP
9	108	\$75,100,000	Enhanced Treatment, partial Wetland, NPS controls, 20 mgd WTP
10	100	\$77,900,000	Enhanced Treatment, Partial Wetland, NPS controls, year 2005 flow
11	68	\$102,000,000	Out-of-Basin to Columbia, Columbia flow augmentation, NPS controls

Note: NPS = Nonpoint Source  
WTP = Waste Treatment Plant  
mgd = Million Gallons per Day

Tualatin River  
Analysis of Control Strategies

Existing Conditions:

	Flow (cfs)	Total Phosphate	
		Conc. (ug/L)	Load (#/day)
Tualatin River Stations	-----	-----	-----
Dilley	140	45	34
Golf Course	100	51	27
Rood	140	103	77
****			
Farmington	170	386	354
Tributaries	-----	-----	-----
Gales Creek	15	75	6
Dairy Creek	30	125	20
Rock Creek	10	300	16
Major Withdrawls	-----	-----	-----
Municipal & Industrial	-25	45	-6
TVID	-40	45	-10
Mainstem Tualatin NPS	-----	-----	-----
Gales to Golf Course	10	56	3
Golf Course to Dairy	5	372	10
Dairy to Rock Creek	5	743	20
	-----	-----	-----
Mun. Effluent Disposal	(mgd)		
Rock Cr. AWTP	13	2400	260
TVID Replacement			
Rock Cr Basin Wetland			
Dairy Cr Basin Wetland			
	-----	-----	-----
Flow Augmentation	(cfs)		
Raise Scoggins flow			
Upper Tualatin Dam			
Columbia River Import			
Rock Creek Basin			
Dairy Creek Basin			

\*\*\*\*\* Location of Peak Concentration

Note: TVID = Tualatin Valley irrigation District  
 AWTP = Advanced Waste treatment Plant

Tualatin River Analysis of Control Strategies

Option 1: \* High lime treatment at Rock Creek With year 2005 design

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	140	45	34	
Golf Course	100	51	27	
Rood	140	103	77	
***** Farmington	193	112	117	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	30	124	20	
Rock Creek	10	297	16	
Major Withdrawals				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	372	10	
Dairy to Rock Creek	5	743	20	
Mun. Effluent Disposal (mgd)				
Rock Cr. AWTP	28	100	23	\$158,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0	200	0	
Dairy Cr Basin Wetland	0	200	0	
Flow Augmentation (cfs)				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
Columbia River Import				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

Option 2: \* Rock Creek effluent exported to the Columbia River  
(Summer Only)

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	140	45	34	
Golf Course	100	51	27	
Rood	140	103	77	
**** Farmington	150	116	93	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	30	124	20	
Rock Creek	10	297	16	
Major Withdrawals				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	372	10	
Dairy to Rock Creek	5	743	20	
Mun. Effluent Disposal	(mgd)			
Rock Cr. AWTP	0	3000	0	\$31,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0	200	0	
Dairy Cr Basin Wetland	0	200	0	
Flow Augmentation	(cfs)			
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
Columbia River Import				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

Option 3: \* Rock Creek AWTP effluent irrigation  
(No replacement of flow)

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	140	45	34	
Golf Course	100	51	27	
Rood	140	103	77	
**** Farmington	150	116	93	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	30	124	20	
Rock Creek	10	297	16	
Major Withdrawls				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	372	10	
Dairy to Rock Creek	5	743	20	
Mun. Effluent Disposal (mgd)				
Rock Cr. AWTP	0	3000	0	\$40,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0	200	0	
Dairy Cr Basin Wetland	0	200	0	
Flow Augmentation (cfs)				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
Columbia River Import				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

- Option 4: \* Rock Creek AWTP effluent partial irrigation  
 (replacement of flow from TVID)  
 \* Identify and control urban/rural non-point sources  
 \* Increase flow from Scoggins for flow augmentation  
 \* Develop wetland areas for municipal effluent disposal

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
<b>Tualatin River Stations</b>				
Dilley	160	39	34	
Golf Course	136	43	31	
Rood	185	64	64	
***** Farmington	213	93	107	
<b>Tributaries</b>				
Gales Creek	15	75	6	
Dairy Creek	39	108	23	\$3,500,000
Rock Creek	19	174	18	\$5,500,000
<b>Major Withdrawals</b>				
Municipal & Industrial	-25	45	-6	
TVID	-25	45	-6	
<b>Mainstem Tualatin NPS</b>				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	186	5	\$1,500,000
Dairy to Rock Creek	5	186	5	\$1,500,000
<b>Mun. Effluent Disposal (mgd)</b>				
Rock Cr. AWTP	6	500	25	\$40,000,000
TVID Replacement	10			
Rock Cr Basin Wetland	6	200	10	\$8,400,000
Dairy Cr Basin Wetland	6	200	10	\$14,700,000
<b>Flow Augmentation (cfs)</b>				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
<b>Columbia River Import</b>				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

- Option 5: \* Rock Creek AWTP effluent to Columbia River  
 \* Import Columbia River wter through the same Tunnel  
 (Water put in Tualatin Tributaries)

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	140	45	34	
Golf Course	100	51	27	
Rood	160	96	83	
***** Farmington	190	102	104	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	50	95	26	
Rock Creek	30	133	22	
Major Withdrawals				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	372	10	
Dairy to Rock Creek	5	743	20	
Mun. Effluent Disposal (mgd)				
Rock Cr. AWTP	0	1500	0	\$195,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0		0	
Dairy Cr Basin Wetland	0		0	
Flow Augmentation (cfs)				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
Columbia River Import				
Rock Creek Basin	20	50	5	
Dairy Creek Basin	20	50	5	



Tualatin River Analysis of Control Strategies

Option 6: \* Upper Tualatin resevoir project

\* Enhanced chemical treatment at Rock Creek year (2005 design flow)

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	340	45	82	
Golf Course	300	47	76	
Rood	340	69	126	
**** Farmington	393	122	259	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	30	125	20	
Rock Creek	10	300	16	
Major Withdrawls				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	372	10	
Dairy to Rock Creek	5	743	20	
Mun. Effluent Disposal (mgd)				
Rock Cr. AWTP	28	500	117	\$40,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0		0	
Dairy Cr Basin Wetland	0		0	
Flow Augmentation (cfs)				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	200	45	48	\$195,000,000
Columbia River Import				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

- Option 7: \* Upper Tualatin Reservoir project  
 \* Enhanced chemical treatment at Rock Creek year (2005 design flow)  
 \* Identify and control non-point sources

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	340	45	82	
Golf Course	300	47	76	
Rood	340	53	97	
**** Farmington	393	105	221	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	30	93	15	\$5,500,000
Rock Creek	10	149	8	\$3,500,000
Major Withdrawls				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	112	3	\$1,500,000
Dairy to Rock Creek	5	112	3	\$1,500,000
Mun. Effluent Disposal (mgd)				
Rock Cr. AWTP	28	500	117	\$40,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0	200	0	
Dairy Cr Basin Wetland	0	200	0	
Flow Augmentation (cfs)				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	200	45	48	\$195,999,999
Columbia River Import				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

# Tualatin River Analysis of Control Strategies

- Option 8: \* Enhanced chemical treatment at Rock Creek  
(20 mgd design flow)
- \* Identify and control urban/rural non-point sources
  - \* Increase flow from Scoggins

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
<b>Tualatin River Stations</b>				
Dilley	190	45	46	
Golf Course	150	46	37	
Rood	190	55	56	
***** Farmington	231	119	148	
<b>Tributaries</b>				
Gales Creek	15	75	6	
Dairy Creek	30	80	13	\$3,500,000
Rock Creek	10	150	8	\$5,500,000
<b>Major Withdrawals</b>				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
<b>Mainstem Tualatin NPS</b>				
Gales to Golf Course	10	19	1	
Golf Course to Dairy	5	74	2	\$1,500,000
Dairy to Rock Creek	5	149	4	\$1,500,000
<b>Mun. Effluent Disposal (mgd)</b>				
Rock Cr. AWTP	20	500	83	\$40,000,000
TVID Replacement	0		0	
Rock Cr Basin Wetland	0		0	
Dairy Cr Basin Wetland	0		0	
<b>Flow Augmentation (cfs)</b>				
Raise Scoggins flow	50	45	12	
Upper Tualatin Dam	0	45	0	
<b>Columbia River Import</b>				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

- Option 9: \* Enhanced Chemical Treatment at Rock Creek  
 ( 20 mgd design flow)
- \* Partial wetland treatment of effluent
  - \* Identify and control non-point sources

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
<b>Tualatin River Stations</b>				
Dilley	140	45	34	
Golf Course	100	51	27	
Rood	149	67	54	
***** Farmington	181	108	106	
<b>Tributaries</b>				
Gales Creek	15	75	6	
Dairy Creek	39	108	23	\$3,500,000
Rock Creek	19	174	18	\$5,500,000
<b>Major Withdrawals</b>				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
<b>Mainstem Tualatin NPS</b>				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	74	2	\$1,500,000
Dairy to Rock Creek	5	74	2	\$1,500,000
<b>Mun. Effluent Disposal (mgd)</b>				
Rock Cr. AWTP	8	500	33	\$40,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	6	200	10	\$8,400,000
Dairy Cr Basin Wetland	6	200	10	\$14,700,000
<b>Flow Augmentation (cfs)</b>				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
<b>Columbia River Import</b>				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	
				\$75,100,000

Tualatin River Analysis of Control Strategies

- Option 10 \* Enhanced Chemical Treatment at Rock Creek  
 year (2005 design flow)
- \* Partial wetland treatment of effluent
  - \* Identify and control non-point sources

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
<b>Tualatin River Stations</b>				
Dilley	190	45	46	
Golf Course	150	49	39	
Rood	206	66	73	
***** Farmington	243	100	131	
<b>Tributaries</b>				
Gales Creek	15	75	6	
Dairy Creek	46	121	30	\$3,500,000
Rock Creek	26	180	25	\$5,500,000
<b>Major Withdrawals</b>				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
<b>Mainstem Tualatin NPS</b>				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	74	2	\$1,500,000
Dairy to Rock Creek	5	74	2	\$1,500,000
<b>Mun. Effluent Disposal (mgd)</b>				
Rock Cr. AWTP	8	500	33	\$40,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	10	200	17	\$9,800,000
Dairy Cr Basin Wetland	10	200	17	\$16,100,000
<b>Flow Augmentation (cfs)</b>				
Raise Scoggins flow	50	45	12	
Upper Tualatin Dam	0	45	0	
<b>Columbia River Import</b>				
Rock Creek Basin	0	50	0	
Dairy Creek Basin	0	50	0	

Tualatin River Analysis of Control Strategies

- Option 11 \* Rock Creek AWTP effluent to Columbia  
 \* Import Columbia River wter through the same Tunnel  
 (Water put in Tualatin Tributaries)  
 \* Identify and control urban/rural non-point sources

	Flow (cfs)	Total Phosphate Conc. (ug/L)	Load (#/day)	Costs
Tualatin River Stations				
Dilley	140	45	34	
Golf Course	100	51	27	
Rood	160	65	56	
***** Farmington	190	68	69	
Tributaries				
Gales Creek	15	75	6	
Dairy Creek	50	68	18	\$3,500,000
Rock Creek	30	83	13	\$5,500,000
Major Withdrawals				
Municipal & Industrial	-25	45	-6	
TVID	-40	45	-10	
Mainstem Tualatin NPS				
Gales to Golf Course	10	56	3	
Golf Course to Dairy	5	186	5	\$1,500,000
Dairy to Rock Creek	5	186	5	\$1,500,000
Mun. Effluent Disposal (mgd)				
Rock Cr. AWTP	0	1500	0	\$90,000,000
TVID Replacement	0			
Rock Cr Basin Wetland	0		0	
Dairy Cr Basin Wetland	0		0	
Flow Augmentation (cfs)				
Raise Scoggins flow	0	45	0	
Upper Tualatin Dam	0	45	0	
Columbia River Import				
Rock Creek Basin	20	50	5	
Dairy Creek Basin	20	50	5	

ATTACHMENT J

REVIEW OF PHOSPHATE DETERGENT BANS

May 5, 1987

Oregon Department of Environmental Quality



## REVIEW OF PHOSPHATE DETERGENT BANS

The following report briefly reviews some of the recent literature pertaining to phosphate detergent bans. The review is organized into the following sections:

- o Introduction
- o Michigan's Phosphate Detergent Ban
- o Chesapeake Bay
- o Critical Evaluation of Phosphate Bans
- o Potential Effect of a Phosphate Ban in the Tualatin River
- o Conclusions
- o Recommendation

### INTRODUCTION

There has been considerable interest nationally in phosphate discharged from domestic sources, particularly, in areas where the effluent is discharged to a lake. In fact, considerable work has been conducted in this area, with a majority of it directed towards the Great Lakes and Chesapeake Bay. Several states in these areas have attempted to control the use of phosphate detergents either totally or partially. The goal has been to reduce the phosphate concentrations in various waters. This, in turn, reduces the growth of aquatic plants and reverses trends towards accelerated eutrophication.

The following report briefly reviews several recent papers that describe and evaluate phosphate detergent bans. A look at this information may assist the state in formulating a reasonable position on whether to control the sale of phosphate detergents in general and what effect it may have in critical water quality problem areas like the Tualatin River. This review should also serve as an informational paper for individuals wanting to know the status of phosphate detergent bans.

The first question one may ask is, "why are phosphates being examined and why are some areas of the country restricting the sale of laundry detergents containing phosphate?" The answer is related to the fact that phosphate plays a key role in the growth of algae. Phosphate is one of the key nutrients, which along with nitrogen, vitamins, sunlight, and water temperature (Attachment H) combine to provide the essential ingredients for algal growth. In situations where phosphate is the limiting nutrient, it is the piece of the puzzle needed to stimulate growth. Excessive quantities of phosphate can lead to excessive algal growth, which can result in a major water quality problem. In various areas across the country, phosphate is being discharged by municipal sewage treatment plants to waterbodies resulting in adverse effects on water quality.

Some states have focused attention on reducing the phosphate content in sewage as a means to reduce the element in treated effluent. This action has resulted in programs to reduce the use of phosphate detergents to limit their entry to treatment plants.

The following report briefly reviews several recent papers that describe and evaluate phosphate detergent bans. A look at this information may assist the state in formulating a reasonable position on whether to control the sale of phosphate detergents in general and what effect it may have in critical water quality problem areas like the Tualatin River. This review should also serve as an informational paper for individuals wanting to know the status of phosphate detergent bans.

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The next question might be, "why is phosphate put in detergents?"

Vallentyne (1974) discussed the composition of detergents. He indicated that detergents have three major ingredients: a surfactant, builders, and fillers. The "surfactant" is the true cleansing agent. "Builders" have little or no cleansing power, but they make the surfactant work better by complexing the calcium and magnesium ions involved in water hardness. "Fillers" are ingredients that reduce the overall manufacturing cost or act in other seemingly mysterious ways.

Of the three ingredients, the builders consist of various types of phosphates. But what purpose do phosphates serve in a detergent?

Vallentyne listed three functions as follows:

1. To soften water.
2. To create and maintain high alkalinity.
3. To remove dirt particles.

The prime function of detergent phosphates among the three listed is in softening water, thereby preventing calcium and magnesium from forming inactive complexes with surfactants and insoluble precipitates with soaps. Detergent phosphates do, however, have a special effect in suspending particles of dirt and soil, but the high concentrations may be unnecessary for that purpose.

Oregon's water supplies are considered to be "soft" (having a hardness content of less than 60 mg/L). Few areas in the state have a hardness

content that are moderately hard. In those areas of the state where the raw water supply is relatively hard, the water is softened at the water treatment plant before delivery to the community.

Given the relatively low hardness content in Oregon's raw and "finished" water supplies, one may question why the phosphate in detergents are needed to soften water that is already soft.

#### **MICHIGAN'S PHOSPHATE DETERGENT BAN**

As previously mentioned, there has been considerable interest in controlling phosphate discharges to the Great Lakes. One lake state, Michigan, has taken the lead in controlling phosphate. In October 1977, Michigan implemented a phosphorus detergent ban prohibiting the sale of household laundry detergents containing more than 0.5 percent elemental phosphorus by weight. The ban allowed a phasing-out of all existing high-phosphorus laundry detergents.

The effectiveness of the Michigan phosphate ban was studied by Hartig and Horvath (Attachment B) in 1982. They compared the phosphorus concentrations in 58 wastewater treatment plants in the pre-ban period of 1976 and 1977 with the post-ban period of 1978 and 1979. The data showed influent and effluent total phosphorus concentrations decreased by 23 and 24 percent, respectively, between these periods. Hartig and Horvath took their analysis further by examining the effect of the ban on surface water quality. Their conclusions were that the phosphate ban was having positive

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ecological impact in the Great Lakes Basin. It appears that both total phosphorus loading and chlorophyll a levels decreased.

Berthouex, Pallesen, Booman, and Sedlack (Attachment C) reviewed the statistical test utilized by Hartig and Horvath in March 1983. This critical review of the mathematical test apparently reduced the effect of the ban from 23 to 13 and 24 to 15 percent in influent and effluent phosphorus, respectively. However, the paper points out that the ban still appeared to remain a positive influence on reducing the total phosphorus contribution to the Great Lakes.

#### CHESAPEAKE BAY

A major effort is underway to control phosphate discharges to Chesapeake Bay. This control effort involves several states and the District of Columbia. Emphasis has been placed on sewage treatment plants and nonpoint sources as the major contributing sources. Lung (Attachment F), in the paper on phosphorus loads to Chesapeake Bay, evaluates various controls on the different phosphorus sources. The paper concludes, that for wastewater treatment plants not practicing phosphorus removal, phosphate detergent bans can reduce the phosphorus load from 15 to 25 percent. Therefore, the ban is one element in the overall pollution control strategy for protecting the Bay.

## CRITICAL EVALUATION OF PHOSPHORUS BANS

Not everyone is in agreement that phosphate detergent bans produce a significant positive benefit. Booman and Sedlak (Attachment G) have taken a critical look at phosphate bans in Maryland and the District of Columbia. Their paper reviews the benefits of bans versus wastewater treatment plant phosphorus control measures. The paper states:

"The relative amount of phosphorus that enters the environment today because of phosphate detergent use is small. Of phosphorus that entered the U. S. environment in 1978, only 1.5 percent was a result of phosphate detergent use. In total, 12 percent of the phosphate that reached the environment came from all municipal and industrial point sources. The remaining 88 percent came from nonpoint sources..."

Their conclusion is that phosphate detergent bans in Maryland and the District of Columbia are consistent with reductions previously observed, but that the controlling factor for improved water quality is the treatment plant technology and its ability to remove phosphorus.

Phosphate detergent bans have been effective in reducing influent loads of phosphorus to sewage treatment plants. Reduced influent loads should result in a corresponding reduction in the cost of treatment. However, field studies have demonstrated that phosphate detergent bans have not resulted in detectable improvements in water quality (Booman and Sedlak, 1986 and Maki, et al, 1984). This lack of a direct relationship has been



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attributed to other nutrients being limiting in the ambient environment; besides phosphorus, the time scale involved, and that the phosphate reduction was not great enough to result in detectable changes.

Therefore, in the final analysis, a phosphate ban is often related to whether noticeable changes can be discerned in water quality. Lee, et al (Attachments D and E) suggest that there needs to be at least a 20 percent reduction in phosphorus discharged to the receiving water body to have a noticeable change in water quality. Although they provide little information to support this conclusion, Lee, et al, explores the potential for achieving this with today's domestic wastewater. The conclusion is that past emphasis on phosphate detergents has in fact reduced the loading from domestic wastewater to the point where a phosphate ban may not show positive results.

The paper by Maki, et al, supports this conclusion. Although a phosphate ban can indeed reduce influent concentration levels, the reduction in itself may not be sufficient to show water quality improvement.

#### **POTENTIAL EFFECTS OF A PHOSPHATE BAN IN THE TUALATIN RIVER BASIN**

Excessive algal growth is one of the major water quality problems being studied by the Department of Environmental Quality in the current Tualatin River study. In the Tualatin River, phosphate is considered one of the key parameters for algal growth. Consequently, attention has been focused on

determining what are the various phosphorus sources. This includes background levels, nonpoints and point sources.

During wet and dry weather periods at different times of the year, phosphorus is discharged to the Tualatin. The limited data to date, indicates that the wastewater treatment plants, and agriculture and urban runoff nonpoint sources are major contributors.

The Rock Creek wastewater treatment plant effluent contains a high concentration of phosphorus which appears to be above the national average for this type of facility. In fact, it is about twice the average. The Unified Sewage Agency (USA) is looking into this problem and has indicated that it will be examining its major point source discharges to see if any higher than expected phosphorus loads are being discharged.

One major component of the treatment plant phosphorus load comes from domestic wastewater. A major source of phosphorus in the domestic waste stream is laundry detergents. Detergent phosphate typically does not enter the environment directly. Instead, this phosphate passes through a sewage treatment operation where it is rapidly converted to ortho-phosphate and becomes indistinguishable from other sources of phosphate.

Phosphate detergent bans have resulted in between 15 percent and 50 percent reductions in influent P loads (Booman and Sedlack, 1986 and Maki et al., 1984). The effect of phosphate detergent bans on influent loads at USA wastewater treatment plants is not known. For the purpose of preliminary

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Phosphate detergent bans have resulted in between 15 percent and 50 percent reductions in influent P loads (Booman and Sedlack, 1986 and Maki et al., 1984). The effect of phosphate detergent bans on influent loads at USA wastewater treatment plants is not known. For the purpose of preliminary

calculations a typical range of reduction of 25 percent to 33 percent can be assumed. Example calculations are shown in Table 1.

Since phosphate removal is already practiced at the Unified Sewage Agency's two largest treatment plants, a phosphate detergent ban would affect effluent concentrations in two ways: (1) reduce cost to achieve a given limitation, and (2) increase the plants ability to achieve a lower limit.

From the example calculations, a ban could reduce the required alum additions needed to achieve the 1.5 mg/L P effluent limitation. In addition, there would be less alkalinity loss and sludge produced. The same results are seen when calculations are made for a more severe (1 mg/L P) effluent limitation.

The savings in alum additions, alkalinity consumption, and sludge production are all nearly proportionally related. It should be noted, however, that the example calculations are a simplification of the processes involved in wastewater treatment. Many of the processes are interactive. For example, alkalinity is required in the nitrification process.

Alkalinity loss due to alum addition will therefore affect the efficiency of nitrification. These interactions set a practical limit to phosphorus removal. The example calculations indicate that a ban with reduced influent phosphorus would make achieving more strict limitations practicle.

Table 1. Examples of Alum Required to Achieve Various Concentrations of Effluent Phosphorous

Example Calculations

From P removal design tests (CH2M HILL) USA 1987:

<u>Reduction Required</u>	<u>Alum: P Weight Ratio</u>
75%	13:1
85%	16:1
95%	22:1

Influent Loads (7-9, 1986) = 10.6 mg/L  
 at 33% reduction = 7.1 mg/L  
 at 25% reduction = 7.9 mg/L

<u>Effluent Limit</u>	<u>No Ban Alum Required</u>	<u>Sludge Produced</u>
1.5 mg/L	158 mg/L	10,543 lb/d
1.0 mg/L	187 mg/L	12,500 lb/d

<u>Ban = 25% Reduction</u>		<u>Ban = 33% Reduction</u>	
<u>Alum Required</u>	<u>Sludge Produced</u>	<u>Alum Required</u>	<u>Sludge Produced</u>
98 mg/L	6,567 lb/d	79 mg/L	5,271 lb/d
124 mg/L	10,478 lb/d	105 mg/L	7,010 lb/d

Calculations Assumed: 20 mgd and 40% recovery for sludge  
 Linear relationship between the P reduction and  
 Alum:P ration listed above (r2 = 0.96)

Alkalinity loss is stoichiometrically related to alum dose: 0.5 mg  
 Alkalinity/mg Alum.

<u>Alum</u>	<u>Alk. Loss</u>
79 mg/L	39.5 mg/L
105 mg/L	52.5 mg/L
158 mg/L	79.0 mg/L

It is important to note that the solution to the Tualatin's River water quality problems will not be found in one control alternative. Several

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It is important to note that the solution to the Tualatin's River water quality problems will not be found in one control alternative. Several

carefully developed alternatives implemented together will be needed to bring about the desired changes to improve water quality. A phosphate detergent ban for the Tualatin Basin may be one piece of a more comprehensive control strategy. As the calculations indicate, a ban even in the saturation where the treatment plant is practicing, P removal can be beneficial by reducing alum requirements and the sludge produced.

## CONCLUSIONS

There appears to be mixed feelings in the need for and the effect of phosphate detergent bans. In some cases the results show a reduction in influent phosphate concentrations. However, others debate the need for such bans when treatment plant technologies can effectively remove phosphate. It is also pointed out that the total phosphate contribution from point sources on the national averages is 12 percent, whereas 88 percent is from nonpoint sources.

A key point to remember, however, is that a primary function of phosphate detergents is as a water softener. Given the relatively low hardness content in Oregon's raw and "finished" water supplies, it is questionably why phosphate detergents are needed to soften water that is already soft.

The Tualatin River has excessive algal growth during summer dry weather. The Department needs to focus control strategies on reducing phosphorus contributions as a factor leading to this growth. Present data indicates that phosphorus is discharged from several different sources. One of these



sources is household laundry detergents. The present Tualatin River water quality study is attempting to quantify phosphorus sources to provide the data needed to formulate and evaluate control strategies.

The Department needs to consider phosphate removal as a key element in improving Tualatin River water quality as well as in other water quality limited stream segments. It must also note that phosphorus is contributed from several sources including: laundry and dishwashing detergents, lawn fertilizers, agriculture practices, car washes, industries, etc. The solution to the problem will therefore not be found in one control, but a series of controls, each directed at a particular facet of the problem.

#### RECOMMENDATION

A phosphate detergent ban may be helpful in controlling water quality problems in the Tualatin River. It may also help to decrease wastewater treatment costs in areas where phosphates need to be controlled to protect water quality. The Department needs to investigate the feasibility and benefits of establishing such a ban.

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DEQ Phosphorous Statutes

ATTACHMENT K

ATTACHMENT K

The Strategic Water Management Group is a group of state agencies which meet approximately monthly to discuss issues and programs affecting the state's water resources. In May 1987, the SWM group established a subcommittee to review and coordinate the activities associated with DEQ's Tualatin River basin study. The committee was assigned some specific work during the start-up of the project and some responsibility to review project progress.

Several committee meetings were held over the length of the project and produced several documents including:

1. List of agencies and advisory committees involved in basin planning activities.
2. Summary of agency interests and responsibilities.
3. Report to the full Strategic Water Management Group.

These documents are attached.

TUALATIN RIVER BASIN

AGENCIES/ADVISORY COMMITTEES INVOLVED IN BASIN PLANNING ACTIVITIES

MAJOR CATEGORY AGENCY/ORGANIZATION	UPPER WATERSHED	MIDDLE WATERSHED	LOWER WATERSHED	GENERAL COMMENTS  • Roles/Duties • Responsibilities • Interests • Major Emphasis
	Major Characteristics: Upper Main Stem RM <u>39</u> to <u>83</u> Tributaries & Activities:*	Major Characteristics: Middle Main Stem RM <u>09</u> to <u>39</u> Tributaries & Activities:**	Major Characteristics: Lower Main Stem RM <u>0</u> to <u>09</u> Tributaries & Activities:***	
<b>WATER QUALITY</b>				
Oregon Department of Environmental Quality:	•	•	•	Responsible for surface ground-water quality.
• Tualatin River Citizen Advisory Committee	•	•	•	Appointed by DEQ to review the development of the Tualatin Basin Water Quality Management Plan.
• Tualatin River Technical Advisory Committee	•	•	•	Appointed by DEQ to provide technical review of DEQ's Tualatin Project.
State Health Division	•			Primacy for State Drinking Water Program, including standards.
U.S. Environmental Protection Agency	0	•	•	Implement federal environmental laws.
Unified Sewage Agency	•	•	•	Provides for the collection and treatment of wastewater in Washington County.
Metro		0	0	Designated areawide Water Quality Management Planning Agency.
Water Resources Future Needs Committee	•	•	•	Appointed by Washington Co. Commission to evaluate resource needs in the future, involved with recreation, potable water, water quality and quantity and agriculture.
Lake Oswego Corporation	0	0	•	Control of algal problems on Lake Oswego.
<b>WATER QUANTITY</b>				
Oregon Water Resources Department	•	•	•	Responsible for surface and groundwater quantity.
• Watermasters	•	0	•	Regulate the allocation of water.
Tualatin Valley Irrigation District	•	•	0	Operates Scoggins Dam for Bureau of Reclamation.
U.S. Dept. of Interior — Bureau of Reclamation	0	0	0	Built Scoggins Dam.
Local Water Supply Districts	•	•	•	Provide drinking and industrial water, trans-basins diversions, trask and Bull Run.
<b>FISHERIES/WETLANDS/ RECREATION</b>				
Oregon Department of Fish and Wildlife	•	•	•	Responsible for managing fish and wildlife resources.
Oregon Parks and Recreation Division	•	•	•	Responsible for state parks.
State Marine Board	•	•	•	License boats, provide dock facilities.
Division of State Lands	•	•	•	Responsible for the state's fill and removal permit.
U.S. Army Corps of Engineer	0	•	•	Federal fill and removal permits.
U.S. Fish and Wildlife Service	0	0	0	Review fill and removal permits.
Bonneville Power Administration	0	0	0	Inventory fishery resources.
Northwest Power Planning Council	0	0	0	Inventory fishery resources.
Tualatin Hills Park and Recreation District	0	•	•	Local parks.

(OVER)

TUALATIN RIVER BASIN (Continued)

MAJOR CATEGORY AGENCY/ORGANIZATION	UPPER WATERSHED	MIDDLE WATERSHED	LOWER WATERSHED	GENERAL COMMENTS
	Major Characteristics: Upper Main Stem RM <u>39</u> to <u>83</u> Tributaries & Activities:*	Major Characteristics: Middle Main Stem RM <u>09</u> to <u>39</u> Tributaries & Activities:**	Major Characteristics: Lower Main Stem RM <u>0</u> to <u>09</u> Tributaries & Activities:***	
<b>AGRICULTURE/FORESTRY</b>				
Oregon Department of Agriculture:	0	0	0	Designated Statewide Agriculture Water Quality Management Agency.
• Division of Soil and Water Conservation	0	0	0	
• Washington County Soil and Water Conservation District	0	0	0	Designated local Agriculture NPS Water Quality Management Agency involved in soil erosion prevention and controlling animal waste.
Coordinated Resource Management	0	0	0	Coordinated approach to resource problems.
U.S. Department of Agriculture:				
• Soil Conservation Service	0	0	0	Provides technical assistance to local Soil and Water Conservation districts.
• Resource Conservation and Development	0	0	0	Program under USDA that provides technical plus financial assistance for watershed projects.
• Agriculture Stabilization and Conservation Service	0	0	0	Provides financial assistance to individual farmers.
Extension Service	0	0	0	Federal, state, and local agriculture education agency.
State Department of Forestry	0	0	0	Responsible for implementing the Forest Practice Act — also, is the designated Water Quality Management Agency for state and private forest lands.
<b>STORMWATER</b>				
Oregon Department of Environmental Quality	0	0	0	Water quality aspects.
• Washington County	-	-	-	Potential implementation agency.
• Washington County Cities	-	-	-	Potential implementation agency.
<b>OTHERS</b>				
Strategic Water Management Group	0	0	0	Group of state agencies chaired by the Governor's Assistant for Natural Resources coordinate State Water Resource Planning.
• Tualatin Basin Planning Subcommittee	0	0	0	Subcommittee formed to coordinate state agency activity in the Tualatin Basin.
Department of Land Conservation & Development	0	0	0	
Boundary Commission	0	0	0	
U.S. Forest Service	0	0	0	
U.S. Dept. of Interior, Bureau of Land Management	0	0	0	
U.S. Dept. of Interior, Geologic Survey	0	0	0	Water quality and quantity water.
* Tributaries: Scoggins Creek, Gales Creek, Dairy Creek, and McKay Creek. Activities: Forestry, Agriculture, Water Supply, and Recreation.				
** Tributaries: Rock Creek, Beaverton Creek, Butternut Creek, Fanno Creek (Urban). Activities: Some Agriculture, Rural to Urban, and Recreation.				
*** Tributaries: Predominately, Southside Drainage and Lake Oswego. Activities: Rural and Recreation.				
0 - Major Involvement			0 - Some Involvement	
			0 - Minor Involvement	

**SUMMARY OF AGENCY RESPONSES TO INFORMATION QUESTIONNAIRE**

Agency	A	B	C	D
1. Department of Land Conservation and Development	Comprehensive plans and implementing ordinances plans include background history and data, inventories and policies.	Some jurisdictions will be addressing requirements to conduct studies on industrial and commercial development, natural resources and public facilities and services. Newly formed task force on distinguishing rural and urban land. Contact is Jim Sitzman.	DLCD expects to consult with Metro and Washington County. Discussions on goal compliance issues related to the Western Bypass.	
2. Department of Geology and Mineral Industries	Several pertinent reports including: DOGAM 1, Bull. 60, Engineering Geo. of the Tualatin Valley Region and USGC Bull. 1119, Geo. of Portland area.	No projects are currently in progress in the Tualatin Basin.	No work is planning in the Tualatin Basin at at time.	Ability to provide geological information about the Tualatin Basin.



3. State Parks and Recreation	Several master plans, feasibility studies, area investigations on a few areas within the basin. Available in State Parks file.	Nothing.	None.	None.
4. Water Resources Department	Lower Willamette River Basin study in 1965. Plan adopted 1966, amended 1968, 1971, 1975, 1976, 1980, and 1985. Several documents available in WRD library. WRD also has stream gauge information.	Stream gauging is on-going.	WRC is planning a comprehensive study and update of the Willamette Basin, possibly in 1988-1989. Has not decided whether to start in upper or lower basin. Willamette examine a full range of issues including watershed enhancement.	WRD currently has some digital mapping capabilities for the Tualatin.
5. State Department of Agriculture (Washington County Soil and Water Conservation District)	Washington County soil survey and several other resource inventories are available upon request or at the District Office.	The Washington County SWCD is a activity engaged in several resource protection efforts. This includes construction sites roadways, utility corridors, and from operations.	The Washington County SWCD has developed a number of potential planning projects contingent on securing resources.	Soil maps.

6. Department of Forestry	Historical data on forest operations. The basin has few forest operations.	New Riparian Area management rules have been adopted.	Assisting DEQ in the NPS assessment.	Can provide maps and aerial photographs.
7. Department of Fish and Wildlife	Tualatin River Basin is a component of the Wild River Fish Management Plan. Recently completed along with several other agencies, the fish and wildlife portion of the NW River assessment study.	ODFW has current and active fish management and monitoring programs in the Tualatin Basin which DEQ needs to be aware of in its planning effort.	ODFW has plans to develop a more detailed Tualatin River plan within the next two or three years. ODFW is also embarking on sub-basin planning as part of the Columbia River Basin system planning action for fish and wildlife.	Fishery resource assessment including riparian zone.
8. Division of State Lands	Regional permit for Hedges Creek wetland and report and recommendations on the navigable waters of Oregon. Information on past permits is available.	Nothing.	No rehabilitation or resource assessment work planned. Projects involving the removal, fill, or alteration of 50 cubic yards of material are required to obtain a permit.	No specific capabilities which would be helpful.

9. State Health Division

The Division has or can obtain from EPA historical data on drinking water quality.

The Division is completing sanitary surveys of all public water systems in the basin. The information is being entered into the data base and will be available upon request.

The Division may be identifying the population served by water imported to the basin.

Limited resources or capabilities available to assist DEQ.

10. Department of Economic Development

None.

None.

Economic planning information for local governments and development organizations as they respond to standards established in the river.

Limited assistance to DEQ but can be helpful to local planning and development organizations.

11. Department of Energy

No information has been developed specifically for the Tualatin; does have GIS map of EPA River segment file at 1:250,000 and Rivers study at 1:100,000.

None.

Planning a Rivers Study Data Base Update; also, planning to have EPA map at 1:100,000.

Extensive GIS capabilities.

**Questions:**

- A. What has the agency completed in the past which could be helpful to the Tualatin River Water Quality Study? Is this information available? How can DEQ obtain it?
- B. What is the agency currently doing which needs to be coordinated with the Tualatin River Water Quality Study? Is the agency currently conducting a resource assessment which might have information useful to DEQ? Does the agency have currently active advisory committees in the Tualatin Basin? How could DEQ coordinate with your current efforts? Joint meetings?
- C. What does your agency have planned for the future which could be helpful to DEQ? Are you planning any resource assessment in the Tualatin Basin? Are you planning major stream rehabilitation work?
- D. What specific capabilities does your agency have, such as Geographic Information System (GIS) mapping, which may be helpful to DEQ in its Tualatin Project? Is there a potential for this to be available?

STRATEGIC WATER MANAGEMENT GROUP

Meeting

JULY 23, 1987

presentation of the  
TUALATIN BASIN PLANNING SUBCOMMITTEE

NEIL J. MULLANE  
DEPARTMENT OF ENVIRONMENTAL QUALITY

## INTRODUCTION

At the Strategic Water Management (SWM) Group meeting in May, the Department of Environmental Quality presented a report describing its water quality planning efforts in the Tualatin River Basin. There was a lengthy discussion of this study and the need for the state agencies to coordinate their activities in the basin, particularly if they may have a direct affect on DEQ's effort. Inorder to provide the needed coordination, the SWM group decided to form a subcommittee on Tualatin Basin Planning. The subcommittee was requested to report back to the SWM group in July with specific information on agency activities in the basin. DEQ was asked to chair the subcommittee and each agency was asked to provide a representative to serve on the committee.

The agencies were subsequently contacted for a representative and meetings were held on June 3rd and July 1st. Attachment A contains a list of subcommittee members, meeting agenda, and the information distributed at each meeting.

## WORK ASSIGNMENTS

The SWM Group assigned the following tasks to the subcommittee:

1. To identify what the state agencies have done, are doing, and have planned for the future in the Tualatin Basin.
2. To identify what coordination needs to take place to assist DEQ in developing the revised water quality management plan for the basin.
3. To report back to the SWM Group on what the state agencies are currently doing or planning in the basin that might help DEQ to develop a water quality protection strategy for the Tualatin Basin.

## SUBCOMMITTEE ACTIVITIES

The first subcommittee meeting was held on June 3, 1987. The primary purpose of the meeting was to provide each committee member with a description of the Tualatin River Water Quality study and to initiate the process of obtaining the desired information. The first half of the meeting was therefore, devoted to reviewing the status of the study and discussing the regulatory concept of total maximum daily loads (TMDLs). The remainder of the meeting was spent discussing what the various agencies were currently doing in the basin

DEQ also distributed a proposed committee purpose statement which listed the questions the committee would have to answer to

accomplish its tasks. The committee reviewed the list and concurred that the following questions needed to be addressed:

1. What is being done by the various state agencies in the Tualatin Basin, which could have an affect on DEQ's effort? (Who is doing what in the basin?)
2. What information is available, which could be helpful to DEQ as it conducts its planning effort?
3. What might the agencies be planning for the future, which could be helpful to DEQ's effort?
4. What technical capabilities do the agencies have, which might be available to assist DEQ?
5. What planning coordination needs to take place between the agencies?

To obtain the information, DEQ prepared a simple questionnaire for the agencies to complete. The questionnaire was reviewed by the committee and the agencies were requested to complete it by June 21. The completed questionnaires were then sent to each agency for review prior to the next committee meeting. At the July meeting the agencies reviewed the information they had provided. This proved to be a worthwhile exchange, with the agencies coming away with a better understanding of what each was doing in the basin. The completed questionnaires are contained in Attachment B.

Table 1 contains a summary of the information provided.

#### PAST INFORMATION

A brief glance at the summary of past information shows that several agencies have information which could be very useful. The Department of Agriculture, through the local Soil and Water Conservation District has available a soil survey for Washington Co. and additional resource inventories. DLCD has the comprehensive plans for the cities and county. DOGAMI has several geologic reports on the basin. The WRD has water quantity information for the Tualatin that is included as part of its Willamette River Basin Plan. ODFW includes the Tualatin as part of its Willamette River Fish Management Plan. They have also just completed, along with several other resource agencies the fish and wildlife portion of the Northwest Rivers Assessment study. The Health Division has access to historical data on drinking water quality. DOE has limited GIS information for the basin, but what they do have includes the NW Rivers study and the EPA's river reach file. DSL has a report on navigable waters in Oregon and past fill and removal permits. Parks has several park master plans and feasibility studies. Forestry has historical data on timber operations.

### CURRENT ACTIVITIES

Only six agencies have current activities in the basin. ODFW is monitoring its fish management programs. The local Soil and Water Conservation District (SWCD) is actively engaged in several resource protection projects. WRD is gauging the river. DLCD is working with several local jurisdictions as they begin to address new planning requirements. The Health Division is completing sanitary surveys of all water supply systems in the basin. Forestry is gearing up to begin implementation of the new riparian area management rules.

As far as basin advisory committees in the different agencies there was not a great deal of activity. The Washington Co. Soil and Water Conservation District has asked that we keep them informed of what was occurring in the basin. DLCD also informed the committee that a task force had been formed to examine the definition of rural and urban land statewide and that this may have some influence on what happens in the basin.

### FUTURE ACTIVITIES

Some important agency activity will be occurring in the future. WRD is planning to initiate the review and revision of the river basin plan for the Willamete River in 1988. ODFW has plans to develop a detailed fisheries management plan specifically for the Tualatin. DLCD is going to be working with METRO and Washington Co. on goal compliance. DOE is planning additional GIS mapping in the basin in conjunction with the NW Rivers study.

### COORDINATION NEEDS

The subcommittee discussed several areas where the agencies need to coordinate their activities.

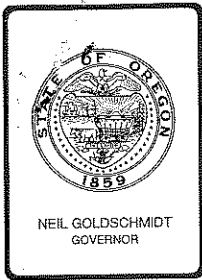
1. DEQ needs to determine what GIS mapping is needed for the study and then it has to meet with DOE and WRD to determine what assistance is available. (This work has already begun with meetings being held with both agencies)
2. DLCD and DEQ need to work closely with each other to determine how best to have water quality standards and river discharge limits reflected in the local comprehensive plans.
3. The Highways Division and DEQ need to establish a stronger communication link, particularly with regards to how future highway development may effect the TMDL's being established.



4. ODFW needs to work closely with DEQ as they develop the detailed fish management plan for the basin. ( This work has been initiated with ODFW's work on the Tualatin Technical Advisory Committee)
5. WRD and DEQ need to work together to obtain the necessary flow data. (Work on this item has already begun with a coordination meeting being held in June)

#### RECOMMENDATION

The Tualatin Basin Planning Subcommittee should continue to meet to provide the needed coordination .



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item F, March 11, 1988, EQC Meeting

Request for Authorization to Conduct a Public Hearing  
Concerning Proposed Amendments to the Hazardous Waste  
Management Rules, OAR Chapter 340, Division 100, 102, and  
104.

### Background and Problem Statement

This is the third in a series of proposed rulemakings which the Department has scheduled over a period of approximately two years. The Department is proposing the adoption, by reference, of a group of new federal hazardous waste management rules. The Department began this series with the adoption of another group of new federal rules on May 29, 1987. A second group of federal rules were adopted by the Commission on December 11, 1987.

The U.S. Environmental Protection Agency (EPA), under authority of the Resource Conservation and Recovery Act of 1976 (RCRA), has developed a national program for the management of hazardous waste. RCRA places the program within the federal province, but also includes provisions for EPA to authorize a state program to assume primary responsibility for implementing the federal program. On January 31, 1986, EPA granted the State of Oregon Final Authorization to manage the base RCRA program (i.e., that part of the program in existence prior to the Hazardous and Solid Waste Amendments of 1984).

On November 8, 1984, the President signed into law a set of comprehensive amendments to RCRA, entitled the Hazardous and Solid Waste Amendments of 1984 (HSWA). These amendments require EPA to make extensive changes to the federal hazardous waste management rules, during the period from November 1984 through May 1990. States are required to make similar changes to their rules, to maintain authorization for the base RCRA program and to be eligible for additional authorization to implement HSWA-related regulations.

Pursuant to HSWA, EPA has promulgated and is continuing to promulgate a large number of new regulations and amendments to existing regulations. Also, EPA periodically makes amendments to the base RCRA program rules.

The Department intends to propose the adoption of these new regulations and amendments in groups or "clusters", approximately once each six months. EPA is encouraging states to use this approach and has established regulatory deadlines by which states must adopt specific rule clusters.

In accordance with these requirements, the Department now requests authorization to conduct a public hearing, concerning the adoption of a group of these new federal rules and the repeal of one existing state rule which is more stringent than a new federal rule. The Department is also taking this opportunity to propose amendments to the existing state reporting requirements for hazardous waste generators and management facilities. A draft hearing notice, Statement of Need, and Statement of Land Use Consistency are attached. The Commission is authorized to adopt hazardous waste management rules by ORS 466.020 and is authorized to take any action necessary to maintain Final Authorization for the RCRA program by ORS 466.086.

### Discussion

The Department is proposing the adoption, by reference, of amendments to the federal rules concerning exportation of hazardous wastes, waste minimization certification by small quantity generators, the listing of materials as hazardous waste, the definition of solid waste, the closure and post-closure care of interim status surface impoundments, and corrective action plans for hazardous waste land disposal facilities. The Department is also proposing to make some changes to existing state rules.

In order to maintain authorization for the RCRA program, the state must adopt all of these federal rules or equivalent rules, within specified timeframes ranging from July 1, 1988 to July 1, 1990. Some of these rules are HSWA requirements and, as explained below, are already in effect in Oregon, but currently administered and enforced by EPA. The Department believes this dual regulation is undesirable. For this reason and to better protect public health, safety and the environment, the Department believes that these federal rules should be adopted by the state as soon as possible.

Each of the proposed new rules and proposed changes to existing rules are discussed below. The title of each rule and the date EPA published it in the Federal Register (or, in the case of an existing state rule, its citation) are underlined. A brief summary of each new rule or proposed rule amendment follows.

### Exports of Hazardous Waste (August 8, 1986 Federal Register).

Prior to HSWA, a state with Final Authorization, such as Oregon, assumed primary responsibility for implementing the federal hazardous waste program. When new, more stringent federal requirements were promulgated, the state was obligated to enact equivalent requirements within specified time frames. However, the new federal requirements did not take effect in the authorized state until they were adopted by the state.

In contrast, new federal requirements and prohibitions, adopted pursuant to HSWA, take effect across the nation without regard to whether a state has an authorized RCRA program or not. States must still adopt HSWA provisions as state law to retain Final Authorization. However, EPA is directed to enforce these requirements until the state adopts them and EPA has granted authorization for the state to manage these new parts of the program.

One such set of HSWA regulations are the August 8, 1986 hazardous waste export regulations. These rules amend existing federal rules pertaining to both the exportation and importation of hazardous waste and to the disposition of waste pesticides generated by farmers. The amendments primarily affect the rules concerning exports. The rules pertaining to imports and to farmers are renumbered, but are not significantly changed. In summary, these amendments prohibit exports of hazardous waste unless:

1. Notification of the intent to export is submitted to EPA at least 60 days prior to the intended date of shipment;
2. Prior written consent is received by EPA from the receiving country;
3. A copy of the prior written consent is attached to the manifest; and
4. The shipment conforms to the terms of the written consent.

The amendments also expand the reporting and recordkeeping requirements for exporters of hazardous waste.

The previous federal rules also required prior notification of intent to export hazardous waste. However, there was no requirement that the prior approval of the receiving country be obtained. The exporter merely needed to obtain confirmation that the waste had been received by the foreign consignee. This was a major concern to Congress. Congress wanted to assure that the foreign country knew what it was receiving and that the exporter complied with any requirements stipulated by the receiving country.

The State of Oregon has a current rule, OAR 340-102-050, which amends the previous federal rules pertaining to exports and imports of hazardous waste. For exporters, the state's rule requires that notification of intent also be sent to the Department, at least four weeks prior to shipment. For the importation of hazardous waste, the state's rule requires that both the foreign generator and the U.S. importer or his agent sign the certification statement on the manifest. The federal rules only require the signature of the U.S. importer or his agent.

The state also has an existing rule, OAR 340-102-051, which amends the federal rule pertaining to farmers. The state's rule requires that farmers disposing of waste pesticides from their own use, must comply with both the federal rule and with Division 109 of the Department's rules. This Division includes additional requirements for the management of waste pesticides and pesticide containers. As noted above, the federal rule pertaining to farmers has been renumbered, but is otherwise unchanged.

The Department is not proposing to change these two existing state rules. The rules are proposed to be renumbered, however, to correspond to the renumbering of the equivalent federal rules.

Waste Minimization Certification by Small Quantity Generators (October 1, 1986 Federal Register).

This rule is another HSWA requirement. EPA has amended the federal small quantity generator rules which the Commission adopted by reference on May 29, 1987. Previously, the federal rules exempted small quantity generators from having to certify, on the manifest, that they had taken steps to minimize their waste generation. This amendment adds that requirement. This requirement was not included in the previous federal rules only because it was not part of EPA's original proposal and the agency felt that time for additional public comment on this issue should be provided.

It is important to note that this federal rule does not impose any specific waste minimization requirements. Rather, small quantity generators are simply required to certify that they have made a "good faith effort" to minimize their waste generation and to select the best management method available to them which they can afford. EPA states, in the preamble to the rule, that it would not expect generators to maintain any records related to the minimization certification and that no agency action would be taken against generators for failure to take a specific action related to waste minimization.

The Department has an emerging Waste Reduction program that is currently just a technical assistance program. However, an advisory committee is presently considering ways to make the program more effective. The Department may, therefore, return to the Commission in the future and propose the adoption of specific waste minimization standards or requirements.

The Department has been delayed in proposing the adoption of this federal rule, because statutory authority to impose waste minimization requirements was unclear, until Senate Bill 116 was passed by the 1987 Legislature. As a practical matter, however, adoption of this rule will have little affect in Oregon. Oregon requires use of the federal manifest form and the new certification statement has been included on that form since October 1986. Accordingly, small quantity generators in this state have already been complying with this rule for more than a year.

Additional Listed Wastes (October 24, 1986 Federal Register).

This HSWA rule adds four wastes to the "K" list of hazardous wastes in the federal rules. The wastes are generated during the production of ethylenedithiocarbamic acid (EBDC) and its salts. The wastes and their identification numbers are:

- K123 Process wastewater (including supernatant, filtrates and washwaters) from the production of EBDC and its salts;
- K124 Reactor vent scrubber water from the production of EBDC and its salts;

- K125 Filtration, evaporation, and centrifugation solids from the production of EBDC and its salts; and
- K126 Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of EBDC and its salts.

ORS 466.005(6)(b) requires that before designating these wastes as "hazardous wastes", the Commission must find that these wastes may:

- A. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
- B. Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

The hazardous constituent in each of the above wastes is ethylene thiourea (ETU). EPA has determined that ETU is carcinogenic, teratogenic and shows evidence of mutagenicity. Also, EPA has determined that ETU is typically present in each of these wastes at significant levels. EPA's discussion of the threat of EBDC wastes to human health and the environment are included on pages 37725 and 37726 of the attached October 24, 1986 Federal Register.

Interim Status Standards for Closure and Post-Closure Care of Surface Impoundments (March 19, 1987 Federal Register).

These rules amend the base RCRA program and concern the closure and post-closure care of existing, nonpermitted, hazardous waste surface impoundments. Under the federal rules, existing facilities are granted "interim status" by EPA and are allowed to continue operating, until a permit is issued. The State of Oregon does not recognize interim status. However, existing, nonpermitted facilities are allowed to continue operating, if they comply with the federal interim status rules and with the Department's rules.

The federal rules provide parallel, but separate requirements for interim status and permitted facilities. The purpose of these amendments is to make the interim status standards for closure and post-closure care of surface impoundments conform to the more stringent standards for permitted facilities.

Previously, the interim status rules required owner/operators to remove all wastes and contaminated materials at closure or to demonstrate that the remaining wastes were no longer "hazardous wastes." In the case of listed wastes, this meant removal of all hazardous wastes and hazardous constituents to background levels. However, for characteristic wastes, this meant removal of wastes only to the point that the remaining wastes no longer exhibited the hazardous characteristic. This standard could allow significant amounts of potentially hazardous substances to remain in place at the site.

The new interim status rules (and the current rules for permitted facilities) require that the facility be considered a landfill and comply with the more comprehensive landfill closure/post-closure requirements, if any hazardous wastes or constituents are left in place that pose a substantial present or potential threat to human health or the environment. This determination is to be made on a site-specific basis. EPA believes that regulating such sites as landfills affords better protection of human health and the environment.

Closure and Post-Closure Care of Surface Impoundments (OAR 340-104-228).

This existing state rule is more stringent than the federal rules described above. As indicated, the federal rules allow owner/operators of hazardous waste surface impoundments the option of closing as landfills. Under the state's rule, owner/operators must make "all reasonable efforts" to affect removal or decontamination before the facility may be closed as a landfill.

There are both advantages and disadvantages to the state's rule. The primary advantage is that with less waste left in place, there may be less likelihood for future problems at the site. The major disadvantages include:

1. The process of excavation may spread contamination to previously uncontaminated areas;
2. As a result of recent rule amendments, surface impoundments are now required to have the same type of double liner systems that landfills have. Accordingly, from an environmental protection standpoint, there is no benefit in moving wastes from impoundments that are so equipped to landfills;
3. In some cases, it is clear at the outset that complete removal (i.e., "clean closure") is not possible or practical. However, the owner/operator must still make all reasonable efforts to affect removal, before being allowed to close the facility as a landfill;
4. "Clean closure" merely moves the waste from one disposal site to another and adds the risk of transportation accidents; and
5. "Clean closure" may be more expensive than in-place closure as a landfill.

An example of the problems with the current rules may be found at the Chem-Security Systems, Inc. (CSSI) facility at Arlington, Oregon. CSSI has a surface impoundment on the same property as its landfill site. Both the impoundment and the landfill are equipped with double liner systems and both are located in the same hydrogeologic setting. From an environmental protection standpoint, it would be reasonable to leave wastes in place and to close the impoundment as a landfill. However, the state's rules require that the wastes be taken from the impoundment, moved across the site and

placed in the existing landfill area. This is costly to the company and exposes workers to additional risk.

Another example may be found at Tektronix, Inc. in Beaverton, Oregon. The company has a surface impoundment located in an active operational area. There are aboveground and underground tanks and piping nearby. Removal of the impoundment's liner would endanger the structural integrity of these adjacent systems. However, a strict interpretation of the current state rule requires that the liner be removed.

It is the Department's policy to generally be consistent with the federal program and to be more stringent only if there is a clear and compelling need to do so. Upon reconsideration of OAR 340-104-228, the Department now finds that there is not a clear and compelling need to be more stringent. As indicated above, the advantages to a more stringent rule may be more than offset by the disadvantages. Accordingly, the Department is now proposing that OAR 340-104-228 be repealed.

Technical Corrections to the Definition of Solid Waste (June 5, 1987 Federal Register).

This rule amends the base RCRA program. The rule makes two minor corrections to the current federal rules concerning recycling and the definition of solid waste.

First, EPA is restoring a provision that was inadvertently deleted by a previous amendment. EPA is now clarifying that recycled materials are considered to be "wastes" only when they are recycled by burning, use in fuel production, or placement on land when this is not the material's normal manner of use. Previously, the rule implied that all recycled materials were wastes.

Second, EPA is deleting a redundancy in the federal rules and stating more clearly that hazardous wastes are always subject to regulation prior to being used in a manner constituting disposal, even if a waste-derived products' actual application is presently exempt from regulation. For example, flammable hazardous wastes may be burned as fuel in industrial boilers without a hazardous waste permit. However, storage of the waste-derived fuel, prior to burning, is subject to regulation.

Corrective Action Programs for Hazardous Waste Land Disposal Facilities (June 22, 1987 and September 9, 1987 Federal Register).

These rules amend the base RCRA program. EPA has revised the permit application requirements, for hazardous waste land disposal facilities, to allow for the development of corrective action plans after the permit is issued. Previously, the federal rules required that corrective action plans for "regulated units" (i.e., surface impoundments, waste piles, land treatment units or landfills that received waste after July 26, 1982), be completed before the permit could be issued. This requirement created significant delays in the issuance of permits. This delay became more serious with the passage, by Congress, of a HSWA requirement that final



disposition of all land disposal permit applications must be completed by November 8, 1988.

In addition, there was an inconsistency in the previous rules, in that corrective action plans for "non-regulated units" (e.g., units that stopped receiving wastes prior to July 26, 1982), were not required until after the permit was issued. For facilities with both regulated and non-regulated units, this sometimes caused the owner/operators to have to develop two separate corrective action programs. This was both inefficient and costly. As noted above, this amendment to the federal rules allows for the development of corrective action plans, for both regulated and non-regulated units, after the permit is issued. The new rule is therefore less stringent than the previous federal rule on this subject. Accordingly, the state is not required to adopt this amendment, to retain authorization. However, the Department agrees with EPA that the amendment should result in the more timely issuance of permits and a more efficient approach for implementing site cleanup programs.

The amendment in the September 9, 1987 Federal Register simply corrects a typographical error which EPA made in the June 22, 1987 rule amendment.

Quarterly Reporting (OAR 340-102-041) and Periodic Report (OAR 340-104-075).

These are existing state rules that specify the information that hazardous waste generators and owner/operators of permitted hazardous waste treatment, storage or disposal (TSD) facilities must periodically submit to the Department. The Department uses the reports for a number of purposes, including budgeting, assessment of generator fees, tracking wastes, determining trends in waste generation and waste minimization, and for providing required information to EPA, the Legislature and others.

Currently, there are two significant problems with these rules:

1. The list of required reporting elements is incomplete with respect to the federal requirements and is therefore less stringent than the corresponding federal rule; and
2. The reporting requirements only apply to generators who are required to use a manifest and to owner/operators of permitted facilities. Accordingly, many generators and TSD facilities are not required to report and the Department cannot accurately project program revenues and track wastes.

In regard to the first problem, the Commission has adopted by reference, federal rules which require generators to report on waste minimization activities. However, OAR 340-102-041 amends that federal rule and deletes the waste minimization reporting requirement. Prior to the passage of SB 116, by the 1987 Legislature, the Commission lacked clear authority to adopt rules pertaining to waste minimization. To maintain consistency with the federal program, this requirement must now be restored in the state's rule.

The second problem concerns the Superfund Amendments and Reauthorization Act of 1986 (SARA). This act provides that a state shall not be eligible for federal Superfund cleanup money, after October 1989, unless it can successfully certify to EPA that it has adequate capacity for treatment, destruction or secure disposition of all hazardous waste reasonably expected to be generated within the state for the next 20 years. The Department currently does not receive adequate data from the regulated community to determine the state's waste management capacity needs.

In addition, the Department's Hazardous Waste Program is currently suffering a significant shortfall in generator and TSD facility fee revenue (the Department requested a hearing authorization on this matter at the Commission's January 22, 1988 meeting). Annual fees are collected from both generators and TSD facilities. Lack of adequate data from generators contributed to inaccurate fee revenue projections during development of the program budget.

Many generators are not required to submit reports (e.g., very small generators who are exempt from the manifest requirement, and generators who manage all of their wastes on-site). The Department will be unable to identify the total universe of generators and determine required capacity unless all registered generators and all TSD facilities are required to submit periodic reports.

Accordingly, the Department is proposing to amend OAR 340-102-041 to require the submission of quarterly reports by all registered generators, and to require that the reports include a description of the generator's waste minimization activities. Some other minor changes are also proposed, for purposes of clarity.

In regard to TSD facilities, the Commission has adopted OAR 340-104-075 which requires quarterly reporting by the owner/operators of permitted treatment and storage facilities and monthly reporting for permitted disposal facilities. However, most of the TSD facilities in Oregon do not yet have RCRA permits and are not subject to this rule.

The Commission has also adopted, by reference, federal rules which require owner/operators of non-permitted TSD facilities to submit periodic reports. However, under these rules, reports are due only once each two years. This reporting frequency does not provide the Department with the up-to-date information it requires to manage the program or track wastes. Accordingly, the Department is proposing to amend OAR 340-104-075, such that the reporting requirements for nonpermitted facilities would be identical to those for permitted facilities. The Department also proposes some changes for purposes of clarity and to make the rule more consistent with the equivalent federal rule.

#### Summation

1. The State of Oregon currently has final authorization to assume primacy for a comprehensive hazardous waste management program.

2. In order to maintain final authorization, federal law requires that the state adopt new federal requirements and prohibitions, within specified time frames, and that the state not retain regulations that are less stringent than the new federal regulations.
3. The Department is proposing the adoption of a group of new federal regulations and the repeal of an existing state rule that is more stringent than one of these new federal rules. The Department also proposes to renumber two existing state rules, to correspond to the renumbering of the equivalent federal rules. In addition, the Department proposes the amendment of two existing state rules, concerning reporting requirements for hazardous waste generators and management facilities.
4. The Department requests authorization to conduct a public hearing on these matters.
5. The Commission is authorized to adopt hazardous waste management rules by ORS 466.020 and is authorized to take any action necessary to maintain RCRA authorization by ORS 466.086.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission authorize the Department to conduct a public hearing, to take testimony on these proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102, and 104.

*Mike Hansen*  
for  
Fred Hansen

- Attachments
- I. Statement of Need for Rulemaking
  - II. Statement of Land Use Consistency
  - III. Draft Hearing Notice
  - IV. Draft Rules, OAR 340, Divisions 100, 102, and 104
  - V. Federal Registers (Chronological Order)

Bill Dana:f  
ZF2906  
229-6015  
February 25, 1988

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF AMENDING ) STATEMENT OF NEED FOR  
OAR CHAPTER 340, ) RULEMAKING  
DIVISION 100, 102, and 104 )

STATUTORY AUTHORITY:

ORS 466.020 requires the Commission to:

- (1) Adopt rules to establish minimum requirements for the treatment storage, and disposal of hazardous wastes, minimum requirements for operation, maintenance, monitoring, reporting and supervision of treatment, storage and disposal sites, and requirements and procedures for selection of such sites.
- (2) Classify as hazardous wastes those residues resulting from any process of industry, manufacturing, trade, business or government or from the development or recovery of any natural resources, which may, because of their quantity, concentration, or physical chemical or infectious characteristics:
  - (a) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
  - (b) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
- (3) Adopt rules pertaining to hearings, filing of reports, submission of plans and the issuance of licenses.
- (4) Adopt rules pertaining to generators, and to the transportation of hazardous waste by air and water.

NEED FOR THE RULES:

The State of Oregon is currently authorized, by the federal government, to manage the comprehensive hazardous waste management program mandated by Congress under the Resource Conservation and Recovery Act (RCRA). In order to maintain authorization, the state must adopt new federal rules and repeal any existing state rules which are less stringent, within specified time frames. Loss of authorization would result in a federally-operated program in the state. The Oregon Legislature supports state authorization and has granted the Department and the Commission authority to take any action necessary to maintain Oregon's authorization.

The Department of Environmental Quality needs to expand the universe of hazardous waste generators and of owners and operators of hazardous waste management facilities who are required to submit periodic reports to the Department. This information is necessary, to obtain a more accurate data base for planning and implementation of the Department's hazardous waste program, and to provide for state waste management capacity data, as required by federal law.

PRINCIPAL DOCUMENTS RELIED UPON:

New federal hazardous waste management rules published in the Federal Register on August 8, 1986; October 1, 1986; October 24, 1986; March 19, 1987; June 5, 1987; June 22, 1987; and September 9, 1987. Existing state rules, OAR Chapter 340, Divisions 100, 102, and 104. These documents are available for review, during normal business hours, at the Department's office, 811 S. W. Sixth Avenue, Portland, Oregon, eighth floor.

FISCAL AND ECONOMIC IMPACT:

The new federal regulations may increase the costs of hazardous waste management for some people in this state. However, any increased costs associated with these new standards will occur irrespective of the Department's proposed rule amendments. The new standards for hazardous waste generators, and for owners and operators of hazardous waste management facilities, have already been promulgated and are currently administered by the U.S. Environmental Protection Agency (EPA). In the event that the state does not also adopt these new standards, EPA will continue to enforce and administer them in Oregon.

The repeal of an existing state rule concerning closure and post-closure care of hazardous waste surface impoundments and the adoption of a similar, but less stringent, federal rule may lower the costs of hazardous waste management for some people.

Expanding the reporting requirements to include hazardous waste generators and handlers, who are currently not required to report, will increase the costs of hazardous waste management slightly for those people.

The small business impact is identical to that described above.

ZF2906.1

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF AMENDING                    )  
OAR CHAPTER 340,                                )  
DIVISIONS 100, 102, and 104                )

LAND USE CONSISTENCY

The proposal described appears to be consistent with all statewide planning goals. Specifically, the rules comply with Goal 6 because they modify existing rules in a manner that ensures the safe management of hazardous waste generation, storage, transportation, treatment and disposal, and thereby provide protection for air, water and land resource quality.

The rules comply with Goal 11 by promoting hazardous waste reduction at the point of generation, beneficial use, recycling, treatment, and by controlling disposal site operations. They also intend to assure that current and long-range waste disposal needs will be accommodated.

Public comment on this proposal is invited and may be submitted in the manner described in the accompanying Public Notice of Rules Adoption.

It is requested that local, state and federal agencies review the proposal and comment on possible conflicts with their programs affecting land use and with statewide planning goals within their jurisdiction. The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts thereby brought to its attention.

ZF2906.2

*Oregon Department of Environmental Quality*

# **A CHANCE TO COMMENT ON...**

**Public Hearing**

Date Prepared: Apr. 1, 1988  
Hearing Date: Apr. 19, 1988  
Comments Due: Apr. 22, 1988

**WHO IS  
AFFECTED:**

Persons who manage hazardous waste, including generators, and owners and operators of hazardous waste treatment, storage and disposal facilities.

**WHAT IS  
PROPOSED:**

The Department of Environmental Quality (DEQ) proposes to amend OAR Chapter 340, Divisions 100, 102, and 104, to include recently promulgated federal requirements. This is necessary to assure equivalence to the federal program and maintain Final Authorization, from the federal government, to manage a comprehensive hazardous waste management program in Oregon. The DEQ also proposes to expand the universe of hazardous waste generators and handlers, who are required to submit periodic reports to the Department.

**WHAT ARE THE  
HIGHLIGHTS:**

- o Additions to the lists of materials designated as hazardous wastes.
- o New regulations concerning hazardous waste exports.
- o New regulations concerning closure and post-closure care of existing surface impoundments, and the repeal of a current rule on this subject.
- o New regulations concerning reporting requirements for hazardous waste generators and management facilities.
- o Technical corrections to the definition of "solid waste."
- o New regulations concerning the development of corrective action plans for permitted hazardous waste disposal facilities.
- o New regulations requiring small quantity generators of hazardous waste to certify that they have instituted a waste minimization program.



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.

HOW TO  
COMMENT:

A Public Hearing is scheduled for:

9:00 a.m.  
Tuesday, April 19, 1988  
DEQ's Portland Office  
811 S.W. Sixth Ave.  
4th Floor Conference Room

Written comments should be submitted at the public hearing or sent to DEQ, Hazardous and Solid Waste Division, Attn: Bill Dana, 811 S.W. 6th, Portland, Oregon 97204, by April 22, 1988.

WHAT IS THE  
NEXT STEP:

After the public hearing, DEQ will evaluate the comments, prepare a response to comments and make a recommendation to the Environmental Quality Commission in June 1988. The Commission may adopt the amendments as proposed, adopt modified amendments as a result of the testimony received or decline to adopt any amendments.

For more information, or to receive a copy of the proposed rule amendments, call Bill Dana at (503) 229-6015 or toll-free, at 1-800-452-4011, in the State of Oregon.

ZF2906.3



Before the Environmental Quality Commission of the State of Oregon

In the Matter of Amending                    ) Proposed Amendments  
OAR 340, Divisions 100, 102, and        )  
104    )

Unless otherwise indicated, material enclosed in brackets [ ] is proposed to be deleted and material that is underlined is proposed to be added.

1. Rule 340-100-002 is proposed to be amended as follows:

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-100-002 (1) Except as otherwise modified or specified by OAR Chapter 340, Divisions 100 to 106, the rules and regulations governing the management of hazardous waste, including its generation, transportation by air or water, treatment, storage and disposal, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Parts 260 to 266, 270 and Subpart A of 124, amendments thereto promulgated prior to July 1, 1986, and amendments listed below in section (2) of this rule are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.005 to 466.080, and 466.090 to 466.215.

(2) In addition to the regulations and amendments promulgated prior to July 1, 1986, as described in section (1) of this rule, the following amendments to Title 40 Code of Federal Regulations, Parts 260 to 266, 270 and Subpart A of 124, as published in volumes 51 and 52 of the Federal Register (FR), are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.005 to 466.080, and 466.090 to 466.215:

(a) Amendments pertaining to liability coverage for hazardous waste management facilities, in 51 FR 25354-56 (July 11, 1986).

(b) Revised standards for hazardous waste storage and treatment tank systems, in 51 FR 25470-86 (July 14, 1986).

(c) Amendments to the rules concerning identification and listing of hazardous waste, in 51 FR 28298-310 (August 6, 1986).

(d) Technical corrections to the HSWA final codification rule, in 51 FR 28556 (August 8, 1986).

(e) Amendments to the rules concerning exports of hazardous waste, in 51 FR 28682-86 (August 8, 1986).

(f)[(e)] Corrections to the revised standards for hazardous waste storage and treatment tank systems, in 51 FR 29430-31 (August 15, 1986).

(g) [(f)] Amendments clarifying the listing for spent pickle liquor from steel finishing operations, in 51 FR 33612 (September 22, 1986).

(h) Amendments concerning the waste minimization certification by hazardous waste generators, in 51 FR 35192-94 (October 1, 1986).

(i) Amendments to the rules concerning the identification and listing of hazardous waste, in 51 FR 37728-29 (October 24, 1986).

(j) Amendments to the interim status standards for hazardous waste surface impoundments, in 52 FR 8708-9 (March 19, 1987).

(k) [(g)] Technical corrections to the rules concerning burning of hazardous waste fuel and used oil fuel in boilers and industrial furnaces, in 52 FR 11821-22 (April 13, 1987).

(l) Technical corrections to the definition of solid waste, in 52 FR 21306-7 (June 5, 1987).

(m) Amendments to the rules concerning the development of corrective action programs for hazardous waste land disposal facilities, in 52 FR 23450 (June 22, 1987).

(n) Correction to the amended rules concerning the development of corrective action programs for hazardous waste land disposal facilities, in 52 FR 33936 (September 9, 1987).

2. Rule 340-102-041 is proposed to be amended as follows:

**Quarterly reporting.**

340-102-041 (1) The provisions of this rule replace the requirements of 40 CFR 262.41.

(2) A generator of hazardous waste [who is required by 40 CFR 262.20 to use a manifest when shipping wastes off-site,] shall submit Quarterly Reports to the Department:

(a)(A) The Quarterly Report shall [contain at least] include, but not be limited to the following information:

(i) A copy of the completed manifest for each shipment made during the calendar quarter; [and]

(ii) A listing of all additional waste generated during the quarter that was sent off-site without a manifest or was used, reused or reclaimed on-site, on a form provided by the Department. The listing shall include [at least], but not be limited to:

(I) The generator's name and address;

(II) The generator's U.S. EPA/DEQ Identification Number;

(III) Identification of the calendar quarter in which the waste was generated;

(IV) The type and quantity of each waste generated, by EPA code number; and

(V) The disposition of each waste, including the identity of the receiving party for wastes shipped off-site and handling method[.];

(iii) A description of the efforts undertaken during the quarter to reduce the volume and toxicity of wastes generated and to recycle wastes, on a form provided by the Department;

(iv) A description of the changes in volume and toxicity of wastes actually achieved during the quarter, in comparison to previous years, to the extent such information is available, on a form provided by the Department; and

(v) If no hazardous waste was generated during the quarter, a statement to that effect, on a form provided by the Department.

(B) The Quarterly Report must be accompanied by the following certification signed and dated by the generator or his authorized representative:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(3) Any generator who treats, stores, or disposes of hazardous waste on-site must also submit a report covering those wastes and activities in accordance with the provisions of [Divisions 104 and 105] rule 340-104-075 and of 40 CFR, Part 266.

3. Rule 340-102-050 is proposed to be amended as follows:

[International shipments] Exports of Hazardous Waste

349-102-050 (1) Any person who is required to comply with 40 CFR 262.50 through 262.58 shall also comply with section[s] (2) [and (3)] of this rule.

(2) When shipping hazardous waste outside the United States, the generator must notify the Department in writing four weeks before the initial shipment of hazardous waste to each country in each calendar year;

(a) The waste must be identified by its EPA hazardous waste identification number and its DOT shipping description;

(b) The name and address of the foreign consignee must be included in this notice;

(c) These notices must be sent to[:] the Department of Environmental Quality, Hazardous Waste Section.

[Hazardous Waste Section  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, OR 97204]

[(3)(a) the requirements of subsection (3)(b) of this rule replace the provisions of 40 CFR 262.50(D)(2).

(b) In addition to the generator's signature on the certification statement, the U.S. importer or his agent must also sign and date the certification and obtain the signature of the initial transporter.]

4. Rule 340-102-051 is proposed to be amended as follows:

**Farmers.**

[340-102-051] 340-102-070 In addition to the provisions of 40 CFR [262.51] 262.70, a farmer disposing of waste pesticides from his own use which are hazardous wastes shall comply with the requirements of Division 109 of these rules.

5. Rule 340-104-075 is proposed to be amended as follows:

**Periodic report.**

340-104-075 (1) The provisions of this rule replace the requirements of 40 CFR 264.75 and 40 CFR 265.75.

(2) The owner or operator must prepare and submit an operating report to the Department, on a [an approved] form provided by the Department. Disposal facility reports are due monthly within 45 days after the end of each calendar month, and treatment and storage facility reports are due within 45 days after the end of each calendar quarter. The report must cover facility activities during the previous month or quarter, as appropriate, and must include, but need not be limited to the following information:

- (a) The EPA identification number, name, and address of the facility;
- (b) The period covered by the report;
- (c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the period; for imported shipments, the report must give the name and address of the foreign generator;
- (d) A description of the quantity of each hazardous waste the facility received during the period and the final handling method for each waste. For off-site facilities, this information must be listed by EPA identification number of each generator;
- (e) The method of treatment, storage, or disposal for each hazardous waste;
- (f) (Reserved)
- (g) The most recent closure cost estimate under 40 CFR 264.142, or 40 CFR 265.142, as appropriate, and, for disposal facilities, the most recent post-closure cost estimate under 40 CFR 264.144, or 40 CFR 265.144, as appropriate; [and]
- (h) A certification signed by the owner or operator of the facility or his authorized representative as required by 40 CFR 270.11(b)[.];
- (i) Copies of manifests or other shipping documents for all hazardous wastes received or a listing of the information from each manifest or shipping document; and
- (j) Monitoring data under 40 CFR 265.94(a)(2)(ii) and (iii), and (b)(2), where required.

(3) The owner or operator of a treatment or storage facility that receives hazardous waste from off-site, for treatment or storage prior to shipping the waste elsewhere, becomes the generator of that waste pursuant to 40 CFR 262.10(f) and 40 CFR 265.71(c), and must comply with the provisions of Division 102, including the reporting requirements in OAR 340-102-041.

6. Rule 340-104-228 is proposed to be repealed as follows:

[Closure and post-closure care of surface impoundments.]

[340-104-228 (1) The provisions of 40 CFR 264.228(a)(1), (c) and (d) are deleted and replaced with the requirements of sections (2), (3) and (4) of this rule.

(2) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 40 CFR 261.3(d) applies.

(Comment: The state program is more stringent than the federal program in that it requires the removal of all wastes, etc., at closure whereas the federal program gives the option of closing with wastes left in place.)

(3) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in section (2) of this rule, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility in accordance with the closure requirements of 40 CFR 264.228(a)(2) and perform post-closure care in accordance with the closure and post-closure care requirements of 40 CFR 264.228(b).

(4)(a) The owner or operator of a surface impoundment that does not comply with the liner requirements of 40 CFR 264.221(a) and is not exempt from them in accordance with 40 CFR 264.221(b) must:

(A) Include in the closure plan for the surface impoundment under 40 CFR 264.112 both a plan for complying with section (2) of this rule and a contingency plan for complying with section (3) of this rule in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent post-closure plan under 40 CFR 264.118 for complying with section (3) of this rule in case not all contaminated subsoils can be practicably removed at closure.

(b) The cost estimates calculated under 40 CFR 264.142 and 264.144 for closure and post-closure care of a surface impoundment subject to this section must include the cost of complying with the contingent closure plan and the contingent post-closure plan.]

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Friday  
August 8, 1986

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**Part III**

**Environmental  
Protection Agency**

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**40 CFR Parts 260, 261, 262, 263, and 271  
Hazardous Waste Management System;  
Exports of Hazardous Waste; Final Rule**

## ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 260, 261, 262, 263, and 271

[SW-FRL-3038-3]

### Hazardous Waste Management System; Exports of Hazardous Waste

**AGENCY:** Environmental Protection Agency.

**ACTION:** Final rule.

**SUMMARY:** On March 13, 1986, the U.S. Environmental Protection Agency (EPA) proposed regulations under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), that would apply to exports of hazardous waste (51 FR 10146). EPA is today promulgating the final regulations on this subject. Consistent with HSWA, the regulations prohibit the export of hazardous waste unless certain requirements are met. These requirements include advance written notification to EPA of the plan to export hazardous waste, prior written consent to such plan by the receiving country, attachment of a copy of the receiving country's written consent to the manifest accompanying each waste shipment, and conformance of the shipment to such consent. In addition to provisions concerning the preceding requirements, today's rule includes provisions governing special manifest requirements, exception reporting, annual reporting, recordkeeping, transporter responsibilities, confidentiality, and State authorization.

**DATES:** Effective Date: November 8, 1986. Exports are prohibited on or after the effective date except in compliance with these regulations. Accordingly, unless consent by the receiving country has been obtained by that date, an export cannot take place. EPA will begin accepting notifications in accordance with these regulations immediately in order to allow time to obtain consent from a receiving country by the effective date of these regulations. Exporters are, therefore, encouraged to submit notifications expeditiously in order to allow time to obtain consent by November 8, 1986, for exports to occur on or soon after that date.

**ADDRESSES:** The OSW docket is located at: EPA RCRA Docket (Sub-basement), 401 M Street, SW., Washington, DC 20460.

The docket is open from 9:30 to 3:30 Monday through Friday, except for Federal holidays. The public must make

an appointment to review docket materials. Call Mia Zmud at 475-9327 or Kate Blow at 302-4675 for appointments. The public may copy a maximum of 50 pages of material from any one regulatory docket at no cost. Additional copies cost \$.20/page.

**FOR FURTHER INFORMATION CONTACT:** Carolyn K. Barley, (202) 382-2217, Office of Solid Waste, Room S-257 (WH-563), 401 M Street, SW., Washington, DC 20460 or the toll-free RCRA Hotline: (800) 424-9346 (in Washington, DC, call (202) 382-3000).

#### SUPPLEMENTARY INFORMATION:

##### Preamble Outline

- I. Authority
- II. Background and Summary of Final Rule
  - A. Existing Export Regulations
  - B. The Hazardous and Solid Waste Amendments of 1984
  - C. March 13, 1986 Proposed Rule
  - D. Summary of Final Rule
- III. Responses to Comments and Analysis of Issues
  - A. Applicability and General Requirements [§§ 262.50, 262.52]
  - B. Definitions [§ 262.51]
    1. Definition of "Receiving Country"
    2. Definition of "Exporter"
      - a. Appropriate Liabilities and Responsibilities
      - b. Applicability of the Export Requirements to Certain Hazardous Wastes
        - (1) Comments Suggesting that EPA Narrow the Applicability of Section 3017
        - (2) Comments Suggesting that EPA Broaden the Applicability of Section 3017
        - (3) Other Issues Related to the Applicability of 3017
      3. Other Definitions
    - C. Notifications of Intent to Export [§ 262.53]
      1. Sixty Day Advance Time
      2. Separate Notification for Each Shipment
      3. Notification Period (12 months vs. 24 months) [§ 262.53]
      4. Renotification [§ 262.53]
    - D. Procedures for the Transmission of Notification, Consent or Objection
    - E. Special Manifest Requirements [§ 262.54]
    - F. Annual Reports, Recordkeeping, and Exception Reports [§ 262.55, 262.56, 262.57]
    - G. Transporter Responsibilities
    - H. Small Quantity Generators
    - I. State Authority
      1. Effect on State Authorization
      2. Universe of "Hazardous Wastes" in Authorized States
    - J. Confidentiality
  - IV. Enforcement
    - A. EPA
    - B. U.S. Customs Service
    - C. Other Agencies
  - V. Effective Date of Final Regulations
  - VI. Economic, Environmental and Regulatory Impacts
    - A. Impact on Small Quantity Generators
    - B. Executive Order 12291—Regulatory Impact
    - C. Paperwork Reduction Act
    - D. Regulatory Flexibility Analysis

## VII. List of Subjects

### I. Authority

These regulations are being promulgated under the authority of sections 2002(a), 3002, 3003, 3006, 3007, 3008 and 3017 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6912(a), 6922, 6923, 6926, 6927, and 6937.

### II. Background and Summary of Final Rule

#### A. Existing Export Regulations

On February 26, 1980, EPA promulgated regulations under the Resource Conservation and Recovery Act of 1976 (RCRA) governing exports of hazardous waste. 45 FR 12732, 12743-12744 (codified at 40 CFR Parts 262 and 263). These regulations place certain requirements on generators and transporters regarding exports of hazardous waste in light of the special circumstances involved in international shipments. Since RCRA did not expressly address exports of hazardous waste, these provisions were promulgated primarily under RCRA sections 3002 (Standards Applicable to Generators of Hazardous Waste) and 3003 (Standards Applicable to Transporters of Hazardous Waste) and are limited in scope. A detailed description of EPA's existing export regulations can be found in the Supplemental Information accompanying the proposed rule for Exports of Hazardous Waste. 51 FR 8744 (March 13, 1986).

#### B. The Hazardous and Solid Waste Amendments of 1984

On November 8, 1984, the President signed into law a set of comprehensive amendments to RCRA, entitled the Hazardous and Solid Waste Amendments of 1984 (HSWA). These comprehensive amendments have far-reaching ramifications for EPA's hazardous waste regulatory program. Among other things, they add a new Section 3017 to RCRA specifically addressing hazardous waste exports.

Generally, subsection (a) of section 3017 provides that, beginning 24 months after enactment of HSWA, the export of hazardous waste is prohibited unless the person exporting such waste: (1) Has provided notification to the Administrator; (2) the government of the receiving country has consented to accept the waste; (3) a copy of the receiving country's written consent is attached to the manifest which accompanies the waste shipment and; (4) the shipment conforms to the terms

of such consent. In lieu of meeting the above requirements, a person may export hazardous waste if the United States and the government of the receiving country have entered into an international agreement establishing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of hazardous waste and the shipment conforms to the terms of such agreement.

Subsection (c) of section 3017 sets forth the requirement to notify the administrator before the shipment leaves the United States and specifies the information to be included in such notification. Subsections (d) and (e) establish procedures for obtaining the receiving country's consent to accept the waste. Subsection (f) addresses the effect of an international agreement on the requirements of Section 3017. Subsection (b) requires the Administrator to promulgate regulations necessary to implement section 3017. Subsection (h) provides that section 3017 does not preclude the Administrator from establishing other standards for the export of hazardous waste under sections 3002 and 3003 of RCRA. Congress also amended section 3008 of RCRA to provide criminal penalties for knowingly exporting hazardous waste without the consent of the receiving country or in violation of an existing international agreement between the United States and the receiving country.

Section 3017 of HSWA contains one additional requirement with which exporters were required to comply immediately upon enactment of HSWA: Subsection (g) requires any person exporting hazardous waste to file with the Administrator, no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous year. EPA codified this particular statutory requirement in its export regulations on July 15, 1985. 50 FR 28702, 28746.

### C. March 13, 1986 Proposed Rule

On March 13, 1986, EPA proposed to amend its hazardous waste export regulations to implement section 3017 and thereby improve its current program governing exports. 51 FR 8744. These specific amendments were placed in a revised Subpart E of 40 CFR Part 262. Because Subpart E currently includes special requirements governing imports of hazardous waste and the disposition of waste pesticides by farmers, these provisions were proposed to be moved to new Subparts F and G respectively

with no substantive changes. Amendments were also proposed to 40 CFR Parts 260 regarding confidentiality, Part 263 pertaining to transporters of hazardous waste, and Part 271 with respect to State authorization.

Readers should refer to the proposed rule for a discussion of the content, alternatives considered, and rationale for the positions taken in the proposal.

### D. Summary of the Final Rule

Today's final rule on the export of hazardous waste adopts most of the provisions of the proposed rule with certain modifications. In summary, today's rule prohibits exports of hazardous waste unless: (1) Notification of the intent to export is provided to the Administrator; (2) prior written consent is obtained from the receiving country; (3) a copy of the prior written consent is attached to the manifest; and (4) the shipment conforms to the terms of the written consent.

Changes arising out of comments on the proposed rule concern primarily: (1) The definition of exporter; (2) the definitions of receiving and transit countries; (3) collection of a copy of the manifest by U.S. Customs at the U.S. point of departure; (4) hazardous wastes for which notification and consent is required; (5) the period of time covered by a notification; (6) the effective date of the regulations; and (7) special requirements for exports by rail.

In addition to today's final rule on the export of hazardous waste, readers should be aware that pursuant to section 6(e) of the Toxic Substances Control Act, EPA has banned the export of polychlorinated biphenyls (PCBs) of 50 PPM or greater in the absence of an exemption. See 40 CFR 761.10. Today's rule on the export of hazardous waste does not affect this prohibition.

### III. Responses to Comments and Analysis of Issues

This section of the preamble addresses the major comments received by EPA on the proposed rule and describes the Agency's position on the major issues raised in the proposal and during the comment period. A separate background document responds to each comment received on the proposal which is not responded to in this preamble as part of the record for this rulemaking. Provisions retained as proposed and not discussed in this preamble are retained for the reasons set forth in the preamble to the proposed rule.

### A. Applicability and General Requirements [§§ 262.50, 262.52]

Section 262.50 describes the applicability of Subpart E. Since EPA is changing the definition of exporter [discussed in Section III.B.2. below], this section provides that Subpart E requirements are applicable not only to persons required to initiate the manifest which specifies a treatment, storage, or disposal facility (TSDF) in the receiving country as the designated facility but also to any intermediaries arranging for the export (i.e., export brokers). A reference to the requirements applicable to transporters transporting waste for export has also been added to this provision to direct transporters' attention to the applicable requirements of Part 263. As explained in the proposal, the special export requirements apply in addition to any applicable domestic requirements which apply independently (e.g., Part 262 requirements applicable to generators) except to the extent Subpart E specifically provides otherwise.

As in the proposal, this section also provides that the export requirements apply to all exports of hazardous waste unless an international agreement is entered into between the United States and the importing country which sets forth different requirements. As the United States has yet to enter into any such agreements, § 262.58 is reserved to address any agreements the United States may enter into in the future.

Section 262.53 summarizes the requirements applicable to exports. Some minor language changes have been made to this section to again reference transporter requirements of Part 263 and to reflect the delineation of responsibilities between transporters and other "exporters" of hazardous waste as discussed in Section III.B.2 below.

### B. Definitions [§ 262.51]

#### 1. Definition of "Receiving Country"

In the March 13, 1986 proposed rule, EPA defined "receiving country" as the foreign country of "ultimate destination" of a hazardous waste. It was EPA's intent to distinguish "receiving country" from "transit country" which was defined as any foreign country through which a hazardous waste passes en route to a receiving country. Prior consent was proposed to be required only from "receiving countries" not "transit countries." The Agency proposed, however, to exercise its discretion under Section 3017(h) to provide notification to transit countries.



EPA specifically requested comments concerning its proposed definition of receiving country, recognizing the importance of the term as used in section 3017. Various alternatives available for defining this term were noted in the proposal such as defining "receiving country" as: (1) All countries through which the waste passes; (2) the first country the waste enters; or, (3) the final destination of the waste. A number of comments were received on this issue, many of which were in agreement with the Agency's definition. However, some commenters recommended expanding the definition of "receiving country" to include any foreign country the waste passes through en route to its ultimate destination, i.e., "transit country."

The primary concern of these commenters was that, under the language of EPA's definition of receiving country, long-term storage or treatment could occur in a "transit country" without its consent so long as the waste would subsequently be sent elsewhere. Moreover, EPA would have no authority to prohibit long-term storage or treatment in a transit country where the transit country objected to the shipment. The scenario was presented where an exporter intended to ship a waste first to country "A" for treatment, then to country "B" for multi-year storage while the "ultimate" disposal facility in country "C" was prepared to receive and dispose of the waste. Under this scenario, even if countries "A" and "B" objected to the shipment, EPA would have no authority to prohibit the shipment to those countries. Concern was expressed that this would encourage unscrupulous exporters to evade consent requirements with sham long-term treatment and storage. In addition, the dangers involved in storing and/or treating the waste were suggested to be of equal concern as those involved in the ultimate disposal of the waste.

EPA is also concerned about long-term storage and/or treatment of U.S. waste in a foreign country. In fact, EPA's proposal explained that its intent was to require consent from the "ultimate destination" of the waste in contrast to countries where mere *transportation through or temporary storage incidental to transportation* was to occur.

The proposal, however, envisioned that although there may be several transit countries involved, there would be only one "ultimate destination" of the waste. The scenarios presented by commenters have brought to EPA's attention that not only was EPA's proposed regulatory language

ambiguous but that there may be, in rare circumstances, more than one country in which something more than mere transportation and/or temporary storage incidental thereto could occur. In order to ensure that prior consent is obtained from countries, in which treatment and/or long-term storage is to occur, the final rule defines "receiving country" as the foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal (except for temporary storage incidental to transportation). The final rule also redefines "transit country" as any foreign country, other than a receiving country, through which a hazardous waste is transported. These definitions reflect the intent of the proposal to exempt from the prior consent requirement mere transportation through or temporary storage incidental to transportation with the added recognition that, in rare circumstances, there may be more than one "receiving country."

In redefining the term "receiving country," EPA recognizes that there may be limits to an exporter's knowledge of further shipment of U.S. generated hazardous wastes from a treatment, storage or disposal facility (TSDF) in one foreign country to another. Thus, EPA interprets the term "receiving country" to include only those countries to which an exporter knows or can reasonably ascertain that the waste will be sent for treatment, storage or disposal. EPA cannot hold exporters responsible for independent decisions by foreign TSDFs to further export a hazardous waste.

The primary exporter is responsible for properly designating a country as a transit country. If any uncertainty arises regarding whether certain "storage" occurring in a foreign country is "storage incidental to transportation," primary exporters should refer, for guidance, to the preamble to the rule clarifying when a transporter handling shipments of hazardous waste domestically is required to obtain a storage permit. See 45 FR 86966 (December 31, 1980). Thus, in determining whether a country is a receiving country or a transit country, the factors to be considered are the nature of the handling of the waste in such country and the length of time the waste remains in such country. EPA is not at this time, however, placing a time limit on the length of time considered "temporary storage incidental to transportation." One of the commenters suggesting a broader definition of receiving country also recognized the need for an exception for temporary storage incidental to transportation.

That commenter recommended a 10-day limit consistent with domestic requirements. See 45 FR 86966 (December 31, 1980). EPA, however, does not feel it appropriate to impose a specific time limitation on storage incidental to transportation where exports are concerned. The time limitation in the rule referenced above was reached based upon the general nature of the transportation domestically. International transportation, on the other hand, may vary among foreign countries. EPA does not have, at this time, information which would allow it to devise a generally applicable time limitation for storage incidental to transportation internationally. To ensure the proper implementation of today's regulation, EPA will selectively review notifications to ensure that countries designated by exporters as transit countries are not, in fact, receiving countries. If EPA determines that a country is improperly designated as a transit country, it will require that country's prior consent to the waste shipment.

In EPA's view, the final definitions of receiving and transit countries and the decision to require notification of transit countries and both notification of and prior consent from receiving countries is consistent with the statute and best implements Congressional intent in enacting section 3017. Congress did not define the term "receiving country" in section 3017. The statutory language uses the term "receiving country" in the singular form which arguably indicates that Congress contemplated only one receiving country. On the other hand, however, use of the singular version may simply reflect the assumption that exports commonly would involve only one receiving country. The statutory language also provides for notification of the *treatment, storage or disposal* facility abroad to which the waste will be sent. This language arguably indicates that Congress contemplated notification of any country in which "treatment," storage" or "disposal" occurs. However, this notification requirement is qualified by the term "ultimate" treatment, storage or disposal facility. This arguably indicates that "receiving country" encompasses only the final destination of the waste with the phrase "treatment, storage or disposal facility" being used simply as the common phrase for identifying the hazardous waste facility which is the "ultimate" destination. To complicate matters further, however, "ultimate" storage is a contradiction in terms since EPA has defined "storage" as the holding of hazardous waste for a

temporary period at the end of which the hazardous waste is treated, disposed of or stored elsewhere. Thus, technically, storage could never be "ultimate," yet Congress used the term "storage" and must have intended it to have some content. An argument could be made that "ultimate" means the TSDF in a single foreign country when the waste is temporarily stored in such country and then moved to another facility in that same country for disposal. In this vein, the phrase "treatment, storage or disposal facility" would arguably evidence intent that notification and prior consent be obtained from any country in which treatment, storage or disposal occurs. Unfortunately, the legislative history of section 3017 does not shed any light on Congress' intent regarding the content of "receiving country."

In view of the ambiguity of this term, EPA believes that it is best defined as the country in which treatment, storage or disposal occurs but not a country in which mere transportation (including temporary storage incidental to transportation occurs. Neither the statutory language nor legislative history evidences a clear intent to require both notification and prior consent for mere transportation through a foreign country which would include, consistent with domestic transportation, temporary storage incidental to transportation.

In EPA's view, Congress was concerned with informing a foreign country and obtaining the prior consent from a country which is actually ending up with the waste whether through disposal, treatment or long-term storage. In other words, Congressional concern was with countries truly accepting the waste and taking significant action to deal with the waste. Generally, the considerations and ramifications for these countries will be different from and greater than those of countries in which only transportation occurs. Moreover, treatment and long-term storage in a foreign country can be a means to avoid domestic regulation of hazardous waste disposition and can pose problems similar to the actual disposal of hazardous wastes. For example, a surface impoundment engaged in "long term storage" of a waste is likely to present risks similar to an impoundment engaged in "disposal" of a waste, assuming the unit is designed, operated and located in a similar manner. Consent from foreign countries in which treatment or storage (other than incidental to transportation) occurs also is necessary to protect against attempts to avoid consent

requirements by labeling particular activities as long-term storage or treatment.

EPA believes that concerns associated solely with transportation through a country are addressed through notification alone which will provide a country with information to enable it to respond to accidents which may occur during transportation. Response is also assisted, and protection afforded for such activities, through the container, labeling and placarding requirements imposed on the transportation of hazardous waste both domestically and by other countries. The notification of transit countries also allows such country to take action to prohibit the entry of such waste into its borders. The treatment of transit countries in the final rule also furthers Congressional intent to impose a minimum of additional regulatory burdens on U.S. generators and administrative burdens on EPA while establishing a more comprehensive and responsible export policy. See 130 Cong. Rec. S9152 (daily ed. July 25, 1984); 129 Cong. Rec. H8163 (daily ed. October 6, 1983). Finally, EPA's definitions of receiving and transit countries and its decision to require prior consent of receiving countries and notification for transit countries is consistent with a new draft decision recently issued by the Organization for Economic Cooperation and Development (OECD) concerning the transboundary movement of hazardous wastes. (Draft Council Decision and Recommendation on Exports of Hazardous Waste from the OECD Area, March, 1986.)

## 2. Definition of Exporter

a. *Appropriate Liabilities and Responsibilities.* In the proposed rule, EPA defined "exporter" to be the person who is required to prepare the manifest in accordance with 40 CFR Part 262, Subpart B for a shipment of hazardous waste that specifies a TSDF in the receiving country as the facility to which the waste will be sent. Thus, for example, the exporter could be the generator in one case (see 40 CFR 260.10, 262.20), the owner or operator of a treatment, storage or disposal facility who initiates a shipment of hazardous waste in another (see 40 CFR 264.71(c), 265.71(c)), or a transporter who mixes hazardous waste of different DOT shipping descriptions in yet another (see 40 CFR 263.10(c)(2)). The proposal also discussed an alternative definition of exporter—any person who intends to export a hazardous waste. Under this definition, all parties involved in the export (i.e., the generator or person required to assume generator

responsibilities, transporter, and any export broker) would be required to comply with all of the export requirements and could be held liable for any failure to do so. Under such a definition, however, only one party would be expected to assume and perform particular duties (such as providing notification) on behalf of all the parties. The proposal noted that this alternative was similar to the treatment afforded generators where several persons meet the definition of generator (see 45 FR 72024 (Oct. 30, 1980)).

EPA rejected this alternative primarily because: (1) It is difficult to define the point at which intent to export occurs and the manifest constitutes clear evidence of such intent (e.g., a question arises as to whether an initial generator who sends its waste to a domestic recycling facility and that facility subsequently exports the waste for further recycling "intends" to export); (2) where several parties meet the definition of "exporter," confusion might occur regarding which party should provide notification on behalf of all the parties potentially causing delay and/or duplicative notification; (3) parties such as transporters should not be subject to liability for responsibilities more appropriately placed on generators or persons required to assume generator responsibilities; and, (4) the party preparing the manifest generally appeared to be in the best position to supply EPA with the information required in the notification, receive the EPA Acknowledgment of Consent for attachment to the manifest, and ensure that the shipment conformed with the terms of the receiving country's consent.

While some commenters supported EPA's proposed definition of exporter, others suggested that full potential liability for export notification and other violations should be placed on all parties engaged in the export. One commenter suggested that EPA could avoid duplicative notification by requiring transporters and brokers to submit a copy of the relevant notification and other documents with an appropriate certification, thereby creating an incentive for such persons to verify the information obtained from the person preparing the manifest. One commenter was especially concerned that, under the proposed rule, waste transporters and brokers who often actually arrange for the domestic transport, international transit, and ultimate treatment, storage, and disposal of the waste would be largely exempt from enforcement.

The Agency agrees, at least in part, with the concerns expressed by these

commenters. Although the Agency suggested in the preamble that the preparer of the manifest designating a foreign TSDF would remain liable for any violations of the duties imposed upon him when performed by a broker on his behalf, the Agency agrees with the commenter that brokers arranging for the export should also be held directly responsible for accurate notification and compliance with the consent of the receiving country. These persons are acting on behalf of the party required to initiate the manifest and often may be similarly situated. For example, a broker would be knowledgeable of most information required in a notification since he would be arranging for the export. Therefore, the Agency has added to the definition of exporter "any intermediary arranging for the export."

The term "intermediary" means "broker." An intermediary/broker is a party who arranges for an export by acting as a middleman between the party originating the manifest and another party involved in the export such as the transporter or foreign waste management facility. An intermediary/broker can be licensed or unlicensed, an agent or an independent contractor. The term "intermediary" excludes transporters, provided the transporter's role is limited to transporting the waste. The term would, however, include transporters if the transporter were also taking on intermediary responsibilities such as arranging for the management of the waste with the foreign TSDF.

With regard to the responsibilities and liabilities of transporters transporting waste for export, EPA is not, for the most part, making the changes suggested by these commenters. The proposed rule included two significant amendments to § 263.20. One prohibited a transporter from accepting a waste from an exporter unless an EPA Acknowledgment of Consent was attached to the manifest. The other required transporters to ensure that the EPA Acknowledgment of Consent accompanied the hazardous waste en route. In addition, existing regulations require transporters to send a copy of the manifest back to the generator (§ 263.20(g)) and to deliver the entire quantity of hazardous waste to the place outside the United States designated by the generator (§ 263.21(a)(4)). These duties parallel the duties placed on transporters of domestic waste shipments. EPA does not believe that transporters of hazardous waste for export should be held responsible for other elements of the notification and consent, such as ensuring that the waste meets the

description contained in the notification or that the quantity of waste consented to by the receiving country has not been exceeded. EPA does not believe it necessary or practical to require transporters to verify that the waste matches the description contained in the notification. This could be construed to necessitate periodic sampling and waste analysis by transporters who are generally not qualified to undertake these actions. In addition, it is possible that the originator of the manifest may employ a number of transporters to transport waste covered by a single notification. It does not seem equitable or practical to require each transporter to ensure that the total quantity consented to by the receiving country has not been exceeded.

Of course, if the transporter knows or is willfully blind to the fact that the waste does not conform with the terms of the consent, he may nonetheless be subject to criminal enforcement action under section 3008(d). In view of the availability of criminal sanctions for such actions, EPA is adding to the requirements applicable to transporters, the requirement that a transporter may not accept a waste for export where he knows the shipment does not conform to the Acknowledgment of Consent. Thus, whereas a transporter has no affirmative duty to ensure conformance of the shipment with the consent, if he is aware that the shipment is not in conformity, he has the duty to refuse to transport the waste.

To clarify its criminal enforcement authority under section 3008(d)(6) against a transporter who knowingly exports hazardous waste without the consent of the receiving country, the Agency is making another change to the definition of exporter. In so doing, EPA wishes to preclude any misunderstanding about the reach of section 3008(d) which might otherwise have been caused by the definition of "exporter" for Subpart E purposes. Therefore, in order to make clear its criminal enforcement authority under section 3008(d) while clearly delineating the limited administrative responsibilities of transporters, the final rule uses the term "primary exporter" to refer to the person defined as an "exporter" in the proposed rule, and, as discussed previously, any intermediary arranging for the export. This change makes clear that these persons are not the only parties which are "exporters" subject to certain responsibilities under section 3017 and criminal enforcement action under Section 306. Transporters transporting hazardous waste for export are also a type of "exporter."

The responsibilities of the primary exporter are contained in Part 263, Subpart E. Although under this revised definition, there may be more than one party acting as the primary exporter, e.g., "the person required to initiate the manifest . . . and any intermediary arranging for the export," the Agency expects one party to submit the notification, keep the required records, and submit the required annual report, etc. on behalf of all the parties. These parties should decide amongst themselves which party should perform these functions on behalf of the other parties meeting the definition of "primary exporter." This is similar to the situation where several parties meet the definition of generator. See 45 FR 72024, 72026 (October 30, 1980). Enforcement actions can, however, be taken against all primary exporters where equitable and in the public interest.

The responsibilities of transporters are identified in 40 CFR Part 263. These responsibilities include the two amendments to § 263.20 included in the proposed rule (with a minor adjustment for rail transportation discussed at Section G below), the existing requirements of §§ 263.20(g), 263.21 and 263.22(d), and the new requirements that a transporter may not accept hazardous waste for export if he knows the shipment does not conform with the Acknowledgment of Consent and he must deliver a copy of the manifest to the U.S. Customs official at the point the waste leaves the United States (discussed at Section E below). In EPA's view, Section 3017 accords it the discretion to determine who constitutes the "person who exports" or "person who intends to export" and to delineate the responsibilities of each person involved consistent with the intent of section 3017.

At the suggestion of commenters, EPA is also making one other change to the definition of exporter. Rather than define "primary exporter" as the person required to "prepare" a manifest, the final rule defines "primary exporter" as the person required to "originate" a manifest designating a foreign TSDF. The purpose of this revision is to make clear that it was and remains EPA's intent that liability is not solely on the individual who physically completes the manifest but rather on the person responsible for originating the manifest. It should be noted that "person" is broadly defined in § 260.10 to include, among others, individuals, corporations, and partnerships. An entity such as a corporation may comprise many individuals. Thus, many individuals can, in appropriate circumstances, be held

liable for non-compliance with the requirements applicable to a primary exporter. For example, the corporate president, vice-president, facility manager, and environmental officer may all be subject to criminal enforcement action under section 3008(d)(6) where such persons decide to export hazardous waste without the consent of the receiving country. EPA emphasizes that the definition of primary exporter does not limit EPA's authority to enforce criminally under section 3008(d)(6) against such parties. *Cf. United States v. Johnson & Towers, Inc.*, 741 F. 2d 662, 667 (3rd Cir. 1984) *cert. denied*, 105 S. Ct. 1171 (1985) (holding that definition of "person" for purposes of knowing unpermitted disposal of hazardous waste under section 3008(d)(2) is not limited to the "owners or operators" regulated under RCRA administrative requirements but rather extends as well to individual employees of the entity disposing of the waste).

*b. Applicability of the Export Requirements to Certain Hazardous Wastes.* Under EPA's proposed definition of "exporter," the regulations governing exports would be applicable to exports of hazardous waste initiated by persons required to prepare a manifest under 40 CFR Part 262, Subpart B or an equivalent provision in an authorized State program. Thus, exports of any hazardous wastes that are exempt from the manifest requirements of Part 262, Subpart B would not be subject to any of the export requirements. Accordingly, such hazardous wastes as samples, residues in empty containers, wastes generated in product transportation vehicles, certain wastes when recycled, and wastes generated by small quantity generators of less than 100 kg/mo would be excluded from the export requirements. *See, e.g.*, 40 CFR 261.4(c) and (d), 261.5, 261.6, and 261.7. In the preamble to the proposed rule, EPA questioned whether Congress intended to regulate for export wastes not regulated domestically and requested comment on whether EPA should expand the wastes subject to section 3017.

(1) *Comments Suggesting that EPA Narrow the Applicability of Section 3017.* Several commenters focused on recycled waste and suggested that all hazardous waste exported for use, reuse, reclamation or other recycling be exempt from the export requirements even when subject to the manifest requirement. Various reasons for this position were put forth including: (1) Additional administrative costs created by the regulations of hazardous waste

exported for recycling could damage or destroy the economic viability of such recycling and result in environmentally less preferable management; (2) due to the volatility of prices paid for recycled metals in international trade, the delay caused by waiting for the receiving country's consent could have a significant adverse economic impact; (3) recyclers have an economic incentive to be certain that their wastes are in fact recycled; therefore, more secure handling of wastes intended for recycling is assured; and (4) the stigma involved in treating hazardous wastes intended for recycling as "hazardous waste" might cause the receiving country to refuse consent. These commenters further argued that there is no indication of Congressional intent to include hazardous wastes for recycling under section 3017; in their view, the phrase "treatment, storage or disposal" as used in section 3017 does not include recycling. Lastly, these commenters cite other sections of RCRA and its legislative history as an indication of Congressional intent to foster all types of recycling of hazardous waste.

EPA does not agree that all hazardous wastes exported for use, reuse, reclamation or other recycling should be exempt from the export requirements. EPA's authority to regulate materials for recycling under Subtitle C has been fully discussed in other rule-makings and need not be repeated in detail here. *See* 48 FR 14472 (April 4, 1983); 50 FR 614 (January 4, 1985). Hazardous waste recycling and ancillary activities are within the statutory meanings of the terms "treatment, storage and disposal." In view of the absence of statutory language limiting the reach of these terms for purposes of section 3017, EPA does not believe Congress intended to exempt hazardous wastes for recycling which EPA fully regulates domestically. Similarly, the argument that hazardous wastes that are recycled do not require regulations because they are inherently valuable and do not generally pose significant risks also has been refuted elsewhere. *See, e.g.*, 48 FR at 14473 *et seq.*; 50 FR at 617-18. Moreover, although EPA is sympathetic to any impacts the requirement of consent may have with respect to some wastes when exported for recycling, where EPA has made the determination that a hazardous waste recycling activity poses sufficient risk domestically to be subjected to full regulation, there is no justification sufficient to override the need of a foreign country receiving such wastes to be accorded notification and the opportunity to accept or reject such waste. Full regulation domestically is

clear evidence that this is the type of waste for which foreign countries would also wish to receive notice and have the means by which to reject such waste and police activities involving such wastes. Narrowing the applicability of section 3017 as these commenters suggested might also encourage sham recycling activities. The potential for this is increased in the context of exports since the foreign facility is outside EPA's jurisdiction, thus making enforcement by EPA more difficult. Accordingly, the final rule continues to apply to all wastes for recycling, which are required to be manifested.

To accommodate commenters' concerns regarding stigmatization of exported recycled hazardous wastes by labeling these materials "hazardous wastes," EPA recommends that exporters include information in their notifications indicating that the waste involved is a "recyclable material" (see 40 CFR 261.6(a)(1)). EPA can then pass this information on to the foreign countries involved. EPA also is doubtful that the possibility of stigmatization or the economic impacts some commenters fear will prove significant. As a result of international discussion and agreement, many countries have become knowledgeable regarding the issue of transboundary movements of hazardous waste. For example, joint decisions and recommendations have been generated under the auspices of the Organization for Economic Cooperation and Development and by the Commission of European Communities. Accordingly, in many cases where recycling of a valuable material is involved, it is likely that the countries involved will demonstrate a sufficient degree of sophistication to respond appropriately and expeditiously to notifications concerning such activities. Moreover, in view of the means EPA intends to use to transmit information, delay on the United States' part and any consequent economic impacts which might result therefrom are unlikely.

The Agency wishes to point out that a relatively narrow set of hazardous secondary materials are not defined as solid wastes and, therefore, are not hazardous wastes when recycled in a particular manner (e.g., listed commercial chemical products that are to be reclaimed (50 FR 614, 619, *codified at* 40 CFR 261.2)). Thus, these materials would not be subject to the export requirements.<sup>1</sup> Exporters of such

<sup>1</sup> These same listed commercial chemical products would, however, be a hazardous waste when, for example "used in a manner constituting disposal." *Id.*

materials, nevertheless, should keep in mind that they have the burden of proof to show that such materials are to be recycled in a manner bringing them outside the scope of "solid waste." See 50 FR at 642 and 40 CFR 261.2(f). Exporters "must keep whatever records or other means of substantiating their claims that they are not managing a solid waste because of the way the material is to be recycled." 50 FR at 642-643. This might include, for example, a description of the foreign recycling facility, evidence that the recycling facility is licensed or otherwise qualified by the foreign jurisdiction, and/or a copy of the contract indicating the terms of the transaction. See also *United States v. Hayes International Corp.*, 786 F.2d 1499, (11th Cir. 1986) (in a prosecution under Section 3008(a)(1) of RCRA for the knowing transportation of waste to an unpermitted facility, the court rejected defendant's claim that it believed the hazardous waste at issue was being recycled, where evidence indicated the lack of a good faith belief).

EPA is aware of evidence that certain materials that have been exported ostensibly for recycling were actually examples of sham recycling. Improper disposal was intended and in fact occurred. For example, a 41-count indictment charging conspiracy, mail fraud, and utilization of false statements was returned on April 17, 1986, by a federal grand jury sitting in the Southern District of California against four officers and owners of two corporations that were allegedly, among other things, claiming to be recycling waste when in fact they knew it was being illegally disposed of in Mexico.

Any notification, consent or annual report based on false representations is invalid. Thus, persons exporting hazardous waste are subject to civil and criminal enforcement actions. These actions are based upon the fact that the exporter did not comply with applicable notification, consent and/or annual report requirements.

Another extremely small group of hazardous secondary materials, although considered hazardous wastes, are either fully exempt or partially exempt from regulation by EPA domestically. See 40 CFR 261.6(a)(2) and (3) (50 FR 614, 665 (January 4, 1985)). Exporters of such secondary materials should keep in mind that the burden of proof is also on the exporter to demonstrate that such waste falls within one of these exemptions. The applicability of the export requirements to these wastes when exported is discussed in detail below in conjunction

with other wastes for which manifests are not required domestically.

EPA also wishes to note that if, as a result of promulgating a new hazardous waste characteristic, adding additional wastes to the list of hazardous wastes, or other regulatory changes, additional wastes become subject to manifesting, exporters of such waste must also comply with the requirements promulgated in today's rule.

(2) *Comments Suggesting that EPA Broaden the Applicability of section 3017.* Some commenters supported the Agency's proposal to exempt from the export requirements those wastes that are presently exempt from manifest requirements. One commenter, however, objected to this scheme suggesting that the language of section 3017 (which states that ". . . no person shall export any hazardous waste identified or listed under this subtitle" unless the requirements of section 3017 are met) clearly indicates Congressional intent to subject all hazardous wastes to the export requirements of section 3017. EPA does not agree that Congress intended to require notification and consent for all hazardous wastes in view of the statutory language itself and the established domestic RCRA program.

EPA's regulatory definition of "hazardous waste" is a broad one. It includes all solid wastes which are listed hazardous wastes or which exhibit the characteristic of ignitability, corrosivity, reactivity, or EP toxicity. Generally, hazardous wastes (whether listed or characteristic) are subject to the generally applicable regulations governing their generation, transportation, treatment, storage and disposal. See 40 CFR Parts 262, 263, 264 and 265. However, there are a very small number of "hazardous wastes" which EPA, for one reason or another, has totally exempted from domestic regulation. These include, for example, residues under certain specified amounts in empty containers and scrap metal (if it demonstrates a characteristic of hazardous waste) when sent for recycling. 40 CFR 261.7, 261.6(a)(3)(iv). In EPA's view, Congress could not have intended to regulate for export those "hazardous wastes" which EPA does not regulate domestically. It is highly unlikely that Congress would have been more concerned about wastes exported than wastes in its own backyard. For example, as Representative Mikulski, the sponsor of section 3017, stated:

Our own country will have safeguards from the ill effects of hazardous waste upon passage of [HSWA]. We should take an equally firm stand on the transportation of hazardous waste bound for export to other

countries. 129 Cong. Rec. H8163 (daily ed. October 6, 1983) [emphasis added].

An "equally firm" stand on exports would not require regulation of a waste for export not regulated domestically.

Nor does EPA agree that section 3017 is clear on its face regarding its scope of coverage. Although section 3017(a) does include language prohibiting the export of "any hazardous waste" unless certain conditions are met, one of those conditions is the requirement to attach a copy of the receiving country's consent "to the manifest accompanying the hazardous waste shipment" [emphasis added]. And, in transmitting notification to a receiving country, section 3017 includes a requirement that EPA, in conjunction with the Department of State, include "a description of the Federal regulations which would apply to the treatment, storage and disposal of the hazardous waste in the United States." These requirements evidence an intent on Congress' part to encompass something less than "all hazardous wastes" since where a waste is not regulated domestically, consent could not be attached to the manifest nor would there be any regulations for EPA to describe which govern the domestic treatment, storage or disposal of such wastes. Thus, EPA does not believe that Congress mandated notifying a foreign country of a "hazard" the United States itself does not believe of sufficient concern to regulate domestically.

The question of the reach of section 3017 also arises with respect to certain hazardous wastes which are regulated minimally domestically, although excluded from the generally applicable requirements placed on the generation, transportation, treatment, storage and disposal of hazardous wastes. These include, for example, samples for testing and wastes generated by small quantity generators generating less than 100 kg/mo of hazardous waste. See 40 CFR 261.4(d); 261.5 FR at 10174 (March 24, 1986).<sup>2</sup>

EPA does not believe that application of the export requirements was intended for those wastes excluded from the generally applicable manifesting requirement even though some de minimus requirements are imposed domestically. In EPA's view, the function served by the manifest domestically is similar to the function served by the notification and consent internationally. The manifest notifies persons receiving the waste or handling the waste of the nature of the materials

<sup>2</sup> The final rule as it applies to small quantity generators is also discussed at Section II of this preamble.

being dealt with and as such affords such persons the opportunity to reject the waste or, if accepted, provides sufficient information to ensure proper handling of the waste. The manifest also serves as a tracking mechanism which allows policing of hazardous waste management and allows action to be taken against persons improperly handling the waste. Similarly, the notification requirement for exports notifies the foreign country receiving the waste of the nature of the materials and as such affords the receiving country the opportunity to reject the waste or if accepted, allows it to have information sufficient to enable it to deal with the waste. The consent requirement allows the foreign country to take action to prohibit unsafe or inadequate handling of a waste by withholding consent.

In EPA's view, therefore, the lack of imposition of the manifest requirement domestically indicates that such wastes do not reach a level of concern to necessitate notice or a mechanism by which action can be taken to police or enforce against improper handling of these wastes. Accordingly, it is unnecessary to impose an equivalent mechanism on exports of these wastes. It also is doubtful that Congress intended to regulate a waste for export more stringently than domestically. Since no tracking mechanism is available domestically for EPA to know whether such a waste ultimately was exported or actually remained in this country, no similar mechanism is necessary for foreign countries. Moreover, in many cases it is unlikely that, in view of the reasons for excluding such wastes from the manifest requirement, these are the types of wastes for which Congress intended notification and consent. For example, in view of the de minimus amounts and practical safeguards involved in dealing with samples, it is unlikely that a significant environmental problem could result or that a foreign country would be significantly concerned about such wastes. See 46 FR at 47426 (September 25, 1981).

Accordingly, EPA is not expanding the scope of section 3017 beyond those wastes for which manifesting is required domestically, with one exception. That exception is spent industrial ethyl alcohol when exported for reclamation. This particular hazardous waste presents a special situation. This waste was exempted from regulation by EPA domestically in view of the fact that the Bureau of Alcohol, Tobacco and Firearms already imposes notice and tracking requirements similar to those imposed generally by EPA on hazardous

wastes domestically. EPA regulation, therefore, was considered redundant. See 50 FR at 649 (January 4, 1985). Since notice and tracking requirements are placed on these wastes domestically in lieu of EPA's requirements, EPA believes that this is the type of waste for which notification and consent should apply for exports. Thus, the final regulation includes an amendment to 40 CFR 261.6 regarding spent industrial ethyl alcohol when exported for recycling. That provision requires that, in the absence of an applicable international agreement specifying different requirements, the person initiating the export of such material and any intermediary arranging for the shipment must: (1) Provide notification to EPA; (2) export only with the consent of the receiving country and in conformance with such consent; (3) provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the material for export; (4) submit an annual report; and, (5) retain certain records. The "person initiating the shipment" is intended to mean the person who would have been required to prepare the manifest but for the exemption in existing 40 CFR 261.6(a)(3)(i). In addition, the final rule requires transporters carrying such materials to refuse to accept such shipment if he knows that it is inconsistent with the Acknowledgment of Consent, ensure that the EPA Acknowledgment of Consent accompanies the waste and that the waste is delivered to the facility designated by the person initiating the shipment. These requirements meet the statutory minimum of section 3017 plus a recordkeeping requirement for enforcement purposes. All other requirements applicable to other exports will not apply to exports of industrial ethyl alcohol exported for recycling since they are essentially tied to the EPA manifesting system or are inapplicable domestically.

(3) *Other Issues Related to the Applicability of section 3017.* One foreign government commented that the definition of exporter should apply to persons required to prepare a manifest both for waste subject to EPA's regulations as well as waste considered hazardous by the transit and receiving countries. Although EPA supports such an approach in principal, it believes that if a foreign receiving country wishes to expand the universe of waste for which it receives notification, this can best be accomplished through an international agreement between the country and the United States. Moreover, it is

questionable whether section 3017 provides authority for EPA to regulate any materials for export that are not "hazardous wastes" identified or listed under RCRA.

Several commenters requested clarification of the applicability of the definition of exporter to certain specific situations. One commenter presented the situation where multiple generators send their waste to a domestic facility for recycling and the recycler later exports still bottoms and other byproducts of the recycling process for use as fuel. In this scenario, the recycler would be the party who originates the manifest designating a foreign TSDF, and thus would be the primary exporter. The initial generators would have designated the domestic facility on their manifests and therefore would not meet the definition of primary exporter. Of course, if the initial generator knew that its waste was being exported by the recycler without the consent of the receiving country, and yet continued to ship waste to that recycler or agreed to participate in the scheme, the initial generator might well be subject to criminal charges for aiding and abetting the recycler and/or conspiring with the recycler to violate section 3008.

Another commenter requested clarification on the applicability of the export requirements when hazardous waste is generated in Alaska and transported through Canada to a facility in the continental United States. This commenter noted that, apparently, EPA did not intend to require notification of Canada under such circumstances since the term "transit country" was proposed to be defined as the country through which a hazardous waste passes "en route to a receiving country." The phrase "en route to a receiving country" was used in the proposal simply to denote short-term storage that may occur "en route." EPA did not intend this language to exempt such shipments from the notification requirement applicable to transit countries. To make this clear, the phrase "en route to a receiving country" has been deleted in the final rule. This action is consistent with an OECD decision to which the United States is a signatory. Decision and Recommendation of the Council on Transboundary Movement of Hazardous Waste, February 1, 1984.

Two commenters urged the Agency to broaden the exemption for certain samples from the export requirements. These commenters requested that EPA broaden the sample exemption to cover hazardous waste samples exported for the purpose of determining: (1) Whether the foreign facility will accept the waste

stream; (2) the treatment, storage, or disposal measures the foreign facility would use; and (3) the price the foreign facility would charge for the treatment, storage, or disposal of the waste. Existing § 261.4(d) conditionally exempts from Subtitle C requirements, any sample of solid waste that is collected "for the sole purpose of testing to determine its characteristic or composition." Because such samples are not subject to the manifest requirements of Part 262, Subpart B, they are exempt from the export requirements. The Agency believes that this comment has merit, not only in the context of exports but also for the management of samples domestically. However, the Agency believes that creating such an exemption would require further analysis for both exports and domestic shipments, and if deemed appropriate, proposal for public comment. The Agency questions what the appropriate conditions for such an exemption would be. For example, the Agency would want to consider whether a quantity limitation or some type of limit on the types of waste covered by the exemption would be desirable. Accordingly, the Agency will consider these suggestions for possible further regulatory action and is not expanding the scope of the § 261.4(d) sample exemption at this time. Unless and until future regulatory action is taken, exports of hazardous waste samples outside the scope of § 261.4(d) must comply with the export requirements. Alternatively, foreign waste management facilities could contract with laboratories in the United States to do any necessary analysis.

**3. Other Definitions.** In its proposed rule, EPA proposed definitions for two additional terms—"EPA Acknowledgment of Consent" and "Consignee." The definition of "EPA Acknowledgment of Consent" has not been changed from the proposed rule. A full discussion of comments and EPA's plans regarding the EPA Acknowledgment of Consent is set forth in Section III. D. of this preamble.

Two comments were received on the proposed definition of "Consignee." In the proposal, "Consignee" was defined as the ultimate treatment, storage, or disposal facility to which the hazardous waste will be sent in the receiving country. One commenter suggested adding "recycling" to the list of facility types, since the proposal intended to cover wastes exported for recycling. EPA does not believe that this change is necessary because, as discussed above, the term "treatment" clearly covers recycling (see, e.g., 40 CFR 260.10).

The second commenter objected to the use of the word "ultimate" in the definition of "Consignee," suggesting that in the case of hazardous wastes that are exported for recycling, storage or treatment, the initial TSDF that receives the waste may transfer certain portions of the waste to a second TSDF. According to this commenter, exporters frequently have no knowledge of or control over such secondary transfers and may be unable to identify, especially prospectively, such secondary TSDF's. EPA acknowledges that further management of an exported waste may occur after it is sent to a foreign TSDF which is beyond the control or knowledge of the exporter. A foreign TSDF may on its own initiative decide to send waste to another TSDF. EPA did not intend to require an exporter to specify actions which occur in a foreign country unknown to him or beyond the scope of his control. EPA used the adjective "ultimate," consistent with the statutory language of Section 3017, to distinguish between the facility to which the waste is being sent for treatment, storage or disposal in a receiving country and a facility *in that same country* at which a shipment may be stored incidental to transportation (e.g., at transfer facilities, loading docks). For example, if a waste is being exported to London, England via Portsmouth, England and the waste is held temporarily in Portsmouth awaiting transportation to London, the consignee would be the facility in London.<sup>9</sup>

The type of storage incidental to transportation which EPA intended to distinguish from the "ultimate" destination of the waste is similar to that type of storage discussed in the preamble to the rule clarifying when a transporter handling shipments of hazardous waste is required to obtain a storage facility permit.

See 45 FR 86966 [Dec. 31, 1980]. However, for purposes of determining who is the consignee, as between a temporary storage facility at which the waste may be stored incidental to transportation and the ultimate destination of the waste, no time limit on the length of such storage is being proposed as is the case in the rule referenced above. EPA believes it would be extremely difficult, if not impossible due to unforeseen events occurring in transit abroad, for an exporter to know prospectively whether a shipment might be stored, for example, for more than ten

<sup>9</sup> In view of the changes in the definition of receiving country, it should be noted that there may be more than one consignee in those rare circumstances where there is more than one receiving country.

days at a storage facility in the course of transportation and would thus become the consignee. Accordingly, the consignee is the facility of ultimate destination of the waste in a receiving country and not a temporary storage facility where a waste may be stored for a short period of time incidental to transportation.

Thus, EPA interprets the term "ultimate TSDF" to mean the final destination of the waste in a receiving country known to the exporter. In view of its interpretation of this term, EPA finds it unnecessary to change the language of the proposed rule.

### C. Notifications of Intent to Export [§ 262.53]

EPA received a number of comments on the subject of notification. These comments focused on four issues related to the notification: (1) The 60-day advance time suggested for submission of the notification; (2) separate notification for each shipment; (3) the period covered by the notification; and (4) renotification.

Subsection (c) of section 3017 requires that any person who intends to export a hazardous waste shall, before such waste is scheduled to leave the United States, provide notification to the Administrator. The purpose of this notification is to provide sufficient information so that a receiving country can make an informed decision on whether to accept the waste and, if so, to manage it in an environmentally sound manner. The notification is also intended to ensure that environmental, public health, and U.S. foreign policy interests are safeguarded and to assist EPA in determining the amounts and ultimate destination of exports of U.S. generated hazardous waste so as to enable EPA and Congress to gauge whether the right to export is being abused.

The regulatory notification requirements are intended to implement the broad statutory requirements for notification set forth in section 3017(c) and ensure that sufficient information is obtained to satisfy Congressional intent.

#### 1. Sixty-Day Advance Time

Section 262.53(a) of the proposed rule suggested that the exporter submit notification to the Agency 60 days before the waste was scheduled to leave the United States. This 60-day advance time represented EPA's best estimate of the amount of time it would take to notify a receiving country, obtain consent, and transmit such consent to the exporter. EPA noted in the proposal that the statute itself sets forth the time

frame (30 days) within which a complete notification must be transmitted to the receiving country after receipt by EPA and the time frame (30 days) within which the consent or objection must be transmitted to the exporter after receipt by the Secretary of State. Since EPA believed the information could be transmitted in less time than statutorily required (see discussion in Section III.D), this 60-day advance time allowed approximately thirty days for the receiving country to provide its consent or objection to the Department of State.

EPA received several comments on the 60-day advance time. Most of the commenters focused their responses primarily on the 30-day period for a receiving country to transmit its consent or objection to the Department of State. One commenter stated that 30 days was an adequate period for dissenting governments to protest shipments. The commenter added that a longer period would cause unnecessary and costly delays in disposing of wastes. Another commenter proposed that a receiving country should be deemed to have given its consent if it fails to respond to EPA's notice within 30 days.

Other commenters expressed a concern that a 60-day advance notice was inadequate and that a 90-day advance notice would be necessary. One commenter in favor of a 90-day advance time stated that the 60-day notice would cause delays in exporting waste. Another commenter expressed the view that a 60-day advance time was too long. This commenter maintained that 30 days would be sufficient and proposed a "fast track" system to expedite EPA transmission.

After reviewing the comments, EPA has decided to retain the 60-day advance time as the recommended submittal time. This period should provide time for EPA, the Department of State, and the receiving country to process the notification and transmit the receiving country's consent or objection to the exporter. In fact, the amount of time estimated for EPA and the Department of State to transmit information already reflects a "fast track" system to expedite transmission. Therefore, EPA does not believe, at this time, that it would be appropriate to shorten the suggested time frame. Of course, exporters may submit notifications at a later date since the 60-day advance time is solely a recommended minimum advance time. Exporters should keep in mind, however, that this could increase the risks of a delay in receipt of consent and consequent delay in shipment.

EPA disagrees with the commenter's recommendation that failure by a

receiving country to respond to a notification should be considered consent. EPA cannot require a foreign country to respond within a specific number of days. Moreover, EPA does not have the authority to assume consent if there is no response within a specific time period because the statute prohibits exports in the absence of written consent. With respect to those exporters who believe the 60-day advance time is too short, EPA notes that exporters may always submit notifications further in advance if they so desire.

EPA reminds exporters that the 60-day advance time is only EPA's best estimate of the time transmission of information will take. A receiving country may take longer to respond than estimated. Accordingly, regardless of the time when a notice is submitted (even if submitted 60 days or more in advance), the shipment cannot take place until consent has been obtained. Exporters therefore, are encouraged to submit notifications at the earliest possible date.

## 2. Separate Notification for Each Shipment

The proposed rule provided that a single notification could cover more than one shipment; a separate piece of paper providing notification for each shipment would not be necessary. This was considered consistent with legislative intent since the statute itself specifies that a notification include information on the "frequency of shipment." Since the statute was not clear on this point, however, the Agency specifically requested comments regarding whether separate notification should be required for each shipment.

The vast majority of commenters stated that separate notification was unnecessary. Several commenters noted that such notification would be burdensome to the Agency as well as to industry. Another commenter found separate notifications for each shipment to be contrary to Congressional intent since the statute requires that the "frequency of shipment" be specified in the notification. Only one commenter supported separate notification for each shipment. This commenter, however, stressed that such notification would be the ideal. EPA agrees with the majority of commenters that Congress did not intend notification for each shipment, and that such notification would create unnecessary burdens on industry, the Agency, and foreign countries. As a result, separate notification for each shipment is not required in the final rule.

## 3. Notification Period (24 Months vs. 12 Months) [§ 262.53]

In its proposal, EPA indicated that a notification could cover a period of up to 24 months. The Agency also requested comment on the alternative of allowing notifications to cover only a 12-month period. Comments received on this issue were divided.

Except for one comment, those in favor of a 24-month period did not provide EPA with a reason why they favored this time period over the 12-month period. The commenter who did provide an explanation suggested that a two-year period would provide the receiving country with time to become familiar with the characteristics of the hazardous waste and to determine whether the facilities were able to properly dispose of the hazardous waste.

Other comments supported the change to a 12-month notification period. Several commenters suggested that because of the difficulties in forecasting export activities over a 24-month period, numerous renotifications would be required, resulting in no net reduction of the burden on exporters. A commenter in support of the 12-month period said that it would improve the accuracy of the estimated number and quantity of shipments identified in a notification. One commenter was concerned that foreign countries would be reluctant to consent to exports for a period as long as 24 months, resulting in the need for protracted negotiations with the receiving country. Another commenter explained that the 12-month time period would allow the receiving country to have greater control over the shipments across the border.

EPA finds the comments in favor of a 12-month notification persuasive and agrees that the better view is to allow notifications to cover a maximum of 12 months rather than 24. In addition, EPA notes that since governments within some countries tend to change rapidly and records may be lost or misplaced or policy changes may occur, the more frequent annual notice would provide more current information to foreign governments than would a 24 month notice. Finally, the amount and detail of information on the effects of hazardous waste on human health and the environment is always increasing, and annual reviews of consent would allow reassessment of any new data.

One commenter asserted that, in view of its regular standard exportation practices, annual or biennial "renotification" for unchanged practices should not be required where a single



notification provides a complete and accurate picture of the waste exportation practices that will occur. Recognizing that practices which deviate from the notification could be enforceable violations of RCRA, this commenter felt that a notification should be allowed to cover any period of time so long as the initial notification fully and accurately reflects the notifier's practices. EPA does not believe that submittal of the notification on an annual basis presents a burden to exporters since such a requirement would only entail duplication of the original notification. Moreover, prudent planning by the exporter should prevent any interruption in exports which might result as a consequence of awaiting new consent. Further, annual notification provides receiving countries with a formal mechanism to review information relative to incoming shipments in light of any new developments which may occur within that country within the previous 12-month period.

#### 4. Renotification [§ 262.53]

Paragraph (c) of proposed § 262.53 required renotification and new consent from the receiving country for changes in the conditions specified in the original notification. Two commenters suggested that renotification should not be required for small variations in shipping procedures and routes.

EPA believes there is some merit to these comments. In fact, the proposal represented an attempt to build into the notification requirements the flexibility to allow for minor changes without renotification and consent. For example, it was proposed that notification include the "estimated" number of shipments of the hazardous waste. Upon re-examination of the issue of notification, however, EPA has decided that some minor regulatory changes would be appropriate. Whereas EPA believes that renotification is necessary where material conditions in the original notification change (since this may affect the original consent granted by the receiving country), it does not believe that certain minor deviations from the original notification warrant renotification and additional consent. In EPA's view, certain notification information is more for informational purposes than integral to a decision to accept or reject a waste. Accordingly, EPA believes that it is doubtful that such deviations would be of sufficient concern to a foreign country for it to wish to reconsider its consent. Moreover, renotification for minor deviations in certain information would put unnecessary burdens on foreign countries, EPA and exporters. And, in

view of the need for at least a two-month advance notification, exporters may not at that date have highly detailed information on an export.

In determining what types of changes should trigger the need for renotification and consent, EPA considered which items are most likely to be highly variable and more importantly, which items would be likely to affect the receiving country's consent. For example, EPA believes that any increase over the estimated quantity of waste to be exported should require renotification and consent. However, EPA has concluded that decreases in the quantity exported would not be likely to affect the receiving country's consent and, therefore, is not requiring renotification for such changes. EPA also is requiring renotification and consent for any changes in the waste description, consignee, ports of entry to and departure from a foreign country, the manner in which the waste will be treated, stored or disposed of in the receiving country, the name of any transit countries, the handling of the waste in transit countries, important factors for a receiving country in determining whether to accept or reject a hazardous waste or for a transit country to take appropriate action. Although renotification will be required for changes in the ports of entry to and departure from transit countries, the names of any transit countries, the appropriate length of time the waste will remain in transit countries, and the nature of the handling of the waste in such countries, consent of the receiving country will not be required for these changes since they are unlikely to affect the receiving country's original consent. However, when the Agency receives notification for these types of changes, it will provide notice of them to any affected transit country.

Renotification will not be required when there is a change in the mode of transportation to be utilized. An exporter may not know sufficiently in advance the highly specific details on how the waste is to be transported. Moreover, the mode of transportation may change en route. For example, transportation which was originally planned to take place by truck may be changed at the last minute to railroad due to unexpected events. EPA also will not require renotifications when there is a change in the type of container in which the waste will be transported. The exporter must already meet the specific container requirements of the Department of Transportation, as well as any such requirements of all transit and receiving countries. Moreover,

exporters must be allowed to repackage containers damaged en route. Renotification will also not be required for changes in the exporter's telephone number since such a change should not affect the receiving country's consent.

The changes noted above are consistent with Section 3017 since the statutory language itself in several respects builds in flexibility in the notification requirements in an effort to achieve the same result as these more specific regulatory provisions. In addition, in the absence of these changes, exporters are likely, for example, to simply list all possible ways a waste may be transported to avoid renotification. Under such circumstances, a foreign country would be receiving no more specific information on these elements. Accordingly, § 262.53(c) has been changed to require renotification for all changes in the original notification except for changes in the exporter's telephone number, mode of transportation, type of container, and decreases in quantity. In addition, the regulatory language has been modified to make clear that consent of the receiving country is not required for changes to the information noted above which is pertinent to transit countries.

EPA is also concerned about the language of proposed § 262.53(a)(2)(ii) which required that the notification contain "the estimated number of shipments of the hazardous waste and the approximate date of each shipment." Commenters stated that the requirement to estimate the number and total quantity is meaningless and explained that waste generation is never preplanned and exact, therefore, information on the amount of waste generated cannot be exact. Other commenters disagreed with the requirement to include the date of shipment, also explaining that waste generation is never preplanned and exact, consequently, information on the shipment dates cannot be exact. Other commenters also disagreed with the requirement to include the date of shipment, explaining that it is not always feasible to know even 60 days in advance of a shipment the exact date when waste will be transported. The commenters suggested that EPA require the expected frequency of shipment rather than the exact date.

Although the notification requirement as proposed only required the approximate dates and estimated number of shipments, EPA notes that no guidance was provided on how much deviation from the approximate date and estimated number of shipments was

allowable without the need for renotification. To avoid the uncertainty inherent in the proposed language, and in view of the comments received expressing concern with this requirement, EPA has chosen to adopt, in the final rule, the statutory language requiring notification of "the estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported." EPA believes this change clearly meets Congressional intent for notification while providing important flexibility to exporters.

Except for the changes regarding notification discussed above, EPA is retaining § 262.53 as proposed for the reasons set forth in the preamble to the proposal.

#### *D. Procedures for the Transmission of Notification, Consent or Objection*

Subsections (d) and (e) of section 3017 require the Department of State to transmit notification of the intended export to the government of the receiving country within thirty days of receipt by EPA of a complete notification from the primary exporter. EPA must then notify the primary exporter of the receiving country's consent or objection to the intended export within thirty days of receipt of a response by the Department of State. Because the exchange of information among EPA, the Department of State, receiving countries and transit countries is administrative in nature and imposes no requirements on the public, EPA did not propose specific procedures to implement these statutory requirements.

As discussed in the proposal, EPA and the Department of State plan to telegraphically transmit the notification as well as the receiving country's response. Notifications would be sent from EPA to the Department of State for transmission to the U.S. Embassy in the receiving country. The U.S. Embassy would forward the information to appropriate authorities in the receiving country in translation, if necessary, with a request for an expeditious written response. Upon receipt of this written response, it would be translated by the U.S. Embassy in the receiving country, if necessary, and cabled to the Department of State for transmission to EPA. Where the terms of the receiving country's consent are understandable only by reference to the export notification (e.g., the receiving country simply references a notification and gives consent without reiterating terms described in the notification), the cable will also include relevant portions of such notification. Where the receiving country fully consented to the export or

consented with specified modifications, this cable would constitute the EPA Acknowledgment of Consent and would be sent to the primary exporter for attachment to the manifest. Where the foreign country rejects the shipment, EPA would so notify the primary exporter in writing. Meanwhile, the original written communication from the receiving country would be sent to the Department of State in Washington in the diplomatic pouch mail. This document would then be forwarded to EPA for retention. A copy would also be forwarded to the exporter.

As required by section 3017, in notifying receiving countries of intended shipments, the government of the receiving country would also be advised that United States' law prohibits the export of hazardous waste unless the receiving country consents to accept the waste. The notification would include a request to provide the Department of State with a response to the notification which either consents to the full terms of the notification, consents to the notification with specified modifications, or rejects receipt of the hazardous waste. Also in accordance with statutory requirements, a description of the Federal regulations which would apply to the treatment, storage, and disposal of hazardous waste in the United States would be provided to the receiving country.

While most commenters favored EPA's suggested procedure of using the cable as the EPA Acknowledgment of Consent, several commenters maintained that an exact duplicate or mechanical reproduction of the actual written consent must be used in lieu of a cable. These commenters suggested that EPA's proposal was contrary to the plain language of the statute and voiced concern over the possibility of human error in transcribing information into a cable or in translating such information.

In EPA's view, transcription of a receiving country's consent into a cable and attachment of such cable to the manifest meets the statutory requirement that a "copy" of the receiving country's written consent be attached to the manifest accompanying the waste shipment. The term "copy" is not limited to a "photo" copy or other mechanical reproduction but can include typed or handwritten "copies." Moreover, EPA believes that "copy" is broad enough to encompass a translation of a receiving country's consent. EPA also believes that the statute accords EPA the discretion to implement the export requirements in a workable and practical fashion. In

EPA's view, this necessitates use of telegraphic communications.

U.S. Embassy personnel will be well qualified to translate the receiving country's response and, as indicated in the proposal, EPA will work closely with the Department of State to ensure that cables prepared by the U.S. Embassy include an exact reiteration or translation of the receiving country's consent. EPA remains concerned that mailing actual reproductions of documents will cause unnecessary delays that can be avoided by the use of cables. Without the use of cables, it would be necessary to increase, and possibly significantly increase, the advance time for submission of notifications. This would require exporters to project their export plans even further into the future when submitting their notifications, risking an increase in the number of renotifications necessary and consequent burdens on EPA, exporters, foreign countries and the Department of State. In addition, were EPA to require that the actual consent document be mailed, transmission would be dependent on a postal system over which neither EPA nor the Department of State would have control. It would be unfair to leave exporters dependent upon postal systems which, in some countries, are of questionable reliability. Nor does EPA believe it would be appropriate to use the Department of State's diplomatic pouch mail. The Department of State has indicated that while diplomatic pouch mail is generally received within two weeks, in some instances it can take from three to six weeks and, therefore, transmission could exceed the 30-day time frame provided by the statute for transmission of consent to the exporter upon receipt by the Secretary of State.\*

One commenter suggested that, although a facsimile of the written consent should be provided the exporter, a Department of State translation might also be helpful. However, this commenter believed that exporters should, nonetheless, be held to compliance with the foreign language

\* One commenter suggested that the statutory time frame problem could be resolved by defining receipt by the Secretary of State as receipt by the Department of State in Washington. Generally, the U.S. Embassy in a foreign country is the representative of the Secretary of State and, therefore, the better view is that receipt by the Embassy is receipt by the Secretary of State. Even were this suggestion adopted, however, the problem would remain that notifications would need to be submitted further in advance thereby risking a consequent increase in burdens on all parties involved due to the increased likelihood that renotification would be necessary for changes in the shipment.

version. EPA notes in response to this comment that it would not take enforcement action against an exporter who relied in good faith on an Embassy translation. Moreover, it would be unfair to require reliance on the foreign language version under such circumstances. Any difficulties arising out of an erroneous translation by the United States is a matter best dealt with by the governments of the countries involved and is a matter of foreign relations appropriately left to the Department of State. Furthermore, were exporters held to the foreign language version, exporters might feel the need to obtain their own translations which could result in various versions of the consent. This could cause needless complications. With use of the Department of State translation, exporters and EPA will be relying on the same translation. Accordingly, EPA is retaining its definition of Acknowledgment of Consent and the procedures for transmission of the notification and consent as proposed except in one respect. To assist in expediting transmission, the final rule adds a requirement that exporters mark the envelope containing the notification "Attention: Notification to Export."

With regard to transit countries, transmission of notification will proceed similar to that for receiving countries. EPA will notify primary exporters of any response of a transit country. As noted earlier, EPA strongly urges exporters to reroute wastes objected to by transit countries since transit countries may take action to prohibit entry.

#### *E. Special Manifest Requirements [§ 262.54]*

This section sets forth special manifest requirements pertaining to exports of hazardous waste in light of the special circumstances relative to such shipments. The final rule adopts the provisions as proposed for the reasons set forth in the preamble to the proposed rule except in one significant respect.

During the development of the proposed rule, EPA considered requiring the transporter to deliver a copy of the manifest to a U.S. Customs official at the point the waste leaves the United States. Customs officials would periodically forward the copies it collected to EPA. Such a requirement would serve as a means to assist EPA in enforcing section 3017. The Agency decided not to propose this requirement because it had no evidence that exporters were violating current notification requirements. In addition, the Agency was of the opinion that copies of manifests retained by

generators could be obtained (e.g., for comparison with notification and consent documents) if concerns arose about violations of section 3017.

The Agency received comments both opposing this requirement as well as strongly urging the Agency to reconsider its decision on this subject. After evaluating the comments received on this issue, obtaining further information on violations of existing notification requirements, and reconsidering the advantages and disadvantages of the collection of manifest copies, EPA has determined that submission of the manifest at the border should be required. Thus, § 262.54(j) of today's rule requires the primary exporter to provide the transporter with an additional copy of the manifest and § 263.20(g)(4) requires the transporter to deliver a copy of the manifest to the Customs official at the point the waste leaves the United States. This is a new tracking device intended to assist EPA in working with the U.S. Customs Service to establish an effective program to monitor and spot-check exports of hazardous waste. This requirement will allow the Agency to monitor closely the generator's compliance with the EPA Acknowledgment of Consent, coordinate enforcement actions with foreign countries, establish trends and patterns for enforcement and program development, and respond to Congressional inquiries. It also provides clear evidence of an important element of proof in enforcement actions (i.e., that an export did or did not occur) and serves as a deterrent to illegal activities. Moreover, this requirement will allow EPA to respond promptly to hazardous waste incidents in foreign countries. Routine submission of these documents to EPA is important in light of foreign policy concerns involved in exporting hazardous wastes. The diplomatic ramifications of improper shipments of United States' wastes could have a significant impact on the United States as a responsible member of the international community.

The Agency believes that the need for an additional copy of the manifest will result in an insignificant increase in the paperwork burden on the regulated community since this requirement does not include preparation of any additional information but only requires an additional copy of existing information.

#### *F. Annual Reports, Recordkeeping, and Exception Reports [§§ 262.55, 262.56, 262.57]*

Section 3017(g) of RCRA imposes a new annual reporting requirement for exports of hazardous waste. The annual

reports should be sent to the Office of International Activities (A-106), United States Environmental Protection Agency, Washington, D.C. 20460. Comments received regarding the proposed rule's annual reporting requirement were largely favorable.

One commenter noted that meeting the annual report requirement for exported wastes would be very easy for exporters who reside in States, such as New York, which already require such reports. Another commenter proposed the creation of an annual report form. Since the number of exporters filing annual reports is expected to be very small, the Agency does not believe that an annual report form is necessary in order to enable it to process annual reports. Nor does the Agency believe that expenditure of the resources necessary to develop and print annual report forms is justified in view of the relatively small number of exports.

One commenter explained that submittal of the annual report would be unrealistic since its members presently do not submit reports and, therefore, do not maintain records on export shipments. This commenter also stated that EPA could easily obtain the material found in the annual report from the biennial report, and that requiring both is unnecessary. EPA notes, in response to this commenter, that section 3017 of RCRA requires annual submissions of information on exports. Therefore, annual reporting is a statutory requirement and information submitted biennially would not meet this requirement. Since commenters did not refute EPA's assertion that most generators retain separate records on domestic shipments and exports, EPA does not believe that the administrative burden on exporters to file annual reports on exports and biennial reports on domestic waste management is excessive. Also, as discussed in the proposal, EPA believes that this approach is administratively less burdensome on the Agency.

A second commenter questioned whether information found in the annual reports could be more readily obtained from computerized notice records. Because the annual report is a statutory requirement, regarding what actually occurred, the notice records cannot be used as a substitute. The annual reporting information will tend to be more specific than the notification information. For example, it will provide information of the actual quantity exported if under the amount estimated in the prior notification.

Accordingly, EPA has retained the annual reporting requirement as

proposed except in one respect. One commenter stated that, by exempting generators who file annual reports from reporting exports on the biennial report form, EPA cannot exempt exporters from the new HSWA waste minimization requirements of section 3002(a)(6) (C) and (D). EPA does not believe that exporters will be exempt from such requirements in most cases based upon the assumption that, generally, an exporter will not only export waste but also will ship some wastes off-site for treatment, storage or disposal domestically. Accordingly, the requirements of section 3002(a)(6) (C) and (D) will be met for all wastes by filing the biennial report as required by 40 CFR 262.41. Nevertheless, to cover the annual circumstance where a person exports all his hazardous wastes, the final rule includes a requirement that unless provided pursuant to 40 CFR 261.41, an exporter must include in the annual report submitted in even numbered years: (1) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and (2) a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984. Small quantity generators generating less than 1,000 kg/mo are exempt from this requirement consistent with 40 CFR 262.44 (See 51 FR 10146, 10176 (March 24, 1986)). Exporters of spent industrial ethyl alcohol for reclamation are also exempt since this requirement does not otherwise apply to such wastes.

With regard to the proposed recordkeeping and exception reporting requirements, EPA received no significant comments on these provisions. Accordingly, EPA is retaining §§ 262.55 and 262.57 as proposed for the reasons set forth in the preamble to the proposed rule.

#### G. Transporter Responsibilities

The March 13, 1986 proposal amended § 263.20 to prohibit a transporter from accepting waste from an exporter unless, in addition to a manifest, an EPA Acknowledgment of Consent was attached to the manifest. EPA also proposed to amend this section to require transporters to ensure that an EPA Acknowledgment of Consent accompanied the waste en route. No changes were proposed regarding other requirements of Part 263 applicable to transporters transporting waste for export. See 40 CFR 263.20(g), 263.21, 263.22(d). As discussed in Section III.B. of this preamble, EPA is retaining these requirements as proposed and is adding

the additional requirements that the transporter deliver a copy of the manifest to a U.S. Customs official at the point the waste leaves the United States and that the transporter refuse to accept hazardous waste for export if he knows it does not conform to the Acknowledgment of Consent.

One further change is also being made in the transporter requirements. This pertains to exports by rail. In drafting the proposed rule, EPA recognized that existing domestic regulations for shipments by rail do not require that the manifest travel with the waste shipment nor do they require that intermediate rail transporters sign the manifest. See 40 CFR 263.21(d). Instead, a shipping paper is required to accompany the waste and the manifest must be sent to the next non-rail transporter, the TSD, or, for exports, the last rail transporter designated to handle the waste in the United States. These special requirements were imposed on rail transporters due to the special nature of the railroad industry in recognition that railroads have sophisticated computerized tracking information systems. If the manifest system were applied to the rail system without adjustment, normal operating practices would be so disrupted as to effectively prevent the use of this method of transportation. See 45 FR 86970, 86971 (December 31, 1980). In the rail system, shipping papers are left with railcars at interchange points to be picked up by the transferee railroad. Thus, no face-to-face contact occurs and the normal manifest system is unworkable.

In keeping with the existing system for railroads, EPA's proposed export provisions required the Acknowledgment of Consent to be attached to the shipping paper in lieu of the manifest. In commenting on the proposal, the Association of American Railroads, brought to EPA's attention that the rail industry is now moving toward a system where there will be no exchange of papers between rail carriers. Each rail carrier will have its own shipping paper issued through a computerized system and therefore not even an exchange of a shipping paper will occur by leaving the shipping paper with the rail car. Instead, each rail carrier operator would carry its own shipping paper for the shipment. In the rail industry's view, the proposed export requirements represented a step backward since the requirement that the Acknowledgment of Consent be attached to the shipping paper would require that papers be passed from rail carrier to rail carrier and the new "paperless" exchange would be

unworkable. This commenter, therefore, suggested that the Acknowledgment of Consent be attached to the manifest which is forwarded ahead to the last rail transporter to carry waste in the U.S.

EPA did not intend to prevent or discourage the use of rail transportation through the export requirements. Nor does EPA believe that this was Congress' intent. In fact, EPA's intent in the proposal was to accommodate the special circumstances of the rail industry while ensuring that the purpose and intent of section 3017 was met. However, while EPA understands that attachment to a shipping paper under the new rail system may not be workable, it is difficult to understand why a copy of the Acknowledgment of Consent cannot be left in the rail car with the shipment. This would not require any face-to-face contact since the document would simply travel with the rail car as it is passed from one railroad to another. Accordingly, the final rule provides that the Acknowledgment of Consent simply accompany the waste shipment for shipments by rail and need not be attached to the shipping paper. Consistent with section 3017, this will allow the consent to accompany the waste shipment.<sup>6</sup> EPA invites further comment on this issue and will consider further modification to this requirement once the new "paperless" rail system is implemented if it can be shown that this requirement essentially prohibits exports by rail.

#### H. Small Quantity Generators

As previously discussed in Section III.B.4 of this preamble, EPA proposed to define an exporter as the person required to prepare the manifest pursuant to 40 CFR Part 262, Subpart B for a shipment of hazardous waste that specifies a treatment, storage, or disposal facility in the receiving country to which the waste will be sent. Under the rules existing at the time of the March 13, 1986 proposal, generators of less than 1000 kg/mo of hazardous waste in a calendar month (i.e., small quantity generators) were not subject to Subpart B of Part 262 (or any other Part 262-266 or 270 regulations),<sup>6</sup> provided

<sup>6</sup> The proposed rule also allowed the Acknowledgment of Consent to be attached to the shipping paper for exports by water (bulk shipment) in view of the domestic scheme for this type of transportation. The final rule does not change the proposal with regard to these exports since there were no comments suggesting that this would be a significant problem.

<sup>6</sup> Generators of between 100-1000 kg/mo were required by Section 3001(d)(3) of HSWA to manifest any waste shipped off-site with a single copy of the Uniform Hazardous Waste Manifest beginning July 1985.

the small quantity generator complied with § 262.11 (hazardous waste determination) and ensured delivery of his waste to an on-site facility or off-site facility either of which met one of five criteria:

1. Permitted under Part 270;
2. In interim status under Parts 270 and 265;
3. Authorized to manage hazardous waste by a State with a hazardous waste management program approved under Part 271;
4. Permitted, licensed, or registered by a State to manage municipal or industrial solid waste; or
5. A facility which beneficially uses, reuses, or legitimately recycles or reclaims its waste or treats its waste prior to beneficial use, reuse, or legitimate recycling or reclamation.

As the preamble to the proposal noted, it appeared that, technically, a small quantity generator who exported his waste would be subject to then-existing export requirements since he would be unable to comply with any of the above requirements. The proposed rule did not propose to change this result. Therefore, under the proposed rule, small quantity generators who exported their wastes would have been subject to full Part 262 requirements, including the proposed export requirements, while small quantity generators who shipped to any of the five kinds of domestic facilities identified above would continue to be exempt from the Part 262 requirements. The proposal indicated that EPA would be considering whether this was the appropriate treatment of small quantity generators in the final rule. In so doing, EPA would specifically consider any changes which ultimately might be made in the small quantity generator provisions being considered in a separate rulemaking (50 FR 31278 (August 1, 1985)). In addition, EPA would consider whether there should be more concern for a waste exported than dealt with domestically.

Since the March 13, 1986 proposal on exports, EPA has published its final rules for generators of less than 1000 kg/mo at 51 FR 10146 (March 24, 1986). In general, that rulemaking subjects generators of 100-1000 kg/mo to most of the hazardous waste management regulations, including the Part 262 multiple copy manifest requirements and retains the current exemption for generators of less than 100 kg/mo from the Part 262 manifesting and other regulatory requirements.

In determining the final export requirements appropriate for generators of less than 100 kg/mo of hazardous waste, EPA has decided to exempt these

generators from the export requirements to be consistent with the Agency's domestic policy with respect to these generators. As discussed at Section III.B.2. above, in EPA's view, only those wastes for which manifests are required domestically are the types of wastes that are properly the subject of section 3017. Moreover, as EPA stated in the March 24, 1986 final rule, it had no data to indicate that additional regulation of generators of less than 100 kg/mo of hazardous waste would provide any significant additional level of environmental protection. Generators of less than 100 kg/mo of hazardous waste account for only 0.07 percent of the total quantity of hazardous waste generated nationally. A review of damage cases also indicated that very few incidents involved quantities below 100 kg. Finally, it does not appear that the effect of the then-existing regulatory language which subjected exports by these generators to Part 262 requirements was intentional.

Accordingly, the final rule modifies § 261.5 to make clear that these generators are exempt from Part 262 requirements for exports as well as for domestic shipments. Any concerns that a foreign country may have about receiving such wastes can be resolved through a bilateral agreement by including the requirement that generators of less than 100 kg/mo provide notification for exports of hazardous wastes.

Generators of 100-1000 kg/mo will be subject to the export rules since under the March 24, 1986 final rule, they are now subject to manifesting requirements.

#### *I. State Authority*

##### **1. Effect on State Authorization**

Consistent with existing procedures, the proposal provided that States could not assume the authority to receive notifications of intent to export. In addition, States would not be authorized to transmit such information to foreign countries through the Department of State or to transmit Acknowledgments of Consent to the exporter. In EPA's view, foreign policy interests and exporters' interests in expeditious processing were better served by EPA's retaining these functions. This would provide the Department of State with a single point of contact in administering the export program and will better allow for uniformity and expeditious transmission of information between the United States and foreign countries. With the exception of these functions, EPA proposed that States include

requirements equivalent to those promulgated today.

EPA specifically requested comments on this approach. As comments were received objecting to the notification process set forth in the proposed rule, EPA has retained the language of the proposed rule in this respect. However, the final rule includes changes to proposal § 271.11 to require State programs to include a requirement that, for exports, a transporter may not accept a waste for export if he knows it does not conform to the Acknowledgment of Consent and must deliver a copy of the manifest to the U.S. Customs official at the point the waste leaves the United States. These changes simply reflect the addition of these requirements to the Federal requirements discussed above.

##### **2. Universe of "Hazardous Waste" in Authorized States**

In the preamble to the proposed rule, EPA explained that where a State has obtained authorization, "hazardous waste" for purposes of the export requirements would be the authorized State's universe of hazardous wastes plus wastes EPA identifies or lists pursuant to HSWA. EPA requested comments on the alternative of basing implementation on the Federal universe of hazardous wastes.

Comments received on this issue were divided. One commenter stated that the approach proposed could result in inconsistencies among States which would be confusing to foreign countries. In addition, such an approach could create unfair burdens on persons exporting from certain States. This commenter also stated that EPA's concern that exporters would have to become familiar with both Federal and State universes of hazardous waste if only the Federal universe was regulated was unfounded.

This commenter further stated that since any authorized State's universe of hazardous wastes must include at least the entire Federal universe, exporters would have little difficulty familiarizing themselves with the Federal universe. In addition, this commenter noted that the use of the Federal universe would be simpler for persons who export from more than one State, obviating the need for detailed knowledge of the universe of hazardous wastes in every State where such persons engage in the export business.

Commenters supporting EPA's approach argued that all wastes considered hazardous at the point of origination should be subject to the

export requirements to assure proper management and disposition.

After reviewing the comments received on the proposed approach and the implications of such an approach, EPA has determined that basing implementation on the authorized State universe plus those wastes identified or listed by EPA pursuant to HSWA remains the better approach. The "authorized State universe" of hazardous wastes consists of: (1) Those wastes in the Federal universe for which the State was authorized at the time it first received final authorization and (2) any wastes subsequently identified or listed by EPA for which the State has received authorization (by filing a request for approval of a program revision). The authorized State universe does not include wastes which are identified or listed by the State as hazardous wastes under State law but are not identified or listed as such by EPA. See 40 CFR 271.1(i)(2).

This approach is consistent with EPA's usual interpretation of the phrase "hazardous wastes identified or listed under this subtitle." The only period of time when any inconsistency among States might occur is during the period allowed States to update their programs to add a non-HSWA waste newly listed or identified by EPA. See 40 CFR 271.21 (Amendments to this section were proposed on January 1986 at 51 FR 496-504.) Only during this period might a particular waste from State A be subject to the export requirements (because State A's program revision is approved early) while the same waste from State B would not be subject to the export requirements (because State B's program revision is approved later than State A's). EPA does not believe that the potential for this inconsistency merits deviating from its usual interpretation of the phrase "identified or listed under this subtitle." Moreover, were export requirements applicable to the Federal universe, more wastes would be subject to the export requirements than are regulated on a national level domestically. This would be inconsistent with the intent to treat wastes for export similar to wastes dealt with domestically. Similarly, a material newly listed by EPA and stored in a State during the time period allowed a State to revise its program to add such waste, would not be subject to regulation while stored but would be subject to regulation once the export of such waste was initiated. Thus, materials exported would become subject to regulation ahead of the time States are required to regulate the waste

domestically. This would make little sense.

To what extent commenters may be suggesting that EPA also regulate wastes listed by a State beyond those regulated Federally, EPA also rejects this approach as inconsistent with its usual interpretation of "identified or listed" under this Subtitle. In addition, EPA would not have the authority to enforce violations with respect to such wastes which would make little sense with respect to a program primarily Federally implemented. Thus, under this final rule, hazardous wastes identified or listed by the State as part of its authorized program which are broader in scope (not in the Federal universe) will not be subject to the export regulations.

### *J. Confidentiality*

EPA proposed to amend § 260.2 to provide that information for which a claim of confidentiality is made will be disclosed by EPA only to the extent and by means of the procedures set forth in 40 CFR Part 2, Subpart B, except that information contained in a notification of intent to export a hazardous waste will be provided to appropriate authorities in receiving countries and the Department of State, regardless of such a claim. Information would otherwise be disclosed to the public and transit countries in accordance with 40 CFR Part 2. The final rule adopts this provision as proposed.

As the preamble to the proposal explained, this approach to the confidentiality of section 3017 notices was based upon EPA's interpretation of RCRA. There is an apparent conflict on the face of the statute between section 3007(b) and section 3017. Section 3007(b) could be read as prohibiting all disclosure of any confidential business information contained in a notice of intent to export. However, this reading would contradict section 3017.

Because the statute must be interpreted to give the fullest possible effect on both section 3007(b) and section 3017, EPA interprets section 3017 to require provision of the notification information to a receiving country through the Department of State even if the information in the notice is confidential, but to prohibit disclosure by EPA of such confidential business information to other persons. The purpose of the notification is to allow receiving countries to make an informed decision as to whether to accept the waste and, if accepted, how to deal with that waste. Moreover, section 3017 prohibits the export of hazardous waste in the absence of consent by the receiving country. Thus, unless such

information can be divulged to the Department of State and receiving countries, informed consent could not be obtained and the export would be prohibited.

If a claim of confidentiality is asserted as to any notification information, EPA will exercise its discretion to determine whether it is the type of information that is important for a transit country to know. For example, it would be important for a transit country to know the type and amounts of waste but probably not important for it to know the port of entry to a receiving country. If the information claimed confidential is deemed to be information of which a transit country should know, the time frame set forth in section 3017(d) for submission of a "complete" notification to a receiving country will not begin to run until a determination by EPA of the validity of any such claim has been made. Only upon EPA's completion of the processing of the confidentiality claim will the notification information be provided to receiving countries and any nonconfidential information provided to transit countries. Since an export cannot take place in the absence of the consent of the receiving country, exporters should be aware that claims of confidentiality could, therefore, significantly delay shipment.

EPA received comments on this subject which stated that the availability of export information should not be abridged. EPA does not believe that the final rule in any way abridges the availability of export information contrary to Congressional intent. In fact, as EPA noted in the proposal, it does not believe that notification information generally is entitled to treatment as confidential business information. It has been EPA's experience that existing notifications, which consist of identification of the exporter, waste and consignee, have not been claimed by exporters to be confidential.

Another commenter questioned why EPA could not provide confidential information to a transit country. As discussed above, EPA believes that the only correct reading of sections 3007(b) and 3017 precludes disclosure of confidential information to parties other than receiving countries and the Department of State. However, EPA notes that a transit country that is not satisfied with the information it receives from the notification may take action to prohibit the waste from entering the country.

#### IV. Enforcement

##### A. EPA

Noncompliance with RCRA section 3017 and regulations promulgated thereunder is subject to civil and criminal enforcement action under section 3008. As the legislative history of section 3017 states:

The requirements of this section should be vigorously enforced using all the tools of Section 3008. To accomplish this, the Agency should work with the U.S. Customs Service to establish an effective program to monitor and spotcheck international shipments of hazardous waste to assure compliance with the requirements of the section. Violations should then be vigorously pursued. S. Rep. No. 98-284, 98th Cong., 1st sess. 48.

Most important, HSWA includes an amendment to section 3008(d) of RCRA authorizing criminal penalties against any person who exports a hazardous waste without the consent of the receiving country or in nonconformance with an international agreement between the U.S. and a receiving country. Section 3008(d)(6) establishes incarceration of up to two years and/or a fine of \$50,000 per day for knowingly exporting a hazardous waste without consent or in violation of a bilateral agreement. Penalties and prison terms may be doubled for second offenses. EPA intends to prosecute violators to the fullest extent.

Subsection (d)(6) of section 3008 subjects to criminal sanctions "any person who knowingly exports" hazardous waste to a foreign country without that sovereign's consent. The receiving country's consent is premised on the correctness of the data on the export notification. "Consent" based upon the false representation of the exporter is invalid.

The following examples of knowing exportation are meant to illustrate (but do not limit) cases in which the Agency would find that the receiving country's consent has not been given and criminal enforcement might be pursued:

1. Exportation of hazardous waste without notification (or without renotification as required under 40 CFR 262.53(c));
2. Exportation of hazardous waste after notification but without consent (or after renotification but without consent based on the renotification); or
3. Exportation of hazardous waste with "consent" based on false representation(s) in the notification.

In the enforcement of these regulations, EPA may also use section 3008(d)(3) of RCRA (which prohibits the knowing omission of material information or the making of a false statement or representation in any

application, label, manifest, record, report, permit or other document filed, maintained, or used for compliance with Subtitle C (e.g., the notification of intent of export)). These two violations are each punishable by up to two years imprisonment and/or a fine of \$50,000. (Potential fines and prison terms are doubled for second offenses.)

##### B. U.S. Customs Service

The new HSWA provision on the export of hazardous waste raises issues concerning cooperation between EPA and the U.S. Customs Service on enforcement matters. As noted above, Congress intended that EPA "should work with the U.S. Customs Service to establish an effective program to monitor and spotcheck international shipments of hazardous waste to assure compliance with the requirements of [section 3017]." To further this legislative intent, EPA has consulted with and is continuing to consult with the U.S. Customs Service in order to develop an effective program to monitor and spotcheck hazardous waste exports.

The United States Customs Service has independent authority to stop, inspect, search, seize, and detain suspected illegal exports of hazardous waste under the Export Administration Act, 50 U.S.C. App. 2411, as amended by the Export Administration Amendments Act of 1985, Pub. L. No. 99-64, 99 Stat. 120 (1985), case law, and U.S. Customs Service regulations (e.g., 19 CFR Part 162). Exporters who violate the Export Administration Act or U.S. Customs Service regulations may also be subject to enforcement actions under those authorities.

##### C. Other Agencies

Exporters of hazardous waste also may be required to comply with pertinent export control laws and regulations issued by other agencies. For example, regulations promulgated by the Bureau of the Census of the Department of Commerce require exporters to file Shipper's Export Declarations for shipments valued over \$1,000. 15 CFR Part 30. It may very well be possible that hazardous waste exported for purposes of recycling would have a value of \$1,000. On January 1, 1986, the Bureau of Census created a new statistical reporting number for hazardous waste within the "Schedule B—Statistical Classification of Domestic and Foreign Commodities Exported from the United States." This number (818.8000) must be used in preparing shipper Export Declarations as required by 13 U.S.C. 301, and 15 CFR 30.7.

Failure to file a Shipper's Export Declaration is subject to civil penalties

as authorized by 13 U.S.C. 305. It is also unlawful to knowingly make false or misleading representations in such documents. This constitutes a violation of the Export Administration Act. To knowingly and willfully make false or misleading statements relating to information on the Shipper's Export Declaration is a criminal offense subject to penalties as provided for in 18 U.S.C. 1001.

##### V. Effective Date of the Final Regulations

EPA proposed that any final regulatory provisions issued pursuant to section 3017(c) setting forth export notification requirements shall become effective 30 days after promulgation. It was EPA's position that, although the statute specifies a 180-day effective date, the statute also accorded EPA the discretion to shorten that time period under appropriate circumstances.

Several commenters expressed serious concern with the 30-day effective date, reading EPA's statement on this issue to mean that exports taking place starting 30 days after the date of publication of the final rule would be subject not only to the notification requirement but also the consent requirement. It was not EPA's intent, however, to require both notification and consent for shipments occurring 30 days after promulgation. Rather, EPA intended the date occurring 30 days after promulgation to be the point at which it would begin processing notifications. Consent would not be necessary until the November 8, 1986 statutory deadline.

Accordingly, to effectuate EPA's intent and to provide time for consent to be obtained for shipments occurring on or soon after November 8, 1986, the final rule provides that the regulations are effective November 8, 1986, but that EPA will begin accepting notifications immediately for shipments to occur on or after that date. This should allow time to process notifications in order to obtain consent by the statutory deadline and thereby avoid any hiatus in exports of hazardous waste.

Another commenter asserted that EPA has no authority to shorten the 180-day effective date. However, as explained in the preamble to the proposal, EPA interprets the statute to afford it the discretion to shorten this time period. Section 3010(b) provides that regulations promulgated under Subtitle C shall have an effective date six months after the date of promulgation. That section also allows the Administrator to provide for a shorter period prior to the effective date under specified conditions. Section

3017(h) also sets forth the requirement that regulations be effective six months (180 days) after promulgation. However, it does not mention specifically the Administrator's discretion to allow a shorter time. Thus, the question arises as to whether section 3010(b) or section 3017(b) is controlling. It is EPA's view that section 3010(b) is controlling. Where Congress intended that the Administrator have no discretion to shorten the period prior to the effective date, Congress used specific language to that effect. For example, section 3001(d)(9) (Small Quantity Generator Waste) provides that "the last sentence of § 3010(b) shall not apply to regulations promulgated under this Section." Accordingly, since Congress did not specifically provide otherwise under section 3017, the Administrator retains the authority to shorten this period.

EPA believes a shorter effective date is appropriate with respect to the export rule because the regulated community does not need six months to come into compliance with these rules. These rules are not complex and simply involve the exchange of general information. Moreover, because of the date of promulgation of this final rule, these regulations cannot be effectuated by November 8, 1986,<sup>7</sup> and still allow for a 180 day period prior to the effective date. Yet, EPA believes it is important to have rules in effect to properly implement section 3017 by that date.

Assuming, however, that section 3010(b) is not controlling, EPA believes that its scheme for effectuation of these rules is also authorized by section 3017 itself. Section 3017 specifies several dates by which certain acts should occur: 24 months for full statutory implementation; 12 months for implementation of the notification requirements of subsection (c); 12 months for enactment of regulations to implement the section; and, 180 days before the effective date of the regulations. Exactly how these time frames were intended to work together is unclear. For example, regulations need not be promulgated for 12 months but notification requirements were required to go into effect in 12 months. At the same time, 180 days was specified as the time between promulgation and effectuation of regulations. The various time frames established in section 3017 do not, on their face, logically interrelate, nor is it apparent which time frame would

<sup>7</sup> Section 3017(a) requires compliance with export requirements 24 months after enactment of HSWA (November 8, 1986).

control if any slippage were to occur. In view of the lack of clarity of the statutory language in this respect, it is EPA's position that the time for full implementation of section 3017 must take precedence over the number of days between the promulgation date and effective date of the implementing notes. This scheme comports with Congressional intent that this section go into effect by November 8, 1986, and that regulations be in place by that time. Where EPA is unable to satisfy both of these statutory time frames, the November 8, 1986, deadline for implementing section 3017 is more important than the number of days between promulgation of the rule and its effective date.

#### VI. Economic, Environmental and Regulatory Impacts

##### A. Impact on Small Quantity Generators

Because of the limited number of generators of between 100-1000 kg/mo EPA expects will export hazardous waste, the impact on small quantity generators should be minimal.

##### B. Executive Order 12291—Regulatory Impact

Executive Order 12291 (46 FR 13193, February 9, 1981) requires that a regulatory agency determine whether a new regulation will be "major" and if so, that a Regulatory Impact Analysis be conducted.

The Administrator has determined that today's final rule is not a major rule, because it has total estimated costs of less than \$100 million per year, and has no significant adverse economic effects.

While EPA recognizes that some companies may experience economic dislocation if there are significant delays in processing notifications and consents, the Agency believes that judicious planning on the part of these companies could eliminate or lessen the impact of such delays, if any. As stated in the preamble to the proposed rule (51 FR 10146, March 13, 1986), EPA will process all notifications and written consents as expeditiously as possible.

##### C. Paperwork Reduction Act

The information collection requirements in this rule have been approved by the Office of Management and Budget under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, and have been assigned OMB control number 2050-0035.

##### D. Regulatory Flexibility Analysis

Pursuant to the Regulatory Flexibility

Act, 5 U.S.C. 601 *et seq.*, a Regulatory Flexibility Analysis must be performed if the regulatory requirements have a significant impact on a substantial number of small entities. No Regulatory Flexibility Analysis is required where the head of an agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

Since 1980, generators exporting hazardous waste have been required by EPA to notify the Administrator four weeks before the initial shipment of hazardous waste to each country in each calendar year. Based upon an analysis of those notifications received, the Agency has determined that no small entities have filed notifications of intent to export. EPA does not anticipate that the universe of generators exporting hazardous waste will significantly change in the future. Therefore, this rule is not expected to have a significant economic impact on a substantial number of small entities and does not require a Regulatory Flexibility Analysis. Therefore, pursuant to 5 USC §601(b), I certify that this regulation will not have a significant economic impact on a substantial number of small entities.

#### List of Subjects

##### 40 CFR Part 260

Administrative practice and procedure, Confidential business information, Hazardous waste, Liquids in landfills.

##### 40 CFR Part 261

Intergovernmental relations, Hazardous materials, Waste treatment and disposal, Recycling.

##### 40 CFR Part 262

Hazardous material transportation, Hazardous waste, Imports, Exports, Labeling, Packaging and containers, Reporting and recordkeeping requirements, Waste minimization.

##### 40 CFR Part 263

Hazardous material transportation, Waste treatment and disposal.

##### 40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping



requirements, Water pollution control, Water supply.

Lee M. Thomas, Administrator. August 5, 1986.

**PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL**

1. The authority citation for Part 260 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, 3010, 3014, 3015, 3017, 3018, 3019 and 7004, Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921 through 6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974).

2. Section 260.2 is amended by revising paragraph (b) to read as follows:

**§ 260.2 Availability of information; confidentiality of information.**

(b) Any person who submits information to EPA in accordance with Parts 260 through 268 of this chapter may assert a claim of business confidentiality covering part or all of that information by following the procedures set forth in § 2.203(b) of this chapter. Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in Part 2, Subpart B, of this chapter except that information required by § 262.53(a) which is submitted in notification of intent to export a hazardous waste will be provided to the Department of State and the appropriate authorities in a receiving country regardless of any claims of confidentiality. However, if no such claim accompanies the information when it is received by EPA, it may be made available to the public without further notice to the person submitting it.

**PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE**

3. The authority citation for Part 261 is revised to read as follows:

Authority: Secs. 1006, 2002(a), 3001, 3002, and 3017 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, 6922, and 6937).

4. Section 261.6 is amended by revising paragraphs (a)(3)(i) to read as follows:

**§ 261.6 Requirements for recyclable materials.**

- (a) \* \* \*
- (3) \* \* \*

(i) Industrial ethyl alcohol that is reclaimed except that, unless provided

otherwise in an international agreement as specified in § 262.58:

(A) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, must comply with the requirements applicable to a primary exporter in §§ 262.53, 262.56 (a)(1)-(4), (6), and (b), and 262.57, export such materials only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in Subpart E of Part 262, and provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export;

(B) Transporters transporting a shipment for export may not accept a shipment if he knows the shipment does not conform to the EPA Acknowledgment of Consent, must ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment and must ensure that it is delivered to the facility designated by the person initiating the shipment.

5. Section 261.5 is amended by revising paragraphs (f)(3) and (g)(3) to read as follows:

**§ 261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.**

(f) \* \* \*  
(3) A conditionally exempt small quantity generator may either treat or dispose of his acute hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is:

(g) \* \* \*  
(3) A conditionally exempt small quantity generator may either treat or dispose of his hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage or disposal facility, either of which, if located in the U.S., is:

**PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE**

6. The authority citation for Part 262 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3002, 3003, 3004, 3005, and 3017 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6906, 6912(a), 6922, 6923, 6924, 6925, and 6937).

7. Section 262.41 is amended by revising the introductory text to paragraph (a), (a)(3), (a)(4) and (a)(5), and adding a sentence at the end of paragraph (b) to read as follows:

**§ 262.41 Biennial Report.**

(a) A generator who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and submit a single copy of a Biennial Report to the Regional Administrator by March 1 of each even numbered year. The Biennial Report must be submitted on EPA Form 8700-13A, must cover generator activities during the previous year, and must include the following information:

- (3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility in the United States to which waste was shipped during the year;
- (4) The name and EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage or disposal facility within the United States;
- (5) A description, EPA hazardous waste number (from 40 CFR Part 261, Subpart C or D), DOT hazard class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage or disposal facility within the United States. This information must be listed by EPA identification number of each such off-site facility to which waste was shipped.

(b) \* \* \*  
Reporting for exports of hazardous waste is not required on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR 262.56.

8. 40 CFR Part 262 is amended by revising Subpart E to read as follows:

**Subpart E—Exports of Hazardous Waste**

Sec.	
262.50	Applicability.
262.51	Definitions.
262.52	General requirements.
262.53	Notification of intent to export.
262.54	Special manifest requirements.
262.55	Exception reports.
262.56	Annual reports.
262.57	Recordkeeping.
262.58	International agreements. [Reserved]

**Subpart E—Exports of Hazardous Waste**

§ 262.50 Applicability.  
This subpart establishes requirements applicable to exports of hazardous waste. Except to the extent § 262.58 provides otherwise, a primary exporter

of hazardous waste must comply with the special requirements of this subpart and a transporter transporting hazardous waste for export must comply with applicable requirements of Part 263. Section 262.58 sets forth the requirements of international agreements between the United States and receiving countries which establish different notice, export, and enforcement procedures for the transportation, treatment, storage and disposal of hazardous waste for shipments between the United States and those countries.

#### § 262.51 Definitions.

In addition to the definitions set forth at 40 CFR 260.10, the following definitions apply to this subpart:

"Consignee" means the ultimate treatment, storage or disposal facility in a receiving country to which the hazardous waste will be sent.

"EPA Acknowledgment of Consent" means the cable sent to EPA from the U.S. Embassy in a receiving country that acknowledges the written consent of the receiving country to accept the hazardous waste and describes the terms and conditions of the receiving country's consent to the shipment.

"Primary Exporter" means any person who is required to originate the manifest for a shipment of hazardous waste in accordance with 40 CFR Part 262, Subpart B, or equivalent State provision, which specifies a treatment, storage, or disposal facility in a receiving country as the facility to which the hazardous waste will be sent and any intermediary arranging for the export.

"Receiving country" means a foreign country to which a hazardous waste is sent for the purpose of treatment, storage or disposal (except short-term storage incidental to transportation).

"Transit country" means any foreign country, other than a receiving country, through which a hazardous waste is transported.

#### § 262.52 General requirements.

Exports of hazardous waste are prohibited except in compliance with the applicable requirements of this Subpart and Part 263. Exports of hazardous waste are prohibited unless:

(a) Notification in accordance with § 262.53 has been provided;

(b) The receiving country has consented to accept the hazardous waste;

(c) A copy of the EPA Acknowledgment of Consent to the shipment accompanies the hazardous waste shipment and, unless exported by rail, is attached to the manifest (or

shipping paper for exports by water (bulk shipment)).

(d) The hazardous waste shipment conforms to the terms of the receiving country's written consent as reflected in the EPA Acknowledgment of Consent.

(Approved by the Office of Management and Budget under control number 2050-0035)

#### § 262.53 Notification of intent to export.

(a) A primary exporter of hazardous waste must notify EPA of an intended export before such waste is scheduled to leave the United States. A complete notification should be submitted sixty (60) days before the initial shipment is intended to be shipped off site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the primary exporter, and include the following information:

(1) Name, mailing address, telephone number and EPA ID number of the primary exporter;

(2) By consignee, for each hazardous waste type:

(i) A description of the hazardous waste and the EPA hazardous waste number (from 40 CFR Part 261, Subparts C and D), U.S. DOT proper shipping name, hazard class and ID number (UN/NA) for each hazardous waste as identified in 49 CFR Part 171-177;

(ii) The estimated frequency or rate at which such waste is to be exported and the period of time over which such waste is to be exported.

(iii) The estimated total quantity of the hazardous waste in units as specified in the instructions to the Uniform Hazardous Waste Manifest Form (8700-22);

(iv) All points of entry to and departure from each foreign country through which the hazardous waste will pass;

(v) A description of the means by which each shipment of the hazardous waste will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.));

(vi) A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country (e.g., land or ocean incineration, other land disposal, ocean dumping, recycling);

(vii) The name and site address of the consignee and any alternate consignee; and

(viii) The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in such

country and the nature of its handling while there;

(b) Notification shall be sent to the Office of International Activities (A-106), EPA, 401 M Street, SW., Washington, DC 20460 with "Attention: Notification to Export" prominently displayed on the front of the envelope.

(c) Except for changes to the telephone number in paragraph (a)(1) of this section, changes to paragraph (a)(2)(v) of this section and decreases in the quantity indicated pursuant to paragraph (a)(2)(iii) of this section when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous waste specified in the original notification), the primary exporter must provide EPA with a written renotification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to paragraph (a)(2)(viii) of this section and in the ports of entry to and departure from transit countries pursuant to paragraph (a)(2)(iv) of this section) has been obtained and the primary exporter receives an EPA Acknowledgment of Consent reflecting the receiving country's consent to the changes.

(d) Upon request by EPA, a primary exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(e) In conjunction with the Department of State, EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of paragraph (a) of this section. Where a claim of confidentiality is asserted with respect to any notification information required by paragraph (a) of this section, EPA may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

(f) Where the receiving country consents to the receipt of the hazardous waste, EPA will forward an EPA Acknowledgment of Consent to the primary exporter for purposes of § 262.54(h). Where the receiving country objects to receipt of the hazardous waste or withdraws a prior consent, EPA will notify the primary exporter in writing. EPA will also notify the primary exporter of any responses from transit countries.

(Approved by the Office of Management and Budget under control number 2050-0035)

**§ 262.54 Special manifest requirements.**

A primary exporter must comply with the manifest requirements of 40 CFR 262.20-262.23 except that:

(a) In lieu of the name, site address and EPA ID number of the designated permitted facility, the primary exporter must enter the name and site address of the consignee;

(b) In lieu of the name, site address and EPA ID number of a permitted alternate facility, the primary exporter may enter the name and site address of any alternate consignee.

(c) In Special Handling Instructions and Additional Information, the primary exporter must identify the point of departure from the United States;

(d) The following statement must be added to the end of the first sentence of the certification set forth in Item 16 of the Uniform Hazardous Waste Manifest Form: "and conforms to the terms of the attached EPA Acknowledgment of Consent";

(e) In lieu of the requirements of § 262.21, the primary exporter must obtain the manifest form from the primary exporter's State if that State supplies the manifest form and requires its use. If the primary exporter's State does not supply the manifest form, the primary exporter may obtain a manifest form from any source.

(f) The primary exporter must require the consignee to confirm in writing the delivery of the hazardous waste to that facility and to describe any significant discrepancies (as defined in 40 CFR 264.72(a)) between the manifest and the shipment. A copy of the manifest signed by such facility may be used to confirm delivery of the hazardous waste.

(g) In lieu of the requirements of § 262.20(d), where a shipment cannot be delivered for any reason to the designated or alternate consignee, the primary exporter must:

(1) Renotify EPA of a change in the conditions of the original notification to allow shipment to a new consignee in accordance with § 262.53(c) and obtain an EPA Acknowledgment of Consent prior to delivery; or

(2) Instruct the transporter to return the waste to the primary exporter in the United States or designate another facility within the United States; and

(3) Instruct the transporter to revise the manifest in accordance with the primary exporter's instructions.

(h) The primary exporter must attach a copy of the EPA Acknowledgment of Consent to the shipment to the manifest which must accompany the hazardous waste shipment. For exports by rail or water (bulk shipment), the primary exporter must provide the transporter with an EPA Acknowledgment of

Consent which must accompany the hazardous waste but which need not be attached to the manifest except that for exports by water (bulk shipment) the primary exporter must attach the copy of the EPA Acknowledgment of Consent to the shipping paper.

(i) The primary exporter shall provide the transporter with an additional copy of the manifest for delivery to the U.S. Customs official at the point the hazardous waste leaves the United States in accordance with § 263.20(g)(4).

(Approved by the Office of Management and Budget under control number 2050-0035)

**§ 262.55 Exception reports.**

In lieu of the requirements of § 262.42, a primary exporter must file an exception report with the Administrator if:

(a) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within forty-five (45) days from the date it was accepted by the initial transporter;

(b) Within ninety (90) days from the date the waste was accepted by the initial transporter, the primary exporter has not received written confirmation from the consignee that the hazardous waste was received;

(c) The waste is returned to the United States.

(Approved by the Office of Management and Budget and assigned under control number 2050-0035)

**§ 262.56 Annual reports.**

(a) Primary exporters of hazardous waste shall file with the Administrator no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. Such reports shall include the following:

(1) The EPA identification number, name, and mailing and site address of the exporter;

(2) The calendar year covered by the report;

(3) The name and site address of each consignee;

(4) By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR Part 261, Subpart C or D), DOT hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped and number of shipments pursuant to each notification;

(5) Except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, unless provided

pursuant to § 262.41, in even numbered years:

(i) a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

(ii) a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984.

(6) A certification signed by the primary exporter which states:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

(b) Reports shall be sent to the following address: Office of International Activities (A-106), Environmental Protection Agency, 401 M Street SW, Washington, DC 20460.

(Approved by the Office of Management and Budget under control number 2050-0035)

**§ 262.57 Recordkeeping.**

(a) For all exports a primary exporter must:

(1) Keep a copy of each notification of intent to export for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(2) Keep a copy of each EPA Acknowledgment of Consent for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

(3) Keep a copy of each confirmation of delivery of the hazardous waste from the consignee for at least three years from the date the hazardous waste was accepted by the initial transporter; and

(4) Keep a copy of each annual report for a period of at least three years from the due date of the report.

(b) The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

(Approved by the Office of Management and Budget under control number 2050-0035)

**§ 262.58 International agreements.**  
**((Reserved))**

9. Title 40 CFR Part 262 is amended by adding new Subpart F to read as follows:

**Subpart F—Imports of Hazardous Waste**

Sec.  
262.60 Imports of hazardous waste.

**Subpart F—Imports of Hazardous Waste**

**§ 262.60 Imports of hazardous waste.**

(a) Any person who imports hazardous waste from a foreign country into the United States must comply with the requirements of this part and the special requirements of this subpart.

(b) When importing hazardous waste, a person must meet all the requirements of § 262.20(a) for the manifest except that:

(1) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number must be used.

(2) In place of the generator's signature on the certification statement, the U.S. importer or his agent must sign and date the certification and obtain the signature of the initial transporter.

(c) A person who imports hazardous waste must obtain the manifest form from the consignment State if the State supplies the manifest and requires its use. If the consignment State does not supply the manifest form, then the manifest form may be obtained from any source.

10. Title 40 CFR Part 262 is amended by adding a new Subpart G to read as follows:

**Subpart G—Farmers**

**§ 262.70 Farmers.**

A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this part or other standards in 40 CFR Part 270, 264 or 265 for those wastes provided he triple rinses each emptied pesticide container in accordance with § 261.7(b)(3) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

**Appendix—Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions)**

11. The instructions to the Uniform Hazardous Waste Manifest form in the Appendix to Part 262 is amended to add under Item 16 a new paragraph after the first paragraph as follows:

Primary exporters shipping hazardous wastes to a facility located outside of the United States must add to the end of the first

sentence of the certification the following words "and conforms to the terms of the EPA Acknowledgment of Consent to the shipment."

**PART 263—STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE**

12. The authority citation for Part 263 is revised to read as follows:

**Authority:** Secs. 2002(a), 3002, 3003, 3004, 3005 and 3017 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 and as amended by the Quiet Communities Act of 1978 (42 U.S.C. 6912, 6922, 6923, 6924, 6925 and 6937).

13. Section 263.20 is amended by revising paragraphs (a), (c), (e)(2), (f)(2) and (g)(3) and by adding paragraph (g)(4) to read as follows:

**§ 263.20 The manifest system.**

(a) A transporter may not accept hazardous waste from a generator unless it is accompanied by a manifest signed in accordance with the provisions of 40 CFR 262.20. In the case of exports, a transporter may not accept such waste from a primary exporter or other person (1) if he knows the shipment does not conform to the EPA Acknowledgment of Consent; and (2) unless, in addition to a manifest signed in accordance with the provisions of 40 CFR 262.20, such waste is also accompanied by an EPA Acknowledgment of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).

(c) The transporter must ensure that the manifest accompanies the hazardous waste. In the case of exports, the transporter must ensure that a copy of the EPA Acknowledgment of Consent also accompanies the hazardous waste.

(2) A shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) and, for exports, an EPA Acknowledgment of Consent accompanies the hazardous waste; and

(2) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) and, for exports an EPA Acknowledgment of Consent

accompanies the hazardous waste at all times.

- (g) . . . . .
- (3) Return a signed copy of the manifest to the generator; and
- (4) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

**PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS**

14. The authority citation for Part 271 continues to read as follows:

**Authority:** Secs. 1006, 2002(a), and 3006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), and 6926).

**§ 271.1 [Amended]**

15. Section 271.1 paragraph (j) is amended by adding the following entry to Table 1 in chronological order:

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Date	Title of regulation
[Insert date of publication] . . . . .	Exports of hazardous waste.

16. Section 271.10 is amended by revising paragraph (e) to read as follows except for the note which remains unchanged.

**§ 271.10 Requirements for generators of hazardous wastes.**

(e) The State program shall provide requirements respecting international shipments which are equivalent to those at 40 CFR Part 262 Subparts E and F, except that:

(1) Advance notification, annual reports and exception reports in accordance with 40 CFR 262.53, 262.55 and 262.56 shall be filed with the Administrator; States may require that copies of the documents referenced also be filed with the State Director; and

(2) The Administrator will notify foreign countries of intended exports in conjunction with the Department of State and primary exporters of foreign countries' responses in accordance with 40 CFR 262.53.

17. Section 271.11 is amended by revising paragraph (c) to read as follows:

**§ 271.11 Requirements for transporters of hazardous wastes.**

• • • • •

(c) The State must require the transporter to carry the manifest during transport, except in the case of shipments by rail or water specified in 40 CFR 263.20 (e) and (f) and to deliver waste only to the facility designated on the manifest. The State program shall provide requirements for shipments by rail or water equivalent to those under 40 CFR 263.20 (e) and (f). For exports of hazardous waste, the State must require the transporter to refuse to accept hazardous waste for export if he knows the shipment does not conform to the EPA Acknowledgment of Consent, to carry an EPA Acknowledgment of Consent to the shipment, and to provide a copy of the manifest to the U.S. Customs official at the point the waste leaves the United States.

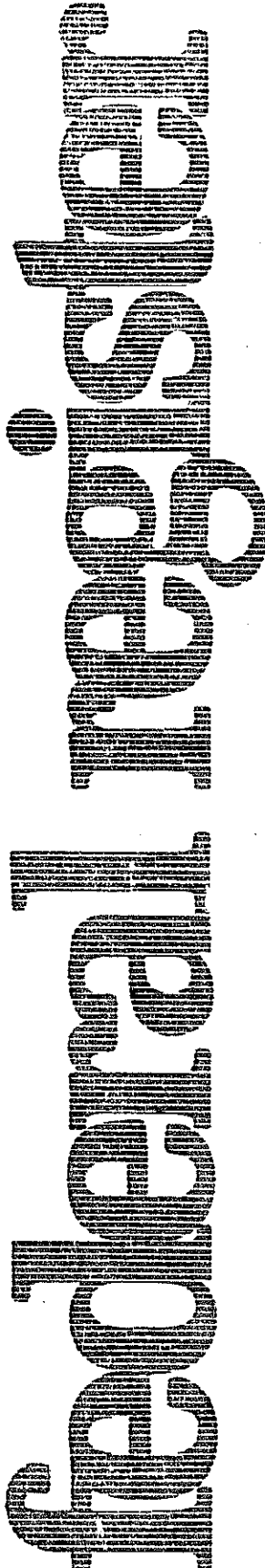
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Wednesday  
October 1, 1986



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**Part VII**

**Environmental  
Protection Agency**

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**40 CFR Part 262**

**Hazardous Waste Management System;  
Standards for Generators of Hazardous  
Waste; Final Rule**

**ENVIRONMENTAL PROTECTION  
AGENCY**

40 CFR Part 262

(SWH-FRL 3074-6)

**Hazardous Waste Management  
System; Standards for Generators of  
Hazardous Waste****AGENCY:** Environmental Protection  
Agency.**ACTION:** Final rule.

**SUMMARY:** On March 24, 1986, the U.S. Environmental Protection Agency (EPA) promulgated final regulations for generators of between 100 kg and 1000 kg of hazardous waste in a calendar month (i.e., generators of 100-1000 kg/mo) under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). At that time, the Agency also requested public comment on whether these generators should be subject to the waste minimization certification contained on the Uniform Hazardous Waste Manifest. Today's action explains the Agency's decision to modify the waste minimization certification for small quantity generators of 100-1000 kg/mo and revises the Uniform Hazardous Waste Manifest to reflect this modification. In addition, today's notice makes a technical correction to the July 15, 1985 Final Codification Rule affecting the waste minimization provisions. Finally, this notice extends the OMB expiration date on the manifest form and stipulates a new OMB form number.

**EFFECTIVE DATE:** September 22, 1986.

**ADDRESSES:** The public docket for this rulemaking is located in Room S-212-C, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. The EPA RCRA Docket is open from 9:30 a.m. to 3:30 p.m., Monday through Friday, excluding Federal holidays. To review docket materials, the public must make an appointment by calling Mia Zmud at 475-9327 or Kate Blow at 382-4675. A maximum of 50 pages of material may be copied from any regulatory docket at no cost. Additional copies cost \$20/page.

**FOR FURTHER INFORMATION CONTACT:** For general information, contact the RCRA/Superfund Hotline, (800) 424-9346, (in Washington, DC, call 382-3000), or the Small Business Hotline, (800) 368-5888. For information on specific aspects to today's notice, contact Robert Axelrad, (202) 382-4761, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460.

**SUPPLEMENTARY INFORMATION:****I. Waste Minimization Manifest  
Certification***A. Final Codification Rule*

EPA amended its existing hazardous waste regulations on July 15, 1985, to incorporate a number of provisions contained in the HSWA of 1984 which had immediate or short term effects on the regulated community (50 FR 28720). Among the requirements for generators of hazardous waste contained in this 'Final Codification Rule' were the provisions of section 3002(b) of HSWA that a generator certify to the following on the Uniform Hazardous Waste Manifest:

I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment.

This certification statement was contained on a revised Uniform Hazardous Waste Manifest Form and instructions published as the Appendix to Part 262. The preamble to the codification rule explained that the certification statement did not apply to small quantity generators at that time because they were not yet subject to the section 3002 generator requirements, including the waste minimization certification requirement. With respect to large quantity generators, (i.e., those persons who generate greater than 1000 kg of hazardous waste in a calendar month or who accumulate greater than 1000 kg at any time), the preamble emphasized the self-implementing nature of the certification requirement and the fact that the Agency would not second guess generators' determinations of what a waste minimization 'program' should consist of or what methods of waste minimization or management were ultimately determined by the generator to be 'economically practicable'. (50 FR 28733)

*B. Small Quantity Generator Rules*

In a Federal Register notice accompanying the March 24, 1986 small quantity generator final regulations (51 FR 10146), the Agency explained that since it had not specifically addressed the issue of waste minimization in the August 1, 1985 proposed rules for small quantity generators, it was requesting public comment on whether generators of 100-1000 kg/mo should be required to certify to waste minimization on the Uniform Hazardous Waste Manifest. As explained in the March 24, 1986

proposal, the requirement that generators of 100-1000 kg/mo certify to waste minimization would automatically go into effect on September 22, 1986, the date these generators become subject to the section 3002 generator standards, unless the Agency acted to exempt them.

At the time, EPA proposed that generators of 100-1000 kg/mo be required to certify to waste minimization since the Agency did not believe that the requirement posed an unreasonable burden and because the Agency believed that protection of human health and the environment would be enhanced. The Agency requested public comment as to whether the waste minimization certification requirement would pose undue administrative burden and whether generators of 100-1000 kg/mo should be exempted from the requirement. Congress has directed EPA to consider the impacts on small business in developing regulations for this group of generator and to specifically consider reducing the administrative and paperwork burdens whenever possible, consistent with protection of human health and the environment. In addition, the legislative history accompanying the waste minimization provisions indicates that Congress did not intend the manifest certification to result in significant paperwork burdens for small quantity generators. See S. Rep. No. 284, 98th Cong., 1st sess. 67 (1983).

As explained in the following section, EPA has decided not to exempt the small quantity generators of 100-1000 kg/mo from the waste minimization manifest requirements. However, for the reasons discussed below, the Agency is modifying the certification statement as it applies to these generators to require only a good faith effort to minimize waste generation and selection of what they believe to be the best available and affordable treatment, storage, or disposal alternative.

*C. Response to Comments*

In the March 24, 1986 proposal, EPA indicated that it believed it appropriate to allow the waste minimization certification requirement to take effect on September 22, 1986, along with the other requirements for small quantity generators, since the requirement, in the Agency's view, would impose a negligible burden. As explained at that time, the certification provision does not 'impose any specific regimen; rather, it directs the generator to review his waste generation and management practices and decide whether they are the most environmentally protective, given his

individual economic and waste management circumstances. The Agency explicitly stated that it would not expect generators to maintain any records related to the minimization certification, and that no civil or criminal penalties, nor other Agency action, would be imposed under RCRA on generators for failing to take a specific action related to waste minimization.

Nevertheless, a number of commenters on the waste minimization proposal objected to application of the requirement to small quantity generators and asserted that an exemption was warranted for a variety of reasons. Many commenters argued that the certification requirement imposed greater burden on small businesses than indicated in the proposal. Specifically, some commenters were concerned that a small business was being asked to certify that they had minimized their waste generation without actually having taken any substantive steps to do so. Other commenters expressed concern over the use of the phrase "a program in place" in the certification statement as indicating a need for far more substantive and formal actions than indicated in the preamble. Failure to be able to demonstrate that such a program was "in place" it was reasoned, would subject these generators to significant potential obligations and liabilities. Other commenters advanced the argument that small quantity generators could do little to minimize their waste generation and that they lacked the financial and technical capability to implement a meaningful waste minimization program. Several commenters also argued that economic necessity would dictate that these generators minimize the amount of hazardous waste requiring disposal and that the certification statement would only serve to confuse them.

The Agency appreciates the concern expressed with respect to the wording of the waste minimization statement to require that generators "have a program in place to minimize waste generation. This statement appears to direct generators to establish a formal system for waste minimization, and from many commenters' perspective, such a requirement would be burdensome because of the attendant need to be able to demonstrate that such a program exists. Some commenters were further concerned that their waste generation did not lend itself to substantial minimization and thus, they would be certifying to having a 'program' in place where none was truly present. The Agency's statements that it would not mandate what a 'program' must consist

of only served to heighten commenters' uncertainty as to what is expected of them.

The Agency strongly supports the concept of waste minimization and believes that attention to opportunities for minimizing waste generation is in everyone's interest. Therefore, the Agency is not exempting small quantity generators from the waste minimization statement. However, the Agency also believes that the same purpose can be accomplished with a modified certification statement that is clearer and less intimidating to small businesses. Therefore, the Agency is modifying the waste minimization certification to read as follows:

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method available to me and which I can afford.

The Agency recognizes that the certification requirement may impose some short term costs on generators as they seek to identify waste minimization options and perhaps modify their waste management practices, if appropriate. However, the Agency does not agree that the waste minimization certification imposes an unreasonable burden for small quantity generators and that an exemption from the requirement is warranted. First, the certification only asks that generators make a good faith effort to minimize their hazardous wastes. In this regard, the Agency intends only for generators to consider the waste minimization options available to them. In addition, the Agency intends to make information available to improve generators' understanding of waste minimization opportunities. For example, EPA is sponsoring, in cooperation with the Public Broadcasting Service (PBS), a national teleconference on the new small quantity generator regulations which will devote a full half hour to the practical benefits and concepts of waste minimization. (The teleconference is scheduled to be telecast October 22, 1986.) EPA is also completing work on a Report to Congress that will describe a variety of waste minimization techniques and options. Second, as discussed in both of the Agency's public notices on this issue (50 FR 28733, July 15, 1985 and 51 FR 10177, March 24,

1986), no specific actions either with respect to process or management changes or the keeping of records demonstrating waste minimization are required of small quantity generators of 100-1000 kg/mo. Furthermore, generators are only expected to take actions which they deem to be affordable. Thus, a generator is not expected to take any actions to minimize waste generation or modify their waste management practices where it is not economically practicable to do so, particularly where the firms' economic viability may be damaged. Finally, many small quantity generators that take steps to minimize their waste generation are likely to benefit from such efforts since minimizing their waste generation could reduce their waste management costs as well as future liability. It should also be noted that EPA recognizes that many small businesses have already taken those actions which are available to them to reduce their waste generation and move toward better waste management practices. For these generators, waste minimization has already been accomplished and the signatory requirement on the manifest should, therefore, be of no consequence.

Some commenters argued that the Agency had not gone far enough in its waste minimization requirements, and that small quantity generators should be required to develop and implement a 'program' for waste minimization. The Agency agrees that all regulated generators of hazardous waste should be subject to the requirement to minimize their waste generation; however, EPA believes that modifying the certification for small quantity generators in this manner is consistent with the statutory requirements, including the Congressional directive to minimize impacts on small business while still providing the necessary degree of protection of human health and the environment. See HSWA section 3001(d). Today's modification will achieve this goal by reducing the perceived impacts of the minimization statement on small quantity generators while furthering the national policy of minimizing hazardous waste generation by requiring these generators to consider waste minimization options.

## II. Technical Corrections to the Uniform Hazardous Waste Manifest Form

### A. Wording Change

In establishing the language for the manifest waste minimization certification in the July 15, 1986, codification rule, the Agency



inadvertently omitted wording contained in the statute which allows the generator to select the *practicable* (emphasis added) method of treatment, storage, or disposal currently available to them. Since the Agency never intended to convey a meaning different from the statutory language, this amendment is simply intended to bring the waste minimization certification statement for large quantity generators into conformance with the statute.

#### B. Extension of OMB Manifest Form Number

The Agency is also revising the Uniform Hazardous Waste Manifest (EPA Form 8700-22) to include a new OMB Number (2050-0039) and expiration date (9-30-88).

#### C. Manifest Certification Signature

Members of the regulated community have asked whether it is permissible for officers or employees of generator companies to sign the manifest certification "on behalf of" the company or other entity that is deemed to be the generator. EPA regulations require that the generator sign the generator certification by hand (40 CFR 262.23(a)(1)), but do not specify who must sign the certification if the generator is not an individual. The regulations define a generator as "any person (emphasis added), by site, whose act or process produces hazardous waste . . . or whose act first causes a hazardous waste to become subject to regulation". (40 CFR 260.10) The term 'person' includes corporations, partnerships, and other legal entities for which some individual must sign the certification. EPA did not intend by the § 262.23(a)(1) handwritten signature requirement to impose personal liability on the individual who actually signs the certification. The question of whether an officer or employee is held responsible for the generator requirements will depend on the facts and circumstances

of individual cases and not solely on whether such person signed the manifest.

In order to clarify that employees or other individuals may sign the manifest certification for a generator who is a legal entity, such as a corporation, EPA is revising Item 16 of the manifest instructions to state that the handwritten signature may be made "on behalf of" the generator.

#### III. Executive Order 12291—Regulatory Impact

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, therefore, subject to the requirement to perform a Regulatory Impact Analysis. Since today's notice makes only minor modifications to the Uniform Hazardous Waste Manifest and does not impose any substantive regulatory requirements on the regulated community, I have determined that this notice is not a major rule subject to the Regulatory Impact Analysis requirements of Executive Order 12291.

#### IV. Paperwork Reduction Act

Under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., EPA must consider the paperwork burden imposed by any information collection request in a proposed or final rule. This final rule will not impose any information collection requirements.

#### V. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., EPA must prepare a regulatory flexibility analysis for all final rules unless the Administrator certifies that the rule will not have a significant impact on a substantial number of small entities. Today's final rule will not result in significantly increased compliance costs for 100-1000 kg/mo generators. This rule only asks these generators to make a good faith effort to minimize their waste generation, and under no circumstances

requires them to incur costs which may in any way impair their economic viability.

Therefore, I hereby certify, pursuant to 5 U.S.C. 601(b), that this final rule will not have a significant impact on a substantial number of small entities.

#### List of Subjects in 40 CFR Part 262

Hazardous materials transportation, Hazardous waste, Imports, Labeling, Packaging and containers, Reporting and recordkeeping requirements, Waste minimization.

Dated: September 22, 1986.

Lee M. Thomas,  
Administrator.

#### PART 262—[AMENDED]

For the reasons set forth in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

1. The authority citation for Part 262 continues to read as follows:

Authority: Secs. 1006, 2002, 3002, 3003, 3004, 3005, and 3017 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1980, as amended (42 U.S.C. 6908, 6912, 6922, 6923, 6924, 6925, and 6937).

2. The Uniform Hazardous Waste Manifest Form in the Appendix to Part 262 is revised as follows:

3. The Appendix to Part 262 is further amended by adding the following paragraph to Item 16 of the instructions after the first paragraph and preceding the Note:

\* \* \* \* \*

#### Item 16: Generator's Certification

\* \* \* \* \*

Generators may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator certifications.

\* \* \* \* \*

BILLING CODE 6560-60-M

Please print or type (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address				A. State Manifest Document Number	
4. Generator's Phone ( )				B. State Generator's ID	
5. Transporter 1 Company Name	6. US EPA ID Number			C. State Transporter's ID	
7. Transporter 2 Company Name	8. US EPA ID Number			D. Transporter's Phone	
9. Designated Facility Name and Site Address	10. US EPA ID Number			E. State Transporter's ID	
				F. Transporter's Phone	
				G. State Facility's ID	
				H. Facility's Phone	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	14. Unit Wt/Vol
		No.	Type		
GENERATOR	a.				
	b.				
	c.				
	d.				
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information					
<p>18. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.</p> <p>If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.</p>					
Printed/Typed Name		Signature		Month Day Year	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials				
	Printed/Typed Name	Signature		Month Day Year	
FACILITY	18. Transporter 2 Acknowledgement of Receipt of Materials				
	Printed/Typed Name	Signature		Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Month Day Year	

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-88

<b>UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)</b>		21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.		
23. Generator's Name				L. State Manifest Document Number			
				M. State Generator's ID			
24. Transporter _____ Company Name		25. US EPA ID Number		N. State Transporter's ID			
				O. Transporter's Phone			
26. Transporter _____ Company Name		27. US EPA ID Number		P. State Transporter's ID			
				Q. Transporter's Phone			
GENERATOR	28. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		29. Containers		30. Total Quantity	31. Unit (Wt/Vol)	R. Waste No.
	a.		No.	Type			
	b.						
	c.						
	d.						
	e.						
	f.						
	g.						
	h.						
	i.						
	S. Additional Descriptions for Materials Listed Above				T. Handling Codes for Wastes Listed Above		
32. Special Handling Instructions and Additional Information							
TRANSPORTER	33. Transporter _____ Acknowledgement of Receipt of Materials				Date		
	Printed/Typed Name		Signature		Month	Day Year	
FACILITY	34. Transporter _____ Acknowledgement of Receipt of Materials				Date		
	Printed/Typed Name		Signature		Month	Day Year	
35. Discrepancy Indication Space							

EPA Form 8700-22A (Rev. 9-86) Previous edition is obsolete.

[FR Doc. 86-22033 Filed 9-30-86; 8:45 am]

BILLING CODE 5560-50-C

addition, generators still are obligated to determine whether these wastes exhibit any of the characteristics of hazardous waste.)

### II. Effective Date

This rule is effective immediately. Although Subtitle C regulations normally take effect six months after promulgation (RCRA section 3010(b)), the Hazardous and Solid Waste Amendments of 1984 amended section 3010 of RCRA to allow rules to become effective in less than six months when the regulated community does not need the six-month period to come into compliance. That is the case here since this rule reduces, rather than increases, the existing requirements for persons generating hazardous wastes. In light of the unnecessary hardship and expense which would be imposed on the petitioners by an effective date six months after promulgation, and in fact that such a deadline is not necessary to achieve the purpose of section 3010, we believe that this rule should be effective immediately. These reasons also provide a basis for making this rule effective immediately under the Administrative Procedure Act, pursuant to 5 U.S.C. 553(d).

### III. Regulatory Impact

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, therefore, subject to the requirement of a Regulatory Impact Analysis. This grant of an exclusion is not major since its effect is to reduce the overall costs and economic impact of EPA's hazardous waste management regulations. This reduction is achieved by excluding wastes generated at a specific facility from EPA's lists of hazardous wastes, thereby enabling this facility to treat its wastes as non-hazardous.

### IV. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601-612, whenever an Agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis which describes the impact of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The Administrator may certify, however, that the rule will not have a significant economic impact on a substantial number of small entities.

This amendment will not have an adverse economic impact on small entities since its effects will be to reduce the overall costs of EPA's hazardous waste regulations. Accordingly, I hereby

certify that this final regulation will not have a significant economic impact on a substantial number of small entities. This regulation, therefore, does not require a regulatory flexibility analysis.

### List of Subjects in 40 CFR Part 261

Hazardous wastes, Recycling.

Authority: Sec. 3001 RCRA, 42 U.S.C. 6921.

Dated: October 17, 1986.

Jeffery D. Denit,

Acting Director, Office of Solid Waste.

For the reasons set out in the preamble, 40 CFR Part 261 is amended as follows:

### PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 continues to read as follows:

Authority: Sections 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6922).

2. In Appendix IX, add the following wastestreams in alphabetical order to Table 1 as indicated:

TABLE 1.—WASTES EXCLUDED FROM NON-SPECIFIC SOURCES

Facility	Address	Waste description
General Cable Co.	Muncie, IN	Dewatered wastewater treatment sludges (EPA Hazardous Waste Nos. F006 and K082) generated from electroplating operations and steel finishing operations after (insert date of final rule's publication). This exclusion does not apply to sludges in any on-site impoundments as of this date.

[FR Doc. 86-24057 Filed 10-23-86; 8:45am]  
BILLING CODE 6560-50-12

### 40 CFR Parts 261 and 271

[SW-FRL-3096-3]

### Hazardous Waste Management System; Identification and Listing of Hazardous Waste

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) today is amending the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) by listing as hazardous four wastes generated during the production and formulation of ethylenebisdithiocarbamic acid (EBDC) and its salts. The effect of this regulation is that all of these wastes will be subject

to regulation under 40 CFR Parts 262 through 266, and Parts 270, 271, and 124.

**DATE:** Effective date: This regulation becomes effective on April 24, 1987.

**ADDRESS:** The OSW docket is located in the sub-basement at the following address, and is open from 9:30 to 3:30, Monday through Friday, excluding Federal holidays: EPA RCRA Docket (S-212) (WH-562), 401 M Street, SW., Washington, DC 20460.

The public must make an appointment (by calling Mia Zmud at (202) 475-9327, or Kate Blow at (202) 382-4675) to review docket materials. Refer to "Docket number F-86-EBDC-FFFFF" when making appointments to review any background documentation for this rulemaking. The public may copy a maximum of 50 pages of material from any one regulatory docket at no cost; additional copies cost \$0.20 per page. Copies of the non-CBI version of the listing background document, the Health and Environmental Effects Profile for Ethylene Thiourea, and not readily available references are available for viewing and copying only in the OSW docket.

**FOR FURTHER INFORMATION CONTACT:** The RCRA/Superfund Hotline at (800) 424-9346 or at (202) 382-3000. For technical information contact Wanda LeBleu-Biswas, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 382-7392.

### SUPPLEMENTARY INFORMATION:

#### I. Background

On December 20, 1984, EPA proposed to amend the regulations for hazardous waste management under RCRA by listing as hazardous four wastes generated during the production and formulation of ethylenebisdithiocarbamic acid (EBDC) and its salts.<sup>1</sup> See 49 FR 49562-49565. The hazardous constituent in these wastes is ethylene thiourea (ETU), which is carcinogenic, teratogenic, and shows evidence of mutagenicity. ETU is typically present in each waste at significant levels; its concentration ranges from 0.005 percent in waste K123 to one percent in waste K125. ETU is also moderately persistent in ground water, as indicated by hydrolysis experiments, and is mobile in the environment, due to its high solubility in water and polar organic solvents. Thus, ETU can reach environmental receptors

<sup>1</sup> The Hazardous and Solid Waste Amendments of 1984 require the Agency to make a determination as to whether wastes from carbamate manufacturing should be listed as hazardous.

in harmful concentrations if these wastes are mismanaged. Furthermore, waste K124 is corrosive. (See the preamble to the proposed rule at 49 FR 49562-49565 (December 20, 1984) for a more detailed explanation of our basis for listing these wastes.) After evaluating these wastes against the criteria for listing hazardous wastes (40 CFR 261.11(a)(3)), EPA had determined that these wastes are hazardous because they are capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

The Agency received several comments on these proposed waste listings.<sup>2</sup> We have evaluated these comments carefully, and have responded to them accordingly. This notice makes final the regulation proposed on December 20, 1984, and outlines EPA's response to the comments received on that proposal.

## II. Response to Comments

This section presents the comments received on the proposed rule, as well as the Agency's response.

### A. Overlap with Other Statutes

The commenter felt that, in light of the Office of Pesticides Program, RPAR Data Call-In, the issuance of the rule should be delayed until the Data Call-In is completed. Specifically, since new data are being developed for the Call-In, in the view of the commenter, these data may shed new light on the tendency of EBDC to degrade to ETU, and on whether there is any potential for absorption of ETU into mammals.

The additional information may shed light on issues related to FIFRA regulation of EBDCs as pesticides. Sufficient evidence currently exists, however, indicating that ETU has toxicological properties of concern (carcinogenicity, teratogenicity, thyroid effects, and mutagenicity), and on its fate and transport in the environment. (from means other than use as a pesticide) to determine, for purposes of RCRA, that these wastes are hazardous. We, therefore, have decided not to delay this ruling. If, however, at any time new data are submitted that may change our basis for listing, we will evaluate the impact on these listed wastes.

<sup>2</sup> One person requested a 30-day extension of the public comment period on this proposal. Although no official extension was given, the Agency usually accepts late comments if they are submitted within a reasonable time after the close of the comment period; however, the Agency is not required to do so. This person never submitted any comments.

### B. Concentrations of ETU

The commenter felt that the concentrations of ETU outlined in the preamble to the proposed rule (see 49 FR 49563) are vague and must be clearly documented, as these concentrations form the basis for the proposed rule. In addition, the commenter believes that the ETU concentrations are open-ended with no limit having been established.

The concentrations of ETU outlined in the table are not vague, but actually are specified for each waste. The concentrations are presented as ranges to depict the boundaries reported by all generators of the waste. The Agency believes that aggregating this information provides a clear and concise description of the range of possible concentrations of ETU in each waste, while protecting the confidentiality of the specific data submitted by the generators.

In response to the comment that no limit has been established for ETU concentrations in the waste, the commenter is correct that no lower bound has been established. The Agency notes, however, that typically and frequently the listed wastes will contain ETU at levels of concern. Any person, however, may petition the Agency, pursuant to 40 CFR §§ 260.20 and 260.22, to exclude from regulation wastes generated at a particular facility. See 50 FR 28727, 28742-43, July 15, 1985. If particular wastes did not contain hazardous levels of ETU (and were not hazardous for any other reason) the Agency could exclude them from regulation.

### C. The Risk of EBDC Wastes to Human Health and the Environment

The commenter stated that, to date, large amounts of EBDCs have been beneficially used in agriculture with no evidence that any harm to humans or the environment has occurred.

Although pesticide uses of EBDC have not been cancelled, the Agency still has concerns (as evidenced by the RPAR Data Call-In and its scheduled 1986 reassessment of its 1982 decision on EBDCs) about possible health effects that would not be readily observable by, or evident to, the user. Chronic health effects, such as cancer, may not manifest themselves for years after exposure. Some effects (e.g., mutagenic or teratogenic effects) will only manifest themselves in a future generation. Similarly, environmental contamination, such as pesticide residues in ground water, may not be immediately evident to users. We do not agree with the commenter that EBDC use has been shown not to pose health or

environmental problems. Nor would evidence of safe use necessarily prove that uncontrolled disposal would not result in environmental harm.

Further, it should be noted that, under FIFRA, a pesticide is registered for use if it will not cause any "unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs, and benefits of use." (See FIFRA Section 2(bb).) Thus, a pesticide that poses some risk may be approved if the benefits outweigh the risks. (In such cases, the Agency typically imposes regulatory restrictions to reduce exposure, thereby reducing the risks.) Under RCRA, however, a waste is considered hazardous if it poses a risk to human health or the environment. This statutory standard does not call for balancing the economic benefits of an activity against its risks. Some controlled uses of a pesticide may be allowed even though some risk may be incurred, due to the economic and substantial social benefits of the pesticide's use. In contrast, under RCRA, a substantial potential hazard to human health or the environment is sufficient to support a decision to list a waste.

### III. Test Methods for New Appendix VII Compounds

The Agency is suggesting Method Numbers 8250 and 8330 to test for ETU. Persons wishing to submit delisting petitions are to use the methods listed in Appendix III to demonstrate the concentration of ETU in the waste.<sup>3</sup> As part of their petitions, petitioners should submit quality control data demonstrating that the methods they have used yield acceptable recovery (i.e., >50% recovery at concentrations above 1 µg/g) on spiked aliquots of their waste.

The above methods are in "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods," SW-846, 2nd ed., July 1982, as amended; available from: Superintendent of Documents, Government Printing Office, Washington, DC 20402, (202) 783-3238, Document Number: 055-002-81001-2.

### IV. CERCLA Impacts

All hazardous wastes designated by today's rule will, upon the effective date, automatically become hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980

<sup>3</sup> Petitioners may use other test methods to analyze for ETU if, among other things, they demonstrate the equivalency of these methods by submitting their quality control and assurance information along with their analysis data. See 40 CFR 260.21.

(CERCLA). (See CERCLA section 101(14).) CERCLA requires that persons in charge of vessels or facilities from which hazardous substances have been released in quantities that are equal to or greater than the reportable quantities (RQs) immediately notify the National Response Center at (800) 424-8802 or (202) 426-2675 of the release. (See CERCLA section 103 and 50 FR 13456-13522, April 4, 1985.)

Pursuant to section 102, all hazardous wastes newly designated under RCRA will have a statutorily-imposed RQ of one pound unless and until adjusted by regulation. If, however, a newly listed hazardous waste contains hazardous substances for which final RQs have already been assigned in Table 302.4, 40 CFR Part 302, the lowest RQ assigned to any of the constituents present in the waste represents the RQ for the waste stream. Thus, if the waste contains only one constituent of concern, the waste will have the same RQ as that of the constituent.

In the case of all four waste streams listed pursuant to this rule, ETU is identified as the only hazardous constituent. ETU has a final RQ of one pound (see 50 FR 13487, April 4, 1985). The Agency proposed in the December 20, 1984 proposal for this rule that RQs of one pound would be designated as the final RQs for the listed wastes (K123, K124, K125, and K126). Since the Agency received no public comments on these proposed RQs, the Agency also is making final in this rule the one-pound RQ proposed for EPA Hazardous Waste Nos. K123, K124, K125, and K126. Since ETU is currently undergoing carcinogenicity assessment for CERCLA RQ adjustment (ranking) purposes, however, both its RQ and the RQ of these four wastes are subject to change when the assessment is completed, as will be noted in their listing in Table 302.4.

The RQs promulgated in this rule are effective upon the effective date of today's action. These listed wastes and their RQs will be added to Table 302.4 of § 302.4 at the time of its next Federal Register publication.

## V. State Authority

### A. Applicability of Rules in Authorized States

Under section 3008 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3008, 7003, and 3013 of RCRA, although

authorized States have primary enforcement responsibility.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final authorization administered its hazardous waste program entirely in lieu of EPA administering the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in the State that the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obliged to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under section 3008(g) of RCRA, 42 U.S.C. 6928(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in non authorized States. EPA is directed to implement those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the HSWA applies in authorized States in the interim.

Today's rule is promulgated pursuant to section 3001(e)(2) of RCRA, a provision added by the HSWA. It is, therefore, being added to Table 1 in § 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to the HSWA, and that take effect in all States, regardless of their authorization status. States may apply for either interim or final authorization for the HSWA provisions identified in Table 1, as discussed in the following section of this preamble.

### B. Effect on State Authorizations

As noted above, EPA will implement today's rule in authorized States until they modify their programs to adopt these rules, and the modification is approved by EPA. Since the rule is promulgated pursuant to the HSWA, a State submitting a program modification may apply to receive either interim or final authorization under section 3008(g)(2) or 3008(b), respectively, on the basis of regulations that are substantially equivalent or equivalent to EPA's. The procedures and schedule for State program modifications under section 3006(b) are described in 40 CFR 271.21. The same procedures should be followed for section 3008(g)(2).

Applying § 271.21(e)(2), States that have final authorization must modify their programs by July 1, 1989 if only regulatory changes are necessary, or July 1, 1990 if statutory changes are necessary. These deadlines can be extended in exceptional cases (40 CFR 271.21(e)(3)).

States with authorized RCRA programs already may have regulations similar to those in today's rule. These State regulations have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to implement these regulations in lieu of EPA until the State program modification is approved. Of course, States with existing regulations may continue to administer and enforce their regulations as a matter of State law. In implementing the Federal program, EPA will work with States under cooperative agreements to minimize duplication of efforts. In many cases, EPA will be able to defer to the States in their efforts to implement their programs, rather than take separate actions under Federal authority.

States that submit official applications for final authorization less than 12 months after the effective date of EPA's regulations may be approved without including regulations equivalent to those promulgated. Once authorized, however, a State must modify its program to include regulations substantially equivalent or equivalent to EPA's within the time periods discussed above.

## VI. Compliance Dates

### A. Notification

The Agency has decided not to require persons who generate, transport, treat, store, or dispose of these hazardous wastes to notify the Agency within 90 days of promulgation that they are managing these wastes. The Agency views the notification requirement to be unnecessary in this case since we believe that most, if not all, persons who manage these wastes have already notified EPA and received an EPA identification number. In the event that any person who generates, transports, treats, stores, or disposes of these wastes has not previously notified and received an identification number, that person must get an identification number pursuant to 40 CFR 262.12 before he can generate, transport, treat, store, or dispose of these wastes.

### B. Interim Status

All existing hazardous waste management facilities (as defined in 40

CFR 270.2) that treat, store, or dispose of hazardous wastes covered by today's rule, and that are currently operating pursuant to interim status under section 3005(e) of RCRA, must file with EPA an amended Part A permit application by April 24, 1987. In addition, facilities which currently treat, store, or dispose of the wastes subject to this rule, but which have not received a permit pursuant to section 3005 and are not operating pursuant to interim status may also be eligible for interim status under the Hazardous and Solid Waste Amendments of 1984. See section 3005(e)(1)(A)(ii) of RCRA, as amended. In order to operate pursuant to interim status, such facilities must get an identification number pursuant to 40 CFR 262.12 and submit a Part A permit application by April 24, 1987. Land disposal facilities which qualify for interim status under section 3005(e)(1)(A)(ii) must also apply for a final determination regarding the issuance of a permit and certify that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements within twelve months of becoming subject to such permit requirements. See RCRA section 3005(e)(3). If not, interim status will terminate on that date.

A hazardous waste management facility which has received a permit pursuant to section 3005, however, may not treat, store, or dispose of the wastes covered by today's rule until it submits an amended permit application pursuant to 40 CFR 124.5, and the permit has been modified pursuant to 40 CFR 270.41 to allow it to treat, store, or dispose of these wastes.

#### VII. Regulation of EBDC Compounds under FIFRA

The Agency issued a notice on August 10, 1977 (42 FR 40618), informing the public that evidence of hazards from the use of EBDCs (and ETU) warranted an in-depth evaluation of risks and benefits. On October 14, 1982, the Office of Pesticides and Toxic Substances concluded that, while there was valid and significant evidence of hazard, additional data were necessary to decide whether or not to cancel EBDCs, and that registrations could continue

with mandatory restrictions on use practices. Additional data on EBDCs and ETU have been requested from registrants. On December 31, 1986, the Agency is scheduled to complete a reassessment of its regulatory position under FIFRA on EBDCs. In conducting the reassessment, the Agency will review the available health and safety data, assess the applicable health and environmental risks, and reach a decision on the registration of pesticide products containing EBDCs.

#### VIII. Regulatory Impact Analysis

Under Executive Order 12291, EPA must determine whether a regulation is "major" and, therefore, subject to the requirement of a Regulatory Impact Analysis. In the proposed listing, EPA addressed this issue by citing the results of an economic analysis that was conducted based on a worst case scenario; the total additional incurred cost for the industry to dispose of the wastes as hazardous was approximately \$33,100. The Agency received no comments on this figure.

Since EPA does not expect that the amendments promulgated here will have an annual effect on the economy of \$100 million or more, will result in a measurable increase in costs or prices, or have an adverse impact on the ability of U.S.-based enterprises to compete in either domestic or foreign markets, these amendments are not considered to constitute a major action. As such, a Regulatory Impact Analysis is not required.

#### IX. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601-612, whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the impact of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required, however, if the head of the agency certifies that the rule will not have a significant impact on a substantial number of small entities.

The hazardous wastes listed here are not generated by small entities (as defined by the Regulatory Flexibility Act), and the Agency has no information indicating that small entities will dispose of them in significant quantities. Accordingly, I hereby certify that this regulation will not have a significant economic impact on a substantial number of small entities. This regulation, therefore, does not require a regulatory flexibility analysis.

#### X. Paperwork Reduction Act

This rule does not contain any information collection requirements subject to OMB review under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*

#### List of Subjects

##### 40 CFR Part 261

Hazardous waste, Recycling.

##### 40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated: October 7, 1986.

Lee M. Thomas,  
Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

#### PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6922).

2. In § 261.32, add the following waste streams to the subgroup "Pesticides":

§ 261.32 Hazardous wastes from specific sources.

\* \* \* \* \*

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Pesticides		
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)

3. Add the following compound and analysis methods in alphabetical order to Table 1 of Appendix III of Part 261:

**Appendix III—Chemical Analysis Test Methods**

Compound	Method No.
Ethylene thiourea	8250, 8330.

4. Add the following entries in numerical order to Appendix VII of Part 261:

**Appendix VII—Basis for Listing Hazardous Waste**

EPA hazardous waste No.	Hazardous constituents for which listed
K123	Ethylene thiourea.
K124	Ethylene thiourea.

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

Promulgation date	Title of regulation	Federal Register reference	Effective date
October 24, 1986.	Listing Wastes from the Production and Formulation of Ethylenebisdithiocarbamic Acid (EBDC) and its Salts.	51 FR 37725	April 24, 1987

[FR Doc 86-23996 Filed 10-23-86; 8:45 am]  
BILLING CODE 6560-50-M

**40 CFR Part 271**

[SW-8-FRL-3099-8]

**Colorado Final Authorization of Hazardous Waste Management Program**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Final rule on application of Colorado for a program revision to

EPA hazardous waste No.	Hazardous constituents for which listed
K125	Ethylene thiourea.
K126	Ethylene thiourea.

**PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS**

5. The authority citation for Part 271 continues to read as follows:

Authority: Sec. 1006, 2002(a), and 3006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), and 6926).

**§ 271.1 [Amended]**

6. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication:

regulate hazardous components of radioactive mixed wastes.

**SUMMARY:** Colorado has applied for final authorization of a revision to its hazardous waste program under the Resource Conservation and Recovery Act (RCRA). The Environmental Protection Agency (EPA) has reviewed Colorado's application and has reached a decision that Colorado's hazardous waste program revision satisfies all of the requirements necessary to qualify for final authorization. Thus, EPA is granting final authorization to Colorado to operate its expanded program, subject to the authority retained by EPA

in accordance with the Hazardous and Solid Waste Amendments of 1984.

**EFFECTIVE DATE:** Final authorization for Colorado shall be effective at 1:00 p.m. on November 7, 1986.

**FOR FURTHER INFORMATION CONTACT:** Charles L. Brinkman, One Denver Place, Suite 1300, 999 18th Street, Denver, Colorado 80202-2413. Phone: 303/293-1794.

**SUPPLEMENTARY INFORMATION:**

**A. Background**

States with final authorization under section 3006(b) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. 6929(b), have a continuing obligation to maintain a hazardous waste program that is equivalent to, consistent with, and no less stringent than the Federal hazardous waste program. Revisions to State hazardous waste programs are necessary when Federal or State statutory or regulatory authority is modified or when certain other changes occur.

On July 3, 1986, the Agency published a Federal Register notice requiring States to have authority to regulate radioactive mixed wastes (51 FR 24504). That notice required States to demonstrate to the appropriate EPA Regional Administrator that their hazardous waste management program applies to all hazardous waste even if mixed with radioactive waste. This demonstration must be made pursuant to the schedule set forth in 40 CFR 271.21(e)(2) for State program revisions.

**B. Colorado**

Colorado received final authorization for its hazardous waste program on November 2, 1984. On July 17, 1986, Colorado submitted a program revision application for additional program approval to regulate the hazardous components of radioactive mixed waste. EPA made a tentative determination on August 8, 1986, that Colorado's program revision would satisfy all requirements if Colorado would include additional information in its Program Description on State staffing and funding for regulation of the hazardous components of radioactive mixed wastes and a numerical estimate of radioactive mixed waste handlers within the State. Colorado submitted additional information on August 11, 1986, which demonstrated Colorado's capability to address the hazardous components of radioactive mixed waste and listed all known handlers of radioactive mixed waste in Colorado. Thus, adequate documentation of Colorado's ability to



Thursday  
March 19, 1987

Part II

# Environmental Protection Agency

40 CFR Part 265

Interim Status Standards for Owners and  
Operators of Hazardous Waste  
Treatment, Storage, and Disposal  
Facilities; Final Rule

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 265**

(SW-FRL-3092-1)

**Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Final Rule****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency is today amending the interim status regulations for closing and providing postclosure care for hazardous waste surface impoundments (40 CFR Part 265, Subpart K), under the Resource Conservation and Recovery Act (RCRA).

The Agency proposed today's modifications to the interim status standards on July 26, 1982. Today's amendments provide conformance between certain interim status requirements for surface impoundments and those requirements contained in the permitting rules of 40 CFR Part 264, that were also published on July 26, 1982. The Agency is also setting forth its interpretation of the regulatory requirements applying to closure of storage facilities regulated under both permits and interim status.

**EFFECTIVE DATE:** These final regulations become effective on September 15, 1987, which is six months from the date of promulgation, as RCRA section 3010(b) requires.

**ADDRESS:** The docket for this rulemaking (Docket No. F-87-CCF-FFFFF) is located in Room MLG100, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC and is available for viewing from 9:00 a.m. to 3:30 p.m., Monday through Friday, excluding holidays. Call Mia Zmud at 475-9327 for appointments.

**FOR FURTHER INFORMATION CONTACT:** RCRA hotline at (800) 424-9346 (in Washington, DC, Call 382-3000) or for technical information contact Ossi Meyn, Office of Solid Waste (WH-565E), U.S. Environmental Protection Agency, Washington, DC 20460, telephone (202) 382-4654.

**SUPPLEMENTARY INFORMATION:****I. Authority**

These regulations are issued under the authority of sections 1006, 2002(a), 3004 and 3005 of the Solid Waste Disposal Act (SWDA), as amended by the Resource Conservation and Recovery

Act (RCRA) of 1976, as amended (42 U.S.C 6905, 6912(a), 6924, and 6925).

**II. Background**

Subtitle C of RCRA creates a "cradle-to-grave" management system intended to ensure that hazardous waste is safely treated, stored, or disposed. First, Subtitle C requires the Agency to identify hazardous waste. Second, it creates a manifest system designed to track the movement of hazardous waste, and requires hazardous waste generators and transporters to employ appropriate management practices as well as procedures to ensure the effective operation of the manifest system. Third, owners and operators of treatment, storage, and disposal facilities must comply with standards the Agency established under section 3004 of RCRA that "may be necessary to protect human health and the environment." Ultimately, these standards will be implemented exclusively through permits issued to owners and operators by authorized States or the Agency. However, until these permits are issued, existing facilities are controlled under the interim status regulations of 40 CFR Part 265 that were largely promulgated on May 19, 1980. Under RCRA interim status, the owner or operator of a facility may operate without a permit if: (1) It existed on November 19, 1980, (or it existed on the effective date of statutory or regulatory changes under RCRA that render the facility subject to the requirements to have a permit under section 3005); (2) he has complied with the notification requirements of section 3010 of RCRA; (3) he applied for a permit (Part A application) in accordance with section 3005 of RCRA. Interim status is retained until the regulatory agency makes a formal decision to issue or deny the permit or until the facility loses its interim status by statute for failure to submit Part B permit application and/or certification of compliance with applicable ground-water monitoring and financial assurance requirements.

In regulations promulgated on July 26, 1982, [40 CFR Part 264, 47 FR 32274], the Agency established permitting standards in 40 CFR Part 264 covering the treatment, storage, and disposal of hazardous wastes in surface impoundments, waste piles, land treatment units, and landfills. Owners and operators of such facilities must meet these standards to receive RCRA permits. Also included in the Federal Register on that date were a series of changes to the interim status requirements of Part 265, which were promulgated to ensure consistency with

the new Part 264 standards. There were, however, a few additional Part 265 conforming changes that the Agency believed should first be proposed for public comment because, in most cases, the public had not had sufficient opportunity to comment on the appropriateness of applying them during the interim status period. Many of the changes that were proposed on July 28, 1982, were promulgated in final regulations on April 23, 1985 (50 FR 16044). Today, the Agency is making final the remaining changes to the surface impoundment closure and post-closure care requirements (§ 265.228) that were proposed on July 26, 1982.

**III. Discussion of Today's Amendments**

The Part 264 rules issued on July 28, 1982, for surface impoundment closure and post-closure care (§§ 264.228 and 264.310) are in many ways similar to the interim status requirements (§§ 265.228 and 265.310). The Part 264 closure rules, however, contain more specific performance standards to assure adequate protection of human health and the environment. For reasons discussed below, the Agency believes the more explicit Part 264 closure rules should also be implemented during interim status. Moreover, EPA believes that the closure process is adequate to apply these closure requirements. The existing review process for interim status closure and post-closure care plans will provide an opportunity for the Agency to review the specifics of the plans for compliance with the closure performance standards. Thus, any problems with misinterpretation of the closure requirements by the owner or operator would be identified and rectified prior to actual closure. In fact, the review process for closure and post-closure care plans during interim status is similar to the review process of closure and post-closure care plans conducted during the permitting process. Therefore, the Agency believes that these closure requirements are capable of being properly implemented during interim status.

The § 265.228 closure rules proposed on July 26, 1982, and promulgated today, retain the basic format of existing regulations by allowing owners and operators to choose between removing hazardous wastes and waste residues (and terminating responsibility for the unit) or retaining wastes and managing the unit as a landfill. (An additional choice for closure is proposed elsewhere in today's Federal Register.) The requirements for both choices are made more specific in today's amendments.

If the owner or operator chooses not to remove or decontaminate the waste and waste residues, then the rules promulgated today provide that the owner or operator must: (1) Eliminate free liquids by either removing them from the impoundment or solidifying them, (2) stabilize the remaining waste and waste residues to support a final cover, (3) install a final cover to provide long-term minimization of infiltration into the closed impoundment, and (4) perform post-closure care and ground-water monitoring.

The Part 265 regulations promulgated today (like the existing Part 264 regulations for permitted units) allow owners and operators of surface impoundments to remove or decontaminate wastes to avoid capping and post-closure care requirements (§ 265.228(a)(1)). They must remove or decontaminate all wastes, waste residues, contaminated containment system components (e.g., contaminated portions of liners), contaminated subsoils, and structures and equipment contaminated with waste and leachate. All removed residues, subsoils, and equipment must be managed as hazardous waste unless there is compliance with the delisting provisions of § 261.3(d). (Similar Part 265 closure and post-closure care rules for waste piles were promulgated on July 26, 1982.)

The new requirements for closure by removal differ significantly from the previous Part 265 requirements in one respect. The previous interim status requirement in § 265.228(b) required owners or operators to remove all waste residuals and contaminated soil or to demonstrate, using the procedures in § 261.3 (c) and (d), that the materials remaining at any stage of the removal were no longer a hazardous waste. Once an owner or operator made a successful demonstration under § 261.3 (c) and (d), (s)he could discontinue removal and certify closure.

Under § 261.3 (c) and (d), materials contaminated with listed waste (as evidenced by the presence of Appendix VIII constituents) are hazardous waste by definition unless the material is delisted. Materials contaminated with characteristic wastes, however, are only hazardous wastes to the extent that the material itself exhibits a characteristic. Thus to meet the old closure by removal standard, owners or operators of characteristic waste impoundments had only to demonstrate that the remaining material did not exhibit the characteristic that first brought the impoundment under regulatory control.

This demonstration, however, arguably allowed significant and potentially harmful levels of hazardous

constituents (i.e., those contained in Appendix VIII of Part 261) to remain in surface impoundment units without subjecting the units to landfill closure, post-closure care, or monitoring requirements.

For example, the previous version of the rule allowed residues from waste that originally exhibited the characteristic of extraction procedure (EP) toxicity to remain in place at "clean closure" if the residue was no longer EP toxic. This could allow an environmentally significant quantity of hazardous constituents to remain at a facility site that will receive no further monitoring or management. While EP toxic criterion would preclude only a concentration that exceeds 100 times the drinking water standard, constituents may remain at levels significantly above the drinking water standards. If such constituents are close to the saturated zone, they may contaminate ground water at levels exceeding the ground-water protection standard. Furthermore, the waste residues may contain significant and potentially harmful levels of other hazardous constituents (listed in Appendix VIII of Part 261) that are not found through EP testing. Hence, the language "or demonstrate what remains is no longer a hazardous waste" has been dropped from the interim status regulations because it is inconsistent with the overall closure performance standard requiring units to close in a manner that eliminates or minimizes the post-closure escape of Appendix VIII constituents.

Making this conforming change ensures that no Appendix VIII constituent presents any threat to human health and the environment. This is also consistent with several of the new requirements added by the Hazardous and Solid Waste Amendments of 1984. For example, new section 3004(u) of PCRA requires corrective action for releases not only of hazardous wastes, but also hazardous constituents. Similarly, section 3001(f) requires the Agency to consider, when evaluating waste delisting petitions, all hazardous constituents found in the waste, not just those for which the waste was listed as hazardous. Finally, new section 3005(i) requires owners and operators of landfills, surface impoundments, waste piles, or land treatment units that qualify for interim status and receive waste after July 26, 1982, to meet the ground-water monitoring and corrective action standards found in Subpart F to 40 CFR Part 264. These regulations also require owners and operators to monitor and clean up the full range of Appendix VIII constituents found in a waste.

The question has also arisen during the implementation of previous closures by removal whether § 265.228 requires consideration of potential ground-water contamination in addition to soil contamination. The answer to this question is yes. The closure by removal requirements in § 265.228 (a)(1) and (b) require removal or decontamination (i.e. flushing, pumping/treating the aquifer) of "underlying and surrounding contaminated soils." Since contamination of both saturated and unsaturated soils may threaten human health or the environment, the Agency interprets the term "soil" broadly to include both unsaturated soils and soils containing ground water. Thus the closure by removal standard requires consideration of both saturated and unsaturated soils. Uncontaminated ground water is, therefore, a requirement for "clean closure" under Part 265 (and Part 264) as revised today as well as under the previous regulation.

The one comment received on the proposed § 265.228 surface impoundment closure and post-closure care requirements for "clean closure" argued that clay liners should be allowed to remain in place at closure even if they are contaminated because their excavation is expensive and hazardous to workers removing the waste. EPA disagrees. While excavation may be expensive, the additional cost of removing the liner will usually be small in comparison to the cost of removing the waste. Therefore, if an owner or operator is willing to expend the resources to remove the waste, it is not unduly burdensome to go one step further and remove the liner. This burden is justified by the benefit of removing contamination from the impoundment. (See discussion below.) If extensive excavation is needed, thereby considerably increasing the cost of removal, it is generally because extensive contamination of the clay and underlying soils has occurred. In these cases, it may be cheaper to install a proper final cover and perform post-closure care rather than remove the contamination. In addition, we do not believe that removal of the liner will be any more hazardous to workers than is the removal of the waste. With proper safety procedures, removal of the waste and liner should not pose an undue hazard to workers.

#### *EPA's Interpretation of the "Remove or Decontaminate" Standard.*

The sole commenter on the proposed rule also suggested that, in addition to the case where all wastes, residues, and contaminated liners and soils are

removed, no final cover should be required where the type and quantity of waste in the liner can be shown to pose no public health or environmental threat. This comment touches upon an issue that has arisen in other contexts, that is: What is the necessary extent of removal or decontamination of wastes, waste residues, contaminated liners, and soils (including contaminated ground water) to avoid the landfill closure and post-closure care requirements under both Parts 264 and 265 regulations? The issue concerning how much removal or decontamination of wastes and waste residues is necessary to protect human health and the environment is relevant in a broad range of regulatory contexts currently being examined by the Agency including closure and corrective actions under RCRA and response actions under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) programs.

The removal and decontamination issue arises directly from differences in regulatory strategy between disposal and storage. A storage unit holds wastes temporarily, and the wastes are eventually removed for treatment or disposal elsewhere. The goal at closure is to leave no materials at the storage site that require further care. In contrast, a disposal unit, by definition, is closed with wastes and residues remaining at the site. The goal at closure is to assure that these remaining wastes and residues are managed in a manner that protects human health and the environment. There is no need for post-closure oversight of storage units since all potentially harmful wastes and contaminated materials are removed. This is not true for disposal units; hence, the Agency has promulgated regulations requiring post-closure care for disposal units. (For further discussions on a proposed alternative closure option, see the preamble to proposed §§ 264.310 and 265.310 elsewhere in today's Federal Register).

To assist the reader, we describe below EPA's interpretation of the "remove and decontaminate" language in §§ 264.228 and 265.228, i.e. we describe the amount of removal or decontamination that obviates the need for post-closure care for both interim status and permitted surface impoundment units. With regard to storage units regulated under both Parts 264 and 265, the Agency interprets the terms "remove" and "decontaminate" to mean removal of all wastes and liners, and the removal of leachate and materials contaminated with the waste or leachate (including ground water)

that pose a substantial present or potential threat to human health or the environment. The Agency recognizes that at certain sites limited quantities of hazardous constituents might remain in the subsoil and yet present only insignificant risks to human health and the environment. Because regulations for storage facilities require no further post-closure care, the Agency must be certain that no hazardous constituents remain that could harm human health or the environment (now or in the future). To provide the necessary level of assurance, the Agency will require owners or operators to remove all wastes and contaminated liners and to demonstrate that any hazardous constituents left in the subsoils will not cause unacceptable risks to human health or the environment. The Agency will review site-specific demonstrations submitted by facility owners and operators that document that enough removal and decontamination has occurred so that no further action is necessary. Owners or operators wishing to avail themselves of the site-specific removal option must include in their closure plans specific details of how they expect to make the demonstration, including sampling protocols, schedules, and the exposure level that is intended to be used as a standard for assessing whether removal or decontamination is achieved (see discussion below). The Agency is presently developing a guidance document explaining the technical requirements for achieving a "clean closure". This guidance document should be available in draft form by January 1987. In the meantime, the following discussion presents the framework for the demonstration procedure.

The closure demonstrations submitted by facility owners and operators must document that the contaminants left in the subsoils will not impact any environmental media including ground water, surface water, or the atmosphere in excess of Agency-recommended limits or factors, and that direct contact through dermal exposure, inhalation, or ingestion will not result in a threat to human health or the environment. Agency recommended limits or factors are those that have undergone peer review by the Agency. At the present time these include water quality standards and criteria (Ambient Water Quality Criteria 45 FR 79318, November 28, 1980; 49 FR 5831, February 15, 1984; 50 FR 30784, July 29, 1985), health-based limits based on verified reference doses (RfDs) developed by the Agency's Risk Assessment Forum (Verified Reference Doses of USEPA, ECAO-CIN-475,

January 1986) and Carcinogenic Potency Factors (CPF) developed by the Agency's Carcinogen Assessment Group (Table 9-11, Health Assessment Document for Tetrachloroethylene (Perchloroethylene) USEPA, OHEA/600/8-82/005F, July 1985) to be used to determine exposure at a given risk, or site-specific Agency-approved public health advisories issued by the Agency for Toxic Substance and Disease Registry of the Center for Disease Control, Department of Health and Human Services.

The Agency is currently compiling toxicity information on many of the hazardous constituents contained in Appendix VIII to Part 261. The facility owner and operators should check with the Office of Solid Waste, Characterization and Assessment Division, Technical Assessment Branch (202) 382-4761 for the latest toxicity information. However, for some hazardous constituents, formally recommended exposure limits do not yet exist. If no Agency recommended exposure limits exist for a hazardous constituent then the owner or operator must either remove the constituent down to background levels, submit data of sufficient quality for the Agency to determine the environmental and health effects of the constituent, or follow landfill closure and post-closure requirements. Data submitted by the owner or operator on environmental and health effects of a constituent should, when possible, follow the toxicity testing guidelines of 40 CFR Parts 797 and 798 (50 FR 39252, September 27, 1985). The Agency does not believe there are many situations where developing exposure levels will be a realistic option for owners and operators because the testing required by 40 CFR Parts 797 and 798 to produce reliable toxicity estimates is expensive and time-consuming.

The Agency believes it is necessary to present policy on the appropriate point of exposure for the various pathways of exposure in order to provide some national consistency in dealing with the potential impacts of the release of hazardous constituents from closing units. The following point of exposure was chosen because the Agency believes it represents a realistic and at the same time reasonably conservative estimate of where either environmental or human receptors could be exposed to the contaminants released from the unit. For the purpose of making a closure by removal demonstration, the potential point of exposure to hazardous waste constituents is assumed to be directly at or within the unit boundary for all

routes of exposure (surface-water contact, ground-water ingestion, inhalation, and direct contact). Potential exposure at or within the unit boundary must be assumed because no further oversight or monitoring of the unit is required if the unit is closed by removal. (Recall that the land overlying a unit that closes by removal may be transferred and developed freely without giving notice of its prior use.) Therefore, no attenuation of the hazardous waste constituents leaching from the waste residues can be presumed to occur before the constituents reach exposure points.

This approach differs from the existing "delisting procedure" developed in response to the requirements of §§ 261.3 (c) and (d), 260.20, and 260.22. As discussed previously, the "clean closure" approach is based on the premise that, after closure by removal is satisfied, no further management control over the waste (or unit) is necessary. In contrast, delisted solid waste remains subject to the regulatory controls promulgated by the Agency under Subtitle D of RCRA. Subtitle D contains performance criteria for the management of non-hazardous waste. Although the Agency is currently assessing whether more specific Federal regulatory requirements are needed for waste management under Subtitle D, most states have already adopted specific regulatory requirements for Subtitle D waste management. Therefore, even though a waste may be delisted its management continues to be controlled. In contrast, closure by removal will not be followed by any regulatory controls; hence, an environmentally conservative approach is needed to assure no further risk to human health and the environment. Therefore, unlike the current "delisting procedure" that is based on a generic process that only considers the ground-water route of exposure, the demonstration procedure discussed here is waste-specific and site-specific, considers all potential exposure pathways, and assumes no attenuation.

The demonstration should be conservative in the sense that it eliminates the uncertainties associated with contaminant fate and transport, focusing on the waste contaminant levels and contaminant characteristics. Therefore, arguments relying on fate and transport calculations will not be accepted. The Agency is pursuing this relatively conservative approach at this time because we are confident that it will be protective of human health and the environment. After a few years of experience with "clean closure"

demonstrations, the Agency may decide that a less stringent approach is sufficiently reliable to assure that closures based on such analyses are fully protective of human health and the environment. At that time, the Agency may change its position on the use of fate and transport arguments for "clean closure" demonstrations. (Elsewhere in today's Federal Register, the Agency is proposing a third closure option that would incorporate fate and transport factors. However, unlike the closure by removal option, that option would require closure to be followed by verification monitoring to verify the fate and transport predictions and assume that the closure protects human health and the environment.)

To make the demonstration with respect to the direct contact pathway, owners or operators must demonstrate that contaminant levels in soil are less than levels established by the Agency as acceptable for ingestion or dermal contact. Total waste constituent levels in soil should be used for this analysis. Arguments based on exposure control measures such as fencing or capping will not be acceptable since the long-term future use of the property cannot be reliably controlled and hence the long-term effectiveness of these measures is uncertain.

To make the demonstration with respect to the ground-water pathway, owners or operators must remove enough contaminated soil and saturated subsoils (i.e., ground water) to demonstrate that constituent levels in ground water do not exceed Agency-established chronic health levels (based on RfD or CPF values) and that residual contaminant levels remaining in the soil will not contribute to any future contamination of ground water. (Note: this demonstration may in some cases require constituent-specific ground water data beyond that required by §§ 265.90 through 2165.100). The demonstration related to residual soil contamination levels must show that levels of constituents found in leachate from the residual soil contamination are not above Agency-established exposure levels. Levels of constituents in leachate may be estimated based on known characteristics of the waste constituents (e.g., solubility and partitioning coefficients) or determined by the results of actual soil leaching tests. The Agency is exploring the appropriateness of using the extraction procedures (but not the acceptable contaminant levels) found in the Toxicity Characteristics Leaching Procedure (TCLP), Federal Register of January 14, 1985 (51 FR 1690). The current EP Toxicity leaching

procedure is insufficient for this demonstration because it does not capture the organic constituents in the waste.

The analysis of potential air exposures should assess contaminants migrating from the soils into the atmosphere. The demonstration should include emission calculations, available monitoring data, and safe inhalation levels based on Agency-established exposure levels.

The potential surface water exposure analysis should compare Agency-established water quality standards and criteria (45 FR 79318, November 28, 1980) with the levels of constituents that may leach from the residual contaminated soil. Tests described previously should be used to estimate the level of constituents in the leachate. The surface water exposure analysis should also consider existing surface water contaminant concentrations.

#### IV. State Authority

##### A. Applicability of Rules in Authorized States

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, the Agency retains enforcement authority under sections 300A, 7003 and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program. The Federal requirements no longer applied in the authorized State, and the Agency could not issue permits for any facilities in a State where the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. The Agency is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted

authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the HSWA applies in authorized States in the interim.

#### B. Effect on State Authorization

Today's rule promulgates standards that are not effective in authorized States since the requirements are not being imposed pursuant to Hazardous and Solid Waste Amendments of 1984. Thus, the requirements will be applicable only in those States that do not have final authorization. In authorized States, the requirements will not be applicable until the State revises its program to adopt equivalent requirements under State law.

40 CFR 271.21(e)(2) requires that States that have final authorization must modify their programs to reflect Federal program changes and must subsequently submit the modification to EPA for approval. The deadline by which the State must modify its program to adopt today's rule is July 1988. These deadlines can be extended in exceptional cases (40 CFR 271.21(e)(3)). Once EPA approves the revision, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs may already have requirements similar to those in today's rule. These State requirements have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to carry out these requirements in lieu of the Agency until the State requirements are approved. Of course, States with existing standards may continue to administer and enforce their standards as a matter of State law.

States that submit official applications for final authorization less than 12 months after the effective date of these standards are not required to include standards equivalent to these standards in their application. However, the State must modify its program by the deadlines set forth in § 271.21(e). States that submit official applications for final authorization 12 months after the effective date of those standards must include standards equivalent to these standards in their application. 40 CFR 271.3 sets forth the requirements a State must meet when submitting its final authorization application.

#### V. Effective Date

Pursuant to section 3010(b) of RCRA, today's amendments will be effective six months after promulgation.

#### VI. Regulatory Impact

Under Executive Order 12291, the Agency must judge whether a regulation is "major" and, therefore, subject to the requirement of a Regulatory Impact Analysis. As stated in the proposed rule on July 26, 1982, the Agency does not believe these conforming changes will result in an annual effect on the economy of \$100 million or more; a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or significant adverse effects on competition, employment, investment, productivity, innovation, or in domestic or export markets. In addition, the Part 265 conforming changes do not impose any requirements beyond those required for permitting facilities under Part 264. Therefore, the Agency believes that today's rule is not a major rule under Executive Order 12291.

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291.

#### VII. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, (5 U.S.C. 601 *et seq.*), the Agency must prepare a regulatory flexibility analysis for all regulations that may have a significant impact on a substantial number of small entities. The Agency conducted such an analysis on the land disposal regulations and published a summary of the results in the Federal Register, Vol. 48, No. 15 on January 21, 1983. Today's conforming regulation does not impose significant additional burdens. In addition, they do not impose any requirements beyond those required for permitting facilities under Part 264.

#### VIII. Paperwork Reduction Act

The certification requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* and have been assigned OMB control number 2050-0000.

#### List of Subjects in 40 CFR Part 265

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal, Water supply.

Dated: March 8, 1987.

Lee M. Thomas,  
Administrator.

For the reasons set out in the preamble, Part 265, Subpart K of Title 40

of the Code of Federal Regulations is amended as follows:

#### PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

1. The authority citation for Part 265 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6925).

2. In 40 CFR Part 265, Subpart K, § 265.228 is revised to read as follows:

§ 265.228 Closure and post-closure care.

(a) At closure, the owner or operator must:

(1) Remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies; or

(2) Close the impoundment and provide post-closure care for a landfill under Subpart G and § 265.310, including the following:

(i) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

(ii) Stabilize remaining wastes to a bearing capacity sufficient to support the final cover; and

(iii) Cover the surface impoundment with a final cover designed and constructed to:

(A) Provide long-term minimization of the migration of liquids through the closed impoundment;

(B) Function with minimum maintenance;

(C) Promote drainage and minimize erosion or abrasion of the cover;

(D) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(E) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) In addition to the requirements of Subpart G, and § 265.310, during the post-closure care period, the owner or operator of a surface impoundment in which wastes, waste residues, or contaminated materials remain after closure in accordance with the provisions of paragraph (a)(2) of this section must:

(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as

necessary to correct the effects of settling, subsidence, erosion, or other events;

(2) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of Subpart F of this part; and

(3) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

[FR Doc. 87-5575 Filed 3-18-87; 8:45 am]

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8" and "D&C Red No 9" in paragraph (b).

**§ 81.27 (Amended)**

5. In § 81.27 *Conditions of provisional listing* by removing the entries for "D&C Red No. 8" and "D&C Red No. 9" in paragraph (d).

Dated: May 31, 1987.

Frank E. Young,

Commissioner of Food and Drugs.

[FR Doc. 87-12798 Filed 6-4-87; 8:45 am]

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**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Parts 261 and 266**

[SW FRL-3213-6]

**Hazardous Waste Management System; Definition of Solid Waste; Technical Corrections**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Technical corrections to definition of solid waste rulemaking.

**SUMMARY:** On January 4, 1985, EPA promulgated final rules defining the statutory term "solid waste" and adopting regulations for hazardous wastes that are recycled. EPA has since identified two provisions that require correction or clarification. This notice makes those changes.

**EFFECTIVE DATE:** June 5, 1987.

**FOR FURTHER INFORMATION CONTACT:** RCRA Hotline, toll free, at (800) 424-9436 or (202) 382-3000. For technical information contact Michael Petruska, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC, 20460, (202) 382-4761.

**SUPPLEMENTARY INFORMATION:**

**I. Technical Corrections to Rule**

1. On January 4, 1985, as part of the final rule defining "solid waste", EPA amended § 261.33 to state that commercial chemical products are solid wastes when they are "discarded" as defined in § 261.2(a)(2)(i) (*i.e.* by being abandoned), or when recycled by burning, use in fuel production, or placement on the land when this is not the material's normal manner of use. See 50 FR at 865. This provision correctly reflected the Agency's intent. The provision was amended in the course of codifying certain of the 1984 RCRA amendments, however, and this amendment (51 FR at 20744, July 15, 1985) inadvertently changed the meaning of the provision to say that these materials are wastes when

recycled in any manner (because, under the July 15 amendment, the term "discarded" was no longer limited to its meaning of § 261.2(a)(2)(i)). EPA did not intend this change, 50 FR at 618, nor did the Congress (see, e.g. RCRA section 3004(q)(1), final sentence). Accordingly, we are correcting the rule by restoring the regulatory language that was inadvertently deleted from the January 4, 1985 rule.

2. Subpart C of Part 266 applies to hazardous wastes that are recycled by being placed on or applied to the land, a practice termed 'used in a manner constituting disposal.' The rules apply when hazardous wastes are applied directly to the land, and when hazardous wastes are first mixed or otherwise combined with any other substance (or substances) before being applied to the land. See § 266.20(a). The rules further indicate that certain waste-derived products that are placed on the land are not presently subject to regulation, namely those that are produced for the general public's use and that undergo a chemical reaction in the course of production so that the hazardous waste component is inseparable by physical means. See § 266.20(b). (Waste-derived fertilizers produced for the general public's use also are exempt. *Id.*)

These rules contain an unintended redundancy. Language in § 266.20(b), exempting certain waste-derived products from regulation, is also cited in § 266.20(a) which states the overall applicability of the section, and so applies not only to waste-derived products but also to the hazardous wastes themselves before being incorporated into the products. We are correcting the redundancy by removing the language exempting products from § 266.20(a), so that § 266.20(a) (as intended) sets out the jurisdictional applicability of Subpart C of Part 266, and § 266.20(b) sets forth exemptions from regulation (again, as intended). This change will not only remove redundant regulatory language but indicate more clearly that hazardous wastes are *always* subject to regulation prior to being used in a manner that constitutes disposal (*i.e.*, in the transportation and storage phases of management, even if a waste-derived product's actual application is presently exempt.) The Agency, in the preamble to the final rule, stated explicitly that such wastes are regulated before being incorporated into waste-derived products. See 50 FR 629/1 (Jan. 4, 1985).

**II. Regulatory Impact**

Under Executive Order 12291, EPA must judge whether a regulation is

"major" and therefore subject to the requirements of a Regulatory Impact Analysis. Since this notice makes technical corrections and does not change the previously approved final rule, this rule is not major and no Regulatory Impact Analysis is required.

**List of Subjects in 40 CFR Parts 261 and 266**

Hazardous material, Waste treatment and disposal, Recycling.

Dated: May 29, 1987.

J.W. McGrav,

Acting Assistant Administrator for Solid Waste and Emergency Response.

For the reasons set out in the Preamble, Title 40 of the Code of Federal Regulations is amended as follows:

**PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE**

1. The authority citation for Part 261 continues to read as follows:

**Authority:** Sections 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6905, 6912(a), 6921, and 6922].

2. Section 261.33 is amended by revising the introductory paragraph to read as follows:

**§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.**

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in § 261.2(a)(2)(i), when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

**PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC WASTES AND SPECIFIC TYPES OF WASTE MANAGEMENT FACILITIES**

3. The authority citation for Part 266 continues to read as follows:

**Authority:** Sec. 1006, 2002(a), 3008, and 3014 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6095, 6912(a), 6925, and 6934].



**Subpart C—Recyclable Materials Used in a Manner Constituting Disposal**

4. Section 266.20 is amended by revising paragraphs (a)(2) and by removing paragraph (a)(3) as follows:

**§ 266.20 Applicability.**

(a) \* \* \*

(2) after mixing or combination with any other substance(s). These materials will be referred to throughout this subpart as "materials used in a manner that constitutes disposal."

[FR Doc. 87-12827 Filed 6-4-87; 8:45am]

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**DEPARTMENT OF THE INTERIOR****Office of Hearings and Appeals****43 CFR Part 4****Special Rules Applicable to Public Land Hearings and Appeals**

**AGENCY:** Office of Hearings and Appeals, Interior.

**ACTION:** Final rule.

**SUMMARY:** The Office of Hearings and Appeals (OHA) in the Department of the Interior (DOI) is revising its rules at 43 CFR Part 4, Subpart E, by adding a provision to establish a 60-day limit on the filing of requests for reconsideration of decisions in public land appeals and to make clear that action on such a request does not affect the effectiveness of finality of the decision of which reconsideration is sought.

**EFFECTIVE DATE:** July 6, 1987.

**FOR FURTHER INFORMATION CONTACT:** James R. Kleiler, Attorney-Adviser, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, Virginia 22203; Telephone: (703) 235-3750.

**SUPPLEMENTARY INFORMATION:****I. Discussion of Rule**

OHA published its proposed regulation concerning the reconsideration and finality of decisions of the Interior Board of Land Appeals (IBLA) on pages 36414-15 of the Federal Register of October 10, 1986, indicating that comments would be accepted through November 10, 1986. Five letters containing comments from the public were received.

Prior to the effective date of this rule, reconsideration of IBLA's decisions has been governed by 43 CFR 4.21(c). This regulation has presented two problems. First, it sets no definite time limitation on the filing of petitions for reconsideration; a petition had only to

be "filed promptly." Because of the vagueness of this standard, IBLA has taken time to evaluate the merits of petitions that could have been summarily denied as untimely if a definite time limitation had been in effect.

The second problem presented by 43 CFR 4.21(c) concerns whether a decision issued by the Board constitutes final agency action, so that the filing and disposition of a request for reconsideration does not affect the finality of the decision for which reconsideration is sought. This is particularly important in actions for which Congress has enacted a statute limiting the time in which a suit for judicial review may be filed, such as 30 U.S.C. 226-2 (1982), which provides: "No action contesting a decision of the Secretary involving any oil and gas lease shall be maintained unless such action is commenced or taken within ninety days after the final decision of the Secretary relating to such matter."

A court is the ultimate arbiter of its jurisdiction, but it is the responsibility of the agency to assist the court by indicating when its action is final and when it is not. Although 43 CFR 4.21(c) provides that IBLA decisions are final and that the "filing and pendency of a request for reconsideration shall not operate to stay the effectiveness of the decision," Federal courts have differed in their interpretations of this language. One court interpreted the quoted language as was intended by the Department: "The clear and imperative language of the regulation states that an IBLA decision is final for the purpose of beginning the . . . appeal period for judicial review unless a stay has been ordered by the Director or the Appeals Board." *Geosearch, Inc. v. Andrus*, 494 F. Supp. 978, 979 (D. Wyo., 1980). This view was adopted in *Geosearch, Inc. v. Hodel*, 801 F.2d 1250 (10th Cir. 1986), a case which involved the same plaintiff but a different oil and gas lease application. Nevertheless, a contrary view was set forth in *Lowery v. Andrus*, No. 79-3314 (D.D.C. July 28, 1980). Accordingly, the new rule makes it clear that the date of issuance of the decision of which reconsideration is sought is the effective date of final agency action, with the result that neither the filing of a request for reconsideration nor its denial will toll the time during which a party may seek judicial review of an IBLA decision.

**II. Discussion of Comments**

The proposed rule would have required petitions to be filed within 30 days after the date of issuance of an IBLA decision. Several comments have

convinced us that this period is too short, especially in Alaska, where a decision might not be delivered until 10 days after issuance. One comment suggested that the 30-day period run from the date of receipt of the decision rather than the date of issuance. Other comments suggested extending the period to 60 or 90 days. The final rule provides that a petition for reconsideration shall be filed within 60 days after the date of a decision.

In response to another comment, we have added a provision that a petition for reconsideration may include a request that the Board stay the effectiveness of the decision for which reconsideration is sought.

This provision complements the penultimate sentence of the rule which makes clear that there is no stay unless so ordered by the Board.

One comment notes that the proposed rule retained the provision of 43 CFR 4.21(c) that limits reconsideration to "extraordinary circumstances where . . . sufficient reason appears." The comment recommends deletion of the phrase "extraordinary circumstances" and suggests that sufficient reason should be enough to justify reconsideration even if the circumstances are all quite common. Nevertheless, we have retained this provision because the Board does not intend to enlarge the scope of its reconsideration practice to make it a routine feature of adjudication. This provision reinforces the Board's expectation that parties will make complete submissions in a timely manner during the appeal, not afterward on reconsideration. This expectation is justified because almost all those who petition for reconsideration have already had two full opportunities to present their cases to the Department: once before the initial decisionmaker and again before the Board. In general, the Board does not give favorable consideration to a petition for reconsideration which merely restates arguments made previously or which contains new material with no explanation for the petitioner's failure to submit such material while the appeal was pending. Because parties recognize their obligations in this regard, relatively few petitions for reconsideration are ever filed. Even so, the Board rarely finds it necessary to grant them, and even more rarely reverses itself.

One comment suggests that the final regulation provide for responsive briefing to a petition for reconsideration. Because the Board rarely grants petitions for reconsideration, we see no reason why adverse parties should

Dated: April 22, 1987.

Lee M. Thomas,  
Administrator.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

**PART 52—(AMENDED)**

**Subpart C—Colorado**

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7642.

2. Section 52.320 is amended by adding paragraph (c)(33) to read as follows:

**§ 52.320 Identification of plan.**

(c) . . .

(33) A revision to Regulation No. 4, "Regulation on the Sale of New Woodstoves", to control emissions from new woodstoves was submitted by the Governor on October 24, 1986.

(i) Incorporation by reference

(A) Colorado Air Quality Control Commission Regulation No. 4, "Regulation on the Sale of New Woodstoves" (Section III.A., Ex. F, G, and Section VI.B. and C.) adopted June 27, 1985.

[FR Doc. 87-14133 Filed 6-19-87; 8:45 am]  
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**40 CFR Part 270**

[FRL-3164-9]

**Development of Corrective Action Programs After Permitting Hazardous Waste Land Disposal Facilities**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency is today amending the regulations establishing information requirements for Part B permit applications under the Resource Conservation and Recovery Act (RCRA) as amended. Currently, RCRA regulations require owner/operators of facilities that treat, store, or dispose of hazardous waste in surface impoundments, waste piles, land treatment units, or landfills that received waste after July 26, 1982 to submit feasibility studies and plans for a corrective action program in the Part B permit application when hazardous constituents in the ground water exceed specified limits. These requirements have created delays in the timely issuance of land disposal permits.

Further, as corrective action for other hazardous and solid waste management units is normally undertaken after issuance of the permit, these requirements can cause inconsistencies in the timing and approach for corrective action for various units at the same facility. This final amendment will allow the owner/operator, at the Regional Administrator's discretion, to conduct certain activities related to ground water corrective action after issuance of the permit.

**DATES:** These regulations shall become effective on June 22, 1987.

**ADDRESSES:** The public docket for this rulemaking is available for public inspection at Room 5-212-E, U.S. EPA 401 M Street SW., Washington, DC 20460 from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. The docket number is F-86-RUP-FFFF. Call (202) 475-9327 to make an appointment with the docket clerk. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

**FOR FURTHER INFORMATION CONTACT:** RCRA hotline at (800) 424-9346 (in Washington, DC call 382-3000) or Dave Fagan, Office of Solid Waste (WH-563), U.S. Environmental Protection Agency, Washington, DC 20460, telephone (202) 382-4497.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

RCRA requires a permit for the treatment, storage, or disposal of any hazardous waste identified or listed in 40 CFR Part 261. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit, and for any applicable post-closure care period. Regulations in 40 CFR Part 270 describe the requirements for permit applications. Regulations in Part 264 specify technical and administrative standards that also apply to facilities that obtain permits.

**A. Land Disposal Standards Issued in 1982**

Subpart F of Part 264, promulgated in July 1982, establishes a three-stage program of detection, compliance, and corrective action for ground water contamination at new and existing "regulated" units. As defined in 40 CFR 264.99(a), a "regulated unit" is a surface impoundment, waste pile, land treatment unit, or landfill that received waste after July 26, 1982.<sup>1</sup> The permit

application requirements for these standards are found in § 270.14(c)(1) through § 270.14(c)(10). Subsections (c)(1) through (c)(4) require the owner/operator to submit basic data for ground water monitoring, including a characterization of the aquifer and a description of the nature and extent of any plume of contamination that has entered ground water from a regulated unit. Sections 270.14(c)(5) through (c)(7) specify the required information for establishing the applicable detection and compliance program required under Part 264, Subpart F.

Section 270.14(c)(8) addresses the information necessary to establish a corrective action program. Such a program is required when hazardous constituents in the ground water exceed the ground water protection standard. Under § 264.94 the ground water protection standard is defined as either the background concentration of the constituent in ground water, one of 14 specified maximum concentration limits (§ 264.94(a)), or a site-specific alternate concentration limit. Sections 270.14(c)(8)(iii) and (c)(8)(iv) require detailed engineering plans and an engineering report describing the corrective action to be taken, and a description of how the ground water monitoring program will demonstrate the adequacy of the corrective action. An engineering feasibility plan for a corrective action program is also required as part of a compliance monitoring program under the first paragraph of text in § 270.14(c)(7).

**B. Effect of the 1984 Amendments**

The new requirements of the Hazardous and Solid Waste Amendments (HSWA) of 1984 have a major impact on the RCRA permit application process for land disposal facilities. Under new section 3095(c)(2) of RCRA, final disposition must be made on permit applications for all land disposal facilities by November 9, 1980. Further, new section 3004(u) of RCRA requires that any permit issued after November 8, 1984 must require corrective action for all releases of hazardous waste or constituents from all solid waste management units at a facility, and financial assurance for such corrective action. Section 3004(u) provides that permits may contain schedules of compliance where corrective action for releases from solid waste management units cannot be completed prior to permit issuance. The legislative history to the provision

<sup>1</sup> This date was originally identified in the 1982 regulations as January 28, 1983, but was amended to

July 26, 1982 (50 FR 25715) in accordance with section 3005(i) of RCRA.

explained that a schedule of compliance can include activities needed to investigate releases for potential corrective action. The term "solid waste management units" includes "regulated units." Hence, section 3004(u) can be interpreted to authorize EPA to revise the 1982 regulations for regulated units that require owners and operators to complete investigations of ground water releases prior to permit issuance.

EPA believes that there are important reasons for such a revision. Under the current regulations, owners and operators of hazardous waste facilities that contain both regulated units and "non-regulated" solid waste units may have to develop two separate corrective action programs: one for releases to ground water from regulated units that must be fully planned before a permit is issued; and one for releases to ground water from "non-regulated" units that may be developed after permit issuance. This second program could also include releases to other environmental media from both regulated and "non-regulated" units.

The Agency is concerned that the requirement for facility owner/operators to develop engineering plans, studies and reports for a corrective action program under § 270.14(c)(7), (c)(8)(iii) and (c)(8)(iv) prior to permit issuance may have several detrimental effects in light of the HSWA amendments. Specifically, the requirement may create delays in the timely processing and issuance of land disposal permits, the imposition of the more stringent Part 264 permitting standards, and possibly the application of section 3004(u) corrective action requirements. These delays are more serious in light of the 1988 permitting deadline. (RCRA section 3005(c)(2)). In addition, the requirement can cause inconsistencies in timing and approach for regulated units as opposed to other non-regulated units at the same facility which may have contaminated ground water, but which could be subject to corrective action under section 3004(u). Where plumes of contamination from regulated and non-regulated units at a facility are not intermingled, the plume of contamination can be analyzed and an effective corrective action plan developed that addresses only the regulated units. Where contaminant plumes are mixed, a full analysis of the entire plume would be required under current regulations (§ 270.14(c)(17)), but the corrective action plan has only to address contamination from the regulated unit. In these situations, concurrent development and approval of a corrective action plan that addresses

both regulated and non-regulated units would be a more efficient approach for implementing ground water cleanup programs. Development of such a plan as part of the permit application, however, may unduly delay issuance of the permit. On December 9, 1986, the Agency issued a proposed amendment to the regulations (FR 44418) to address this inconsistency.

## II. Discussion of Today's Final Rule

The Agency is today promulgating the December 9 proposed amendments in final form. The rule amends the Part 270 regulations to allow the information related to detailed corrective action planning currently required under the first paragraph of § 270.14(c)(7), § 270.14(c)(8)(iii) and (c)(8)(iv) to be developed, at the Regional Administrator's discretion, after permit issuance through schedules of compliance included in the permit. Owner/operators will be required to obtain advance written authorization from the Regional Administrator waiving these information requirements if the corrective action plan for regulated units is to be developed through a permit schedule of compliance. Such authorization by the Regional Administrator will be granted on a case-by-case basis, depending on the circumstances at each facility.

This amendment will have several benefits. It will serve to expedite the process of bringing land disposal facilities under the more stringent Part 264 permitting standards. In addition, as discussed above, the amendment will allow a more coherent process for development and review of corrective action programs at facilities with complex ground water contamination problems resulting from both regulated units and solid waste management units.

EPA wishes to emphasize that today's rule does not affect other application information requirements found in § 270.14(c)(1) through (c)(6), including identification of the uppermost aquifer, characterization of contaminated ground water, and development of a detection or compliance ground water monitoring system. In particular, the ground water protection standard, which provides both the trigger level for initiation of corrective action as well as the clean-up standard for regulated units, will have to be developed and approved prior to permit issuance. Accordingly, the public will have the same opportunity to review and comment on these activities through the permit application process. Under today's rule, only the actual design of a corrective measures program can be developed after permit issuance through a permit schedule of

compliance. Regulations governing permit modifications (§ 270.41) will be followed to incorporate the actual corrective action program into the permit once it is developed. These permit modification procedures include public notice and opportunity for comment on the design of the corrective measures program.

On October 24, 1986, the Agency proposed regulations (51 FR 37354) requiring financial assurance for corrective action as mandated by RCRA § 3004(u). The proposal would require that financial assurance for corrective action must be demonstrated when corrective action measures have been specified in the permit. The preamble to that proposal explained that, under the current proposal, financial assurance for corrective action must be demonstrated when corrective action measures have been specified in the permit. The preamble to that proposal explained that, under the current regulations, EPA expected corrective action measures for ground water releases from regulated units to be specified at the time of permit issuance. Financial assurance for these actions would be required immediately after the permit is issued.

As a result of today's rule, however, corrective action for releases to ground water from regulated units may be specified after a permit is issued. Under the proposed financial assurance rule, this change would also change the timing for submission of financial assurances. Where corrective action measures and financial assurance are specified after a permit is issued, the owner or operator will have to follow EPA's procedures for major modifications to permits. These procedures require notice and opportunity for public comment. See 40 CFR 270.

In developing today's final rule, EPA considered several options for modifying § 270.14(c) information requirements related to land disposal units. Specifically, EPA considered allowing owners and operators to develop ground water protection standards under schedules of compliance. Where an owner or operator seeks an alternative concentration limit, development of such alternative limits can be very time-consuming. Although EPA had tentatively rejected this option, it solicited public comment on the impacts of such an approach.

In response, two commenters recommended that alternate concentration limits be developed after permit issuance, since the time and resource requirements for development

of ACLs may delay permit issuance. EPA has decided, however, to retain the present approach as outlined in § 270.14(c). Ground water protection standards and alternative concentration limits are the levels at which protection of human health and the environment will be measured. EPA believes that these requirements should be developed, undergo public comment, and be approved prior to an owner/operator receiving a permit to operate a regulated unit, and are, therefore, an integral part of the permit application process.

EPA received eleven comments on other aspects of the proposed rule. All but one expressed general support for the proposal. Outlined below is a summary of those comments.

One commenter was concerned about the possibility that financially unsound facilities might receive a permit but would be unable to afford the necessary corrective action if a corrective action plan were not required in the permit application. This situation, however, is addressed in the current regulations. Should a facility fail to provide financial assurance for corrective action after permit issuance, the permit could be terminated under § 270.43(a)(1) for noncompliance with a permit condition. Corrective action at that facility would then be addressed under other RCRA or Superfund authorities.

Another commenter stated that the requirement for formal written approval by the Regional Administrator to allow for development of the corrective action plan after permit issuance would unnecessarily delay the permitting process. The Agency disagrees with this comment. The time and resources required for the owner/operator to develop the corrective action plan and for the Agency to review the plan are considerable. Formal authorization will help to assure that: (1) The reasons for allowing development of the plan after permit issuance are clear; and (2) both parties have agreed to this provision, thereby avoiding any misunderstandings and corresponding delays in reviewing the permit application.

Finally, one commenter expressed concern regarding the preamble discussion in the proposed rule which dealt with the efficiency of addressing in a concurrent and comprehensive manner cleanup of ground water which has been contaminated by regulated units and other sources at a facility. EPA wishes to clarify that it is not the Agency's intention, nor is it allowed under Part 264 Subpart F regulations, to defer or delay corrective action for releases from regulated units until all sources of contamination and all ground water contaminant plumes at the facility

are fully characterized, and corrective action plans for that contamination have been developed. When ground water contamination from a regulated unit has been characterized, corrective action for that contamination will be implemented as prescribed by the standards in Subpart F.

### III. State Authority

#### A. Applicability of Rules in Authorized States

Under Section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3003, 7003, and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final authorization administered its hazardous waste program entirely in lieu of EPA administering the Federal program in that State. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in the State which the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obliged to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under section 3005(g) of RCRA, 42 U.S.C. § 9605(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to refrain from final authorization, the HSWA applies in authorized States in the interim.

#### B. Effect on State Authorizations

Today's announcement promulgates standards that would not be effective in authorized States since the requirements would not be imposed pursuant to the Hazardous and Solid Waste Amendments of 1984. Thus, the requirements will be applicable only in those States that do not have interim or final authorization.

Further, authorized States are only required to modify their programs when EPA promulgates Federal standards that are more stringent or broader in scope than the existing Federal standards. For those Federal program changes that are less stringent or reduce the scope of the program, States are not required to modify their programs. This is a result of section 3009 of RCRA which allows States to impose standards in addition to those in the Federal program. The standards proposed today are considered to be less stringent than the scope of the existing Federal requirements. Therefore, authorized States are not required to modify their programs to adopt requirements equivalent or substantially equivalent to the provisions listed above.

### IV. Effective Dates

EPA believes it has a sound basis for suspending the statutory six-month effective date (RCRA 3010(b)) for this regulatory amendment. HSWA amended section 3010(b) to provide that EPA may shorten or provide for an immediate effective date where (1) the regulated community does not need six months to come into compliance, (2) the regulation responds to an emergency situation, or (3) there is other good cause. The regulated community does not need six months to come into compliance with this regulation amendment, since the amendment does not materially affect the regulatory responsibilities of owner/operators. Therefore, these regulations will become effective immediately upon promulgation.

### V. Regulatory Analysis

#### A. Executive Order 12291 and Regulatory Impact Analysis

Under Executive Order 12291, EPA must judge whether a regulation is "major" and, thus, subject to the requirement of a Regulatory Impact Analysis. The notice published today is not major because: the rule will not result in an effect on the economy of \$100 million or more, will not result in increased costs or prices, will not have significant adverse effects on competition, employment, investment, productivity, innovation, and will not significantly disrupt domestic or export markets. Therefore, the Agency has not prepared a Regulatory Impact Analysis (RIA). The rule was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

#### B. Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et

seq.), the information collection requirements contained in this rule were previously approved by OMB and were assigned OMB control number 2050-0007.

### C. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., whenever an Agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis which describes the impact of the rule on small businesses (i.e. small businesses, small organizations, and small governmental jurisdictions). The Administrator may certify, however, that the rule will not have a significant impact on a substantial number of small entities.

EPA has determined that this amendment will have no adverse economic impact on small entities. In fact, the rule will have a positive effect because it will reduce the amount of information required for RCRA Part B permit applications. Therefore, I hereby certify that this regulation will not have a significant impact on a substantial number of small entities.

### List of Subjects in 40 CFR Part 270

Administrative practice and procedure, Reporting and recordkeeping requirements, Hazardous Materials, Waste Treatment and disposal, Water Pollution control, Water supply, Confidential business information.

Dated: June 15, 1987.

Lee M. Thomas,  
Administrator.

For the reasons set out in the preamble, Part 270 of Chapter I of Title 40 of the Code of Federal Regulations is amended as follows:

### PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

1. The authority citation for Part 270 continues to read as follows:

Authority: Sections 1006, 2002, 3005, 3007, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended (42 U.S.C. 6905, 6912, 6925, C927, 6974), unless otherwise noted.

2. In § 270.14 paragraph (c) introductory text is republished, paragraph (c)(7) introductory text is revised, and (c)(8)(v) and an OMB control number are added to read as follows:

### § 270.14 Contents of Part B: General Requirements.

(c) *Additional information requirements.* The following additional information regarding protection of ground water is required from owners or operators of hazardous waste surface impoundments, piles, land treatment units, and landfills except as provided in § 264.90(b):

(7) If the presence of hazardous constituents has been detected in the ground water at the point of compliance at the time of the permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of § 264.99. Except as provided in § 264.99(h)(5), the owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of § 264.100, unless the owner or operator obtains written authorization in advance from the Regional Administrator to submit a proposed permit schedule for submittal of such a plan. To demonstrate compliance with § 264.99, the owner or operator must address the following items:

(8) . . . . .  
(v) The permit may contain a schedule for submittal of the information required in paragraphs (c)(9) (iii) and (iv) provided the owner or operator obtains written authorization from the Regional Administrator prior to submittal of the permit application.

(Information requirements approved by the Office of Management and Budget under control number 2050-0007)

[FR Doc. 87-14134 Filed 6-10-87, 8:45 am]  
BILLING CODE 6550-50-M

### DEPARTMENT OF COMMERCE

#### National Oceanic and Atmospheric Administration

#### 50 CFR Part 640

[Docket No. 83345-7101]

#### Spiny Lobster Fishery of the Gulf of Mexico and South Atlantic; Correction

**AGENCY:** National Marine Fisheries Service (NMFS), NOAA, Commerce.  
**ACTION:** Final rule; correction.

**SUMMARY:** This document corrects the effective date in the preamble of the final rule for the Spiny Lobster Fishery

of the Gulf of Mexico and South Atlantic which appeared in the Federal Register of June 15, 1987 (52 FR 22656).

**FOR FURTHER INFORMATION CONTACT:** Michael E. Justen, 813-893-3722.

In rule document 87-13618 beginning on page 22656 the following correction is made: On page 22658, column 1, line 12 from the bottom of the page, the date July 8, 1987, is corrected to read "July 15, 1987."

Dated: June 16, 1987.

Richard D. Roe,

Director, Office of Fisheries Management,  
National Marine Fisheries Service.

[FR Doc. 87-14102 Filed 6-19-87; 8:45 am]

BILLING CODE 3510-22-M

### 50 CFR Part 674

[Docket No. 78619-7119]

#### High Seas Salmon Fishery off Alaska

**AGENCY:** National Marine Fisheries Service (NMFS), NOAA, Commerce.

**ACTION:** Final rule.

**SUMMARY:** The Secretary of Commerce (Secretary) announces the commercial salmon fishing periods in the exclusive economic zone (EEZ) off southeast (S.E.) Alaska for 1987. The Secretary notes that the Pacific Salmon Commission (Commission) has established a base harvest limit of 265,000 chinook salmon for all commercial and recreational fisheries in S.E. Alaska in 1987. This action is necessary to establish the opening of the commercial troll fishery for 1987 and is intended to conserve chinook salmon stocks covered by the Pacific Salmon Treaty.

**EFFECTIVE DATE:** June 20, 1987.

**FOR FURTHER INFORMATION CONTACT:** Aven M. Andersen (Fishery Management Biologist, NMFS), 907-586-7228.

#### SUPPLEMENTARY INFORMATION:

##### Background

Section 7(a) of Pub. L. 99-5, the Pacific Salmon Treaty Act of 1985, 16 U.S.C. 3631 et seq., requires the Secretary to issue conforming amendatory regulations applicable to the EEZ to fulfill U.S. treaty obligations to Canada. This action amends the regulations at 50 CFR Part 674 to adopt fishing seasons and catch limitations for 1987 that, in conjunction with similar measures adopted by the State of Alaska (State) for its waters, will ensure that the high-seas salmon fishery is conducted in a manner that fulfills our international obligations under the Pacific Salmon Treaty.

deemed objectionable and the grounds for the objections. A hearing will be granted if the objections are supported by grounds legally sufficient to justify relief sought.

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act (Pub. L. 96-354, 94 Stat. 1164, 5 U.S.C. 601-612), the Administrator has determined that regulations establishing new tolerances or raising tolerance levels or establishing exemptions from tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the Federal Register of May 4, 1981 (46 FR 24950).

**List of Subjects in 40 CFR Part 180**

Administrative practice and procedure, Agricultural commodities, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: August 28, 1987.

Douglas D. Camp, Director, Office of Pesticide Programs.

Therefore, 40 CFR Part 180 is amended as follows:

**ART 180—(AMENDED)**

1. The authority citation for Part 180 continues to read as follows:

Authority: 21 U.S.C. 346p.

2. Section 180.381 is amended by adding and alphabetically inserting the raw agricultural commodities broccoli, cabbage, and cauliflower in paragraph (a), to read as follows:

**§ 180.381 Oxyfluorfen; tolerances for residues.**

(a) \* \* \*

Commodity	Parts per million
Broccoli	0.05
Cabbage	0.05
Cauliflower	0.05

[FR Doc. 87-20053 Filed 9-8-87; 8:45 am] BILLING CODE 6560-60-M

**40 CFR Part 270**

[FRL-3250-4]

**Development of Corrective Action Programs After Permitting Hazardous Waste Land Disposal Facilities; Correction**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; correction.

**SUMMARY:** This notice corrects an error in regulations which appeared in the Federal Register on June 22, 1987 [52 FR 23447] which related to RCRA permit application requirements for corrective action from regulated units.

**FOR FURTHER INFORMATION CONTACT:** Mr. David M. Fagan at (202) 382-4497.

**SUPPLEMENTARY INFORMATION:** Under a final regulatory amendment published on June 22, 1987, RCRA facility owner/operators may now develop, at the discretion of the Regional Administrator, ground water corrective action programs after issuance of the RCRA permit to the facility, under a schedule of compliance. The June 22 Federal Register notice contained an inadvertent omission which requires correction. Specifically, 40 CFR 270.14(c)(8)(v) specified that written authorization to develop a corrective action program under a permit schedule of compliance must be obtained "prior to submittal of the permit application." The word "complete" was mistakenly omitted; the provision should have read "prior to submittal of the complete permit application."

Date: August 27, 1987.

Thaddeus L. Juszczak, Acting Assistant Administrator for Office of Solid Waste and Emergency Response.

The following correction is made in FRL-3184-9, Development of Corrective Action Programs After Permitting Hazardous Waste Land Disposal Facilities published in the Federal Register on June 22, 1987 [52 FR 23447].

**§ 270.14 [Amended]**

§ 270.14(c)(8)(v) on page 23450 which reads, "The permit may contain a schedule for submittal of the information required in paragraphs (c)(8) (iii) and (iv) provided the owner or operator obtains written authorization from the Regional Administrator prior to

submittal of the permit application" is revised to read as follows:

"The permit may contain a schedule for submittal of the information required in paragraphs (c)(8) (iii) and (iv) provided the owner or operator obtains written authorization from the Regional Administrator prior to submittal of the complete permit application."

[FR Doc. 87-20053 Filed 9-8-87; 8:45 am] BILLING CODE 6560-60-M

**FEDERAL MARITIME COMMISSION**

**46 CFR Part 581**

[Docket No. 86-29]

**Filing of Service Contracts and Availability of Essential Terms**

AGENCY: Federal Maritime Commission. ACTION: Final Rule.

**SUMMARY:** The Federal Maritime Commission is amending its rules governing service contracts to address problems the Commission has experienced in obtaining adequate service contract records. This rule defines service contract records and requires ocean common carriers and conferences to maintain these records in a readily accessible or retrievable manner for a period of five years from the termination of each contract. Further, service contract records must be made available to the Commission within 30 days from the date of a written request. Two additional provisions of the final rule are being held in abeyance until further notice by the Commission. One requires service contract records to be maintained in the United States unless a responsible official of a carrier or conference certifies in writing that they will be supplied to the Commission on request. The other permits the Commission to cancel a carrier's or conference's right to maintain records outside the United States, if service contract records are not made available to the Commission.

**DATE:** Effective November 9, 1987, except for § 581.10 (c) and (d) which are indefinitely stayed.

**FOR FURTHER INFORMATION CONTACT:** Robert G. Drew, Director, Bureau of Domestic Regulation, Federal Maritime Commission, 1100 L Street

##

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

1			
2			
3	DEPARTMENT OF ENVIRONMENTAL QUALITY,	)	NOTICE OF ASSESSMENT
4	OF THE STATE OF OREGON,	)	OF CIVIL PENALTY
5		)	No. WQ-NWR-87-27
6	Department,	)	MULTNOMAH COUNTY
7	v.	)	
8	MERIT USA, INC.,	)	
9	an Oregon corporation,	)	
10		)	
11	Respondent.	)	

I

This notice is given to Respondent, Merit USA, Inc., an Oregon corporation, pursuant to Oregon Revised Statutes (ORS) 468.125 through 468.140, ORS Chapter 183 and Oregon Administrative Rules (OAR) Chapter 340, Divisions 11 and 12.

II

A Notice of Assessment of Civil Penalty (WQ-NWR-85-59) dated July 3, 1985 from Fred Hansen, Director, DEQ, to Merit Oil & Refining, Inc. (Merit Oil), is on file with the Environmental Quality Commission in this case and is incorporated herein by this reference. That notice was received by William Briggs, President and Registered Agent of both Merit Oil and Merit USA, on July 11, 1985. By that notice, the Department notified Merit Oil that it had committed one or more violations and that a civil penalty would be assessed if any of those violations continued or if any similar violation occurred five (5) or more days after receipt of that notice as is more fully set forth in that notice. Merit Oil was involuntarily dissolved as a corporation on March 13, 1986. *not so reinstated*

///

1 III

2 On or about March 10, 1987 Respondent spilled, or caused a spill of,  
3 oil into a marsh/creek connected to Smith Lake, waters of the state, from  
4 Respondent's secondary oil recovery facility on property owned by  
5 Respondent and identified as 4150 N. Suttle Road, Portland, in violation of  
6 ORS 468.720(1) and 468.785(1).

7 IV

8 The Director hereby imposes upon the Respondent a civil penalty of  
9 \$3,500 for the one or more violations alleged in Paragraph III.

10 V

11 The one or more violations alleged in Paragraph III involve aggravat-  
12 ing factors which support the assessment of a civil penalty larger than the  
13 minimum civil penalty which may be assessed pursuant to the schedule of  
14 civil penalties contained in OAR 340-12-055. The mitigating and aggravat-  
15 ing factors considered by the Director in establishing the amount of the  
16 penalty are attached hereto and incorporated herein by this reference.

17 VI

18 This penalty is due and payable immediately upon receipt of this  
19 notice. Respondent's check or money order in the amount of \$3,500  
20 should be made payable to "State Treasurer, State of Oregon" and should  
21 be sent to the Director of the Department of Environmental Quality.

22 VII

23 Respondent has the right, if Respondent so requests, to have a formal  
24 contested case hearing before the Environmental Quality Commission or its  
25 hearing officer regarding the matters set out above pursuant to ORS Chapter  
26 183, ORS Chapter 468.135(2) and (3), and OAR Chapter 340, Divisions 11 and 12



1 at which time Respondent may be represented by an attorney and  
2 subpoena and cross-examine witnesses. That request must be made in writing  
3 to the Director, must be received by the Director within twenty (20) days  
4 from the date of mailing of this notice (or if not mailed, the date of  
5 personal service), and must be accompanied by a written "Answer" to the  
6 charges contained in this notice. In the written "Answer," Respondent  
7 shall admit or deny each allegation of fact contained in this notice and  
8 affirmatively allege any and all affirmative claims or defenses to the  
9 assessment of this civil penalty that Respondent may have and the reasoning  
10 in support thereof. Except for good cause shown:

11 A. Factual matters not controverted shall be presumed admitted;

12 B. Failure to raise a claim or defense shall be presumed to be a  
13 waiver of such claim or defense;

14 C. Evidence shall not be taken on any issue not raised in the notice  
15 and the "Answer."

16 If Respondent fails to file a timely "Answer" or request for hearing  
17 or fails to appear at a scheduled hearing, the Director on behalf of the  
18 Environmental Quality Commission may issue a default order and judgment,  
19 based upon a prima facie case made on the record, for the relief sought  
20 in this notice. Following receipt of a request for hearing and an  
21 "Answer," Respondent will be notified of the date, time and place of the  
22 hearing.

23 ///

24 ///

25 ///

26 ///

VIII

If the one or more violations set forth in Paragraph III continue,  
or if any similar violation occurs, the Director will impose an additional  
civil penalty upon the Respondent.

MAY 28 1987

Date

Fred Hansen  
Fred Hansen, Director  
Department of Environmental Quality

**CIVIL PENALTY: MITIGATING AND AGGRAVATING FACTORS**

(OAR 340-12-045(1))

**RESPONDENT:** Merit USA, Inc.

**COUNTY:** Multnomah

**CASE NUMBER:** WQ-NWR-87-27

**TYPE OF VIOLATION:** Violation of Oregon Revised Statutes water quality laws.

**PENALTY LIMITS:** Minimum \$500 Maximum \$20,000  
(each violation or day of violation)

**1. Prior violations:**

Merit Oil and Refining, Inc. (Merit Oil) received a 1985 civil penalty for an oil spill and a chemical spill from the same North Portland facility. There was an additional oil spill at this site in July 1986. William Briggs is the president and Registered Agent for Respondent and was the president and Registered Agent for Merit Oil before it was involuntarily dissolved as a corporation on March 13, 1986.

**2. History of Respondent in taking all feasible steps or procedures necessary or appropriate to correct any violation:**

William Briggs agreed that Merit would take steps to prevent oil spills in Stipulation and Final Order No. 19-WQ-NWR-85-59, signed by Mr. Briggs on August 14, 1986. Specifically, Mr. Briggs agreed, in Paragraph IV of the Stipulation, to 1) cease discharging to the slough behind the facility, and 2) complete Merit's industrial wastewater permit application at the city of Portland by September 15, 1986. Merit Oil has done neither, and so has violated both conditions of the Stipulated Order.

Department told Mr. Briggs in a letter dated August 12, 1986, which enclosed the Stipulated Order, that failure to connect to the city's wastewater system would leave Merit with no apparent method to manage its wastewater and contaminated stormwater during winter rains. Staff subsequently told Merit staff, knowing that the connection permit application was delayed, that it would need to closely monitor its operations to prevent spills. Respondent's spill this year indicates that its monitoring has been inadequate, and that it has been negligent in not taking all feasible steps or procedures to prevent spills.

In addition to better monitoring, Respondent could also have placed soil around its oil-water separation pond to provide more freeboard, and therefore make overflow less likely. Also, if the spill resulted from oil from under tire piles on Respondent's property, as Mr. Briggs suggested in an April 10, 1987 letter to the Department, Respondent could have had channels for diverting surface water runoff near the perimeter of its property, connected to a separation or treatment facility, to ensure that no contamination reached public waters.

**3. The economic and financial condition of the Respondent:**

Respondent is under Chapter 11 bankruptcy.

4. The gravity and magnitude of the violation:

An estimated 100 gallons of oil was spilled. It coated vegetation on the bank of the marsh adjacent to Smith Lake with a heavy, black layer of oil. Department staff observed unusually large areas of pooled oil on the surface throughout Respondent's property before spill clean-up began, indicating inadequate surface water runoff control by Respondent.

5. Whether the violation was repeated or continuous:

Repeated.

6. Whether a cause of the violation was an unavoidable accident, or negligence or an intentional act of the Respondent:

Negligent.

7. The opportunity and degree of difficulty to correct the violation:

Respondent had the opportunity to prevent the violation by ensuring that there was adequate surface water runoff controls at Respondent's facility and monitoring Respondent's operations to prevent spills.

8. Respondent's cooperativeness and efforts to correct the violation:

Respondent acted promptly to start spill cleanup activities, once requested to by the Department. These have now been almost completed.

9. The cost to the Department of investigation and correction of the violation prior to the time the Department receives Respondent's answer to the written notice of assessment of civil penalty:

Not considered.

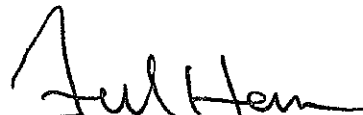
10. Any other relevant factor:

None.

I have considered the above factors in establishing the amount of Respondent's civil penalty. The major aggravating factors were: 1) that this was Merit's third oil spill at the site in a period of a little more than two years, 2) that Respondent failed to carry out the provisions of the Stipulated Order, signed by William Briggs, after Merit Oil & Refining dissolved as a corporation, and 3) that Respondent could have prevented the spill. There were no major mitigating factors.

MAY 28 1987

Date



Fred Hansen  
Director



4150 N. Suttle Rd. • Portland, Oregon 97217 • 1 (503) 286-8352

6/8/81 HWJ

2

May 30, 1987

Mr. Fred Hansen, Director  
Department of Environmental  
811 S.W. 6th Avenue  
Portland, Or 97204

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

RE: Appeal of May 18, 1987  
Notice of Assessment  
of Civil Penalty  
#WQ-NWR-87-27  
Multnomah County

RECEIVED

JUN 05 1987

Dear Mr. Hansen:

Your facts are incorrect: OFFICE OF THE DIRECTOR

There was no overflow of our pond at anytime, nor is there any factual evidence to support your claim.

The spill and the tire area are not on our property, and there is no evidence that the oil came from our property.

In 1986 all outlets to offsite drainage were sealed and have remained so.

We have not violated the conditions in your Stipulation and Final Order #19-WQ-NWR-85-59, and this clearly shows your lack of proper investigation. (1.) We did cease discharging to the slough as agreed and sealed all outlets even though you still allow our competitor to discharge into the slough without a permit. (2.) Our wastewater permit application was submitted and is still under active consideration as we have developed a method acceptable to the City. (3.) We always had and still have an apparent method to handle our wastewater. We boil water off, as that is part of our business. (4.) A review of our records will show our efforts in closely monitoring our operation including considerable overtime on rainy weekends. No one asked. Your conclusions are in error and there is no evidence of negligence on our part.

further errors in your Notice of Assessment show a lack of proper investigation. My correct name is Wilmer Briggs, not William. There is no evidence that the oil came from our property. The spill was not on our property. Respondent was bankrupt in Chapter 7 in late 1985. The oil on our site is non-hazardous and suitable for dust control as allowed by the State laws. How does this action assist the recycling industry who are attempting to clean up others' messes?

Therefore, respondent denies each and every allegation of your Notice of Assessment and requests an appeal. Respondent requests within ten days of the date of this request full and complete copies of all letters, notes, pictures, and other documents contained in or within the knowledge of the Department of Environmental Quality of the State of Oregon. Upon written notice, respondent will pick up these copies at D.E.Q.'s Portland office.

Yours truly,

W. L. Briggs  
President



FEB 05 1988

## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1334 PHONE (503) 229-5696

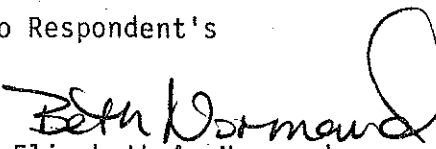
February 2, 1988

Members of the Environmental Quality Commission

Re: DEQ v. Merit USA, Inc.  
Case No. 4-WQ-NWR-87-27

I am enclosing the following documents pertaining to this case which is to be heard by the Commission at its meeting on March 11, 1988:

1. Notice of Assessment of Civil Penalty dated May 28, 1987
2. Merit USA's Answer
3. Transcript of Hearing
4. Exhibits, except photos, which will be available at the Commission hearing
5. Hearing Officer's Findings of Fact, Conclusions of Law and Final Order, dated October 22, 1987
6. Merit USA's Notice of Appeal
7. DEQ's Notice of Appeal
8. Department's Memorandum on Department Cross-Appeal
9. Respondent's Exceptions and Appeal Brief
10. Respondent's Answering Brief to Department's Cross-Appeal
11. Department Memorandum and Brief in Opposition to Respondent's Memorandum
12. Department's Reply Brief to Respondent's
13. Respondent's Reply Brief

  
Elizabeth A. Normand  
Hearing Officer

EAN/jbg  
Enc

6

BRUCE L. MELKONIAN & ASSOCIATES

ATTORNEYS AT LAW  
12728 S.E. STARK STREET  
PORTLAND, OREGON 97233  
(503) 257-9607

BRUCE L. MELKONIAN  
ORRIN R. ONKEN

October 26, 1987

Office of Director  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, Oregon 97204

EQC  
Hearing Section

OCT 30 1987

Re: DEQ v. Merit USA, Inc.  
No 4-WQ-NWR-87-27

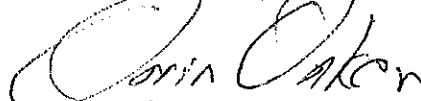
Dear Office of Director:

Enclosed please find a notice of appeal in the above mentioned matter. I would like to receive a transcript or a copy of the hearing tapes as quickly as possible. Because I have not yet received those tapes. I also enclose a motion for an extension of time in which to file exceptions and brief. Please notify me if the chairman will allow the motion.

I am serving the notice and motion on the hearings officer because OAR 340-11-132(2)(f) allows either the chairman or the hearing officer to permit extensions.

If you have any questions about this matter do not hesitate to call.

Very truly yours,

  
Orrin R. Onken

cc Bill Briggs  
Arnold Silver  
Nazih I. Girgis

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
RECEIVED  
OCT 28 1987  
OFFICE OF THE DIRECTOR

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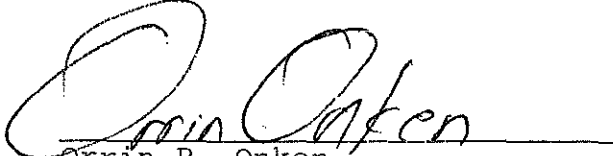
BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL )  
QUALITY OF THE STATE OF OREGON )  
Department, )  
vs. )  
MERIT USA, INC. )  
Respondent )

No. 4-WQ-NRW-87-27  
NOTICE OF APPEAL

Respondent hereby appeals that decision of Nazih I. Girgis rendered in this matter on October 22, 1987. Exceptions and brief shall follow.

October 26, 1987.

  
Orrin R. Onken  
Attorney for respondent

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
OCT 28 1987

OFFICE OF THE DIRECTOR




BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL )  
QUALITY of the State )  
of Oregon, )  
 )  
Plaintiff, )  
 )  
v. )  
 )  
MERIT USA, INC. )  
 )  
Respondent. )

NO. 4-WQ-NRW-87-27  
DEPARTMENT NOTICE  
OF APPEAL

The Department hereby appeals the hearing officer's Final Order, dated October 22, 1987, to the Environmental Quality Commission and requests review of such Order by the Commission.

DATED this 3 day of November, 1987.

  
\_\_\_\_\_  
ARNOLD B. SILVER  
Assistant Attorney General  
Of Attorneys for the Department  
of Environmental Quality

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY of the State of Oregon,

Department,

v.

MERIT USA, INC.

Respondent.

No. 4-WQ-NWR-87-27

DEPARTMENT MEMORANDUM ON DEPARTMENT CROSS-APPEAL

The Department has cross-appealed from the hearings officer's Final Order of October 22, 1987, which reduced the amount of the civil penalty assessed by the Director against respondent from \$3,500 to \$2,000. The amount of reduction in civil penalty, while itself not monumental, nonetheless presents a major policy and legal question for the Commission.

BACKGROUND SUMMARY

On or about May 28, 1987, the Department imposed a civil penalty of \$3,500 against respondent for an oil spill into the public waters of the state, in violation of ORS 468.720(1) and 468.785(1). On or about October 22, 1987, the hearings officer upheld the Department civil penalty, but reduced the amount to \$2,000. The hearings officer found the penalty should be more than the minimum of \$500 because of respondent's previous oil spill violations and respondent's negligence. However, the hearings officer also found that several mitigating factors justified a reduction of the penalty from \$3,500 to \$2,000. These mitigating factors were listed as (a) prompt cleanup

DEPARTMENT OF JUSTICE  
500 PACIFIC BLDG., 520 S.W. YAMHILL  
PORTLAND, OREGON 97204-1381  
TELEPHONE 229-5725

1 efforts; (b) respondent's cooperation; (c) bona fide steps to  
2 correct oil spills; and (d) heavy rain.

3 STATEMENT BASIS OF DEPARTMENT'S CROSS APPEAL

4 When the Director imposed the civil penalty of \$3,500 in  
5 this case, he attached to such penalty notice a "mitigating and  
6 aggravating factors" sheet, pursuant to OAR 340-12-045(1). In  
7 such sheet, the Director considered and discussed the identical  
8 mitigating factors in reaching a decision to impose a \$3,500  
9 civil penalty that the hearings officer considered in reaching a  
10 decision to reduce such penalty to \$2,000. In fact, the "heavy  
11 rain" found by the hearings officer to be a mitigating factor  
12 was, in part, found by the Director to be an aggravating factor.

13 ISSUE ON CROSS-APPEAL

14 Is a hearings officer authorized to consider the identical  
15 mitigating factors considered by the Director in imposing the  
16 original civil penalty, in order to reduce such penalty below the  
17 amount initially imposed by the Director?

18 ARGUMENT

19 This is not a case where the hearings officer reduced the  
20 amount of civil penalty imposed by the Director because of new  
21 information produced at the hearing, such as the financial con-  
22 dition of respondent. Nor is it a case where the civil penalty  
23 amount was reduced because the Department failed in proving the  
24 factors relied upon by the Director. Instead, this is a case  
25 where the hearings officer substituted his judgment for that of  
26 the Director and re-weighed the factors already evaluated by the

1 Director. The Department challenges the authority of the  
2 hearings officer to reduce a civil penalty amount based on the  
3 same information considered by the Director in imposing such  
4 penalty. The Director, for example in History of Respondent,  
5 considered the potential for a violation during winter rains.  
6 Heavy rain in western Oregon during late fall and winter is  
7 neither unusual or unexpected. Yet the hearings officer in part  
8 considered a "heavy rain" as a mitigating factor. The Director  
9 further considered respondent's cooperativeness and efforts to  
10 correct the violation. The Director found respondent acted  
11 promptly to start cleanup, once notified of the violation by  
12 the Department. Again the hearings officer used this identical  
13 factor considered by the Director to impose the initial penalty,  
14 to reduce the penalty. In short, the hearings officer substi-  
15 tuted his judgment for that of the Director. For two separate  
16 but connected reasons, this is not the role of the hearings  
17 officer. The two issues of the Director's discretion and the  
18 reviewing hearings officer's scope of review are necessarily  
19 interrelated.

20 1. Director's Discretion

21 OAR 340-12-045(1) states:

22 "(1) In establishing the amount of a civil  
23 penalty to be assessed, the Director may consider  
24 the following factors:

25 "(a) Whether the respondent has committed  
26 any prior violation, regardless of whether or not  
any administrative, civil, or criminal proceedings  
was commenced therefore;

1           "(b) The history of the respondent in taking  
2 all feasible steps or procedures necessary or  
appropriate to correct any violation;

3           "(c) The economic and financial conditions  
4 of the respondent;

5           "(d) The gravity and magnitude of the viola-  
6 tion;

7           "(e) Whether the violation was repeated or  
8 continuous;

9           "(f) Whether a cause of the violation was an  
10 unavoidable accident, or negligence, or an inten-  
11 tional act of the respondent;

12           "(g) The opportunity and degree of dif-  
13 ficulty to correct the violation;

14           "(h) The respondent's cooperativeness and  
15 efforts to correct the violation for which the  
16 penalty is to be assessed;

17           "(i) The cost to the Department of investiga-  
18 tion and correction of the cited violation prior  
19 to the time the Department receives respondent's  
20 answer to the written notice of assessment of  
21 civil penalty; or

22           "(j) Any other relevant factor."

23           "(2) In imposing a penalty subsequent to a  
24 hearing, the Commission shall consider factors  
25 (a), (b), and (c), of section (1) of this rule, and  
26 each other factor cited by the Director. The  
27 Commission may consider any other relevant factor.

28           "(3) Unless the issue is raised in  
29 respondent's answer to the written notice of  
30 assessment of civil penalty, the Commission may  
31 presume that the economic and financial conditions  
32 of respondent would allow imposition of the  
33 penalty assessed by the Director. At the hearing,  
34 the burden of proof and the burden of coming  
35 forward with evidence regarding the respondent's  
36 economic and financial condition shall be upon  
37 the respondent."

(Emphasis added.)

1           The Commission's policy, as articulated by this rule, is  
2 to authorize the Director to establish the amount of the civil  
3 penalty prior to the hearing and to allow the Commission to  
4 reduce the penalty subsequent to hearing. Nothing in this rule  
5 or any other known Commission policy, authorizes a hearings  
6 officer to re-consider the identical factors evaluated by the  
7 Director and lower the penalty, absent new information or failure  
8 of proof. In fact, by doing so, the hearings officer substituted  
9 his judgment for that of the Director to set the penalty amount.

10 2. Hearings Officer's Scope of Review

11 Portland Steamship Co. v. Coos Bay Pilot's Ass'n., 39 Or App 513  
12 (1979), presents an analogous situation to the issue now presented  
13 to the Commission. In Coos Bay, a Board of Pilot Commissioners'  
14 order granting a rate increase was challenged because of the size  
15 of the increase. The petitioner contended the Board did not give  
16 "adequate" consideration to several statutory rate factors. The  
17 contention was not that the Board did not consider the factors,  
18 but only that it did not give "due regard" to such factors. The  
19 court upheld the Board's order by stating it is not for the court  
20 to determine how much weight the Board should give any one  
21 factor. The balancing of the Board's considerations is a matter  
22 of expertise for the Board to which the legislature delegated  
23 this function. This principle is the same in this case.

24 OAR 340-12-045(1) authorizes the Director to establish the amount  
25 of a civil penalty. The Director may consider certain factors in  
26 setting the amount. He did so. It is not for the hearings

1 officer to determine how much weight the Director should give any  
2 one factor. That is for the Director's reasonable exercise of  
3 discretion.

4 In Dickinson v. Davis, 277 Or 665 (1977), the Public  
5 Utility Commission imposed a civil penalty on a trucker. The  
6 Commissioner subsequently mitigated the penalty. The circuit  
7 court, on review, did not believe the mitigation was enough and  
8 further reduced the penalty. The Supreme Court reversed and  
9 remanded the case back to the circuit court. The Court stated  
10 at page 675:

11 "When the commissioner properly states the  
12 factual predicates for 'the terms he considers  
13 proper' in mitigating penalties \* \* \* plaintiffs  
14 [have] the burden to disprove them \* \* \* The  
15 statute does not direct the reviewing court to  
16 substitute its judgment on the reasonableness of  
17 the commissioner's order in the sense of modera-  
18 tion or appropriateness."

16 The Director in this case properly stated the factual  
17 predicates for which he imposed the penalty. Merit did not  
18 disprove them. OAR 340-12-045 does not authorize the hearings  
19 officer to substitute his judgment for that of the Director on  
20 the reasonableness of the penalty in the sense of moderation or  
21 appropriateness.

#### 22 CONCLUSION

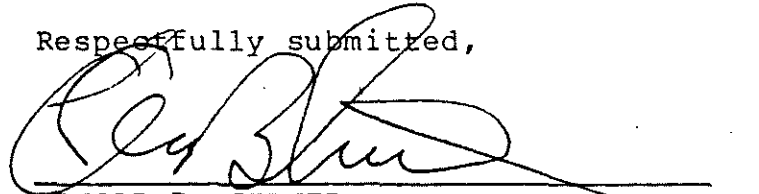
23 The amount of the civil penalty to be imposed by the  
24 Director is within his sound discretion based upon factors set by

25 / / /

26 / / /

1 statute and rule. The hearings officer cannot reweigh the  
2 identical factors considered by the Director and reduce the  
3 penalty because he desires to substitute his judgment for that of  
4 the head of the Department.

5 Respectfully submitted,

6  
7 

8 ARNOLD B. SILVER  
9 Assistant Attorney General  
10 Of Attorneys for Department  
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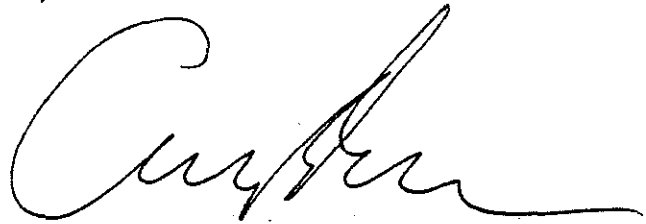
DEPARTMENT OF JUSTICE  
500 PACIFIC BLDG., 520 S.W. YAMHILL  
PORTLAND, OREGON 97204-1381  
TELEPHONE 229-5725



CERTIFICATE OF SERVICE

I, Arnold B. Silver, hereby certify that on the 15th day of December, 1987, I served the within DEPARTMENT MEMORANDUM ON DEPARTMENT CROSS-APPEAL upon respondent's attorney, Orrin R. Onken, by then depositing in the United States mail at Portland, Oregon, a full, true and correct copy thereof, addressed to said person as follows:

Orrin R. Onken  
Melonian & Associates  
12728 S.E. Stark Street  
Portland, OR 97233

A handwritten signature in cursive script, appearing to read 'Arnold B. Silver', written over a horizontal line.

ARNOLD B. SILVER  
Assistant Attorney General

CERTIFICATE OF SERVICE

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

1			
2	DEPARTMENT OF ENVIRONMENTAL	)	
3	QUALITY OF THE STATE OF OREGON	)	Case No. 4-W <del>4</del> <sup>0</sup> -NWR-87-27
4	Department,	)	
5	v.	)	RESPONDENT'S EXCEPTIONS
6	MERIT U.S.A., INC.	)	AND APPEAL BRIEF
7	Respondent	)	

A. RESPONDENT'S EXCEPTIONS TO FINDINGS OF FACT

Respondent objects to the findings of fact as follows. The numbers correspond to the numbers in the hearing officer's findings of fact.

1. Respondent does not operate an oil recycling business. Respondent simply holds bare title to the land on which there is a fuel processing plant operated by Fuel Processors, Inc. (Trans. p. 65, l. 22-25; p. 72, l. 1-15; p 78, l. 10-17). Merit USA has done no business since May of 1984. It has been through a chapter seven bankruptcy and now does no more than hold title to the property. It leases the property to Fuel Processors, Inc. Thus, Merit's only connection to a fuel processing operation is that of lessor to the company that reprocesses oil.

2. Reprocessing activity takes place on the property but it is not done my Merit USA, Inc.

3. No objection.

4. The testimony was that a defunct tire recycling plant was located on land owned by the respondent and leased to a

1 - RESPONDENT'S APPEAL BRIEF

DEPARTMENT OF ENVIRONMENTAL QUALITY  
1987 15 08 3 04 PM 4 111

1 company called Petro Enertech, Inc. That company stored a large  
2 number of tires for its operation on the Slocum property which  
3 adjoins the property owned by the respondent. (Trans. p. 63, l.  
4 1-25, p. 80, 2-9)

5 5. Tires owned by the bankrupt Petro Enertech, Inc., were  
6 primarily on the Slocum property which is next to respondent's  
7 property. Some of the tires had spilled onto respondent's  
8 property. (Trans. p. 63, l. 14-25)

9 6. No exception.

10 7. The pond on respondent's land is for recovery of oil  
11 from water that has drained from the site and for the storage of  
12 cooling water. Any oil in the water floats on top of the water  
13 and is removed and recovered for reprocessing. The land is  
14 engineered so that water runs into this pond. (Trans. p. 50., l.  
15 3-12, p. 60, l. 7-25) The pond has no outlet. The water is  
16 boiled off or evaporated. (Trans. p. 16, l. 1-7) The drainage is  
17 pursuant to a professionally engineered spill plan. (Merit,  
18 Exhibit 1).

19 8. The complaint was made on March 11, 1987. (Trans. p.  
20 9. l. 4-9). Thus, if the rain caused the problem, the rain had  
21 to have been ~~be~~ earlier. X

22 9. There is no evidence that oil from the respondent's  
23 property spilled into the slough. The DEQ simply failed in its  
24 burden of proof in this matter. Mr. Vopel in his testimony X  
25 stated that he saw nothing to indicate that the treatment pond  
26 had overflowed. (Tr. p. 24, l. 3-13). He stated that the

1 treatment pond was the only reasonable source of oil, yet he saw  
2 no evidence that the pond had overflowed. Id. He took  
3 no chemical tests to aid in discovering the origin of the oil.  
4 (Tr. p. 24-25) He testified that he made no inquiries whatsoever  
5 concerning other possible sources for the oil. (Tr. p. 25, l. 9-  
6 11) His conclusion seems primarily based on speculation by Mr.  
7 Mitchoff, an employee of Fuel Processors. Mr. Mitchoff, in the  
8 middle of cleaning the spill, opined that the treatment pond might  
9 have overflowed. However, Mr. Mitchoff testified at the hearing  
10 that the oil did not come from the treatment pond. It came from  
11 beneath the tires on the Slocum property. In fact, at one point  
12 the referee stopped the respondent's case because respondent was  
13 presenting evidence that the pond did not overflow. The hearings  
14 officer stated, "I haven't heard any testimony from DEQ regarding  
15 the pond overflowing." (Trans. p. 47, 11-7) The attorney for the  
16 DEQ came to the rescue, stating that Mr. Vopel had testified that  
17 the pond overflowed "based upon his investigation and  
18 conversations with Mr. Mitchoff." (Trans. p 47, l. 22-24).

19 In short, there was no investigation at all. At the time  
20 Mr. Vopel was there neither oil nor water was flowing off Merit  
21 land. The allegation that the pond overflowed was simply Mr.  
22 Mitchoff's erroneous speculation. Mr. Vopel testified that the  
23 land where the spilled oil appeared drained several properties in  
24 the area including Pacific Hardwoods and a truck container  
25 facility. (Trans. p. 27) Furthermore, Mr. Mitchoff, the man who  
26 actually cleaned the spill, stated that the oil was coming from

1            underneath tires that were located on the Slocum property. The  
2            DEQ has the burden of proof in this matter. It neither  
3            investigated nor proved anything. No tests were taken. No other  
4            sources were even considered. There is no direct link whatsoever  
5            between the respondent's property and the oil flowing into the  
6            slough from beneath the tires.

7            10. It is true that the DEQ representative determined that  
8            the spill originated on the respondent's property, but, as stated  
9            above, the determination was based on nothing more than  
10           speculation by a Fuel Processors employee. That speculation  
11           turned out to be incorrect. In fact, there was no investigation  
12           whatsoever and no link between the oil in the slough and the oil  
13           on Merit property.

14           11. Mr. Mitchoff did tell the DEQ representative that the  
15           pond may have overflowed. However, at the time he was in the  
16           midst to trying to clean up the water. He was not investigating  
17           the source. He stated in the hearing that he did not believe  
18           that the pond overflowed. (Tr. p. 85) The pictures taken by the  
19           DEQ show that the pond had not overflowed. (DEQ Exhibit 1) The  
20           black line that the oil leaves on the side of the pond designates  
21           its highest level. The evidence was overwhelming that the pond  
22           did not overflow.

23           12. Mr. Briggs, president of Merit, was in Hawaii at the  
24           time the oil entered the slough. When he returned a couple of  
25           days later he was<sup>s</sup> faced with oil in the slough. He was primarily  
26           concerned with cleaning it up. The DEQ representative testified

1 at the hearing that when he told Mr. Briggs that the agency might  
2 proceed with a fine Mr. Briggs responded that he "probably  
3 deserved it." (Tr. p. 19, l. 16-17) Mr. Briggs denies the  
4 comment. He testified that his response was that "he supposed he  
5 would" receive a fine. (Tr. p 73, l. 3-8). In any case, the  
6 whole conversation occurred in the middle of clean up before  
7 anyone had determined the source of the oil. The context of the  
8 conversation was that if the oil came from his property then he  
9 probably could be fined. Mr. Briggs testified at the hearing  
10 that he felt he might receive a fine because of his knowledge that  
11 the department would not do a competent investigation. He was  
12 right.

13 13. Mr. Briggs was not present until three days after the  
14 spill, at which time the investigation, if there was one, was  
15 over. Mr. Briggs always maintained and the evidence showed that  
16 the oil came from beneath the tires located on his neighbor's  
17 property.

18 14. The hearings officer is correct. Mr. Briggs did clean  
19 up the spill. The DEQ relied primarily on this fact in  
20 determining who was responsible. The spill occurred during  
21 heavy rains when Mr. Briggs was not in town. Fuel Processors had  
22 the resources and equipment to clean oil spills. Mr Briggs asked  
23 his employees to clean up the oil and they did. With the benefit  
24 of hindsight, it is unfortunate that they did so. Rather than  
25 being rewarded for their prompt efforts to clean up an  
26 environmental problem, the fact of the clean up has been used

1 against them as evidence that they caused the problem.

2 15. It is true that Mr. Briggs did not ask his neighbor to  
3 share in the clean up costs. The neighbor was a good neighbor  
4 who shared equipment with Mr. Briggs and was a possible customer.  
5 (Tr. p. 33, l. 17-22; p. 70, l. 24-25) Mr. Briggs was the person  
6 with the knowledge and equipment to do the job. His neighbor had  
7 neither the expertise nor the equipment. Any decision regarding  
8 whether or not to seek reimbursement from the neighbor was a  
9 business decision on the part of Mr. Briggs and cannot be held  
10 against him in determining fault in this matter.

11 16. It is true that there have been two previous oil spills.  
12 The reprocessing plant has handled over 700,000 gallons of dirty  
13 oil. The plant cleans up the messes of others and returns this  
14 hazardous material to the marketplace as clean useable oil. Each  
15 of the previous spills was cleaned up promptly by the  
16 respondent. Those spills were not similar to what occurred this  
17 time and the system for dealing with spills was not the same.  
18 Neither spill was a repeat of a past problem. Both were caused by  
19 some new development which no one, including the DEQ,  
20 anticipated. Each time the respondent did even more that was  
21 suggested by DEQ to prevent future spills.

22 17. Discharge of water into the slough was a permitted use  
23 at the time. Respondent has not discharged into the slough since  
24 1986.

25 B. RESPONDENTS OBJECTION'S TO CONCLUSIONS OF LAW

26 1. The hearings offers found that the respondent "caused"

1 oil to enter the waters of Oregon in violation of ORS 468.720(1)(a).  
2 The DEQ presented its case first and had the burden of proof.  
3 See OAR 340-11-120(3)(a). The hearings officer made findings  
4 based upon the evidence in the transcript. There was no evidence  
5 of or finding that the respondent did any act or omission that  
6 "caused" oil to enter the waters of the state.

7 Respondent has found no case interpreting the word "cause"  
8 within the context of ORS 468.702(1)(a). However, in the law of  
9 negligence legal cause exists when a person's act or omission  
10 is a substantial factor in bringing about injury or damage.  
11 Brennen v. City of Eugene, 285 Or 401, 591 P2d 719 (1979). In  
12 essence a trier of fact must find that "but for" some act or  
13 omission on the part of a party, damage would not have occurred.  
14 The hearings officer in this matter found damage in the shape of  
15 oil in the waters of Oregon. He made no finding that there  
16 was any act or omission on the part of Merit U.S.A. or its  
17 employees that caused the damage. He could not make that  
18 finding because the DEQ failed to put on any evidence of an act  
19 or omission on the part of the respondent which led to there  
20 being oil in the water.

21 A person violates ORS 468.720(1)(a) if he causes pollution of  
22 any waters or places wastes in a location where they are likely  
23 to enter the waters of the state. The hearings officer found  
24 that the respondent violated the statute "by causing the entry of  
25 oil into the water." There is no finding of fact upon which this  
26 conclusion can be based. Because the hearings officer, after



1 reviewing the evidence, could not find or identify any single act  
2 or omission on the part of the respondent that was a substantial  
3 factor in causing oil to enter the water of Oregon, he simply  
4 cannot find that the respondent was in violation of the cited  
5 statute.

6 The hearings officer also found the respondent in violation  
7 of ORS 468.785(1) by "causing the entry of oil into the waters of  
8 this state." This statute and its related administrative rules  
9 provide penalties against persons having control over oil if the  
10 oil enters the waters of the state. There was no evidence in  
11 this case that the oil came from the respondent's property, thus  
12 there was no evidence that the respondent had any control over  
13 the oil that ended up in the waters of the state of Oregon.

14 ORS 468.785 provides that "It shall be unlawful for oil to  
15 enter the waters of the state from any . . . facility . . .  
16 regardless of the cause of the entry or the fault of the person  
17 having control over the oil." A person having control of oil is  
18 defined in ORS 468.780(2) as a person "using, storing or  
19 transporting oil immediately prior to entry of such oil into the  
20 waters of the state."

21 The testimony was that the oil appeared after heavy rains  
22 from beneath a pile of tires which is ninety percent on property  
23 belonging to Mr. Slocum. The DEQ could not identify any flow of  
24 oil or water from the respondent's property to the place where  
25 there was oil in the slough. They took no samples that could  
26 link the oil in the water to oil on the respondent's property.

ha

1 They made no inquiries concerning any other possible sources of  
2 oil. The oil that came up from beneath the tires on the Slocum  
3 property could have come from a variety of places and could have  
4 been there a substantial amount of time before the heavy rains  
5 lifted the oil high enough to allow it to escape from the tires.

6 The burden is on the DEQ in this matter. The respondent  
7 does not have to prove that he was not in control of the oil that  
8 appeared from beneath the tires. The DEQ must prove that he was.  
9 They made no effort to do so. Instead they observed the  
10 respondent cleaning up the mess, assumed that to be evidence of  
11 guilt, and brought this proceeding. The hearings officer was  
12 concerned because the respondent didn't cross examine Mr. Slocum  
13 in an attempt to pin liability on him. The respondent had no  
14 obligation to attack a man who is a good neighbor and business  
15 contact. The DEQ is charged with the task of proving a prima  
16 facia case. They had to show that the respondent was "using,  
17 storing, or transporting" the oil immediately prior to its  
18 entering the waters of Oregon. They did not. Mr. Briggs is, in  
19 essence, being punished for taking steps to clean up the waters  
20 of this state. Punishment of that sort is neither desirable or  
21 authorized by statute.

22 3. The hearings officer found that the respondent should  
23 receive more than a minimum fine because of previous spills. The  
24 evidence was that those spills were from causes entirely  
25 different from the possible causes of the spill that occurred in  
26 the spring of 1986. The site has a professional engineers spill

1 plan. Improvements in the site have continually been made.  
2 These improvements are over and above what has been required by  
3 government agencies.

4 C. PROPOSED FINDINGS AND OF FACT AND CONCLUSIONS OF LAW

5 The respondent proposes that the following findings of fact  
6 and conclusions of law be substituted for those of the hearings  
7 officer.

8 FINDINGS OF FACT

9 1. Respondent holds title to land at 4150 N. Suttle Road,  
10 Portland, Oregon and leases a portion of that land to Fuel  
11 Processors, Inc. The lessee operates a plant for the  
12 reprocessing of used motor oil. The respondent has no active  
13 business.

14 2. An inoperative tire gasification facility was located on  
15 another portion of respondent's land. The company that built the  
16 tire gasification plant was bankrupt and no longer operating.  
17 The owners of the gasification plant had stored a very large pile  
18 of tires on adjoining land that belonged to Mr. Slocum, a  
19 neighbor of the respondent.

20 3. On or about March 9, 1987, the Portland area was drenched  
21 with about two inches of rain.

22 4. After the rains, oil appeared on the Slocum property  
23 being lifted from beneath the tires on the Slocum property.

24 5. Mr. Briggs was in Hawaii at the time the oil appeared on  
25 his neighbor's property. He ordered employees of Fuel  
26 Processors, Inc. to clean up the oil.

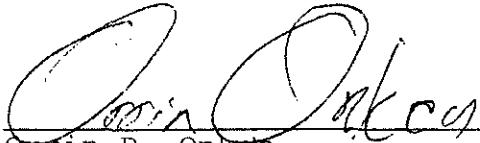


1 There were no tests. There was no consideration of any other  
2 cause or source. There was simply no investigation at all.  
3 Nevertheless, the respondent has to defend his business against  
4 unfounded charges.

5 Since 1985 the respondent's property been regularly improved  
6 in order to prevent spills of any sort. A second oil and water  
7 separator has been added. The storage pond now has a oil mop. A  
8 water tank has been added to hold extra water. An oil recovery  
9 tank has been added for the pond oil. Two pond pumps have been  
10 added to return water to the evaporation still. Underground well  
11 water is no longer used or discharged into the storm sewers.  
12 The discharge pipe to the storm sewers has been filled. The  
13 process area has been cemented over. The property has been  
14 filled and graded. These safety measures are above and beyond  
15 what has been requiried by the DEQ.

16 Despite the above improvements the DEQ continues to regard  
17 the respondent as presumptively guilty. In this case oil was  
18 reported in the waters near the respondent's property. The  
19 department failed to investigate in any reasonable manner. The  
20 representative of the department admitted that he never  
21 considered any source or cause other than the respondent. He  
22 took no tests and never even compared the oils. He found no oil  
23 or water flowing from the respondent's land to the slough. His  
24 evidence was that when he arrived the employees of Fuel  
25 Processors were cleaning up the oil. Once again, the respondent  
26 is being pursued for acts which protect and improve the

1 .environment. The persecution comes from that agency in  
2 charge of protecting the environment. It is an odd state of  
3 affairs.

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7 Orrin R. Onken  
8 Attorney for respondent  
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CERTIFICATE OF SERVICE

I, Orrin R. Onken, certify that on December 18, 1987, I served the within Respondents Exceptions and Appeal Brief upon the attorney for the DEQ, Arnold Silver by mailing a certified true copy to him from Portland, Oregon and addressed to him at the Department of Justice, 500 Pacific Building, 520 S.W. Yamhill, Portland, Oregon 97204.

A handwritten signature in black ink, appearing to read "Orrin Onken", written over a horizontal line.

Orrin R. Onken  
Attorney for respondent

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF OREGON	)	Case No. 4-W2-NWR-87-27
Department,	)	
v.	)	RESPONDENT'S ANSWERING BRIEF TO DEPARTMENT'S CROSS APPEAL
MERIT U.S.A., INC.	)	DEPARTMENT OF ENVIRONMENTAL QUALITY
Respondent	)	

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INTRODUCTION

OFFICE OF THE DIRECTOR

The Department has objected to the hearings officer reducing the penalty on the grounds that the hearings officer did not have the power to change the penalty suggested by the Director. However, the hearing in this matter was before the Environmental Quality Commission. The parties were the Department of Environmental Quality and the Merit U.S.A., Inc. Thus, the hearings officer was a designee of the commission and had the power, as provided by administrative rule, to reconsider the amount of the penalty. The officer did nothing improper.

ARGUMENT

All of the correspondence and pleadings in this matter have led the respondent to believe the contested case hearing in this matter was before the Environmental Quality Commission. The hearing was scheduled by commission employees and the captions on the notices and pleadings have always indicated that the hearing was before the commission.

///



OAR 340-11-120(1)(a) provides as follows:

1 Contested case hearings before the Commission shall be held  
2 under the control of the chairman as Presiding Officer, or  
3 any Commission member, or other person designated by the  
Commission or Director to be Presiding Officer

4 OAR 340-11-005 defines "Presiding officer."

5 "Presiding officer" means the Commission, its Chairman, the  
6 Director, or any individual designated by the Commission or  
7 the Director to preside in any contested case, public, or  
8 other hearing. Any employee of the Department who actually  
9 presides in any such hearing is presumptively designated by  
the Commission or Director, such presumptive designation to  
be overcome only by a written statement to the contrary  
bearing the signature of the Commission Chairman or the  
Director

10 The hearing in this case was a contested case as defined by  
11 ORS 183.310. Therefore, the hearings officer served as a  
12 designee of the Commission with no objection from the Director.  
13 The presiding officer conducted the hearing according to the  
14 detailed rules set out in OAR 340-11-120. Those rules mirror the  
15 statutes contained in Oregon's Administrative Procedures Act. At  
16 the close of the hearing he made findings of fact and conclusions  
17 of law. One of the conclusions of law was that the penalty in  
18 this matter should be \$2,000.

19 The Department now argues that the hearings officer cannot  
20 reduce the penalty because of limitations in OAR 340-12-045(2).  
21 That rule provides as follows:

22 In imposing a penalty subsequent to a hearing, the  
23 Commission shall consider factors (a), (b) and (c), of  
24 section (1) of this rule, and each other factor cited by the  
25 director. The Commission may consider any other relevant  
factor.

26 The Department's argument ignores the fact that the hearings

2 - RESPONDENT'S ANSWERING BRIEF TO DEPARTMENT'S CROSS APPEAL

Page

1 officer, by rule, represented the Commission. Thus, the rule was  
2 not violated. The reduced penalty was imposed subsequent to the  
3 hearing, and presumably the hearings officer considered all the  
4 factors cited by the director.

5 The appeal in this matter is from the decision of a single  
6 representative of the Commission to the entire Commission. The  
7 procedure for an appeal to the entire Commission is outlined in  
8 OAR 340-11-132. All parties have attempted to follow these  
9 rules. The hearings officer was that single representative and  
10 committed no error in regard to reduction of the penalty.

11 An interesting sidelight to this problem is that even if  
12 this contested case had been before the Department, the hearings  
13 officer would still have been able to determine the amount of  
14 penalty. OAR 340-11-120(2) provides that "[c]ontested case  
15 hearings before the Department shall be held under the control of  
16 the Director as Presiding Officer or other person designated by  
17 the Director to be Presiding Officer." The rule goes on to state  
18 the details of how the presiding officer should conduct the  
19 hearing. Thus, in a hearing before the Department, the presiding  
20 officer is a designee of the Director. To accept the  
21 Department's argument on cross appeal would be to hold that in  
22 hearings before the Department the Director cannot, after a  
23 hearing, order a penalty different from the one contained  
24 in the Notice of Assessment he prepared before the hearing. That  
25 makes no sense whatsoever.

26 The two cases cited by the Department do not bolster its

1 argument. Both cases deal with the proper role of an Oregon  
2 court when an administrative decision is appealed to that court.  
3 Both state that a "court" ought not substitute its judgment for  
4 that of an administrative commission, but should limit itself to  
5 errors of law. The cases are no help to the Department in an  
6 appeal to the entire Commission from the decision of a single  
7 Commission hearings officer.

8 Two final points weigh against the Department's position.  
9 First, when asked to address the amount of the penalty by the  
10 hearings officer, the Department, through its attorney stated, "I  
11 can only address that generally, Mr. Examiner, because ordinarily  
12 I don't look at myself as an advocate for a specific amount of  
13 penalty." (Tr. p. 89, l. 7-9) On appeal however, the Department  
14 not only advocates a higher penalty, it argues that the presiding  
15 officer had no power to change the penalty contained in the  
16 Notice of Assessment. This argument was never entertained at the  
17 hearing and is actually inconsistent with statements made by the  
18 Department at the hearing. The Department should be estopped  
19 from making an argument that it failed to make at any point  
20 earlier in the proceedings.

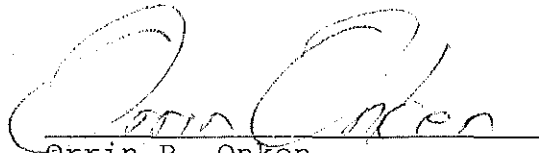
21 Second, the Department points out that the Director found  
22 heavy rains to be an aggravating factor while the hearings  
23 officer found it to be a mitigating factor. Perhaps the ruling  
24 of the hearings officer is that the Department failed in its  
25 burden of proof on this factor. That, even according to the  
26 Departments brief, could be grounds for a penalty different from

1 that contained in the notice of assessment.

2 CONCLUSION

3 The actions of the hearings officer in his capacity as a  
4 designee of the Commission were specifically authorized by  
5 administrative rule and there was no error in his reducing the  
6 penalty now being advocated by the Department.

7 Respectfully submitted

8  
9  
10 

11 Orrin R. Onken  
12 Attorney for Merit, U.S.A., Inc.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

EQC  
Hearing Section

JAN 15 1988

Department of Environmental  
Quality of the State of Oregon,

Department,

v.

MERIT U.S.A., INC.

Respondent.

No. 4-WQ-NWR-87-27

DEPARTMENT MEMORANDUM  
AND BRIEF IN OPPOSITION  
TO RESPONDENT'S MEMORANDUM

The Department submits its Memorandum and Brief requesting the Commission affirm the hearing officer's Order in this case. The Department has also filed a cross-appeal asking the Commission to review the hearing officer's Order reducing the penalty imposed by the Director from \$3,500 to \$2,000.

Before discussing the Department's position seeking affirmance of the hearing officer's Order, Department's counsel asks the Commission's forbearance in a short digression from the current case. This digression will hopefully serve to put this case in proper perspective.

I. The Saga of Recycled Butix (Circa 4020 A.D.)

Long ago and far away in a galaxy called Fable-a existed a company by the name of SMAG, Inc. SMAG operated a Butix recycling business. One day after a heavy sunstorm, Butix escaped from a Butix tank and entered the nearby icemold, causing extreme discoloration and odor. When Star Federation officers arrived they found SMAG employes cleaning up the escaped Butix. When a chief employe was asked what happened, the employe

1 responded, "our Butix tank overflowed." SMAG president, Bruno  
2 Wolf, subsequently told Federation staff "he deserved to be fined."  
3 Because SMAG had previous Butix violations, SMAG was cited to  
4 appear in Federation Court. During the trial, SMAG president  
5 Wolf testified it cost his company \$10,000 to clean up the  
6 escaped Butix. However, he also testified the Butix did not come  
7 from his company, it came from his neighbor's land who manufac-  
8 tured Widgets. The Butix was hidden under an old pile of used  
9 BLOPS left by a disappeared firm which came up during the  
10 sunstorm. This testimony developed after his neighbor left the  
11 court and could not respond. Mr. Wolf also testified SMAG did  
12 not operate the Butix recycling business. The business was  
13 operated under a lease by FLOX, Inc., a company headquartered in  
14 a galaxy termed Fiction-a. However, SMAG and FLOX were both  
15 operated by Mr. Wolf and his son Tima. Finally, Mr. Wolf claimed  
16 the Star Federation wanted to put him out of business and was  
17 after him, because he was concerned about a clean environment.  
18 The judge did not believe Mr. Wolf's story and fined him a sum of  
19 trillars. Mr. Wolf has now appealed to Star High Court. A  
20 review of Star Court records shows that a similar case occurred  
21 in 1987 on the third planet from the sun, called Earth.

22 II. The Saga of Recycled Oil - Circa 1987 A.D. - Merit USA

23 Merit owns real property at 4150 N. Shuttle Road, Portland,  
24 Oregon. Up until the hearing date, the Department believed  
25 Merit also operated an oil recovery and processing facility on  
26 this property. On or about March 10, 1987, after heavy rains,

1 oil was spilled into a marsh/creek connected to Smith Lake,  
2 public waters of the state. Investigation by the Department's  
3 staff led them to the firm conclusion that the oil spill  
4 originated from Merit's property and particularly from operations  
5 at the oil recovery facility. When Department staff arrived at  
6 the oil spill scene, they found Merit employes cleaning up the  
7 oil. When a senior employe (later variously termed as a partner  
8 or shareholder by the employe and Briggs) was asked what happened,  
9 the employe responded Merit's oil treatment pond overflowed.  
10 Mr. Briggs subsequently told Department staff "he deserved to be  
11 fined." Because Merit has had previous oil spill violations,  
12 Merit was issued a civil penalty notice of violation. During the  
13 hearing, Merit's president, W. Briggs, testified it cost his com-  
14 pany upwards of \$10,000 to clean up the oil spill. However, he  
15 also testified he believed the oil did not come from Merit's pro-  
16 perty; it came from underneath tires stored on a neighboring pro-  
17 perty owner's land who was in the plywood business. Further, he  
18 felt the oil came up during the heavy rains. This story deve-  
19 loped after his neighbor had testified and left the hearing. The  
20 neighbor, Slocum, did testify however, that Briggs would clean up  
21 the oil to "do what was right." Mr. Briggs, for the first time,  
22 also testified Merit did not operate the oil recovery business.  
23 The business was operated by a Washington corporation under lease  
24 from Merit. The corporation is not qualified to do business in  
25 Oregon. No lease was produced and Mr. Briggs announced he was  
26 also the president of the Washington corporation. Mr. Briggs

1 also testified he was a good neighbor and wanted to expend \$10,000  
2 just to help his neighboring property owner out of trouble. He  
3 did not plan on suing his neighbor and recovering his loss. He  
4 was also a good environmentalist and the Department was just  
5 picking on him. The hearing officer did not believe Mr. Briggs  
6 story and upheld the majority of the fine imposed by the  
7 Department. Merit-Briggs has now appealed to the Environmental  
8 Quality Commission.

9 ISSUE ON APPEAL

10 Was there evidence to support the hearing officer's Order  
11 concluding that respondent spilled or caused a spill of oil into  
12 public waters of the State of Oregon in violation of ORS 468.720(1)  
13 and 468.785(1)?

14 ARGUMENT IN SUPPORT OF HEARINGS OFFICER'S ORDER

15 Department's counsel's portrayal of SMAG, Inc. (4020 A.D.)  
16 in relation to Merit USA (1987 A.D.) is admittedly facetious.  
17 However, the portrayal was intended to demonstrate the fiction of  
18 Merit's position.

19 The record in this case shows Merit owns a oil recovery  
20 and processing facility and that approximately 200 gallons of oil  
21 spilled into public waters of the state after heavy Oregon rains.  
22 No eyewitnesses to the spill came forward. As a result, Merit  
23 would have everyone believe the oil "mysteriously" surfaced from  
24 tires on an adjoining land owner's property.

25 1. What is clear from the evidence is that Department  
26 investigators arriving at the scene of the spill found Merit.



1 employes engaged in major cleanup activities. The cost of such  
2 activities was estimated by Briggs to be approximately \$10,000 or  
3 more. Briggs does not intend to sue his neighbor to collect this  
4 money because he, Briggs, is a "good guy" and a "good neighbor."

5 (2) Briggs claims the oil came from underneath tires stored  
6 on his neighbor's property. However, since the tires have been  
7 there for a long period of time, it is not explained why the oil  
8 decided to surface at this point in time.

9 (3) A partner or shareholder of Briggs or Merit tells  
10 Department staff, the oil spill was due to Merit's oil treatment  
11 pond overflowing because of the heavy rains. The person, at the  
12 time of the hearing did not remember this statement. The loss of  
13 memory occurred after Briggs returned to Oregon from Hawaii.

14 (4) Briggs tells Department staff "he deserves to be fined."  
15 He later recants this statement.

16 (5) Department staff's inspection of the property discloses  
17 pools of water and oil, in almost a straight line from the oil  
18 treatment pond to public waters.

19 (6) At the hearing, for the first time, Briggs tells the  
20 hearing officer that Merit USA does not operate the oil recovery  
21 facility; it is leased to Fuel Processors, Inc., a Washington  
22 corporation. No lease is produced; Fuel Processors is not  
23 qualified to do business in Oregon; and Briggs and his son own  
24 and operate Fuel Processors as well as Merit.

25 Quite simply stated, the hearing officer did not believe  
26 Mr. Briggs.



1 evidence clearly shows that the Briggs-Merit Oil treatment pond  
2 was placed in a location which allowed oil to overflow into  
3 public waters after heavy rain. The spill could have been pre-  
4 vented by adequate measures. Respondent now contends there was  
5 no evidence or finding that it did any act or omission that  
6 "caused" oil to enter public waters. Respondent cites the  
7 Commission to Brennen v. City of Eugene, 285 Or 401, dealing with  
8 proximate cause and the law of negligence. But the present case  
9 is not a negligence case. ORS 468.720(1)(a) provides no person  
10 shall place or cause to be placed any waste in a location where  
11 they are likely to escape or be carried into public waters of the  
12 state by any means. The hearing officer found respondent operates  
13 an oil recycling business. (Finding 1.) Respondent also main-  
14 tains ponds to prevent spills into waters and maintenance ponds  
15 to treat oil (Finding 7); heavy rains drenched Portland (Finding  
16 8); oil spilled from respondent's property to a slough (Finding  
17 9); and DEQ found that the oil that entered public waters origi-  
18 nated from respondent's property (Finding 10). The "cause" the  
19 hearing officer is referring to is "placing or causing" to be  
20 placed wastes in a location where they are likely to escape or be  
21 carried in to public waters by any means. The statute does not  
22 incorporate herein the law of negligence. Rather, the statute  
23 means simply something that brings about a result. Further, the  
24 hearing officer finds that respondent was, in fact, negligent and  
25 could have prevented the spill by exercising reasonable care.  
26 (Conclusion 2.) Either way respondent loses.

DEPARTMENT OF JUSTICE  
500 PACIFIC BLDG., 520 S.W. YAMHILL  
PORTLAND, OREGON 97204-1381  
TELEPHONE 228-5725

1 (2) ORS 468.785(1) makes it unlawful for oil to enter the  
2 waters of the state, regardless of fault, negligence, intentional  
3 act or accident. ORS 468.790 imposes strict liability for such  
4 conduct. Respondent now contends there was no evidence that the  
5 oil came from respondent's property nor that respondent  
6 controlled the oil. Respondent still claims the oil came from  
7 Mr. Slocum's property from under tires stored thereon.

8 First, it is enough to say that the hearing officer did not  
9 believe respondent's story that the oil came from tires on the  
10 neighbor's property. Second, the hearing officer made findings  
11 that the oil came from respondent's property and he, in fact,  
12 used and stored such oil. In short, Merit-Briggs had control  
13 over the oil. The statute fixing responsibility is a strict  
14 liability statute and respondent cannot escape the civil penalty  
15 by pointing his finger at others.

16 C. The Hearing Officer's Decision

17 Bluntly speaking, and as previously noted, the hearing  
18 officer did not believe Mr. Briggs nor his witnesses. (He poli-  
19 tely stated the Department's witnesses were more logical.) The  
20 hearing officer personally heard all witnesses' testimony,  
21 observed their demeanor, evaluated their responses, assessed  
22 their credibility and found in favor of the Department. The  
23 hearing officer found it incredible (1) that Merit would expend  
24 upwards of \$10,000 to clean up an oil spill when Merit also  
25 claimed the spill was caused by a third person and (2) not  
26 attempt to recover such costs. This credibility assessment

1 is important. The Commission should not disturb its hearing  
2 officer's conclusions without clearly finding the hearing officer  
3 in error. Alston v. Employment Division, 67 Or App 59, 61  
4 (1984); Lewis v. Employment Division, 66 Or App 303, 307 (1984).

5  
6 CITATIONS TO TRANSCRIPT

- 7 (1) Cause of treatment pond overflow was heavy rain.  
(Volpel Tr 16, lines 10-14)
- 8 (2) Overflow was preventable.  
(Volpel Tr 16, lines 15-25)
- 9 (3) Partner-shareholder said pond overflowed.  
10 (Volpel Tr 15, lines 9-12) (Tr 25, Lines 16-18)
- 11 (4) Merit cleaning up oil.  
12 (Volpel Tr 17, lines 10-23) (Slocum Tr 34, lines 10-16)
- 13 (5) Briggs deserves a penalty.  
(Volpel Tr 19, lines 15-16)
- 14 (6) Merit had previous spills.  
15 (Volpel Tr 20, lines 8-18) (Tr 30, lines 1-11)
- 16 (7) Oil led from treatment pond to public waters.  
(Volpel Tr 22, lines 12-25)
- 17 (8) The oil was used oil.  
18 (Volpel Tr 23, lines 1-4)
- 19 (9) Treatment pond only reasonable source of oil.  
(Volpel 24, line 19)
- 20 (10) Not possible oil came from tires.  
21 (Volpel Tr 28, lines 10-12)
- 22 (11) Neighbor Slocum does not know Briggs businesswise or  
23 personally.  
(Slocum Tr 33, lines 14-21).
- 24 (12) Briggs would take care of oil.  
(Slocum Tr 35, lines 8-13)
- 25 (13) Merit, not Fuel Processors, has a spill plan.  
26 (Briggs Tr 42, lines 12-18) (Tr 43)

DEPARTMENT OF JUSTICE  
500 PACIFIC BLDG., 520 S.W. YAMHILL  
PORTLAND, OREGON 97204-1381  
TELEPHONE 228-5725

- 1 (14) Briggs has money to cleanup spill but not tires.  
(Briggs Tr 64, lines 11-13)
- 2 (15) Fuel Processors is created.  
3 (Briggs Tr 65, lines 19-25)  
4 It is a Washington corporation, NOT Oregon registered.  
(Briggs Tr 66, lines 1-15)
- 5 (16) Cost approximately \$10,000 to cleanup oil.  
(Briggs Tr 71, line 25) (Briggs Tr 76, lines 7-9)
- 6 (17) Briggs testifying for Merit.  
7 (Briggs Tr 72, lines 10-12)
- 8 (18) Briggs did not claim oil was under tires.  
(Briggs Tr 73, lines 21-25) (Tr 74, lines 1-8)
- 9 (19) Briggs has not sued Slocum for costs.  
10 (Briggs Tr 76, lines 4-8)
- 11 (20) Briggs claims "tire lien."  
12 (Volpel Tr 81, lines 4-25)  
13 Briggs controls tires.  
(Volpel Tr 82, lines 1-5)
- 14 (21) If tires had oil, it would surface a long time ago.  
(Volpel Tr 82, lines 9-20)
- 15 (22) Mitchoff is Briggs' partner.  
16 (Tr 85, lines 22-25)  
17 Briggs states shareholder.  
(Tr 86, line 1)  
18 Partner of corporation.  
(Tr 86, line 10)
- 19 (23) Mitchoff does not know about previous tire oil leaks.  
(Tr 88, lines 5-11)
- 20 (23) Pond overflowed.  
21 (Tr 85 - Tr 86)

CONCLUSION

22 Merit-Briggs uses the old ploy that when neither the facts  
23 nor law are on your side, confuse the issue and attack everyone  
24 else. Thus, Merit's evidence takes the following form:  
25

26 // //

1 (1) The Department is a "bad guy." The Department of  
2 Environmental Quality (DEQ) did not carry out its statutory  
3 mandate; it did not investigate; it did not test.

4 (2) DEQ is "after" Merit-Briggs.

5 (3) The spill came from a neighbor's property (Slocum).  
6 (This assertion was made after Slocum testified and left the  
7 hearing.)

8 (4) The tires on the neighbor's property are owned by a  
9 bankrupt or long-gone company.

10 (5) The tires on the neighbor's property are not  
11 Merit-Briggs' tires. However, Merit may claim a lien on them.

12 (6) Merit does not operate the oil recovery facility. The  
13 facility is operated by a lessee. However, the lessee is, in  
14 fact, a corporation with Briggs as president.

15 (7) Briggs is portrayed as the guardian of the environment;  
16 the cleaner-up of other persons' spills; the persecuted by the  
17 Department and just all around good neighbor. This portrayal did  
18 not wash with the hearing officer.

19 The evidence clearly supports the hearing officer's  
20 decision and should be upheld, with the penalty increased to the  
21 amount set by the Director.

22  
23 DAVE FROHNMAYER  
Attorney General



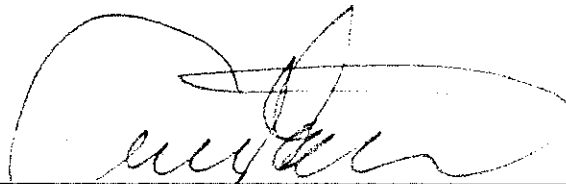
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24  
25 ARNOLD B. SILVER  
26 Assistant Attorney General  
Of Attorneys for Department

CERTIFICATE OF SERVICE

I hereby certify that on the 14th day of January, 1988, a true copy of the within Department Memorandum and Brief in Opposition to Respondent's Memorandum was served upon the following attorney of record, by depositing it in the United States Post Office at Portland, Oregon, postage prepaid, addressed as follows:

Orrin R. Onken  
Attorney at Law  
12728 S.E. Stark Street  
Portland, OR 97233

A handwritten signature in cursive script, appearing to read "Arnold B. Silver", is written over a horizontal line.

ARNOLD B. SILVER



BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

3	Department of Environmental	)	
4	Quality of the State of Oregon,	)	
5		)	
6	Department,	)	No. 4-WQ-NWR-87-27
7	v.	)	
8	MERIT U.S.A., INC.	)	DEPARTMENT'S REPLY BRIEF TO
9		)	RESPONDENT'S ANSWERING BRIEF
10	Respondent.	)	[CROSS-APPEAL]

I. INTRODUCTION

Respondent contends the Department cannot object to the hearings officer reducing the civil penalty imposed by the Director. The basis of this contention is that the hearings officer was a designee of the Commission and had the power to reconsider the amount of the penalty. In summary, respondent contends the hearings officer was the Commission. The Department believes respondent has misunderstood the administrative framework of the Department and Commission, and is in error in its contention. If respondent is correct in his argument that the Department cannot appeal the hearing officer's order to the Commission, than the argument is equally applicable to the hearings officer's order finding respondent in violation of law and imposing a civil penalty. Respondent cannot contend on one hand he can appeal the hearings officer's order to the Commission but that the Department cannot do so.

25 // //  
26 // //

DEPARTMENT OF JUSTICE  
500 PACIFIC BLDG., 520 S.W. YAMHILL  
PORTLAND, OREGON 97204-1381  
TELEPHONE 229-5725



1 " \* \* \* shall be the final order of the  
Commission \* \* \* unless any of the parties  
2 \* \* \* files a Notice of Appeal." (Emphasis added.)  
3

4 The Department is a "party" to a contested case hearing  
5 before the Commission or presiding officer and entitled to appeal.  
6 OAR 340-11-005(9).

7 What the Commission's rules provide is quite clear. (1) The  
8 Department is a party to a contested case hearing before a  
9 hearings officer; (2) a party, including the Department, may  
10 appeal a hearings officer's Final Order to the Commission; and  
11 (3) a hearings officer's Final Order is not final if an appeal is  
12 taken within 30 days. A contrary result would mean any party,  
13 including the Department, is always "stuck" with the hearings  
14 officer's order no matter how erroneous. Thus, the Commission  
15 has not considered any factors under OAR 12-045(2), simply  
16 because this case has not yet been considered by the Commission.

17 B. Other Respondent Contentions

18 (1) It is quite true that Department's counsel does not view  
19 himself as an advocate for a specific amount penalty, independently  
20 of his client, the Department. This does not mean counsel is not  
21 an advocate for the Department's position. The amount of such  
22 penalty was set by the Director, independent of counsel.  
23 Department counsel, in response to the hearing officer's inquiry,  
24 merely explained the factors considered by the Director to the  
25 hearings officer. Estoppel is hardly an issue, since respondent  
26 neither relied upon anything nor changed any position.

1 (2) If there was a failure of proof regarding any aggravating  
2 factors, the hearing officer did not make any findings of fact  
3 of conclusions of law in this area. Without such a finding and  
4 conclusion, the Department can only assume there was no failure  
5 of proof.

6 CONCLUSION

7 Respondent has misunderstood the Commission-Department  
8 administrative framework. The hearing officer is not the  
9 Commission. The Department may appeal a hearing officer's deci-  
10 sion to the Commission. The hearing officer's order reducing  
11 the amount of civil penalty set by the Director was in error.

12 DAVE FROHNMAYER  
13 Attorney General

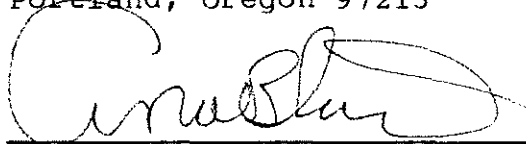
14 

15 ARNOLD B. SILVER  
16 Assistant Attorney General  
17 of Counsel for the Department.

CERTIFICATE OF SERVICE

I hereby certify that on the 15th day of January, 1988, a true copy of the within Department's Reply Brief to Respondent's Answering Brief was served upon the following attorney of record, by depositing it in the United States Post Office at Portland, Oregon, postage prepaid, addressed as follows:

Orrin R. Onken  
Attorney at Law  
12728 S.E. Stark  
Portland, Oregon 97213



---

ARNOLD B. SILVER

CERTIFICATE OF SERVICE

ORRIN R. ONKEN

ATTORNEY AT LAW

12728 S.E. STARK • PORTLAND, OREGON 97233

503 - 257-9609

January 27, 1988

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

EQC  
Hearing Section

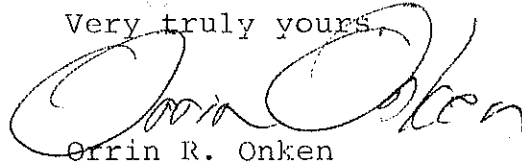
FEB 1 1988

Re: DEQ v. Merit  
No 4-wQ-NWR-87-27

Dear Commission:

Enclosed please find respondent's Reply Brief in the above mentioned matter.

Very truly yours,



Orrin R. Onken

cc Arnold Silver  
Bill Brigg

DEPT. OF ENVIRONMENTAL QUALITY  
RECEIVED  
FEB 1 1988

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

2 OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL )  
QUALITY OF THE STATE OF OREGON ) Case No. 4-W2-NWR-87-27  
4 Department, )  
5 v. ) RESPONDENT'S  
6 MERIT U.S.A., INC. ) REPLY BRIEF  
7 Respondent )  
8

9 Introduction

10 The Department, in its answering brief, tells a humorous and  
11 lighthearted tale, but it has little to do with the facts and  
12 evidence in this case. The Department once again attempts to  
13 place the burden of proof on Merit U.S.A. In essence, it is  
14 saying that if a complaint is made by the Department, the accused  
15 then must prove that the charge is not true. This is an  
16 admirable tactic in that it relieves the Department of any  
17 obligation to reasonably investigate environmental incidents.  
18 However, it is not the law, and the Department has simply  
19 failed in proving its case.

20 A. The Parties to the Case.

21 The Department is doggedly determined to place liability on  
22 Merit U.S.A., Inc. even though it has been informed on numerous  
23 occasions that that company is bankrupt and no longer in  
24 business. At the time of previous complaints filed by the  
25 Department, the Department was told that Merit had been placed in  
26 involuntary bankruptcy and had no assets. Again just a few

1 months ago Mr. Briggs met with the Department and the  
2 Environmental Protection Agency. At that meeting, the financial  
3 status of Merit was again explained in detail. At the most  
4 recent hearing it was again explained that Merit had been through  
5 a chapter 7 liquidation (Tr. p. 78). Nevertheless, the Department  
6 charges ahead in an attempt to impose a fine on a company that  
7 does no business and has no assets whatsoever with which it can  
8 pay a fine.

9 The only thing that the Department would have had to do to  
10 learn the relationship between Merit and Fuel Processors, Inc.  
11 was call Mr. Briggs and ask him. They did not do so.

12 The Department now claims that Merit is the "real party in  
13 interest" and that it cannot deny that fact because Merit did not  
14 plead an affirmative defense. The Department pleaded the  
15 allegation that Merit operates an oil reprocessing business.  
16 Merit denied that allegation. The denial put the allegation at  
17 issue. There was no need to plead an affirmative defense. See  
18 ORCP 19B.

19 The Department's failure to name the correct party is  
20 admittedly a small issue. However, it is typical of the way the  
21 investigation in this matter was handled from the beginning.

#### 22 B. The Overflowing Storage Pond

23 The Department's brief states over and over that the water  
24 storage pond overflowed. The Department seems to believe that if  
25 it repeats the allegation enough times the allegation becomes  
26 true. However, the transcript stands by itself.



1 After the Department completed its case the hearings officer  
2 question Merit's attorney about his direct examination. He  
3 stated as follows: "I don't understand if we have to go into all  
4 this - whether we have to go into all this detail Mr. Onken. I  
5 haven't heard any testimony from DEQ regarding the pond  
6 overflowing. I believe a question was asked by Mr. Silver and  
7 Mr. Vopel indicated that it had not." The only evidence of a  
8 pond overflow was from Mr. Vopel. In the middle of the clean up  
9 he spoke to Mr. Mitchoff. The testimony was as follows: "I asked  
10 him what he thought the probable cause was and he mentioned that  
11 it was - he thought maybe the treatment pond overflowed." (Tr. p.  
12 15, l. 15-17) Mr. Mitchoff, however, testified that by the time  
13 he finished the clean up he had determined that the oil did not  
14 come from the storage pond. (Tr. p. 85, l. 5-13). Mr. Briggs  
15 also testified that a simple examination of the pond proved that  
16 it could not have been the source of the oil. (Tr. p. 49, l. 8-  
17 14)

18 In short, there was no credible evidence of a treatment pond  
19 overflow. No witness testified to seeing an overflow and no tests  
20 were taken to match the oil in the slough to the oil in the pond.  
21 The Department simply failed in its burden of proof.

### 22 C. The Clean Up

23 Both the Department and the hearings officer assert that the  
24 spilled oil must have belonged to Merit because Mr. Briggs  
25 ordered his employees to clean up the spill. The reasoning is  
26 that he wouldn't clean up spilled oil unless he was the one who

2 - RESPONDENT'S REPLY BRIEF

1 spilled it. The logic is attractive but not necessarily correct  
2 in this instance. Mr. Briggs had two strong motives for cleaning  
3 the oil from the slough. First, he wanted to clean it quickly  
4 just in case it turned out that the oil came from his facility.  
5 Second, his business is removing used and hazardous oil from the  
6 environment. He has the resources and equipment to do so.  
7 Consequently, when the oil appeared in the waters near his land  
8 it was both reasonable and logical that he take steps to minimize  
9 any damage.

10 Mr. Briggs was in Hawaii at the time of the spill. He was  
11 informed of the problem by phone. He had no way at that time to  
12 determine whether his facility was the culprit or not. To be on  
13 the safe side he ordered his employees to begin immediate clean  
14 up. The only other option was to do nothing until the cause of  
15 the spill was determined. However, the do nothing option  
16 presented severe risks. The environment would suffer much more  
17 than if cleanup was started promptly. Clean up at a later date  
18 would be more costly for whoever was determined to be  
19 responsible. And finally, if it turned out that the oil was from  
20 his facility, his potential liability would be much greater than  
21 if the spill were promptly taken care of.

22 Another motive for the prompt clean up, whether his  
23 responsibility or not, was his concern for the water quality in  
24 the state of Oregon. He is in the business of recycling oil, a  
25 business which is encouraged by Oregon statutes. See ORS  
26 468.853. He has lobbied the legislature for restrictions on the

1 spreading of used and untested oils on the roads of Oregon.  
2 Thus, it is not out of character for Mr. Briggs, on hearing of an  
3 oil spill near his property, to order his employees to move  
4 quickly to clean it up.

5 The Department, in its answer, asserts repeatedly that Mr.  
6 Briggs spend \$10,000 on the clean up. None of the references to  
7 the transcript support that figure. It complains that Merit  
8 didn't bring out evidence from witness Slocum. However, Slocum  
9 was the department's witness and the department had the burden of  
10 proof. Merit had no obligation to ask Slocum any questions  
11 whatsoever.

12 In conclusion, the clean up was not the act of man trying to  
13 correct a problem he created. It was the act of a prudent  
14 businessman and environmentalist. It should not be held against  
15 him.

16 D. The Hearing Officer's Decision

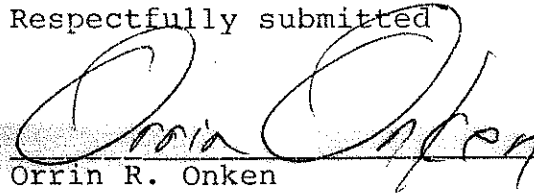
17 The hearings officer misconstrued the burden of proof in  
18 this case. The Department had to prove with credible evidence  
19 that Merit owned or controlled the oil that got into the slough.  
20 Merit had no obligation to put on any evidence whatsoever. Yet  
21 the hearings officer faults Merit for not proving that the oil,  
22 which was clearly not on Merit property, came from some source  
23 other than the reprocessing facility. Merit had no obligation to  
24 do so. Any obligation to investigate and determine the source  
25 rested with the Department. The Department failed to  
26 investigate. It made no tests and never considered any source

1 other that the Merit facility. Thus, when it came time to  
2 present evidence, the only way the Department could prevail was  
3 to convince the hearings officer that Merit had to prove itself  
4 not liable. This is not the law.

5 CONCLUSION

6 The Commission in this matter should consider the evidence  
7 de novo and conclude that the Department failed to prove any  
8 violation on the part of the respondent.

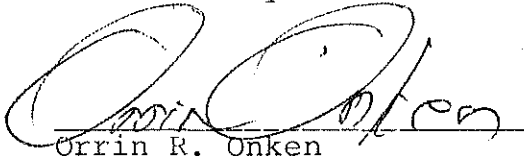
9 Respectfully submitted

10   
11 Orrin R. Onken

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CERTIFICATE OF SERVICE

I, Orrin R. Onken, attorney for respondent, certify that I served the foregoing Respondent's Reply Brief on Arnold Silver, attorney for petitioner by mailing a certified true copy to him at the Department of Justice, 500 Pacific Building, 520 S.W. Yamhill, Portland, Oregon 97204 on January 27, 1988.

  
Orrin R. Onken



U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

Merit  
Roo Ex 1

*Chiff*

REPLY TO  
ATTN OF: M/S 525

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Bill Briggs  
Merit Oil & Refining, Inc.  
4150 N. Suttle Road  
Portland, Oregon 97217

Dear Mr. Briggs:

On September 24, 1986, an inspection was conducted by an employee of the U.S. Environmental Protection Agency (EPA) at your Portland oil storage facility. At that time, you were found to be in violation of the federal oil spill regulations (40 CFR 112) as no Spill Prevention, Control, and Countermeasure (SPCC) plan was available for our on-site review.

At this time, in order to avoid any misunderstanding, I am requesting that you send to my attention a copy of your SPCC plan within 48 hours of your receipt of this letter. If no SPCC plan has been prepared for your oil storage facility, then a plan will be required within 60 days. Failure to have a written spill prevention plan may result in substantial civil penalties being imposed.

In order to help you with your spill prevention work, I am enclosing a copy of the federal oil spill prevention regulations and examples of several SPCC plans. If you have any questions concerning this matter, you can reach Jeff Webb of my staff at the address above or by calling (206) 442-1196.

Sincerely,

*James C. Willmann*  
James C. Willmann, Chief  
Superfund Removal and Emergency Section

Enclosures

cc: DEQ  
Office of Regional Counsel

*Called 12-9-86*  
*message*  
*12-16-86*  
*10-11-86*

*Mr Jeff Webb:*

*Please note attached spill plan copy that was filed with your office in 1985. Also, attached are copies of letters asking for your follow up on possible violation of the law by them.*



U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

REPLY TO  
ATTN OF: M/S 525

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Bill Briggs  
Merit Oil & Refining, Inc.  
4150 N. Suttle Road  
Portland, Oregon 97217

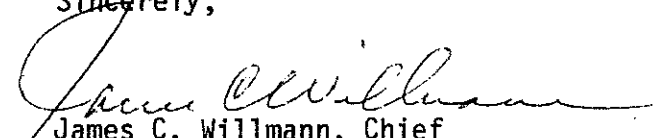
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Sincerely,

  
James C. Willmann, Chief  
Superfund Removal and Emergency Section

Enclosures

cc: DEQ  
Office of Regional Counsel

Mr. Jeff Webb:

10-15-86

Please note attached spill plan copy that was filed with your office on 10/15/86. Also, attached are copies of letters asking for your follow up on possible violations of the law by others.

Yours Truly  
Jeff Webb

S P I L L P R E V E N T I O N P L A N

- A) Merit USA, Inc.  
Fuel Processors, Inc.
- B) Used and Scrap Oil Recovery and ReRefining
- C) Construction started in September 1979--In operation since then
- D) 4150 Suttle Road, Portland, Oregon 97217
- E) Merit USA, Inc. (same as above)
- F) General Manager, Bill Briggs
- G) Facility has operated since 1979 handling millions of gallons of used oil with no spills until 1/17/85 (see detail attached).
- H) Approval

W. L. Briggs, President, Merit USA, Inc.

- I) I hereby certify that I have examined the facility and attest that this Spill Prevention Plan has been prepared in accordance with good engineering practice.

Name \_\_\_\_\_

Signature \_\_\_\_\_

(Seal)

Registration # \_\_\_\_\_

State of California

Date: \_\_\_\_\_



Spill Prevention Control and Counter Measure Plan

Merit USA, Inc.  
4150 Suttle Road  
Portland, Oregon 97217  
Phone (503) 286-8352

Certification

Engineer: \_\_\_\_\_

Signature: \_\_\_\_\_

Registration # \_\_\_\_\_

State of California

Date: \_\_\_\_\_

- 1) Merit USA, Inc.  
4150 N. Suttle Road  
Portland, Oregon 97217  
(503) 286-8352

President: W. L. Briggs  
5485 Oetkin Drive  
Milwaukie, Oregon 97222  
(503) 659-9896

Manager: George Miller  
2701 N.W. 104th Street  
Vancouver, Washington 98660  
(206) 574-2339

- 2) Merit's facility receives used and scrap oil from a two state area by tanker trucks. The incoming product is similar to 20 weight motor oils except it is black in color. Product is then distilled to remove water, high flash, and then filtered to make a fuel for heavy industry.

All discharge of products goes to drains connected to an oil/water separator where oil is recovered and pumped back to the plant. The water goes to a 80,000 gallon pond. Should any oil reach the 80,000 gallon pond, it is

recovered with a power 24-hour mop and automatically returned to the first oil/water separator for removal back to the plant. There is also a second oil/water separator on the outlet of the 80,000 gallon pond so if the pond receives a large volume of oil, the final separator would prevent 80,000 gallons of oil going on to the third containment area. There is a shut off valve on the line from the pond outlet to the storm drain which would be closed should the worst happening occur. All oil (280,000 gallons) would be contained on site for recovery when the valve is closed. There is a continuous flow of all rain and process water as it passes through the oil/water separator and pond. In the third containment area there are four 8 ft. absorbent oil booms at the outlet into the storm drain which are monitored weekly. In addition, there is a solid boom across a 6 foot culvert approximately 125 feet from the outlet which would contain any sizeable spill if all other systems fail.

#### Fixed Storage Tanks

(2)	30,000
(2)	22,000
(6)	12,000
(6)	10,000
(3)	8,000
(2)	6,000
(2)	4,000

---

280,000 Total Storage

Trucks on site vary from 2 small 1500 gallon units to 2 truck and trailers, as all equipment is not always in the area.

The 4 acre plant site is fenced on three sides with the back side protected by raised railroad and wooded area and is fully diked. It operates 8 hours per day, 7 days per week and is locked when not open.

- 3) First spill in 6 years was 1/17/85 and a number of improvements have been made to assure it does not happen again.
- 4) Spill prevention--Storage Tanks and Stills

- 1) Tanks have locking valves and caps
- 2) The total area is diked and designed so all spills, water, etc. go to the only drains which all connect to the oil/water separator where any spilled oil will be recovered and returned to be refined daily.
  - a) Secondary containment is the 80,000 gallon pond which would hold 2 1/2 times the largest tank.
  - b) Third containment area, if all else is full or failed, is boomed and culvert area is large enough to contain the total plant capacity.
- 3) Main power switches are in warehouse area which, when locked, is secured.
- 4) Normal inventory of all products on site is under 150,000 gallons and should the total be spilled, the design of the site will hold it all.

5) Spill Prevention--Vehicular

Again, the site is lower than dikes and ground slope and any truck spill would be contained and end up in the oil/water separator for recovery.

Company vehicles are equipped with absorbent boom and pads and drivers are trained to contain spills and call for aid at once should an accident occur.

6) Personnel

Copy of this spill plan is posted in personnel area and it is reviewed at monthly meetings.

Phone numbers of managers are posted and the key emergency system for total containment--closure of the outlet valve on the pond--is stressed to each employee.

- 7) A) Absorbent booms, pads, and bags are on hand.
- B) The oil/water separators are viewed daily and oil pumped back for processing as needed to keep any oil off the pond.
- C) An electric operated oil mop is operated on the pond to remove any traces of oil.

- D) The open storm drain is viewed weekly for any traces of oil and cleaned if any accumulation is present.
- E) The booms on the storm drain are reviewed as above and replaced if necessary.
- F) Total plant is viewed daily by plant operator, manager, and at least weekly by General Manager, and corrections are taken as needed.



4150 N. Suttle Rd. • Portland, Oregon 97217 • 1 (503) 286-8352

February 18, 1985

U.S. Environmental Protection Agency, Region X  
1200 6th Avenue  
Seattle, Washington 98101

Attention: MS-525

Dear MS-525:

Attached is our Spill Prevention Control that has been in effect since 1980 and a copy of our Spill Report to State of Oregon D.E.Q.

The spill prevention plan performed as planned. However, the problem was an unknown flaw in the construction of the protective system.

This flaw has been corrected plus addition of two oil booms in the open storm sewer behind the plant, increase in the size and height of the pond so no overflow can happen, set-up of stronger daily controls over care for oil-water separation, and a 24-hour pump on the oil-water separator to keep the pond area cleaner.

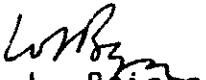
You should know that in 5-years of operation and handling over 4,000,000 gallons per year of waste oil, we have kept it out of other water ways and there have been no other spills.

In addition, the spill was fully contained and cleaned up at Merit's expense.

Also, Fuel Processors, Inc. is not a part of this action, as Merit U.S.A. Inc is the plant owner and operator.

Sorry for the problem.

Yours truly,

  
W. L. Briggs  
President

WLB:mb

SPILL PREVENTION PLAN  
Merit Oil & Refining Inc.  
4150 N. Suttle Road  
Portland, Oregon 97217

2-80

CONTACT: W. L. Briggs  
Office: 1-503-286-8342  
Home: 659-9896

All Employees read and initial with a date following your Initial.

Your company is required to have a Spill Prevention Plan in case of uncontrolled or major spill, fire, etc., so that all oil, water, etc. is contained on site.

All drains are connected to the oil/water separator and then into the 60,000 gallon pond.

The total area is diked to cause all water or oil to pass through the oil/water separator.

The key to this system is the 2-valves in the pond area. In the case of any large spill or leak, the large Red Valve in the lower area of the pond must be closed, and the black valve if the pond is ready to overflow. These should be turned off and on at least once per week to check their operation.

As each of you knows, each shift is required to view the plant, normally each hour, around the clock, to assure that the operation is working smoothly.

Yours truly,

W. L. Briggs  
President

DAILY WORK SHEET

DATE: 2/7/85

UPON INSPECTION, IF BILL SHOULD NOT FIND THESE IMPORTANT AREAS IN GOOD SHAPE, THE EMPLOYEE INVOLVED WILL NO LONGER BE WORKING HERE.

- |   |  | ADDITIONAL INFORMATION |
|---|--|------------------------|
| 1) IS PUMP WORKING?   | YES <u>X</u> NO _____                    | _____                  |
| 2) IS LARGE POND CLEAR OF OIL?                              | YES _____ NO <u>X</u> _____              | <u>Minimal Amount</u>  |
| 3) OIL TRACE ON OUTFLOW BOX?                                | YES <u>X</u> NO _____                    | <u>Very little</u>     |
| 4) CHECKED STORM DRAINS SOUTH END OF PROPERTY               | YES <u>X</u> NO _____                    | <u>Clear water</u>     |
| 5) CHECKED BOOMS ACROSS R.R. PIPE & EAST END OF STORM DRAIN | YES _____ NO <u>NA</u> _____             | _____                  |
| 6) CHECKED LEVEL OF LARGE POND.                             | INCHES <u>BELOW</u> OUTLET WALKWAY _____ | <u>4"</u>              |
| 7) CHECKED OFF SPEC TANK                                    | YES <u>X</u> NO _____                    | <u>6500 gal</u>        |

NO DIRECT DUMPING IN POND.....

NOTE: IN THE EVENT OF MAJOR OIL SPILL OVER 3-4000 GALLONS, YOU MUST AT ONCE, SHUT THE OUTLET VALVE ON POND.

SIGNED Steve Wagner



4150 N. Suttle Rd. • Portland, Oregon 97217 • 1 (503) 286-8352

January 16, 1985

Spill Report

Mr. Leo L. Baton, Chief  
Department of Environmental Quality  
522 S.W. Fifth Avenue  
Box 1760  
Portland, Oregon 97207

Dear Mr. Baton:

This report covers the sudden and accidental spill of used motor oils sometime between 1-12-85 and 1-16-85 at our plant at 4150 N. Suttle Road.

Over a period of five years I have inspected and monitored the oil-water separator with no spills ever occurring in that time. Our investigation shows that a restriction in the 10" outlet pipe to the final vault caused the slowing down of the outflow. The result was an increase in the level of the main pond of approximately 18". There is a pipe hole at that level and the oil floating on top of the pond leaked into the final vault replacing the protective water until only oil was flowing into the surface storm water system. It then floated under the railroad and Marine Drive into the edge of Smith Lake.

Crowley Environmental has been hired to contain and clean up the oil.

The area is approximately 1500' long by 200' wide and will take two to three weeks to clean up because it is in the heavy brush area.

At this point, there have been no fish or bird victims.

We have arranged to increase the height of the final vault and weld the pipe hole so no over flow is possible without visual observation. In addition, we are adding a pump with a float switch to reduce the oil level.

Considering the millions of gallons of waste oil we have handled, it is fortunate that a possible flaw has been corrected and it has been contained before a major problem developed.

Please contact me for any additional questions.

Yours truly,

  
W. L. Briggs



DEQ  
EXhibit  
6

CERTIFICATE OF  
TRUE COPY

I, X HARRY G. EDMONDS, certify: that I  
(Name)  
am employed by the City of Portland, Bureau of Environmental Services,  
(Name of Government Agency)

as X INDUSTRIAL WASTE ENGINEER; that in such capacity I am the  
(Title)  
legal custodian and keeper of the File for X MERIT USA  
(Type of Records)  
copies

records of my governmental employer; that the attached ~~copy~~ of ~~THESE DOCUMENTS~~ letters  
from the City of Portland, Bureau of Environmental Services to W.L. Briggs, 4150  
N. Suttle Road, Portland, Oregon 97217 dated April 27, 1987, March 4, 1987, February  
19, 1987, X JANUARY 12, 1987

and Letters from W.L. Briggs to the City of Portland dated X  
~~is an official document within these records, that it has been compared by me~~ and a  
letter dated August 26, 1986 from the City of Portland, Bureau of Environmental Services to Fred  
~~with the original and that it is a correct transcript thereof.~~  
Hansen, Director, DEQ, are official documents within those records, that they have been compared  
by me with the originals in the file, and that they are correct transcripts thereof.

(Place official seal,  
if any, here)

Dated: X 15<sup>th</sup> of July, 1987.

X

X Harry G. Edmonds  
(Signature)



CITY OF

# PORTLAND, OREGON

BUREAU OF ENVIRONMENTAL SERVICES



City Administrator  
120 S.W. 5th Ave.  
Portland, Oregon 97204-1972

January 12, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
#594507

William L. Briggs, President  
Merit USA  
4150 N. Suttle Road  
Portland, OR 97217

Re: Municipal Sewer Service

Dear Mr. Briggs:

This will document my telephone call to you last Wednesday (1/7/87) and expand upon the subjects covered. You may recall that I, (1) acknowledged receipt of your transmittal of 12/22/86, (2) called your attention to the covered sampling manhole on your property and requested the roofing shingles and debris be removed from the top of the cover by not later than 1/31/87, (3) mentioned that I had received a laboratory report from the DEQ documenting water quality samples collected on 7/17/86 in the vicinity of the old discharge pipe from the Merit treatment pond, and (4) in response to your question, offered 2/2/87 as the earliest date that an issuable permit could be drafted for your facility.

Upon closer review of the DEQ report which shows high levels of phenol and chlorophenols in the water samples, your sample report of 12/9/86, and the City water quality samples of 9/18/86 and 9/22/86, e.g. methylene chloride 0.5 mg/l, benzene 0.43 mg/l, tetrachloroethylene 1.20 mg/l, toluene 0.32 mg/l, and pH 7.9 (9/18) and 5.6 (9/22), it appears highly probable that the pretreatment technology presently employed at Merit Oil would not provide an effluent consistently meeting the stringent limits, e.g. 1.37 mg/l for total toxic organics (TTO) and other pollutants to be regulated in the permit.

It is not the City's intention to stifle your efforts to obtain sewer service, but I do feel that it is only fair to point out the risk to you if the treatment processes do not produce an effluent with a margin of safety in meeting the City's permit limits. If, after consideration, you wish to accept this risk, the City will allow Merit Oil to discharge on a short-term trial basis. To do so will require Merit Oil's acceptance of the City's conditions and the understanding that poor performance during this period could jeopardize Merit's chances of obtaining a long-term discharge permit from Portland in the near future.

Engineering  
Bill Gaffi  
796-7181

System Management  
Bob Reck  
796-7133

Wastewater Treatment  
Ross Peterson  
285-0205

Solid Waste  
Dolyn Kies  
796-7010

January 12, 1987  
Page 2

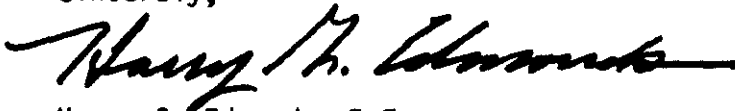
However, if you wish to take advantage of the short-term trial permit offer, please indicate your desire by signing on the bottom of this letter and return it to my attention. Your signature constitutes Merit Oil's acceptance of the following terms and conditions:

1. The permit will be limited to a period not exceeding 120 days.
2. During this period the permittee (Merit USA) will be required to meet all effluent limitations, self-monitoring and reporting requirements, and special conditions prescribed by the City.
3. The City may at its discretion revoke permission to discharge to the City sewer at any time during this period upon 24 hour written notification.

Alternatively, you might find it in your best interest to postpone this action pending additional evaluation and improvements to the preliminary treatment facilities. If you do elect to exercise the trial permit, please return the signed agreement by not later than January 21, 1987 so that I can prepare the necessary paperwork by February 2, 1987. Naturally, if all discharges to the City sewer are in compliance during this 120 day period, a conventional 5-year permit will be granted authorizing continued discharge to the Portland system. The long-term permit will incorporate additional criteria as deemed appropriate to ensure the integrity of the sewer system and compliance with applicable City policies and federal regulations.

If you have any questions or comments relative to this matter, please call me at 796-7208.

Sincerely,

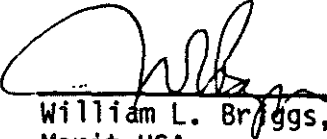


Harry G. Edmonds, P.E.  
Industrial Waste Engineer

HGE:a1  
79:merit

cc: Richard J. Volpel, DEQ  
Tom Bottenberg, Portland  
Jim Cooke, Portland

I REQUEST THE SPECIAL 120 DAY PERMIT DESCRIBED ABOVE AND AGREE TO ABIDE BY ITS TERMS AND CONDITIONS.



William L. Briggs, President  
Merit USA

1-19-87  
Date



CITY OF  
**PORTLAND, OREGON**

BUREAU OF ENVIRONMENTAL SERVICES

Dick Bogle, Commissioner  
John Lang, Administrator  
1120 S.W. 5th Ave.  
Portland, Oregon 97204-1972  
(503) 796-7169

August 26, 1986

Fred Hansen - Director  
Oregon Department of Environmental Quality  
522 SW 5th Ave.  
PO Box 1760  
Portland, OR 97207

Re: Merit Oil & Refining Inc. - 4150 N. Suttle Road

Dear Mr. Hansen: <sup>Fuel</sup>

We are in receipt of your letter of 8/12/86 to William L. Briggs regarding your departments offer to mitigate an earlier \$1200.00 civil penalty against Merit Oil for its violation of ORS 468.785(1). Since the DEQ's offer is contingent upon Merit Oil completing its industrial wastewater discharge permit application with the City of Portland by 9/15/86 and connecting to the City sewer system within 30 days of receiving approval from the City, we feel compelled to respond.

Merit Oil has yet to respond to our letter of 11/6/85 regarding deficiencies in its permit application of 10/21/85 except by telephone call from Bill Briggs to Harry Edmonds on 7/14/86 requesting a copy of the letter. Because of the potential deleterious nature of the wastewaters generated at this facility on the POTW, the City is becoming less receptive to pursuing the idea of issuing a discharge permit for this company. Our reservations are further intensified because of the apparent lack of follow-through by Mr. Briggs and the continuing history of spills at this site. Connection to the City sewer without demonstrated spill control and preliminary treatment facilities would only transfer the problem to the POTW without any net environmental benefit. Until these issues are resolved, the City sewer system should not be considered as a solution to Merit Oil's problems.

We thank you for this opportunity to comment. If you desire to pursue this matter further with the City, please contact Harry Edmonds at 796-7208.

Sincerely,

Robert W. Rieck, P.E.  
Branch Manager, System Management

HGE:lld  
121:hanson

cc: Janet Gillaspie - DEQ  
Rick Volpel - DEQ

Tom Bottenberg - City  
Harry Edmonds - City  
Engineering  
Bill Gaffi  
796-7181

System Management  
Bob Rieck  
796-7133

Wastewater Treatment  
Jack Irvin  
285-0205

Solid Waste  
Delyn Kies  
796-7010



CITY OF

**PORTLAND, OREGON**

BUREAU OF ENVIRONMENTAL SERVICES

Bob Koch, Commissioner  
John Lang, Administrator  
1120 S.W. 5th Ave.  
Portland, Oregon 97204-1972

February 19, 1987

William L. Briggs, President  
Merit USA  
4150 N. Suttle Road  
Portland, OR 97217

Re: Municipal Sewer Service

Dear Mr. Briggs

This will document our February 9, 1987 site visit to your facility and your February 17, 1987 conversation with John Smits. During the inspection we reviewed the processes and sources of discharge to your preliminary treatment system, the proposed discharge point and the sampling manhole.

At the time of our inspection, the oil water separator located in the pond was completely submerged. You explained that the high pond level was due to a compressor water leak during the preceeding weekend. The thickness of oil on the pond surface was observed to be about 6 inches. You pointed out a 5000 gal. horizontally oriented steel tank that you had recently placed beside the existing 10,000 gal. vertical tank intended to collect oil from the surface of the larger tank. You also showed us the location of the proposed coalescer and gave us a copy of the construction plan. We observed the sampling manhole structure, noting no discharge from the branch line serving the south edge of the plant site near the boiler and heater room. The results of the analysis of the sample we collected from the 10,000 gal. tank on February 9, 1987 that John Smits transmitted to you by telephone (1/17/87) are as follows:

<u>Parameter</u>	<u>Concentration (mg/l)</u>
Methylene Chloride	Not Detected
Benzene	3.4
Toluene	1.7
Tetrachloroethylene	0.65
Volatile Organics (not identified)	Estimate high concentration
pH	6.0

Page Two  
February 19, 1987

As mentioned in our January 12, 1987 letter and John Smits by telephone, the City is still very concerned that your treatment system even with the addition of the coalescer structure will not produce an effluent meeting the limits of the proposed temporary permit.

You indicated construction of the coalescer should be completed by March 12, 1987. We will check back on 3/5/87 to review your progress. Additionally, regarding the required discharge meter, we would prefer installation near the discharge point just ahead or just past the coalescer, selected to accurately measure a gravity batch discharge. The selection of a meter is your responsibility. It must be reliable, easily accessible and comply with the attached portion of the Code of the City of Portland Chapter 17.36.050. There are numerous meter companies listed in the yellow pages, and you should probably contact a firm before the coalescer is placed, as that may effect piping arrangements for a meter.

We have discussed the batch discharge of wastewater from your facility following treatment, analysis for compliance with permit limits and acceptance of the batch for discharge when permit parameters are met. Considering the proposed arrangement of the treatment components i.e., collection - oil water separator - tank "separator" - coalescer - discharge, it is apparent that analysis of a "batch" is not possible. If you consider the coalescer necessary to complete the treatment to comply, then collection of the batch for analysis and hopefully discharge, should follow the coalscer. Only in this way can a completely treated effluent be held and tested for compliance prior to the City's acceptance. As proposed, the discharge of the 10,000 gal. tank to the coalescer could only continue long enough to collect a sample for analysis and the flow would need to stop awaiting the compliance determination. Even if the initial sample met limits, the City is not prepared to assume the entire tank contents run through the coalescer would comply due to possible fractionation and differential settling in the large tank. It may be necessary to rearrange the treatment components or install an additional tank to hold a batch of completely treated wastewater for analysis and subsequent acceptance for discharge or rejection as appropriate. Please review these concerns and respond to us as soon as you can.

Your short-term industrial wastewater discharge permit is being held pending installation of an approved discharge meter, the coalescer you have proposed, response to our "batch" discharge concerns listed above and demonstration that the discharge will consistently comply with anticipated permit limits such as but not limited to 1.37 mg/l for total toxic organics (TTO). We plan to send you a preliminary draft permit Schedule A (Waste Discharge Limitations) by March 6, 1987 for your review.

Page Three  
February 19, 1987

Regarding your complaint, about another waste-oil processor, we are investigating and hope to have a response for you by February 27, 1987.

If you have any questions or comments regarding this letter please contact me at 796-7208 or John Smits at 796-7584.

Sincerely,



Harry G. Edmonds, P.E.  
Industrial Waste Engineer

HGE:JS/11d  
130:briggs

Enc.

cc: Richard J. Volpel, DEQ  
Bob Rieck, City  
Tom Bottenberg, City  
Jim Cooke, City



CITY OF

**PORTLAND, OREGON**

BUREAU OF ENVIRONMENTAL SERVICES

Bob Koch, Commissioner  
John Lang, Administrator  
1120 S.W. 5th Ave.  
Portland, Oregon 97204-1972

March 4, 1987

William L. Briggs, President  
Merit, USA  
4150 N. Suttle Road  
Portland, OR 97217

Re: Municipal Sewer Service

Dear Mr. Briggs:

Enclosed please find a preliminary draft Schedule A (Waste Discharge Limitations). The pollutants or pollutant properties listed are based on toxic constituents reasonably expected to be present in used oil processing wastewaters. The proposed concentration based limits are those staff consider necessary to protect the POTW (Publically Owned Treatment Works).

The Schedule A portion of your short term industrial wastewater discharge permit, when issued, will list these parameters and final discharge limits. At present, your permit is being held pending:

1. Installation of an approved discharge meter,
2. Installation of the coalescer you have proposed,
3. Arrangement of treatment components that will allow compliance testing of a completely treated "batch" of wastewater and
4. Demonstration that your pretreatment system has the potential to meet the proposed discharge limits.

We hope the draft Schedule A will help you evaluate your wastewater treatment system and look forward to a progress report regarding the items listed above. If you have any questions, please contact John L. Smits at 796-7584 or myself at 796-7208.

Sincerely,

Harry G. Edmonds, P.E.  
Industrial Waste Engineer

HGE:JLS/11d  
130:briggs(4)

cc: Richard J. Volpel, DEQ  
Bob Rieck, City  
Tom Bottenberg, City  
Jim Cooke, City



SCHEDULE A  
WASTE DISCHARGE LIMITATIONS

Expiration Date: \_\_\_\_\_  
Permit Number: 400  
Page \_\_\_\_\_ of \_\_\_\_\_

**DRAFT**

WASTE DISCHARGE LIMITS

1. Waste Discharge Limitations Not To Be Exceeded After Permit Issuance Date

For used oil processing facilities discharging less than 5,000 gallons per calendar day of process wastewater:

<u>Pollutant or Pollutant Property</u>	<u>Maximum Concentration for Any 1 Batch (mg/l)</u>
<u>Conventional</u>	
BOD	300
TSS	350
Oil and Grease	100
pH	Range: 5.5 - 10.0
<u>Non-Conventional</u>	
Ammonia (as N)	50
Sulfides	50
Chlorine Demand	20
<u>Priority Pollutants</u>	
<u>Specific Limitations</u>	
Benzene	0.5
Toluene	0.5
Methylene Chloride	1.0
Trichloroethylene (TCE)	1.0
Phenols (non-chlorinated)	2.0
<u>Metals</u>	
Arsenic	1.0
Beryllium	*
Cadmium	1.0
Chromium	5.0
Cyanide	1.0
Lead	1.0
Mercury	*
Nickel	3.0
Selenium	*
TOTAL METALS	<u>10.5</u>
<u>Other Toxicants</u>	
Tetrachloroethylene	
1,1,1-Trichloroethane	
Carbon Tetrachloride	
Dibromochloromethane	
Fluoranthene	
Naphthalene	
Nitrobenzene	
PCB's (polychlorinated biphenyls)	
Polynuclear aromatic hydrocarbons	
2,3,7,8-Tetrachlorodibenzo-p dioxin	
Chlorinated phenols	
TOTAL	<u>1.37</u>

\* Under Review



CITY OF

**PORTLAND, OREGON**

BUREAU OF ENVIRONMENTAL SERVICES

Bob Koch, Commissioner  
John Lang, Administrator  
1120 S.W. 5th Ave.  
Portland, Oregon 97204-1972

April 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

William L. Briggs, President  
Merit USA  
4150 N Suttle Road  
Portland, OR 97217

Re: Municipal Sewer Service  
Sampling Manhole

Dear Mr. Briggs,

As you know, your application for an industrial wastewater discharge permit is being held pending receipt of additional information listed in our March 4, 1987 and February 19, 1987 letters. We have yet to receive the requested information.

Since we have not heard from you in several months, a response to our letters is needed to bring the matter to a conclusion. Please be aware that the City is considering placement of a temporary plug in the branch sewer line that serves the processing area, until a permit is issued. May we have a written status report from you by June 1, 1987?

Because Merit USA is prohibited from discharging to the City sewer until a permit is issued, we have periodically inspected the sampling manhole to confirm that no discharge is occurring. These inspections are increasingly difficult due to accumulated dirt and debris over the manhole, and because it is located slightly below grade.

Chapter 17.34.080(c) of the Code of the City of Portland requires access to the manhole be available to City representatives at all times. By this letter, you are required to add on additional 4 inch riser to the manhole ring by May 29, 1987 and maintain the sampling manhole in a continuously accessible condition.

Page Two  
April 27, 1987

If you have any further questions please contact John L. Smits at  
796-7584.

Sincerely,

Harry G. Edmonds, P.E.  
Industrial Waste Engineer

JLS:HGE/11d *JLS*  
142:briggs

cc: Richard Volpel, DEQ  
Bob Rieck, City  
Tom Bottenberg, City  
Jim Cooke, City

CERTIFICATE OF  
TRUE COPY

DEC  
Exhibit  
5

I, Linda K. Zucker, certify: that I  
(Name)  
am employed by the Environmental Quality Commission  
(Name of Government Agency)  
as Hearings Officer; that in such capacity I am the  
(Title)  
legal custodian and keeper of the contested case hearing  
(Type of Records)  
records of my governmental employer; that the attached copy of the document  
"Notice of Assessment of Civil Penalty - Case # WQ-NWR-85-59"  
is an official document within those records, that it has been compared by me  
with the original and that it is a correct transcript thereof.

(Place official seal,  
if any, here)

Dated: 9/9/87, 1987.

L K Zucker  
(Signature)

Original as filed with  
Hearings 7-25-85  
0.5

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

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OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY,	)	NOTICE OF ASSESSMENT
OF THE STATE OF OREGON,	)	OF CIVIL PENALTY
	)	No. WQ-NWR-85-59
Department,	)	MULTNOMAH COUNTY
	)	
v.	)	
	)	
MERIT OIL & REFINING, INC.,	)	
a Washington corporation,	)	
	)	
Respondent.	)	

I

This notice is given to Respondent, Merit Oil & Refining, Inc., a Washington corporation, pursuant to Oregon Revised Statutes (ORS) 468.125 through 468.140, ORS Chapter 183 and Oregon Administrative Rules (OAR) Chapter 340, Divisions 11 and 12.

II

A. On or about January 15, 1985, ~~as a result of Respondent's negligence,~~ Respondent polluted waters of the state by allowing oil to enter waters of the state, Smith Lake, from Respondent's facility at 4150 N. Suttle Road, Portland (Respondent's facility), in violation of ORS 468.785(1).

B. On or about February 8, 1985 Respondent ~~negligently~~ allowed waste, organic chemicals, to be placed in a location at Respondent's facility where such waste was likely to escape or be carried into waters of the state, in violation of ORS 468.720(1)(a).

III

The Director hereby imposes upon the Respondent a civil penalty of

1 \$500 for the violation alleged in Paragraph IIA and a civil penalty of  
2 \$700 for the violation alleged in Paragraph IIB for a total civil  
3 penalty of \$1,200.

4 IV

5 ~~The civil penalty assessed against Respondent in Paragraph III above,~~  
6 ~~for the violation alleged in Paragraph 2A, is the minimum which may be~~  
7 ~~assessed pursuant to the schedule of civil penalties contained in OAR 340-~~  
8 ~~12-055(3). The violation alleged in Paragraph 2B involves aggravating~~  
9 ~~factors which support the assessment of a civil penalty larger than the~~  
10 ~~minimum civil penalty which may be assessed pursuant to the schedule of~~  
11 ~~civil penalties contained in OAR 340-12-055(2)(b). The mitigating and~~  
12 ~~aggravating factors considered by the Director in establishing the amount~~  
13 ~~of that penalty are attached hereto and incorporated herein by this~~  
14 ~~reference.~~

15 V

16 The pollution sources described in Paragraph II above would not  
17 normally be in existence for five (5) days.

18 VI

19 This penalty is due and payable immediately upon receipt of this  
20 notice. Respondent's check or money order in the amount of \$1,200  
21 should be made payable to "State Treasurer, State of Oregon" and should  
22 be sent to the Director of the Department of Environmental Quality.

23 VII

24 Respondent has the right, if Respondent so requests, to have a formal  
25 contested case hearing before the Environmental Quality Commission or its  
26 hearing officer regarding the matters set out above pursuant to ORS Chapter

1 183, ORS 468.135(2) and (3), and OAR Chapter 340, Division 11 at which  
2 time Respondent may be represented by an attorney and subpoena and cross-  
3 examine witnesses. That request must be made in writing to the Director,  
4 must be received by the Director within twenty (20) days from the date  
5 of mailing of this notice (or if not mailed, the date of personal service),  
6 and must be accompanied by a written "Answer" to the charges contained  
7 in this notice. In the written "Answer," Respondent shall admit or deny  
8 each allegation of fact contained in this notice and shall affirmatively  
9 allege any and all affirmative claims or defenses to the assessment of  
10 this civil penalty that Respondent may have and the reasoning in support  
11 thereof. Except for good cause shown:

12 A. Factual matters not controverted shall be presumed admitted;

13 B. Failure to raise a claim or defense shall be presumed to be a  
4 waiver of such claim or defense;

15 C. Evidence shall not be taken on any issue not raised in the notice  
16 and the "Answer."

17 If Respondent fails to file a timely "Answer" or request for hearing  
18 or fails to appear at a scheduled hearing, the Director on behalf of the  
19 Environmental Quality Commission may issue a default order and judgment,  
20 based upon a prima facie case made on the record, for the relief sought  
21 in this notice. Following receipt of a request for hearing and an  
22 "Answer," Respondent will be notified of the date, time and place of the  
23 hearing.

24 VIII

25 If the one or more violations set forth in Paragraph II continue,  
26 or if any similar violation occurs, the Director will impose an additional





CIVIL PENALTY: MITIGATING AND AGGRAVATING FACTORS

(OAR 340-12-045(1))

RESPONDENT: Merit Oil & Refining, Inc.

COUNTY: Multnomah

CASE NUMBER: WQ-NWR-85-59

TYPE OF VIOLATION: Oregon Revised Statutes (ORS)

PENALTY LIMITS: Minimum \$50 Maximum \$10,000  
(each violation or day of violation)

1. Prior violations:

*in a quantity estimated by Respondent at 3000 gallons*

Respondent spilled ~~4000-6000~~ gallons of used motor oils into Smith Lake on and before January 15, 1985. This spill also originated from Respondent's oil-water separator.

2. History of Respondent in taking all feasible steps or procedures necessary or appropriate to correct any violation:

After notification by the Department, Respondent initially shut off the valve in the oil-water separation pond to stop the discharge of chemicals from the pond. Respondent later, however, reopened this valve ~~without authorization from the Department or consideration of potential adverse environmental impact.~~

3. The economic and financial condition of the Respondent:

Unknown - not considered.

4. The gravity and magnitude of the violation:

An unknown quantity of organic chemicals was spilled. No biological impacts were observed.

5. Whether the violation was repeated or continuous:

Single occurrence. ~~Respondent reopened the valve in the pond three days after it was closed, however, without the Department's permission.~~

6. Whether a cause of the violation was an unavoidable accident, or negligence or an intentional act of the Respondent:

~~Negligence. Responsible and prudent operation of Respondent's facility would have included monitoring of the "off-loading" of waste oil. Had Respondent done so, the organic chemicals would likely have been discovered before they significantly contaminated the oil-water separation pond. This in turn would have allowed the chemical spill to have been averted.~~

Also, Respondent had no apparent or documented inspection schedule for checking the discharge outfall from the oil-water separator. Respondent failed to conduct daily monitoring of the outfall, a prudent practice in Respondent's business. Had Respondent done so, the spill would likely have been discovered earlier.

7. The opportunity and degree of difficulty to correct the violation:

After the oil spill from Respondent's facility was discovered on January 15, 1985, Respondent should have taken extra measures, including more frequent monitoring of the discharge outfall, to prevent further spills to waters of the state.

Also, Respondent had the opportunity to prevent any further spill of organic chemicals after the February 8, 1985 spill by ensuring that the valve remained closed. ~~until the Department notified the Respondent that it could be reopened.~~

8. Respondent's cooperativeness and efforts to correct the violation:

*was generally cooperative in its efforts to correct the violation.*  
~~Respondent did not heed the Department's instruction to keep the valve closed. Rather, Respondent reopened the valve, thereby allowing any organic chemicals still in the pond to discharge into the environment.~~

9. The cost to the Department of investigation and correction of the violation prior to the time the Department receives Respondent's answer to the written notice of assessment of civil penalty:

20 hours.

10. Any other relevant factor:

None.

I have considered the above factors in establishing the amount of Respondent's civil penalty. The major aggravating factors were Respondent's, ~~continued negligent operation of Respondent's facility even after the January oil spill, and Respondent's intentional reopening of the valve after being instructed not to reopen it.~~ A moderate mitigating factor was the lack of demonstrable harm to the environment from the chemical spill.

3 July 1985

Date

Fred Hansen

Fred Hansen  
Director

DEQ  
EXHIBIT  
3

CERTIFICATE OF

TRUE COPY

I, Larry Cwik, certify: that I  
(Name)  
am employed by the State of Oregon Department of Environmental Quality  
(Name of Government Agency)

as Program Coordinator, Enforcement Section; that in such capacity I am the  
(Title)  
legal custodian and keeper of the file for Merit USA, Inc.,  
(Type of Records)

copies  
records of my governmental employer; that the attached ~~copy~~ of the documents  
letters from W.L. Briggs, Fuel Processors, Inc., to Richard Volpel, DEQ, dated  
April 10, 1987 and May 6, 1987, are

they have  
official documents within those records, that ~~xxxxxx~~ been compared by me  
they are  
with the originals and that ~~xxxxxx~~ correct transcripts thereof.

(Place official seal,  
if any, here)

Dated: July 1, \_\_\_\_\_, 1987.

[Handwritten Signature]  
(Signature)

WD-Mult  
FUEL PROCESSORS INC.

P.O. Box 1407  
701 Bozarth  
Woodland, WA. 98674  
(206) 225-6571

Dept. of Environmental Quality

RECEIVED  
APR 13 1987

W.L. Briggs  
Culick ↔ TRS

April 10, 1987

NORTHWEST REGION

Mr. Richard J. Volpel  
State of Oregon  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, OR 97204

REGIONAL OPERATIONS DIVISION  
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED  
APR 14 1987

Dear Mr. Volpel:

Sorry to be so late on the report of the spill which we discovered on 3-9-87, but I had understood that the 3-9-87 oil spill plan that was given to D.E.Q. satisfied that need.

I have reviewed the spill daily since my return on March 13. We have it fully contained and work on it each day. It is a difficult spill to clean up as it appears to be old oil coming from under the pile of tires, and only when it rains for days. The upper area is handling any leaching and is fully contained. It appears to be lessening. The lower clean up area is also contained, but it is going slowly.

We do not know where the oil originated, but can speculate on three possible causes over the last five years.

1. When the bankrupt tire oil company was operating, they had a large chipper in that area and it had a number of hydraulic hoses that broke a number of times.
2. In late 1986 a semi trailer of used oil was parked for a few days near the tires and we found a leak in it, but since it was in our area and on plant site, we cleaned it up and were reasonably sure it didn't go anywhere. It may have leaked under the tires.
3. When the tire oil company left in 1985, several of their tanks had oil in them and we didn't know it until we were allowed to take custody of the equipment in February of 1987. There were signs that the valving was seeping, but there were no oil pools, etc.

We will attempt to complete the clean up this weekend, but will need to keep the booms and containment intake for some time to assure that all the oil has appeared. We will keep you informed.

Best regards,

  
W. L. Briggs  
President

*W.L. Briggs*

# FUEL PROCESSORS INC.

P.O. Box 1407  
701 Bozarth  
Woodland, WA. 98674  
(206) 225-6571

Dept. of Environmental Quality

*ST: WLD*  
*EAIF*

RECEIVED  
MAY 11 1987

NORTHWEST REGION

May 6, 1987

Mr. Richard J. Volpel  
State of Oregon D.E.Q.  
811 S.W. 6th Avenue  
Portland, OR 97204

Dear Mr. Volpel:

Just a short report on clean-up efforts on the small oil spill near our plant at 4150 N. Portland.

Again, the area of approximately 150 sq. ft. is fully contained and there is approximately 1/4 inch of oil on the water. We have been vacuuming daily and are close to having the site clean.

There doesn't appear to be any other problem.

I will let you know when it is complete.

Yours truly,

*W.L. Briggs*  
W. L. Briggs  
President

REGIONAL OPERATIONS DIVISION  
DEPARTMENT OF ENVIRONMENT  
MAY 13 1987

WLB:mb

OEC  
EXhibit  
4

CERTIFICATE OF  
TRUE COPY

I, Linda K. Zucker, certify: that I  
(Name)  
am employed by Environmental Quality Commission  
(Name of Government Agency)  
as Hearings Officer; that in such capacity I am the  
(Title)  
legal custodian and keeper of the contested case hearing  
(Type of Records)

records of my governmental employer; that the attached copy of the document

" Stipulation and Final Order - Case # 19-WQ-NWR-85-59 "

is an official document within those records, that it has been compared by me  
with the original and that it is a correct transcript thereof.

(Place official seal,  
if any, here)

Dated: Sept 9, 1987

Linda K. Zucker  
(Signature)



## Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE: (503) 229-5696

September 19, 1986

- William L. Briggs, President  
Merit Oil & Refining Co., Inc.  
4150 N. Suttle Road  
Portland, OR 97217

Re: DEQ v. Merit Oil & Refining Co., Inc.  
Stipulation and Final Order  
No. 19-WQ-NWR-85-59

Dear Mr. Briggs: *Bill*

The Stipulation and Final Order mitigating the \$1,200 civil penalty in the above case to \$300 was approved by the Environmental Quality Commission at its September 12, 1986 meeting. A copy of the signed order is enclosed. The mitigated penalty has been paid in full.

I wish to remind you that the order requires you to submit all necessary information to complete your industrial wastewater permit application with the City of Portland by September 15, 1986. The order also requires you to connect to the City of Portland's Sanitary Sewerage System within 30 days of receiving approval from the City. Lastly, the order requires you to notify this Department in writing when you have completed: 1) your application, and 2) your connection.

In your August 15 letter to Fred Hansen transmitting the signed stipulation, you expressed the concern that you might not get the City of Portland connection done within the time frame established. The time for completing your application to the City, September 15, is now past. Please immediately send us a report on the status of your permit application. If you have completed your application to the City, state the day the application was completed. If you have not completed the application, state why not, what you are doing to get the application completed, and when the application will be completed.

Please note in paragraph V of the order that you are liable for civil penalties for violations of the order. I trust that you are making extraordinary efforts to comply with the order so that civil penalty action will not be necessary to encourage compliance.

I look forward to promptly receiving your report.

Sincerely,

*Janet A. Gillaspie*  
Janet A Gillaspie  
Regional Manager  
Northwest Region

VAK:f  
GF1346

cc: City of Portland, Industrial Waste Section  
Water Quality Division, DEQ  
Enforcement Section, DEQ  
Business Office, DEQ

1                   BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
2                                   OF THE STATE OF OREGON

3   DEPARTMENT OF ENVIRONMENTAL QUALITY,   )   STIPULATION AND FINAL ORDER  
4   OF THE STATE OF OREGON,                   )   No. 19-WQ-NWR-85-59  
  )   MULTNOMAH COUNTY  
5                                   Department,   )  
                                  v.                   )  
6   MERIT OIL & REFINING, INC.,                )  
7   an Oregon Corporation,                    )  
  )  
8                                   Respondent.   )  
9    )

10                                   WHEREAS:

11           1.   On July 3, 1985 the Department of Environmental Quality  
12   (Department) filed with the Environmental Quality Commission (Commission) a  
13   Notice of Assessment of Civil Penalty in Case No. WQ-NWR-85-59 against  
14   Merit Oil and Refining, Inc., an Oregon Corporation (Respondent), assessing  
15   a \$1,200 civil penalty upon Respondent.

16           2.   On July 17, 1985 the Respondent filed a request for hearing  
17   and answer to the Notice referred to in Paragraph 1 above.

18           3.   Respondent has acted in good faith to make efforts to settle.

19           4.   The parties wish to prevent a recurrence of pollution  
20   problems Respondent has experienced in January and February 1985 and July  
21   1986.

22           5.   Money saved from a reduced penalty amount can be used toward  
23   remedial actions required by this order and to assist the needed recycling  
24   of waste oils.

25           6.   The parties wish to compromise and settle the civil penalty  
26   referred to in Paragraph 1 above on the following terms.



1 NOW THEREFORE, in consideration of the mutual covenants and agreements  
2 of the parties hereto, it is stipulated and agreed that:

3 I

4 Respondent hereby waives any and all objections it may have: to  
5 the form, content, manner of service and timeliness of the Notice referred  
6 to in Paragraph 1 above; to a contested case hearing thereon and judicial  
7 review, thereof; and to service of a copy of this stipulated final order,  
8 which order shall be effective upon signing by or on behalf of the  
9 Commission.

10 II

11 Respondent admits each and every fact and violation alleged in the  
12 Notice referred to in Paragraph 1 above as amended in Paragraph IVA below.

13 III

14 Subject to approval by the Commission, the parties agree to a  
15 mitigation of the \$1,200 civil penalty to \$300.

16 IV

17 The Commission shall enter a final order:

18 A. Amending Notice No. WQ-NWR-85-59 as shown on the copy attached  
19 hereto and incorporated herein.

20 B. Finding that each and every fact and violation alleged in the  
21 Notice referred to in Paragraph I above, as amended in Paragraph IVA  
22 above, occurred.

23 C. Imposing upon Respondent a civil penalty of \$300 for the  
24 violations cited in the Notice, as amended, plus interest from the date  
25 which the order is signed below until paid in full.

26 D. Finding that the Department and Commission have satisfied all

1 the requirements of law and the mitigation herein is consistent with public  
2 health and safety and is in the public interest.

3 E. Requiring Respondent to cease discharging to the slough behind  
4 Respondent's facility.

5 F. Requiring Respondent to:

- 6
- 7 1) Complete Respondent's industrial wastewater permit application at  
8 the City of Portland, through completing the necessary paper work  
and analysis and submitting all necessary information to the city,  
by September 15, 1986; and
  - 9 2) Connect to the City of Portland's sanitary sewerage system within  
10 thirty days of receiving approval from the city; and
  - 11 3) Notify the Department in writing upon completion of items F1 and  
F2 above.

12 V.

13 Respondent acknowledges that it has actual notice of the contents  
14 and requirements of this stipulated final order and that failure to fulfill  
15 any of the requirements hereof would constitute a violation of this  
16 stipulated final order and could subject Respondent to liability for  
17 additional and independent penalties in amounts as great as the statutory  
18 maximum and would not be limited in amount by this stipulated final order.  
19 Therefore, should Respondent commit any violation of this stipulated final  
20 order, Respondent hereby waives any rights it might then have to any and  
21 all ORS 468.125(1) advance notices prior to the assessment of civil  
22 penalties for any and all such violations of this stipulated final order.

23 ///

24 ///

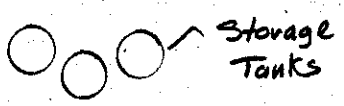
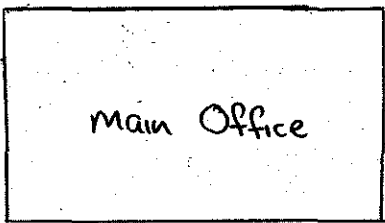
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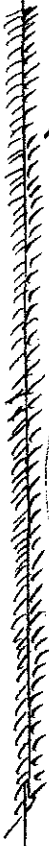


AN

Suttle Rd

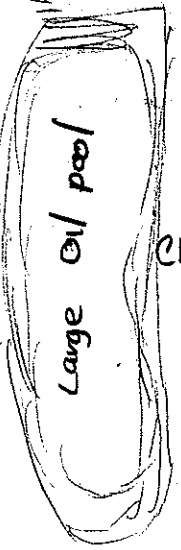


Property Line



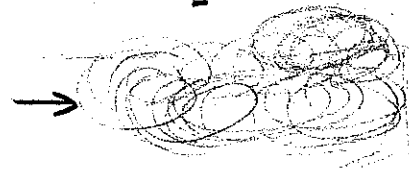
dike

Foundry Sands



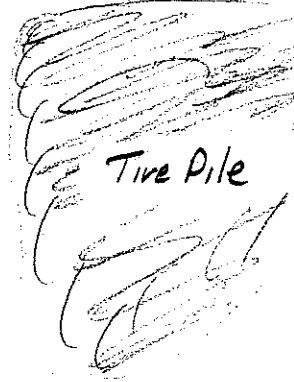
Chipped Tires

Tire  
Pyrolysis  
Unit



PROBABLE PATH  
OF OIL SPILL

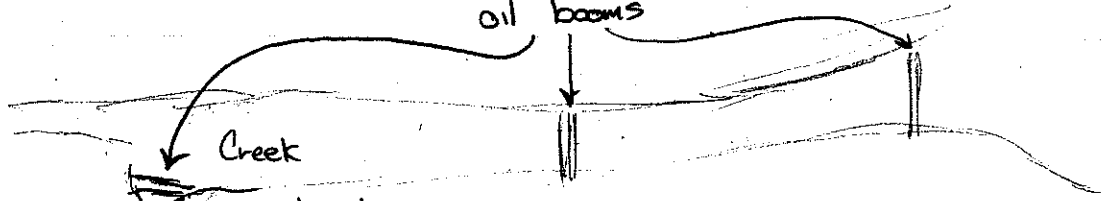
oil pools



soil berm  
Marsh

dark oil  
level line  
on bank

oil booms



DEQ  
EXHIBIT 2

Pictures (Photos) that  
will be available at  
the hearing.



1           6. Oil from the now bankrupt recycling operation accumulated and seeped  
2 into the ground beneath the tires.

3           7. Respondent maintains ponds on its property to prevent seepage of oil  
4 into the ground or surrounding water.

5           8. On or about March 11, 1987, the Portland area was drenched with  
6 about two inches of rain.

7           9. Oil spilled from respondent's property to the nearby slough,  
8 resulting in a citizen complaint to DEQ.

9           10. A DEQ representative visited the respondent's premises and  
10 determined that the oil that contaminated the water originated on respondent's  
11 property.

12           11. At the time of the visual inspection, a respondent partner and  
13 stockholder advised the DEQ representative that the spill probably resulted from  
14 a pond overflow.

15           12. Respondent's president informed the DEQ representative that he  
16 "deserved" a penalty as a result of the spill.

17           13. At no time during the inspection did respondent's president allege  
18 that the oil originated on a neighbor's property.

19           14. Respondent acted promptly to clean up the spill at a cost of  
20 approximately \$6,000.00.

21           15. Respondent did not ask its neighbor to share in the cleanup costs.

22           16. Previous oil spills occurred on respondent's premises in 1985 and  
23 1986.

24           17. Respondent agreed in 1986 to cease discharging into the slough  
25 behind its property.

26 CONCLUSIONS OF LAW

1           1. The Commission has jurisdiction.

2           2. Respondent violated ORS 468.720(1) and 468.785(1) by causing the  
3 entry of oil into the waters of this state. Respondent is liable for a civil  
4 penalty for this violation.

5           3. DEQ proved that respondent was involved in two previous spills and  
6 that it could have prevented the spill by exercising reasonable care.  
7 Mitigating circumstances include: prompt cleanup efforts by respondent;  
8 respondent's willingness to cooperate with DEQ; bona fide steps taken by  
9 respondent to prevent oil spills; and the unusual rain that fell in the Portland  
10 area. The penalty should be more than the minimum of \$500.00 because of the  
11 previous incidents and respondent's negligence. However, in light of mitigating  
12 circumstances listed above, \$3,500.00 appears to be excessive. The penalty is  
13 hereby reduced to \$2,000.00.

14 DISCUSSION

15           The evidence presented at the hearing was conflicting. The witness for  
16 DEQ testified that the oil originated on respondent's property. Respondent, on  
17 the other hand, contested such testimony, contending that his neighbor was the  
18 culprit.

19           The referee concludes that DEQ's testimony is more logical and, thus,  
20 more credible. Respondent spent approximately \$6,000.00 to clean up the spill.  
21 If the discharge was, in fact, caused by the neighbor, respondent would not have  
22 spent time and money to clean it up, or, at the very least, would have brought  
23 the problem to the neighbor's attention and requested his cooperation to prevent  
24 similar discharges in the future.

25           The aforementioned neighbor testified at the hearing on DEQ's behalf.  
26 He was dismissed prior to the end of the hearing without objection from either



1 party to tend to his business. Allegations by respondent were made after the  
2 witness departed. The respondent's representative had every opportunity to  
3 raise these accusations prior to the witness leaving upon cross-examination or  
4 otherwise, to give the witness an opportunity to respond. The delay in raising  
5 the allegations undermines respondent's credibility.

6 DEQ's case is further fortified by admissions made by respondent's  
7 representatives to DEQ. The representatives made no allegations, at the time of  
8 the inspection by DEQ, that the neighbor was the party responsible for the spill.

9 In summary, the weight of the credible evidence establishes, to the  
10 referee's satisfaction, that the oil originated on the respondent's property.

11 ORS 468.790 states that a person who has control over oil which enters  
12 the waters of the state shall be strictly liable for damages "without regard to  
13 fault" unless he can show, among other things, that the discharge was caused by  
14 an act or omission of a third party. Since respondent failed in his attempt to  
15 establish that a third party was responsible for the spill, he is subject to a  
16 civil penalty under the provisions of OAR 340-12-055.

17  
18 Dated this 22nd day of October, 1987.

19  
20 

21 NAZIH I. GIRGIS  
22 Hearings Officer

23 NOTICE: If you disagree with this Order you may request review by the  
24 Environmental Quality Commission. Your request must be in writing  
25 directed to the Environmental Quality Commission, 811 SW Sixth Avenue,  
26 Portland, Oregon 97204. The request must be received by the  
Environmental Quality Commission within 30 days of the date of mailing

1 or personal service of Order. If you do not file a request for review  
2 within the time allowed, this order will become final and thereafter  
shall not be subject to review by any agency or court.

3 A full statement of what you must do to appeal a hearings officer's  
4 order is in Oregon Administrative Rule (OAR) 340-11-132. That rule is  
enclosed.

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY )  
OF THE STATE OF OREGON, )

Department, )

v. )

MERIT USA, INC., )

Respondent. )

TRANSCRIPT OF TESTIMONY

No. 4-W2-NWR-87-27

Multnomah County

Hearing held in the State Employment Office,  
Portland, Oregon, beginning at 9:00 a.m.,  
Monday, September 14, 1987

BEFORE: NAZIH R. GIRGIS, Referee

TRANSCRIBER: JILL BISHOP

PRESENT:

DEPARTMENT OF ENVIRONMENTAL QUALITY:

ARNOLD SILVER, Assistant Attorney General  
with two witnesses

MERIT USA, INC.:

ORRIN ONKEN, Attorney at Law  
with two witnesses

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EXHIBITS (CONT.):

<u>DESCRIPTION</u>	<u>OFFERED</u>	<u>RECEIVED</u>
<u>DEQ EXHIBITS (CONT.):</u>		
6. Letter from City of Portland Bureau of Environmental Services, two pages, 1/12/87; Letter to Fred Hansen from City of Portland Bureau of Environmental Services, one page, 8/26/86; Letter from City of Portland, Bureau of Environmental Services, three pages, 2/19/87; Letter from City of Portland, Bureau of Environmental Services, one page, 3/4/87; Schedule A, Waste Discharge Limitations, one page; Letter from City of Portland, Bureau of Environmental Services, two pages, 4/27/87, Certificate of True Copy from Harry G. Edmonds, 7/1/87	38	40

MERIT USA, INC. EXHIBITS:

1. Certified Mail - Return Receipt Requested letters from U.S. Environmental Protection Agency to Bill Briggs, two pages; Spill Prevention Plan, Spill Prevention Control and Counter Measure Plan, four pages; Letter from Bill Briggs to U.S. Environmental Protection Agency, 2/18/85; Letter from Bill Briggs to Spill Prevention Plan; Daily Work Sheet; Letter from Bill Briggs to Department of Environmental Quality, 1/16/85	42	43
--	----	----

25

1           REFEREE GIRGIS: This is a hearing in the matter  
2 of Merit USA, Inc. The hearing is being held in Portland,  
3 on Monday, September 14, 1987, at 9:00, by Referee Girgis  
4 with the Employment Division assigned to hold this DEQ  
5 Hearing. The Merit USA, Inc. is represented by Mr. Orrin,  
6 O-R-R-I-N, Onken, O-N-K-E-N, Attorney, and he is  
7 accompanied by Mr. Wilmer Briggs, B-R-I-G-G-S, and is  
8 expecting another witness shortly, Mr. Robert Mitchoff,  
9 M-I-T-C-H-O-F-F. DEQ is represented by Mr. Arnold Silver,  
10 Assistant Attorney General, and he is accompanied by Mr.  
11 Charles Slocum, S-L-O-C-U-M, Mr. Rick Volpel, V-O-L-P-E-L,  
12 and both of those are witnesses, and Mr. VanCollius  
13 (phonetic), who is an observer. This case arose out of a  
14 Notice of Assessment that was mailed on May 28, 1987,  
15 imposing a \$3500 civil penalty. The respondent appealed  
16 in a timely fashion on June 5, 1987, and a Notice of  
17 Hearing was mailed to the parties for today's hearing on  
18 August 21, 1987. We will start by taking testimony from  
19 Mr. Volpel, and then Mr. Slocum. And, testimony from both  
20 witnesses and any other witness will be taken under  
21 oath. Mr. Silver will be given an opportunity to examine  
22 his witnesses, and Mr. Onken an opportunity to  
23 cross-examine DEQ's witnesses. Then Mr. Briggs and  
24 Mr. Mitchoff will testify under oath on behalf of the  
25 respondent. Mr. Onken will have an opportunity to ask

1       them questions, and Mr. Silver an opportunity to  
2       cross-examine the respondent's witnesses. Then I will end  
3       the hearing and issue a decision as soon as I can.  
4       Mr. Silver, any questions before we proceed?

5               MR. SILVER: No, Mr. Girgis.

6               REFEREE: And, Mr. Onken, any questions?

7               MR. ONKEN: No questions.

8               REFEREE:       Okay.       And we do have now,  
9       Mr. Robert Mitchoff, is that correct?

10              MR. GRAY: No.

11              REFEREE:       Oh, I'm sorry.       You're not  
12       Mr. Mitchoff?

13              MR. GRAY: Charlie Gray.

14              REFEREE: Charlie Gray.

15              MR. BRIGGS: From DEQ.

16              REFEREE: Okay. Is he going to be a witness,  
17       Mr. Silver?

18              MR. SILVER: I don't think he is --

19              REFEREE: Okay.

20              MR. SILVER: Mr. Girgis.

21              REFEREE: Okay. I'm sorry. I just assumed this  
22       was Mr. Mitchoff because we were waiting for  
23       Mr. Mitchoff. This is Mr. Charlie Gray with DEQ?

24              MR. BRIGGS: Correct.

25              REFEREE: Okay. Mr. Volpel, please stand and



1 raise your right hand.

2

3

4

RICHARD J. VOLPEL,

5 called as a witness for the DEQ, being first duly sworn,

6 testified as follows:

7 REFEREE: State your name, please.

8 WITNESS: Richard J. Volpel.

9 REFEREE: And spell your last name for the  
10 record.

11 WITNESS: V-O-L-P-E-L.

12 REFEREE: Okay. Mr. Silver, you may proceed.

13

DIRECT EXAMINATION

14 BY MR. SILVER:

15 Q Mr. Volpel, what do you do for the Department of  
16 Environmental Quality?

17 A I'm an investigator for the Northwest Region.

18 Q How long have you been doing that kind of work?

19 A Approximately 18 months.

20 Q What's your educational background?

21 A I have a BS degree in biology.

22 Q From where?

23 A PSU.

24 Q You've met Mr. Briggs, have you not --

25 A Yes.

1 Q --Mr. Volpel?

2 A Yes.

3 Q And you had occasion to talk with him off and on --

4 A Uh-huh.

5 Q --in the past years, but - you'll have to say yes or

6 no, so the --

7 A Yes.

8 Q --tape --

9 A Yes.

10 Q --tape recorder can pick it up --

11 REFEREE: Okay. Excuse me, Mr. Silver.

12 MR. SILVER: Yes.

13 REFEREE: Are you Mister --

14 MR. SILVER: No.

15 MR. BRIGGS: No, he's another wit - observer

16 like --

17 REFEREE: Okay, from DEQ?

18 MR. BRIGGS: This is Tom Bispham, yes.

19 REFEREE: Tom?

20 MR. BRIGGS: Yes.

21 REFEREE: What's your last name, please?

22 MR. BISPHAM: Bispham, B-I-S-P-H-A-M.

23 REFEREE: Okay. Thank you, sir. Go ahead,

24 Mr. Silver. I'm sorry.

25 Questioning of Mr. Volpel by Mr. Silver resumed:

1 Q Let's see, where - Mr. Volpel, have you - did you have  
2 occasion to visit Merit USA property in 1987?

3 A Yes, I did.

4 Q Can you tell the Hearings Examiner approximately what  
5 date that was?

6 A I believe it was March 12.

7 Q Of 1987?

8 A 1987, yes.

9 Q What prompted you to go to the property?

10 A We received a citizen's complaint on March 11, of a  
11 gentleman that claimed that they had oil in the creek --

12 Q Excuse me, go ahead.

13 A Okay. And Charlie Gray and George Davis responded on  
14 the 11th, and they found oil in the creek.

15 Q And then when did you go?

16 A I went down the next day at approximately 9:00, I  
17 believe, and - and took a look at it in the  
18 investigation.

19 Q Can - can you generally describe for the Hearings  
20 Examiner the location of Mr. Briggs' property there at USA  
21 in relation to public waters or the river or what else is  
22 there? Just generally described, so they can have an  
23 understanding --

24 A Okay.

25 Q --of where we're - what we're talking about?

1 A It'd be easier if I had a diagram.

2 Q Well, let me see if I can --

3 A If I can --

4 Q --help you out.

5 UNIDENTIFIED MALE VOICE: That board behind, if  
6 you want.

7 Questioning of Mr. Volpel by Mr. Silver resumed:

8 Q Does this help?

9 A Yeah. Is that okay?

10 Q Well, first of all, let me ask you what this is. Or  
11 did you do --

12 A Okay. This - this is a diagram of the property, yes.

13 Q Did you do this yourself?

14 A Yes, I drew it myself.

15 MR. SILVER: Mr. Examiner - whoops, excuse me.

16 REFEREE: Excuse me. This is Mr. Mitchoff?

17 MR. MITCHOFF: Mitchoff.

18 REFEREE: Okay.

19 MR. BRIGGS: The third one in --

20 REFEREE: I didn't want to commit myself this  
21 time. Twice I've been fooled. Go ahead.

22 MR. SILVER: Okay --

23 REFEREE: Go ahead.

24 MR. SILVER: Mister - Mr. Examiner, I want to  
25 just mark this as exhibit - if that's all - I don't know

1 your procedure, but if you would allow me to just mark  
2 this Exhibit 1 DEQ for identification. This might help  
3 you get an idea of the physical location of the property,  
4 and it --

5 REFEREE: Okay.

6 MR. SILVER: --it doesn't - I mean, I'm not  
7 intending it to be drawn to scale or any - any remarkable  
8 characteristics, but only for you to follow what the --

9 REFEREE: Okay. Mr. Onken, why don't you review  
10 that with your witnesses --

11 MR. ONKEN: I will.

12 REFEREE: --and see if you have any objections.  
13 If we don't have any objections, I will receive  
14 Exhibit 1.

15 MR. ONKEN: Is this it?

16 MR. SILVER: Well, it's supposed to be just a  
17 drawing of the --

18 MR. ONKEN: Just a drawing, okay --

19 MR. SILVER: --of the area.

20 MR. ONKEN: Oh.

21 MR. SILVER: I suppose this - there gonna -  
22 testimony will eventually be that --

23 MR. ONKEN: A facsimile of what we have --

24 MR. SILVER: Okay.

25 REFEREE: Any objections?

1 MR. ONKEN: Well, not to it being marked. I  
2 probably won't object if it's offered.

3 REFEREE: Yeah. Well, I believe he's offering  
4 it, so --

5 MR. SILVER: Just for identification, nothing  
6 more.

7 REFEREE: Oh, okay.

8 MR. SILVER: I don't - I don't --

9 REFEREE: I just wanted to --

10 MR. SILVER: No, I don't have any --

11 MR. MITCHOFF: Excuse me, this is an as-per-usual  
12 situation. I mean, this would be what you would see at  
13 any time you'd go up here. Not --

14 MR. SILVER: I don't want to address --

15 REFEREE: Wait, please. Please, Mr. Mitchoff --

16 MR. ONKEN: We'll never get through --

17 REFEREE: DEQ is represented by Mr. Onken.

18 MR. ONKEN: No, I represent Merit.

19 REFEREE: I'm sorry. I'm sorry. By Mr. Onken -  
20 Merit is represented by Mr. Onken and let him object or  
21 make any statements. If you have any - any suggestions,  
22 talk to him.

23 Questioning of Mr. Volpel by Mr. Silver resumed:

24 Q Well, my only - I just would like you to explain for  
25 the Hearings Examiner the physical location of the

1 property, of where the river or slough or anything is and  
2 so then if we can just follow it a little bit.

3 A Okay. This is Suttle Road right here. This is the  
4 access to the Merit property by the road. You drive down  
5 here, there's a tire pile here. There's a Tire Pyrolysis  
6 Unit here. Merit has a treatment pond here, and there's a  
7 creek or a wetland area behind the property. Now, the  
8 actual property line from Merit, I believe this - this  
9 treatment pond is near the edge. So their - their  
10 property is probably right about there. Their property  
11 line is right down here. It's kind of a triangular-shaped  
12 piece of prop - well, no, not really. Merit's property  
13 kind of has a flag here and then narrows down. So the  
14 Merit property is very narrow at this back end.

15 Q Okay. Where is the water?

16 A Okay. The water is right here. This is the treatment  
17 pond. This handles the runoff from the Merit property.

18 Q Okay. Where is - where is the slough or wetlands?

19 A The wetland is right here.

20 Q Okay. And where does that lead into?

21 A This leads in - it goes underneath the culvert,  
22 underneath some railroad tracks, underneath North Marine  
23 Drive, and into Smith Lake.

24 Q Okay. All right. When you got there, did you have an  
25 opportunity to inspect Mr. Briggs' and Merit USA's

1 property?

2 A Uh-huh. Yes, I did.

3 Q Can you tell the Examiner or describe to the Examiner  
4 what you saw?

5 A Well, it had had a couple days of heavy rain and the  
6 ground was fairly wet. And there was large pools of oil  
7 throughout the property. There - there was pools in front  
8 of the tire pile and it appeared that there was some oil  
9 that had run down the side of the tire pile into - in  
10 through the tires and this oil surfaced outside of the  
11 tires again and it was running into the marshy area, or  
12 the creek area. And there was oil - a pretty good heavy  
13 layer of oil on that marsh creek area.

14 Q Okay. Did you follow the oil down to the wetlands and  
15 the slough or --

16 A Well, yes, that's where it eventually ended up.

17 Q Okay. Can you describe for the Examiner what it  
18 looked like?

19 A It was heavy black oil a layer - oh, in some areas it  
20 was a couple inches thick. Other places it was just very  
21 thin.

22 Q Was this in the wetlands and the lake?

23 A It wasn't in the lake. It was just in the wetland  
24 area. Down in the creek and part of it was in the marsh.

25 Q Did it coat any vegetation?



1 A Yes, it coated the side of the creek very heavily with  
2 oil and you could tell that the level had gone down  
3 because the vegetation above the water, oh, maybe five or  
4 six inches, was still coated with oil.

5 Q Did you talk to anyone there or did you meet with  
6 anyone at the --

7 A Yes, I talked --

8 Q --spill?

9 A --to Bob Mitchoff.

10 Q Mr. Mitchoff. And does he - is he employed by Merit  
11 USA?

12 A I believe he is. He said he is a partner.

13 Q Okay. Did you talk with Mr. Mitchoff as to what  
14 possibly caused this?

15 A I asked him what he thought the probable cause was and  
16 he mentioned that it was - he thought maybe the treatment  
17 pond overflowed.

18 Q The treatment pond - what exact - can you describe for  
19 the Examiner, in as simple language as you can, what the  
20 treatment --

21 A Sure.

22 Q --pond is?

23 A The treatment pond is an area where some of the runoff  
24 - not all the runoff, but some of the runoff from Merit's  
25 operation runs into, and there there's an oil skimmer that

1 skims off the oil. Normally there's an oil layer on top  
2 of that treatment pond that the oil skimmer will take the  
3 oil off and puts it in a tank for reprocessing. And then  
4 in the past this treatment pond was drained. The treated  
5 water was drained to the creek. But since last August  
6 that pipe has been disconnected and all the water has  
7 boiled off or evaporated.

8 Q What would cause a treatment pond like that to  
9 overflow?

10 A Periods of high runoff --

11 Q How --

12 A --rain storms.

13 Q Rain?

14 A Rain.

15 Q Are there any - any steps that you can take to correct  
16 that type of problem?

17 A You can step up your processing of the water inside  
18 the pond to try to lower it down as fast as possible, or  
19 you could increase the freeboard.

20 Q Now, let me interrupt you.

21 A Okay.

22 Q So the Examiner knows what freeboard is --

23 A Okay.

24 Q --'cause I don't know what it is.

25 A You could probably berm up the area so any - any water

1 or oil flowing out of the treatment pond would be  
2 contained.

3 Q I mean, is that - was that kind of information ever  
4 conveyed to Mr. Briggs --

5 A I don't --

6 Q --prior to this?

7 A --don't know.

8 Q Okay.

9 A I don't believe so.

10 Q When you got there, were there any steps being taken  
11 to clean this oil out of the --

12 A Yes.

13 Q --marsh and --

14 A Yes.

15 Q --creek?

16 A There were - there were sets - at least two sets of  
17 booms - oil booms across the creek. Bob had a crew trying  
18 to berm up the area so the oil wouldn't be going into the  
19 creek anymore. They had the Cats stocked. It was - it  
20 was a pretty messy day.

21 Q But there were some affirmative steps being taken --

22 A Oh, definitely --

23 Q --to clean it up?

24 A Yes, yes. I felt they were doing a good job.

25 Q Let me show you these pictures, Mr. Volpel, and I'm

1 gonna mark these again so there isn't - I'll mark them DEQ  
2 Exhibit 2. There's - there's more than one picture, but  
3 I'll just do it for clarification, and ask you if you're  
4 familiar with those pictures.

5 A Yes, I am.

6 Q Well, how - can you tell the Examiner - did you take  
7 those pictures?

8 A Yes, I took these pictures.

9 Q When - do you recall when you took them?

10 A I believe it was March 12.

11 Q Well let me ask you, do they truly and accurately  
12 represent the scene as you saw it at the time?

13 A Yes, I believe they do.

14 MR. SILVER: I'm gonna offer these, Mr. Onken.

15 (PAUSE)

16 MR. ONKEN: No objection.

17 MR. SILVER: Thank you.

18 REFEREE: Okay. Exhibit 2 is received.

19 (DEQ EXHIBIT 2 RECEIVED INTO EVIDENCE)

20 Questioning of Mr. Volpel by Mr. Silver resumed:

21 Q All right. Mr. Volpel, did you ever talk to  
22 Mr. Briggs himself about this spill?

23 A Yes, I did.

24 Q Do you recall approximately when that was?

25 A Mr. Briggs was in Hawaii when - when this occurred, so

1 it would be a couple days afterwards.

2 Q What did you talk to him about?

3 A Basically about the oil in the creek and cleanup, how  
4 he was gonna handle the cleanup.

5 Q What did Mr. Briggs feel about - did he tell you  
6 anything about the spill?

7 A Basically he didn't know what happened, and that's  
8 about all he talked about. He didn't know what happened  
9 and that - just that - it just happened, there was just  
10 oil there and --

11 Q And he was gonna clean it up?

12 A Uh-huh, yes.

13 Q Did he indicate whether or not - how he thought he  
14 should be fined?

15 A Well, he felt that - I guess, yes. He felt that there  
16 - you know, I told him we were probably gonna proceed with  
17 penalty and he said that he probably deserved it.

18 Q Let me show you - I'm gonna mark this DEQ Exhibit 3,  
19 and ask you if you can identify these letters which are  
20 marked as true copy.

21 A Yes. This is the spill report that we got from  
22 Mr. Briggs.

23 Q What's the second letter?

24 A This is a letter basically - it looks like a report of  
25 cleanup.

1 Q Cleanup from Mister --

2 A Yeah. How they had been proceeding.

3 MR. SILVER: Mr. Onken, I'm gonna offer these.

4 MR. ONKEN: No objection.

5 REFEREE: Okay. Exhibit 3 is received.

6 (DEQ EXHIBIT 3 RECEIVED INTO EVIDENCE)

7 Questioning of Mr. Volpel by Mr. Silver resumed:

8 Q Mr. Volpel, do you know whether or not Mr. Briggs has  
9 had any previous oil spills at his property?

10 A Yes, he has.

11 Q Can you tell the Examiner approximately when they  
12 were?

13 A Sometime in 1985 there was a - I guess a rather large  
14 spill, judging by the records, and it was pretty  
15 expensive. The oil did reach the lake. And then in 1986  
16 - August 1986, there was another spill to the creek. It  
17 didn't reach the lake this time. And those are the spills  
18 that I'm aware of.

19 MR. SILVER: (Pause) I don't think I have  
20 anything further of Mr. Volpel, Mr. Girgis. Maybe the  
21 Examiner has some questions. I have nothing further of  
22 the witness.

23 REFEREE: Okay. Mr. Onken?

24

25

- - - - -

CROSS-EXAMINATION

1  
2 BY MR. ONKEN:

3 Q Mr. Volpel, was it your testimony that you had a  
4 bachelor of science in --

5 A Yes.

6 Q --biology?

7 A Yes.

8 Q Now, if I could use, I think Exhibit 1, the map. You  
9 testified regarding the property line - the Merit property  
10 line. How did you determine what that property line  
11 was?

12 A We looked on county records and in discussions with  
13 Mr. Slocum, who is the next door neighbor over here at  
14 Pacific Coast Hardwoods.

15 Q And is this tire pile that you've drawn, is that on  
16 Merit property?

17 A A small part of it is, yes.

18 Q The bulk of it is not --

19 A Yes.

20 Q --is that --

21 A Right, that's true.

22 Q And you - these oil pools here that you've pointed and  
23 this spillage, is that Merit property?

24 A Some of it is and some of it isn't.

25 Q To the best of your knowledge, which part is and which

1 part isn't?

2 A I would say probably right about here. It's just the  
3 edge of the treatment pond.

4 Q And that you got from looking at a county map or --

5 A Yes, yes.

6 Q And this - I take it the marsh, then, is not on Merit  
7 property?

8 A Part of it is, if I understand --

9 Q Is any of the --

10 A The Merit property runs back through here. Now, I'm  
11 not quite sure where the property line starts and stops.

12 Q All right, to the best of your knowledge. Could you  
13 follow a distinct line from this - I mean, you've drawn  
14 this map to indicate that this spilled oil came from this  
15 treatment pond, is that - that's the --

16 A Yes.

17 Q --essence of your testimony --

18 A Yes.

19 Q --here today?

20 A Yes.

21 Q Could you follow a distinct - I don't know there would  
22 be a black line?

23 A Lots of pools or oil in that direction.

24 Q And how did you know it was oil?

25 A It's black, it's thick.



- 1 Q Could you determine what kind of oil?
- 2 A It was used oil.
- 3 Q Used oil?
- 4 A Yes, used oil. It's very dark, almost black.
- 5 Q And there were certain pools of it. Was it mixed with  
6 water?
- 7 A Yes. The majority of it was probably water, but there  
8 was a definite oil layer on that water in the pools.
- 9 Q So at this point of distance from the treatment pond  
10 there was some, essentially, pools of water with oil in --
- 11 A Yes.
- 12 Q That's - we're not talking about a pool of oil?
- 13 A No, not solid oil.
- 14 Q And your determination of this oil was 'cause it's  
15 black and looked kind of like black oil. Nothing - did -  
16 do you take samples of it?
- 17 A I don't believe I did.
- 18 Q Do you know of anyone that took samples?
- 19 A No, I don't.
- 20 Q So it's just your looking at it was your determination  
21 then?
- 22 A Yes.
- 23 Q Can you tell the difference between used motor oil or  
24 diesel fuel or --
- 25 A I think I can.

1 Q --carbons --

2 A Yes, I can.

3 Q Did you examine the treatment pond?

4 A Yes, I did.

5 Q Was there - you didn't testify to anything indicating  
6 from your examination that the treatment pond had  
7 overflowed, other than some oil down by the tires, isn't  
8 that correct?

9 A That's true. At the time I was there there was a  
10 treatment pond - the treatment pond wasn't overflowing.

11 Q Okay --

12 REFEREE: Was or was not?

13 WITNESS: It was not.

14 Questioning of Mr. Volpel by Mr. Onken resumed:

15 Q So other than the existence of the oil in the water  
16 over there, you don't know that --

17 A No.

18 Q You never saw that treatment pond --

19 A I'm only speculating. That's the only reasonable  
20 source of oil.

21 Q And did you test any oil in that treatment pond?

22 A No.

23 Q There's no - to your knowledge there's no chemical  
24 test --

25 A Well, sure there is.

- 1 Q --linking the two?
- 2 A No, no --
- 3 Q You don't have --
- 4 A --I did not take any.
- 5 Q Okay. Were any tests ever taken in - in - anywhere?
- 6 A Not - not for this one.
- 7 Q Okay.
- 8 A Not this time.
- 9 Q Did you inquire into any other possible sources for  
10 this?
- 11 A No, I didn't. I - when I was there I talked to  
12 Mr. Mitchoff, and - and he said that --
- 13 Q Mr. Mitchoff will testify.
- 14 A Okay.
- 15 MR. SILVER: Well, let him answer.
- 16 WITNESS: I asked Mr. Mitchoff what he speculated  
17 the cause was and he thought that the treatment pond  
18 overflowed, and I found that was pretty reasonable.
- 19 Questioning of Mr. Volpel by Mr. Onken resumed:
- 20 Q But you asked him what he thought at the time and he  
21 speculated?
- 22 A Yes, that's true.
- 23 Q And so he didn't state to you that he saw the  
24 treatment pond --
- 25 A No, no.

1 Q How much - you could determine that this was oil. Did  
2 you determine how much had been --

3 A Yes, I - I felt it was in excess of 100 gallons.

4 Q What goes into making that sort of determination?

5 A Basically I - I looked at the amount that was  
6 covered. I look - I took in consideration how much oil  
7 there was, where the Cat was stuck - where the Cat tractor  
8 was stuck there was a lot of oil.

9 Q In your best opinion, could that - how much could that  
10 vary either way? Could it have been 20 gallons?

11 A No.

12 Q Could it have been 200?

13 A Yes. About 100 gallons is very conservative.

14 REFEREE: Okay. Just a second and let me turn  
15 the tape on the other side.

16 (END OF SIDE A TAPE 1)

17 Go ahead, sir.

18 Questioning of Mr. Volpel by Mr. Onken resumed:

19 Q Did you ever examine these - this marshy area prior  
20 to --

21 A Yes, I have.

22 Q --and the soil - the base of the soil and vegetation  
23 around there black before this oil spill?

24 A No.

25 Q At the time you examined Merit was there any oil or

- 1 water flowing off the Merit property?
- 2 A Not directly, no.
- 3 Q Where this property stood was - I understand the - the  
4 property of Pacific Hardwood, do you recall any things  
5 that were on that property?
- 6 A No. There was tires - there were tires on the  
7 property. There's a lot of fill on the property. Pacific  
8 Coast Hardwoods doesn't really use - utilize that property  
9 back there. There's not much back there.
- 10 Q Is there equipment, trucks, and --
- 11 A Not that I noted.
- 12 Q You didn't notice anything?
- 13 A No, I don't believe there was anything in that area.
- 14 Q Is that a natural drainage area for - for the  
15 surrounding --
- 16 A Yes.
- 17 Q --land?
- 18 A Yes, it is.
- 19 Q So does it drain other properties, say, besides --
- 20 A Yes, it does.
- 21 Q --Pacific Hardwood?
- 22 A Yes, it does.
- 23 Q And is this a pretty heavy industrial area?
- 24 A I wouldn't say so.
- 25 Q Not so?

- 1 A No.
- 2 Q Not too much. Does it - did you notice a container  
3 facility for trucks that --
- 4 A Yes, I did.
- 5 Q And would this marshy area drain that?
- 6 A Yes, it would.
- 7 Q At the time you noticed it, do you think there was oil  
8 or oily water underneath this pile of tires?
- 9 A Yes, there was.
- 10 Q Isn't it possible that this oil could have floated up  
11 from standing oil that had been underneath those tires?
- 12 A I don't believe so.
- 13 Q You mentioned a - I assume in sort of testimony  
14 regarding mitigating circumstances the 1985 spill. Did  
15 you investigate or --
- 16 A No, I wasn't - I wasn't working in the northwest  
17 region at that time.
- 18 Q So you're just relying on what might appear in the  
19 record?
- 20 A Yes.
- 21 Q No personal knowledge?
- 22 A No.
- 23 Q And in 1986, do you have any personal knowledge?
- 24 A Yes, I do.
- 25 Q And do you know, were there any proceedings

1 instituted?

2 A No, there wasn't.

3 Q Was there any fine?

4 A No, there wasn't.

5 Q The first time you talked to Mr. Briggs it's your  
6 testimony he told you he didn't know what had happened?

7 A That's right.

8 MR. ONKEN: No more questions.

9 REFEREE: Any further questions, Mr. Silver?

10 MR. SILVER: Well, yes, Mr. Girgis, just one or  
11 two.

12

13

- - - - -  
REDIRECT EXAMINATION

14 BY MR. SILVER:

15 Q Mr. Volpel, you know, I just completely forgot to ask  
16 you, do you know the nature of the type of work that  
17 Mr. Briggs does? What's his business down there?

18 A He's a used oil reprocessor. He takes oil from all  
19 service stations and waste fuel oil from other companies  
20 and filters it, boils off the water, and some of the oil  
21 he reprocesses as lubricating stock, which is - is oil -  
22 lubricating oil. And the other product he produces is  
23 waste oil for fuel.

24 Q So I guess the nature of his business is oil?

25 A Yes.

1 Q You said you were a little familiar with the 1986  
2 spill. The DEQ didn't institute any proceedings against  
3 Mr. Briggs at that time, did they?

4 A That's correct.

5 Q And can you tell the Examiner why they didn't?

6 A Mr. Briggs cleaned up the spill real fast - I mean, he  
7 did a real good job of cleaning the spill up, and he  
8 discontinued his discharge into that creek. He used to  
9 treat - or he used to discharge treated water into that  
10 creek. And by eliminating his discharge, we felt that  
11 that was a step in the right direction.

12 MR. SILVER: I have no further questions,  
13 Mr. Girgis.

14 REFEREE: Okay, thank you. Mr. Slocum?

15 MR. SLOCUM: Yes, sir.

16 REFEREE: Okay. Please stand. Move closer here,  
17 please, and --

18 MR. SILVER: Mister - Mr. Girgis.

19 REFEREE: Yes.

20 MR. SILVER: I have another couple of exhibits.  
21 But go ahead and swear Mr. Slocum, if you'd like.

22

23

-----  
CHARLES L. SLOCUM,

24 called as a witness for the DEQ, being first duly sworn,  
25 testified as follows:



1 REFeree: Have a seat, sir.

2 MR. SILVER: Mister - this time I have a couple  
3 of extra for you, Mr. Onken.

4 MR. ONKEN: What number exhibit do you have?

5 REFeree: Three.

6 MR. SILVER: We're on --

7 REFeree: The last one was three.

8 MR. SILVER: --the last one. These are two for  
9 you, Mr. Onken.

10 MR. ONKEN: I get these?

11 MR. SILVER: Yeah, these are yours. I'd like to  
12 introduce certified copies of two exhibits, Mr. Onken.  
13 These are - excuse me, Mr. Girgis. They are DEQ  
14 Exhibit 4, and DEQ Exhibit 5, and these are certified  
15 copies of DEQ Orders relating to the last - one of the oil  
16 spills of Mr. Merit - of Mr. Briggs for the record.  
17 There's a - basically an agreement between Merit and DEQ,  
18 and --

19 MR. ONKEN: I don't have an objection here. Just  
20 if I could, though, for clarification --

21 MR. SILVER: Sure, go ahead.

22 MR. ONKEN: I assume this is - is on the issues  
23 of those elements --

24 MR. SILVER: Yes.

25 MR. ONKEN: --of mitigation --

1 MR. SILVER: Yes.

2 MR. ONKEN: --and not tending to prove that -  
3 that there's any liability in this particular case?

4 MR. SILVER: That's correct. That's correct,  
5 Mr. Onken.

6 REFEREE: Exhibits 4 and 5 are received.

7 (DEQ EXHIBITS 4 AND 5 RECEIVED INTO EVIDENCE)

8 MR. SILVER: That has nothing to do with this  
9 particular one.

10 MR. ONKEN: All right.

11 MR. SILVER: Proceed, Mister --

12 REFEREE: Yes, sir --

13 MR. SILVER: --Girgis?

14 REFEREE: --proceed. Mr. Slocum, please move  
15 closer to the table and that's the mike - a standard mike  
16 there.

17 WITNESS: Okay.

18 REFEREE: And state your name and spell your last  
19 name.

20 WITNESS: Charles L. Slocum, S-L-O-C-U-M.

21 REFEREE: Yeah, you may proceed, Mr. Silver.

22 DIRECT EXAMINATION

23 BY MR. SILVER:

24 Q Mr. Slocum, you don't know me, do you?

25 A No, sir.

1 Q You know Mr. Briggs?

2 A Yes, sir.

3 Q What's the nature of your work, Mr. Slocum?

4 A We're in the lumber business. We have a - basically  
5 it's a dry kiln servicing operation. We buy green lumber,  
6 some from our own mill coming in, and it comes up there  
7 and we kiln-dry it and service it, and ship it to the  
8 furniture manufacturers.

9 Q Where is your business located, Mr. Slocum?

10 A We're at 4044 North Suttle Road, North Portland.

11 Q Is that anywhere near Mr. Briggs' operation?

12 A Yes, sir, our property lines adjoin. Our west line  
13 and his east line.

14 Q Now, this may be awkward for you, Mr. Slocum, so I  
15 want to try to make it as easy as I can. Do you know  
16 Mr. Briggs businesswise or personally or both?

17 A Well, neither one really. We're just kind of  
18 neighbors and - and you know, if we can help each other  
19 out once in awhile we do. You know, like borrowing a  
20 piece of equipment, or something like that. So that's  
21 about the basis of our relationship really.

22 Q Now, we've had some testimony, Mr. Slocum, that on or  
23 about March 12 - March 10, I can't remember which, there  
24 was an oil spill at the Merit property. Were you in your  
25 business at that time - about that time on your business

1 property? Were you there at your business?

2 A What was the date?

3 Q Oh, on or about March 10, March 11. I'm trying to pin  
4 it down a little bit more, but I can't.

5 A '87?

6 Q Yes, 1987.

7 A I - I assume I would be there, yes.

8 Q Did you see any - anything going on at Mr. Briggs'  
9 property?

10 A Well, I saw some activity over there. Four or five  
11 people or a half a dozen, I've forgotten. And I walked  
12 over there and - and they were trying to contain - well,  
13 we'd had lots of rain and there was some - it looked to me  
14 like some oil on top of - of the water that was running  
15 off there. And they were working at it with just both  
16 hands, all of 'em, trying to contain it.

17 Q What --

18 A So I just turned and went back to my office.

19 Q What did you see overflowing?

20 A I didn't see anything overflowing.

21 Q Yeah.

22 A Because I was down alongside the - the tires, and I  
23 could just see water with - it looked like, with some oil  
24 possibly on top of it.

25 Q Coming from where?

1 A Coming from the edge of the tires and around there.

2 Q Did you see any oil coming from Mr. Briggs' pond?

3 A Well, I don't think I walked up there. It's up 60, 80  
4 yards, or something like that, from where I was, if I  
5 remember correctly.

6 Q Did you ever talk to Mr. Briggs about it?

7 A Oh, probably. I don't remember exactly what, but it  
8 really wasn't bothering me. And Bill said he'd take care  
9 of it, and so that was good enough for me.

10 Q Bill told you he'd take care of the oil?

11 A Yes, sir.

12 Q The cleanup?

13 A Yes, sir.

14 Q Okay. Is there any reason why he would tell you  
15 that?

16 A Well, because I think he's an honorable man and he'd  
17 want to do what was right.

18 MR. SILVER: I have nothing further of  
19 Mr. Slocum.

20 REFEREE: Mr. Onken?

21 - - - - -

22 CROSS-EXAMINATION

23 BY MR. ONKEN:

24 Q As exactly as you can, do you recall the - the date of  
25 this --

1 A No, sir, I don't.

2 Q You don't recall which day. I think that --

3 A You mean of the spill we're talking about or - per se  
4 or --

5 Q Oh, the - the - the day that you walked out and say  
6 these people working hard to try and --

7 A No, I really don't.

8 Q So it could have been before or after Mr. Voipel was  
9 there, you wouldn't know?

10 A Well, no, I wouldn't know exactly. But I'd assume  
11 because it was in that time that we was having the heavy  
12 rains that we had had for three of four days or a week.  
13 And we get other water coming off the street as well. The  
14 city - they did put in the - the sewers. They told us  
15 that it wouldn't flow over, but I suppose that's beside  
16 the point.

17 Q So that - that area drains a lot of different -  
18 including the road and --

19 A Yes, it does.

20 Q And you - you never saw any of the storage pond  
21 overflow? You never saw it coming out of there?

22 A I don't remember if I did or not. I don't think I  
23 walked up there because it was raining so hard and this  
24 gentleman here - I forget his name, they were down there  
25 working, and so I just went down to see what was going on,

1 and got back and got back in the grass.

2 Q I understand. But you did see some oil in water at  
3 the edge of the time?

4 A It looked to me like it.

5 Q It looked. You don't have any particular expertise in  
6 oil, but it just --

7 A No, I don't --

8 Q --you look at oil and it looks somewhat like --

9 A Well, it looked like --

10 Q Yeah.

11 A --it looked like oil to me as far as I know. But I  
12 don't --

13 MR. ONKEN: I understand. No more questions.

14 MR. SILVER: I have nothing further of  
15 Mr. Slocum.

16 REFEREE: Okay. I just don't understand, Mister  
17 - why were you there in the first place? It's not clear  
18 to me why you were there. Were you just passing through  
19 or were you curious or what?

20 WITNESS: You mean why I was at the property?

21 REFEREE: Yes.

22 WITNESS: Well, my office sits where if I look  
23 out the door I can see the back side of my property and I  
24 saw these people out there on my property. So naturally I  
25 went out. I was curious to see what they was doing on my

1 property.

2 REFEREE: Okay. Do you have any other witnesses,  
3 Mr. Silver?

4 MR. SILVER: No other witnesses, Mr. Girgis.

5 REFEREE: Okay.

6 MR. SILVER: One last exhibit. We can - let's  
7 see, where - where are we?

8 REFEREE: Exhibit 6.

9 MR. SILVER: Exhibit 6. I'll pass this to  
10 Mr. Onken. Mr. Girgis and Mr. Onken, what these exhibits  
11 are, are certified copies of letters from the City of  
12 Portland to Mr. Briggs dealing with his hook-up to the  
13 City of Portland treatment system. And that's all they  
14 are intended to represent. That's all I have. Those are  
15 the only letters I have, Mr. Onken.

16 REFEREE: Yeah. Mr. Silver, do you need  
17 Mr. Slocum?

18 MR. SILVER: I don't need Mr. Slocum unless  
19 Mr. Onken has any further need for him.

20 REFEREE: Mr. Onken?

21 MR. ONKEN: I do not.

22 MR. SILVER: May he be excused, Mr. Girgis?

23 REFEREE: Just a second. Just a second. Just a  
24 second..

25 MR. ONKEN: Oh, oh. Can I ask one more



1 question?

2 REFEREE: Go ahead, sir.

3 Questioning of Mr. Slocum by Mr. Onken resumed:

4 Q Prior to seeing these people on your property, did you  
5 ever call up Merit and say, "There seems to be a problem  
6 down on my property"?

7 A I don't really know.

8 Q You don't recall doing that?

9 A No.

10 MR. SILVER: Okay. Nothing more.

11 REFEREE: Okay. Thank you, Mr. Slocum.

12 MR. SILVER: Thank you.

13 WITNESS: You bet, thank you.

14 MR. SILVER: Thank you, sir.

15 MR. BRIGGS: Thanks, Chuck.

16 WITNESS: You bet, Bill.

17 (PAUSE)

18 MR. ONKEN: Your Honor, I'm not quite certain -  
19 I'm not quite certain of the purpose of all these,  
20 Mister --

21 MR. SILVER: Well --

22 MR. ONKEN: And these have to do with water --

23 MR. SILVER: What these have to do with, again,  
24 has nothing to do with his current liability, Mr. Onken.  
25 Under the old Stipulation, there was some requirement for

1 Mr. Briggs to hook up to the City of Portland's treatment  
2 facility. And these letters are intended to show the  
3 current status of that hook-up. That's all I --

4 MR. ONKEN: Well, we can - we can bring it up. I  
5 suppose for that limited purpose and just in regard to, I  
6 guess, mitigating circumstances and the fact that there  
7 was an earlier Order directing hook-up to sewers and this  
8 showed the progress of hooking for waste --

9 MR. SILVER: That's right.

10 MR. ONKEN: For water discharge into - into city  
11 sewers, not - not disposing of oil into lakes. I mean,  
12 it's simply water --

13 MR. SILVER: That's right.

14 MR. ONKEN: And because the issues here, although  
15 they do relate to that previous Order, the whole matter  
16 being discussed is different.

17 MR. SILVER: Right.

18 MR. ONKEN: So with that caveat, I --

19 REFEREE: So you're not objecting to Exhibit 6?

20 MR. ONKEN: No.

21 REFEREE: Okay. Exhibit 6 is received.

22 (DEQ EXHIBIT 6 RECEIVED INTO EVIDENCE)

23 MR. ONKEN: I'd just make it clear to the  
24 Hearings Officer that, you know, I don't think that  
25 affects liability in this case in any sense and even its

1 effect on mitigation is probably minimal, but relevant.

2 REFEREE: Okay. Who would you like to start  
3 with, Mr. Onken?

4 MR. ONKEN: Okay. I'll call Bill Briggs.

5 REFEREE: Mr. Briggs, please stand.

6 - - - - -

7 WILMER L. BRIGGS,

8 called as a witness for the Merit USA, Incorporated, being  
9 first duly sworn, testified as follows:

10 REFEREE: State your name, please.

11 WITNESS: Wilmer L. Briggs, W-I-L-M-E-R. And the  
12 last name, B-R-I-G-G-S.

13 REFEREE: Okay. Mr. Onken?

14 DIRECT EXAMINATION

15 BY MR. ONKEN:

16 Q Mr. Briggs, what business are you in?

17 A I'm in the business of recycling and reclaiming from  
18 the environment waste oils from two or three states from  
19 all types of sources.

20 Q And what - what do you do with waste oil?

21 A We basically first filter it to get out the large  
22 material. Then we distill it to remove the water and the  
23 volatiles (phonetic), and at that point we then put it  
24 through a vibrating filter screen to take any of the very  
25 fine solids out of it. At that point it becomes fuel or

1 lubricating oil or - or on-site fuel for our boilers.

2 REFEREE: Or what?

3 WITNESS: On-site fuel for our boilers.

4 Questioning of Mr. Briggs by Mr. Onken resumed:

5 Q And then that waste oil is a useable product?

6 A At that point it becomes substitutive - it becomes a  
7 substitute for virgin major oil companies fuels.

8 Q About how much oil do you handle a year?

9 A In that site we have since 1979 handled approximately  
10 35 million in and 35 out, so something close to 70 million  
11 gallons of material.

12 Q Do you have a Spill Plan?

13 A Yes, we have an engineered certified Spill Plan.

14 MR. ONKEN: I'd like this marked Respondent's  
15 Exhibit - I don't know how to respond.

16 MR. SILVER: That's fine. That's your Merit --

17 MR. ONKEN: Exhibit 1. Merit, that's better.  
18 It's simple.

19 Questioning of Mr. Briggs by Mr. Onken resumed:

20 Q Could you identify this packet of documents?

21 A This is a copy through the EPA when they questioned me  
22 in 1986 as to whether I had a Spill Plan or not. And then  
23 there was a copy of the Spill Plan that was instigated in,  
24 I believe, early '80, signed by certified eng - or this is  
25 a copy, however, that doesn't happened to be signed by

1 one, but there are those available both at EPA and I do  
2 have it in my file. Signed by a certified engineer that  
3 says that no matter what happens in this site, and I'm  
4 recapping - it's available. That says, no matter what  
5 happens in this site, it will be contained on the site so  
6 that there's no migration from the site - plans actually.

7 Q Was the plan being followed in early March of 1985?

8 A In file - its filed - been followed continuously since  
9 early 1980.

10 Q Did it work?

11 A I believe it worked, yes.

12 MR. ONKEN: I'd like to offer the Plan.

13 MR. SILVER: I have no objection to the Plan.

14 MR. ONKEN: Thank you.

15 REFEREE: Okay. Merit's Exhibit Number 1 is  
16 received.

17 (MERIT EXHIBIT 1 RECEIVED INTO EVIDENCE)

18 Questioning of Mr. Briggs by Mr. Onken resumed:

19 Q Now, you were out of town at the - when this -  
20 whenever it occurred, you were out of town when it was  
21 discovered?

22 A That's correct.

23 Q And when you returned, did you examine your grounds  
24 and the plant?

25 A Yes, because over the phone I wasn't satisfied with

1 what I was hearing, and the minute - the minute that I  
2 returned, which I think was on the 13th - there's some  
3 confusion in my mind as to when the spill was to have  
4 taken place 'cause DEQ says the 9th in one day and the  
5 10th in another. And today's testimony was that it - the  
6 10th or the 11th, so I'm not sure. But our man's written  
7 authorization as to how to clean up the spill was dated  
8 the 9th, which is a different date than we're being  
9 testified that the spill took place. But in any case I  
10 returned, I think, on the 13th. And I immediately went to  
11 the pond because one of the functions I had was being very  
12 concerned about any damage to the environment, and  
13 particularly the slough behind. Immediately the first  
14 thing I did was go to the pond to determine if it had  
15 overflowed. Now, someone would say, how do I determine  
16 the pond overflowed days later? The pond normally has a  
17 sheen of oil on top of it and there are some pictures  
18 here. It normally has a sheen of oil on top of it and so  
19 that wherever the height of that pond goes, it will leave  
20 a black mark on the side of the pond. Now if it  
21 overflows, then it would be black all the way over the top  
22 and - and in our pictures I can delineate that very  
23 clearly that there was still freeboard left on the pond.  
24 Probably about a foot of freeboard left on the pond. Now,  
25 bear in mind this was a very, very rainy time - super

1 rainy. Any low spot on anybody's property was completely  
2 full of water. If there was any oil on our site at all,  
3 all these ponds - or puddles would have a sheen of oil if  
4 there was any oil present. A sheen of oil being something  
5 that looks like a - a rainbow, maybe on the edge a little  
6 black material on the edge of it. We are a processing  
7 plant. We do process millions of gallons of material.  
8 They spill on site. As long as it doesn't mitigate and  
9 properly cleaned up it's an allowable activity. But when  
10 you rain, some of that oil is going to raise from the soil  
11 if there's ever been any oil activity there. And so  
12 that's one reason we try to contain everything on site.  
13 We even have an extra pond, which is on his map. It shows  
14 an oil pond. I don't like that on Exhibit 1. I'm not  
15 sure I like that nomenclature, but it's an overflow pond  
16 which would accommodate very large volumes of oil or - and  
17 water, if there was anything that happened. For instance,  
18 if one of our tanks blew up at night it would not go off  
19 site, it would end up in one of these ponds and we  
20 wouldn't have an environmental cleanup. So when I  
21 returned, I looked for this mark and I found the mark  
22 clearly on the site of the pond on the low area, but there  
23 was at least a foot of freeboard yet available to go  
24 over. So at that point I determined in my mind that the  
25 pond did not flow over.

1 Q Well, hold up. So from examination, even though a few  
2 days later, you could tell that that pond had not --

3 A Yes, here's --

4 Q --overflowed?

5 A --here's a picture as an example. These are current  
6 pictures, and you can put them in as exhibits, if you  
7 like, or whatever you feel necessary. But --

8 Q Well, explain the black line and how you can tell.

9 A Well, you can clearly see the level of the line - of  
10 the water and you can see that at one time six or eight  
11 inches higher than that there's a line clearly - you see  
12 it clearly delineating the level of any oil if there was  
13 oil in the pond. If there was no oil, there would be no  
14 mark. So there are two of those. And --

15 Q I'd offer those exhibits --

16 MR. SILVER: Well, what - what's - what's --

17 REFEREE: Okay. Just a second, let me change the  
18 tape.

19 MR. ONKEN: Okay.

20 MR. SILVER: Maybe - maybe you can - we have to  
21 get into who took them and when they were taken and the  
22 type of day it was taken and --

23 REFEREE: Okay. We'll do that when we come back  
24 on the record.

25

(END OF SIDE B TAPE 1)



1 Okay, we're back on the record and the case was not  
2 discussed off the record. I don't understand if we have  
3 to go into all this - whether we have to go into all this  
4 detail, Mr. Onken. I haven't heard any testimony from DEQ  
5 regarding the pond overflowing. I believe a question was  
6 asked by Mr. Silver and Mr. Volpel indicated that it had  
7 not. So why are you presenting this evidence? What are  
8 you trying to --

9 MR. ONKEN: Oh well, I --

10 REFEREE: Unless I misunderstood your --

11 MR. ONKEN: Unless --

12 REFEREE: Unless I missed something --

13 MR. ONKEN: I think - I think --

14 REFEREE: Or misunderstood anything, then, there  
15 no reason for you to prove otherwise.

16 MR. ONKEN: I - I would --

17 MR. SILVER: Are we still on --

18 MR. ONKEN: --agree --

19 MR. SILVER: --are we still --

20 REFEREE: We're on the record. Oh, yes.

21 MR. SILVER: Well, I think Mr. Volpel testified  
22 as far as follows, Mr. Girgis. His investigation led him  
23 to believe that the pond did overflow. He based that upon  
24 his investigation and conversations with Mr. Mitchoff.

25 REFEREE: Okay.

1 MR. SILVER: So I assume that Mr. Onken and  
2 Mr. Briggs are attempting to show in their view that it  
3 did not overflow.

4 REFEREE: Okay.

5 MR. ONKEN: That was my understanding that  
6 although not particularly strong, there was some evidence  
7 in Mr. Volpel's testimony that might lead you to think  
8 that it overflowed, and I was --

9 REFEREE: Okay. If that --

10 MR. ONKEN: If that --

11 REFEREE: If that was the gist of his --

12 MR. ONKEN: If the DEQ will --

13 REFEREE: --testimony because --

14 MR. ONKEN: --grant that there's no testimony  
15 there that the pond overflowed, then I'll - I'll  
16 discontinue.

17 MR. SILVER: No, you go right ahead.

18 REFEREE: Go ahead, sir.

19 MR. ONKEN: All right.

20 Questioning of Mr. Briggs by Mr. Onken resumed:

21 Q Mr. Briggs, these pictures taken as an example of that  
22 line, when were they taken?

23 A They were actually taken yesterday.

24 Q So it's not close in - in proximity to - you didn't go  
25 out and take pictures right after?

1 A No, but I - it was interesting to note on their  
2 exhibits that I can see the line. And I'd never had  
3 access to their pictures before.

4 Q Well, did you see a spot in one of these where you  
5 can --

6 A (Pause) Right there. See it?

7 Q Okay. This is on the picture labeled, ". . .Looking  
8 West. Note treatment pond on right." And you're pointing  
9 to the lower spot?

10 A Yeah, I'm looking right here. You can see the line,  
11 it's never been above that.

12 Q And so from that you're determining that it hadn't  
13 recently overflowed?

14 A That's correct.

15 Q And there was oil in there, so if it overflowed it --

16 A Well, you can see oil there at this point.

17 Q I understand. Now there's - there's - because of the  
18 nature of your business, there tends to be oil on the  
19 ground on occasion?

20 A It's unavoidable. Whenever someone cracks a hose on a  
21 truck, there's dribbles of oil. If a person parks his  
22 truck in an incorrect spot, there may be drippage of  
23 oil. If he spills a five-gallon bucket which he -  
24 contains the oil in a hose disconnect, it's bound to - the  
25 oil spills. There's just no preventable way. The

1 question is, how do you handle it?

2 Q And how do you handle it?

3 A The site's been designed so that any water or oil to  
4 come onto the site gravitate to the pond, on the pond.  
5 Then through normal separation, oil normally will come to  
6 the top. We will recover the oil, make it into fuel, and  
7 sell it. The water at that point is then pumped back  
8 first for cooling water to cool the condensers - so some  
9 water's evaporated when you cool the condensers. And the  
10 next thing that happens then the water is cooked within  
11 the - within the oil strain and that - and at 212 turns to  
12 steam and becomes vapor and - and evaporated off.

13 Q All right.

14 A So in addition to that, we have two holding tanks  
15 above the pond that we do pump the water up into those  
16 holding tanks so that we can let them separate the oil off  
17 the top again and a long - for a longer - long time and  
18 get more oil out of it, and then bring the oil off on one  
19 side and bring the water off the other side. So there's  
20 probably 30,000 gallons of water storage besides the pond  
21 plus the third lower area pond, which could act as an  
22 overflow if everything went to hell.

23 Q So even with the - the rain that occurred early in  
24 March, you had sufficient capacity to contain all your  
25 fuels on the - on site?

1 A Yes, however, this was the first year that we've had  
2 to do this 'cause always before we've had an outlet that  
3 was allowed to - to the stream and it was a permitted  
4 outlet. So it was new to us, so we had overtime on  
5 weekends, and particularly when it was raining, a man  
6 would come in on Saturdays and Sundays, stay as long as  
7 necessary to keep the pond at the right level, and do  
8 other things at the same time.

9 Q Now this land where the oil showed up next to these  
10 tires, what type of land would this be?

11 A Well, this - this land is - is fill land, land that  
12 has been filled in the last five or six years. And our  
13 land was filled with a - with a legal permit. There's  
14 some discussion now that - that the adjoining lands were  
15 not filled with a legal permit, so there's a lot of  
16 activity there. But we had a legal permit in 1983, which  
17 is continued and active --

18 Q But the --

19 A So the land --

20 Q Let's get back to the marsh land that - where this oil  
21 showed up on the tires that belonged to Pacific Northwest,  
22 the makeup of the --

23 A Well, the property line is a little different than  
24 what was - what was earlier testified to in Exhibit A. We  
25 have a picture here to show a surveyor's stake and Mr.

1 Slocum has had the property just recently - I mean, within  
2 the last three or four weeks because of the difficulty  
3 (phonetic) over the fill placed on his property. So there  
4 are presently stakes all down through the area to  
5 determine where the property lines are. And they're  
6 readily available to look at. If you observe - actually  
7 my treatment pond, about one foot of it's on his property  
8 line. So if you were to lay this out properly, you would  
9 find that - and I have a picture here. You would find  
10 that the only tires on my property are a few that  
11 somebody's rolled off the top when they've climbed up all  
12 the way through it. And here is a picture to determine  
13 that. This person is standing right by the - by the  
14 property surveyed --

15 MR. SILVER: Excuse me, Mr. Onken. I - I -  
16 Mr. Girgis, excuse me. I - I don't want to object. I  
17 just don't understand what this testimony is about. And  
18 maybe you could help us understand what this is about.

19 Questioning of Mr. Briggs by Mr. Onken resumed:

20 Q Well, I - yeah. I'm trying to deter - I was trying to  
21 get to the nature of this land next to the tires. Now  
22 that - not so much on whose property is in - what I want  
23 is - is this drainage from variety of the land.

24 A This is drainage from all - from all properties  
25 adjacent to, including the street, not including the

1     detrainer yard for Mr. Slocum. It is unimproved, unpaved  
2     ground so that where the tires are laying - I'm not sure  
3     what they're laying on. I'm not sure if they're low, or  
4     high, or there's spots underneath it or what.

5     Q    When you examined the - the oil that was down there,  
6     was it underneath the tires?

7     A    It was coming out of the far side, the east side of  
8     the tire pile, which is not on our property, and getting  
9     in a pool where the Cat was that - we ditched the Cat.  
10    And I found no evidence of a direct trail from my property  
11    to that spill. There was certainly water everywhere. No  
12    - no evidence of oil.

13    Q    Is it conceivable that - that oil could have at some  
14    time, even rather quite distant in the past, collected  
15    beneath those tires?

16    A    That is conceivable.

17    Q    And would the heavy rains have lifted the oil out?

18    A    If I were to conjecture, and it's purely speculation,  
19    I would say that we've never had two inches of rain in one  
20    day since I've been there. But we did have at that point  
21    and we had rainy weather on both sides of that.  
22    Conjecture is that water filled the area under the tire  
23    pile. Some oil was there from whenever and it then did  
24    leakage out on the east side of Mr. Slocum's pile of tires  
25    and on the front.

1 Q And there are - are there other sources where oil  
2 might come from in the area if it was gonna slide under  
3 the tires and not show up until a heavy rain?

4 A There are - there are other sources. It's very  
5 difficult to speculate, but there are other sources.

6 Q For instance, what might be likely?

7 A Well, the container yard handles - I'm guessing at  
8 this point. I'm speculating, but 50 or 60 trucks a day.  
9 They do service their own equipment there. They're in a  
10 direct upstream mode from where we are. The prior tire  
11 people that leased the ground, I would - and they went  
12 broke, I was no party to that business at all. They  
13 certainly had a chipper operating in this area that was  
14 chipping the tires and eating them into small pieces. And  
15 they certainly had broke their hydraulic lines a number of  
16 times on this big chipper and repaired 'em and filled  
17 their hydraulic back up again. But that was in 1983 and  
18 '84, in that era. So there was certainly oil there at  
19 that point. Whether it was absorbed in the ground or  
20 what, I don't know. But there was no visual signs. If  
21 you'd walk out there, you'd find no visual signs of oil.

22 Q The - how large is the stack of tires?

23 A Well, the stack of tires is probably 200 feet long and  
24 100 feet wide.

25 Q So there's a substantial amount of ground underneath



1 where oil or lubricants or hydraulic fluids might collect?

2 A That's correct.

3 Q Now after discovering loose oil, you did clean it up,  
4 did you not?

5 A Every time. I cleaned it up without any expense to  
6 anyone but us and as quickly as prudently possible.

7 Q Did you intend by cleaning it up to be an admission  
8 that you were at fault for the problem?

9 A Absolutely not. But it mitigates any possible damage  
10 and obviously that's the reason we're here.

11 Q And also you're - isn't it true you're the only one in  
12 a position to clean up?

13 A Well --

14 Q Some --

15 A --we had the permission because our business is  
16 cleaning up used oils. So it's not an insurmountable task  
17 for us to clean up something.

18 Q Now, there have been documents put in here regarding a  
19 - the two previous incidents. One I believe in '86. Go  
20 ahead and start with that and I - I suppose those - there  
21 were only two admitted to back when we talked. What -  
22 what occurred in that '86 event in which no proceedings  
23 developed?

24 A Well as a surprise to everybody, we found that you can  
25 get bunker fuels, which are heavy ship oils and are

1 something we do recover, sometimes they're heavier than  
2 water. Normally oil floats on water and you can readily  
3 see it. But bunker fuels are - are what's left after they  
4 removed every conceivable type of oil out by the major  
5 refinery. And there's still a lot of useable energy in  
6 those, so they're very heavy material. They're so viscous  
7 that if you cooled them, you could walk on 'em. So we'd  
8 get them and we do blend them with our oils, which - to  
9 lighten one up and picking the other up, and we've never  
10 had any problem. To our surprise, we processed about  
11 150,000 gallons of bunker fuel, which is not a normal  
12 thing. Maybe 2,000 or 3,000 gallons a month is normal.  
13 But over a period of four or five weeks, to our surprise,  
14 when we den - we - we were policing the pond behind the  
15 property in your exhibit in this area. We were policing  
16 it, as we normally do, 'cause we keep oil booms there so  
17 that if any oil ever got off the property, it doesn't go  
18 under the - under the <sup>culvert</sup> cauldron and then to Smith Lake.  
19 It's just strictly a protective measure. We were policing  
20 them, and even when you discharge at ten parts per  
21 million, which is an allowable discharge under all known  
22 criteria from oil and grease, that material normally  
23 floats to the top. And so when it comes up against an  
24 absorbent boom, it accumulates. So if you were putting  
25 out a million gallons a month of material then eventually

1 there's gonna be some oil against that boom and then we'd  
2 go take our truck and our equipment down and would remove  
3 the oil off the back of the boom and continue on. So we  
4 did. We went down one day and - and cleaned that boom  
5 off. And when we cleaned the boom off, we lowered the  
6 water level 'cause you take some water with you when you  
7 do that. We lowered the water level two or three inches,  
8 and on the sides under the water level we found a black  
9 substance. So this unfortunately was about the time one  
10 of our neighbors had - had said that we're discharging oil  
11 in the back. It happened actually to be the same day and  
12 so we were working on that area when DEQ arrived and  
13 viewed what we were doing and - and the first activity we  
14 knew about was the same day when we were cleaning it out  
15 so then they looked too and determined that it looked to  
16 be bunker fuel, a tacky oil, but it was only in the first  
17 pond because after the first spill we had in - in '85, we  
18 made three little lagoons back there and put these oil  
19 barriers in and what not, so we had added protection if  
20 anything happened. So as we sucked the water out, we  
21 found more and more of this material until finally we got  
22 to the bottom of a pond that's about twice as big as this  
23 room, and we found about eight inches of heavy bunker fuel  
24 in the bottom of that and pulled it off with a truck, and  
25 then we cleaned up the area and that was within a matter

1 of two days. There's some testimony that the 30 or 40  
2 feet on down below that was with bunker fuel because it  
3 was black in color. The water was black in color. There  
4 was no oil below that upper pond. No oil escaped into  
5 Smith Lake. But the black substance is an interesting  
6 thing because in this testimony today there was - there  
7 was a statement that there was a black substance of about  
8 five inches along the grasslands and the marshlands coming  
9 from this oil spill. It would be most helpful if we had  
10 evidence of that chemically because what we found in the  
11 area, part of the area was filled with foundry sands.  
12 Foundry sands are high in carbon. If you were to run your  
13 hand through foundry sands, it just turns black, although  
14 the foundry sands themselves may be a clean-looking  
15 material. So at this point, whenever there's rain, the  
16 water has a tendency to turn black because of this. The  
17 second point is, and it's well documented in some of their  
18 exhibits that I picked up from their file, that the  
19 blackish water that they thought was oily water they took  
20 samples and found no oil in, but they found tire  
21 residue. So when the tires were chipped, a lot of fine  
22 carbon was generated and so it had the tendency to turn  
23 some water black. No sheen on the top, but black water.  
24 So I may be off the subject and digressing but I'm  
25 concerned about what they thought the black substance was

1 along the water.

2 Q Now the charge here today is - is in essence for  
3 polluting the waters of Oregon. You've really - being a  
4 recycler, you've been active in - in pollution control and  
5 that sort of - could you advise our Hearings Officer of  
6 some of the activities you've been involved in in regard  
7 to legislation and the handling of motor oil?

8 A Well, we - we agree that the used motor oil should not  
9 be disbursed into the environment. Presently the State of  
10 Oregon allows industrial oil control with used oils,  
11 untested used oils, so that technically today any oils  
12 that could be wrought could still be applied to any roads,  
13 any land. The only key is that if they happen to get into  
14 the water table then they could do something about it.  
15 It's not really enforced within the state, but these oils  
16 that we have are the same materials that are allowed today  
17 to be applied to the ground anywhere in this state  
18 untested so that certainly we don't enjoy that. We don't  
19 think that's the right application. We make every effort  
20 not to do that. This year we spent an awful lot of time  
21 in the legislature trying to get rules passed to eliminate  
22 this. We were able to get it through the Senate, through  
23 all committees on the floor of the House, and they ran out  
24 of time. So unfortunately, it didn't get passed this  
25 year. But - so two years from now we'll make the attempt

1 again. I have spoke at many functions for recycling. I  
2 have spoke at many EPA functions to try to get the rules  
3 and regulations useable so that we can recover these  
4 materials.

5 Q How many recycling plants of this sort do you operate  
6 or are you involved in?

7 A Presently five. This was the first generation plant -  
8 or the first one we built in '79. The designs of the  
9 newer ones are easier to handle, much more contained than  
10 this one. We've slowly improved this one and, in fact,  
11 I'm sure Rick would - would tell you now that in the last  
12 few months we have done everything possible to cement the  
13 area so that all processing material now runs into a  
14 central tank, not the pond. So the processing material is  
15 now promptly removed from the pond area, which then gives  
16 us the opportunity to be connected to the sewer. We've  
17 been actually - we're working with the City of Portland  
18 ever since they asked us to connect to the sewer. Each  
19 time we've done something the sewer people come back with  
20 some suggestions or some ideas, and we have slowly  
21 progressed to the point that by spending a lot of money on  
22 cement and changing our drainage area in the process area,  
23 that we think we can be able to hook up to the city with  
24 much less negative type material going into the sanitary  
25 tanks.

1 Q In the particular spill we're talking about today, has  
2 that been cleaned up?

3 A It was cleaned up as readily and as quickly as we  
4 thought was prudent. It took us six or seven weeks to get  
5 it done simply because we got the bulk off, but because  
6 some in that small area in the area we're talking about  
7 that we had the cleanup in is probably four times as big  
8 as this room. It was immediately surrounded with booms.  
9 It was grassy. It was full of sticks, logs, and tires.  
10 And we pulled everything at a slow pace but everytime we  
11 get it about clean we let it set for a few days and it'll  
12 rain a little more and we get a little more, so it took us  
13 about six weeks to finally get it to the point that we -  
14 it could be blessed. But it is clean. There's grass  
15 growing on it now. But there's a picture here if you want  
16 it, but - of the site.

17 Q And that was done at your expense?

18 A At my expense. One comment that I noticed in - in  
19 these proceedings was that - that we - we don't record our  
20 spills.

21 Q How can you respond to that?

22 A I violently respond to that simply because in every  
23 single case the minute we knew of the spill, it was  
24 reported to DEQ. I reported the first \$180,000 spill to  
25 them myself. I hired a contractor before they ever got on

1 site to clean the mess up. So it's - it's almost as if  
2 they are not working with the recyclers but they're -  
3 they'd rather whip us than join us and --

4 MR. SILVER: Oh, I don't think we need your --

5 MR. ONKEN: Yeah, okay.

6 MR. SILVER: --opinions, Mr. Briggs.

7 WITNESS: Maybe not. But I certainly am entitled  
8 to expression --

9 MR. SILVER: Not in this hearing you --

10 REFEREE: Okay.

11 MR. SILVER: --don't.

12 REFEREE: Okay. Just a sec --

13 MR. ONKEN: Okay. Calm down --

14 REFEREE: Just a second. Are you - are you  
15 objecting, Mr. Silver?

16 MR. SILVER: I'm objecting to his expressing  
17 opinions, Mr. Girgis. I think if he wants to testify as  
18 to facts, he can. But his own personal views are his own  
19 personal business.

20 WITNESS: I suspect there are facts in the  
21 file.

22 REFEREE: Okay. Let's - let's stick to the  
23 facts, Mr. Briggs.

24 MR. ONKEN: I have no more questions.

25 REFEREE: Okay. Go ahead, Mr. Silver.



CROSS-EXAMINATION

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BY MR. SILVER:

Q Just a couple of questions, Mr. Briggs. I'm interested in these tires that you keep on talking about. These tires are, what, on Mr. Slocum's property?

A They are.

Q Aren't they your tires?

A No.

Q Whose tires are they?

A They never were my tires.

Q Whose tires are they?

A The - the tires belong to a bankrupt firm called Petro Innertech (phonetic).

Q Petro Innertech?

A Yes.

Q And who was Petro Innertech? Who was the operator?

A They --

Q Do you know?

A A series of people and I'm not sure I can recall all of them, but I had nothing to do with any of it.

Q All right. Part of the tires are on your property and part of 'em are on Mr. Slocum's property?

A I would say 99 percent on Mr. Slocum's property and maybe one percent on mine.

Q Why are those tires there if they don't belong to you

1 or Mr. Slocum?

2 A Mr. Slocum gave that firm permission to store the  
3 tires on his property.

4 Q Okay. And now the firm's gone?

5 A The firm is bankrupt, that's correct.

6 Q Okay. And they're still there on Mr. Slocum's  
7 property and part of 'em are still on your property?

8 A That's correct.

9 Q And why are they on your property?

10 A Well, what would you suspect they involve --

11 Q Well, I mean, if they're not yours why are you keeping  
12 them on your property?

13 A Because I don't have the - the monetary resources to  
14 dispose of them at this point.

15 Q You don't have the monetary resources, okay. Let's  
16 talk a little bit about your cleanup of this spill,  
17 Mr. Slocum - or excuse me, Mr. Briggs. How long did it  
18 take you to clean it up?

19 A Well, the bulk of the material was cleaned up with a  
20 matter of probably five to seven days.

21 Q You use your - did you use your crews - your employees  
22 to clean it up?

23 A We used one outside contract at the immed - a  
24 contractor at the immediate offset so that we could stop  
25 it and do the best we could for a day or two.

1 Q And how much did that cost you?

2 A I would suspect about \$1,100.

3 Q Now, you know, I - I've heard your testimony,  
4 Mr. Briggs, about your desire to clean up the environment,  
5 but in all honesty if this wasn't your spill, why would  
6 you expend \$1,100 to clean it up?

7 A Simply to mitigate any possible damages. My - my  
8 dealings with DEQ in the past have been they don't listen  
9 very hard to what happens, they just go on and do their  
10 own thing.

11 Q Okay. So are you - the Examiner should understand  
12 that although you did not feel that this was your  
13 responsibility, you still expended \$1,100 to clean it up?

14 A Substantially more than that 'cause I used my own  
15 help.

16 Q Okay. So then we expended this money to clean up the  
17 spill, but we don't have any money to haul off those tires  
18 off your property?

19 A That's correct because you're dealing with Merit USA,  
20 you're not dealing with Fuel Processors, Incorporated.

21 Q I see. Well, I - I don't understand the difference.

22 A Fuel Processors, Incorporater is - Incorporated is the  
23 current lessee on this site.

24 Q And who are - and who are they?

25 A They are a company owned by myself and my son.

1 Q And are they an Oregon corporation?

2 A They are a Washington corporation.

3 Q And are they qualified to do business in the State of  
4 Oregon?

5 A Yes, they are.

6 Q As of when?

7 A As far as I know for years.

8 Q Well, if they're a Washington corporation and they're  
9 not registered to do business in Oregon, then they're not  
10 qualified. You understand that, don't you?

11 A I understand that, yes.

12 Q Okay. Are they registered as a corporation in  
13 Oregon?

14 A I'd have to verify that. I made an attempt to  
15 register 'em some three or four years ago --

16 MR. ONKEN: Objection. I don't see the  
17 relevance --

18 MR. SILVER: Well, he's bringing it up,  
19 Mr. Onken, and I'm only trying to understand what Fuel  
20 Processors and these tires have to do with it all. I'm  
21 only asking him what this has to do with it. I - I can't  
22 understand if he's got \$1100 and a lot of employees  
23 cleaning up an oil spill why he can't clean up the tires  
24 that he claims aren't his.

25 MR. ONKEN: Well, whether Fuel Processors is

1 properly registered on - all that has to do with their  
2 ability to bring a lawsuit --

3 MR. SILVER: Well --

4 MR. ONKEN: --not their ability to operate.

5 MR. SILVER: Well, it certainly has a lot to do  
6 with their ability to do business in Oregon. If they're  
7 not registerd as a foreign corporation they can't do any  
8 business here at all.

9 MR. ONKEN: They can do any business --

10 MR. SILVER: Well --

11 MR. ONKEN: They just can't bring a lawsuit.

12 MR. SILVER: Well, what kind of business can they  
13 do?

14 REFEREE: Well, we're not concerned with that,  
15 sir.

16 MR. ONKEN: I agree.

17 REFEREE: I'm not concerned about whether they're  
18 licensed or registered or if they're - that has nothing to  
19 do with the issue at hand.

20 WITNESS: May I say one thing?

21 REFEREE: Just a second, I'm gonna turn the tape  
22 on the other side, and I'm gonna make another comment, and  
23 then you can say whatever it was --

24 MR. SILVER: Sure.

25 (END OF SIDE A TAPE 2)

1 Okay, Mr. Silver, did you just say off the record that you  
2 had nothing further?

3 MR. SILVER: Nothing further.

4 - - - - -

5 EXAMINATION

6 BY THE REFEREE:

7 Q Okay. So I believe the - the matter has been  
8 resolved. I don't feel that we should go ahead and - but  
9 I did have the same concerns that Mr. Silver expressed,  
10 and I was going to ask the same questions as to - as to  
11 why, Mr. Briggs, if you felt that you were not responsible  
12 for the spill, why would you spend - whether it was \$1,100  
13 or even \$10 to take care of it?

14 A My past experience with them is that - and a good  
15 example is another file where they claimed we were a  
16 hazardous waste site, and it took us two or three years to  
17 finally convince them that we weren't and just recently  
18 they mailed us a letter releasing us from that activity.  
19 They wouldn't listen to any explanation we had. They just  
20 kept plowing away for three or four years, and out making  
21 me hire people and do this activity until at last they saw  
22 that there was a strategy problem there and they did  
23 correct it.

24 Q Okay. When --

25 A But I'm very concerned with my dealings with them.

- 1 Q Okay. When you came back from your trip, was there a  
2 problem?
- 3 A The clean-up was already underway.
- 4 Q Okay. Cleanup of what?
- 5 A The cleanup of the oil on Mr. Slocum's property when I  
6 got back.
- 7 Q So there was oil?
- 8 A There was certainly oil on Mr. Slocum's property, no  
9 question.
- 10 Q Okay. Did that oil reach any waters?
- 11 A Yes, it was in the water on Mr. Slocum's lake.
- 12 Q So that's another question I wanted to ask. You're  
13 saying that this oil did not come from your land?
- 14 A I'm saying that I have no way of knowing if this oil  
15 came from my land.
- 16 Q Do you have any way of knowing that it did not come  
17 from your land?
- 18 A I do not have any way of knowing that it did not with  
19 exception that our plan is engineered for that and we  
20 weathered a long time there.
- 21 Q But you are saying that definitely it did not come  
22 from an overflow of your pond --
- 23 A Absolutely.
- 24 Q Could it have come from any other area of your land  
25 other than the pond?

1 A It could not at that point have come from my property  
2 at that point.

3 Q So you're saying that it did not come from your  
4 property?

5 A I'm saying during the period, that's correct.

6 Q Whose property did it come from?

7 A My investigation determined that it came out of the  
8 tire piles on Mr. Slocum's property and that it dissipated  
9 on the east side, which is some 150 feet from us -  
10 dissipated out of the east side of that tire pile into  
11 Mr. Slocum's water area of his marsh.

12 Q Okay. And Mr. Slocum is the witness that we had here  
13 today?

14 A Correct.

15 Q Did you discuss that Mister - with Mr. Slocum at any  
16 time?

17 A At no time have I talked to Mr. Slocum about this oil  
18 spill.

19 Q Why not?

20 A Why would I? I had cleaned the material up.

21 Q Well, you're saying that the oil came from his  
22 property. Why would you spend the money and not go after  
23 him for the money?

24 A Simply because he's a legitimate neighbor who's done a  
25 number of favors for me and I've done a number of favors



1 for him.

2 Q How did you determine that it came from the tires on  
3 Mr. Slocum's property and not from the tires on your  
4 property?

5 A Because when I returned I went around to the Slocum  
6 side of the pile and there was oil still coming from  
7 underneath the tires into the pool area that we had  
8 established with a berm around it to catch any further  
9 deterioration - or any further flow of oil from that  
10 source.

11 Q Okay. How much money do you figure it would cost you  
12 to remove the tires on your property?

13 A Well, the - the - the pile that they're talking about  
14 would cost me very little. But in addition to that there  
15 are four or five other piles further back upon my  
16 property, not this source, that would need to be  
17 removed.

18 Q Do you know how much money --

19 A About \$12,000 is the closest estimate we had.

20 Q And you said that it cost you substantially more than  
21 \$1,100 to correct this problem that we're dealing with  
22 today?

23 A That's correct.

24 Q How much did it cost you?

25 A I would say it probably cost us about \$6,000, and this

1 was expended by Fuel Processor, who is the lessee, but not  
2 my Merit USA, who is the lessor of the property, who owns  
3 the property.

4 Q Who owns the property?

5 A Merit USA.

6 Q And that money was spent by Merit USA?

7 A No, that was spent by Fuel Processors, Incorporated.  
8 Merit has not had an active business activity since May of  
9 1984.

10 Q Are you here today representing - or testifying on  
11 behalf of Merit or Fuel Processors?

12 A On the behalf of Merit. I'm still the president. The  
13 company still is active and in good standing within the  
14 State of Oregon. One of the reasons is, there still is  
15 the asset of that property.

16 Q Do you recall Mr. Volpel coming in on your property  
17 either March 11 or March 12 or thereabout?

18 A Yes.

19 Q Did you have any discussions with him?

20 A Well, it was a little later than that but, yes, I  
21 did. When he came on the property after this spill had  
22 been handled on the 9th with Mr. Mitchoff, he came the  
23 next day supposedly, and then I came about two days  
24 later. He did come and visit with me and we did view the  
25 site, and we did discuss what was going on.

1 Q Did you at any point indicate to him that you deserved  
2 any penalties that would be imposed?

3 A I did not. The comment was something like this, "I  
4 suppose that we're gonna have" - I would feel - his  
5 comment was that, "You'll probably get a fine and some  
6 kind of a penalty out of this activity," and I might  
7 comment with, "I suppose I will because of my lack of  
8 competence in their investigation of what happened."

9 Q Did you at that point take Mr. Volpel to the tire -  
10 tires or the location where those tires were piled on and  
11 tell him that this is not my property, that this oil came  
12 from a neighbor's property and I'm not responsible for it,  
13 I should not be held responsible for any fines?

14 A That conversation was after we had viewed the site and  
15 he determined that we were making every effort to clean  
16 the site up.

17 Q Yes, but did you tell him that you should not be held  
18 responsible for it because the --

19 A In a letter at a later date I said, "I do not know the  
20 cause" is exactly what I told him.

21 Q Did you at any time tell him that the tires are not  
22 located on your property and that you should - and - and  
23 that consequently you should not be held responsible for  
24 any penalties?

25 A Well, at that point, no, I did not --

1 Q Why not?

2 A --to that question, that is.

3 Q Why didn't you do that?

4 A For the simple reason that my past experience with  
5 them is with an - with any oil spill, I'd better get my  
6 tail in gear and clean it up. If that oil had been  
7 allowed to continue on, there would have been lots of  
8 damages, regardless of who had to clean it up.

9 Q Well, that's correct. You answered the question that  
10 I had coming. Why would DEQ go after you and not after  
11 Mr. Slocum? If you told 'em that this came from Mr.  
12 Slocum's property wouldn't they have pursued it against  
13 him?

14 A That's what I would think they would. I don't think I  
15 should be here today.

16 Q Mr. Slocum was here today and I - I wished we hadn't  
17 dismissed him because I didn't see anything coming - any  
18 questions coming either from you or from your attorney to  
19 - to Mr. Slocum to indicate that he was responsible for  
20 this spill. If I had known that I would not have  
21 dismissed him. I - that's why I seldom dismiss witnesses  
22 before the hearing ends because we sometimes get into that  
23 and then we have to continue - I'm not gonna continue the  
24 hearing, but I'm just saying that sometimes this happens,  
25 that's - that's why I'm always reluctant to dismiss those

1 witnesses. But the question is, Mr. Briggs, why didn't  
2 you raise this point at the time that this witness was  
3 here so that we could have confronted him with those -  
4 with this testimony basically --

5 MR. ONKEN: I think that was --

6 REFEREE: Did you raise that, Mr. Onken?

7 MR. ONKEN: (unintelligible) --

8 REFEREE: Okay. Did you raise it?

9 MR. ONKEN: Well, I think the issue today - I  
10 thought the issue today here was whether - whether Mr.  
11 Briggs was liable or not, not to aid the DEQ in - in  
12 picking on, frankly, a friend and neighbor - a business  
13 neighbor, at least, of my client.

14 MR. SILVER: He's already picked on him,  
15 Mr. Onken. He's trying - he's blamed everybody but  
16 himself.

17 REFEREE: No, it's not picking on anyone and we -  
18 and I'm certainly not trying to pick on anyone. But if  
19 Mr. Briggs is saying that he is not responsible for the  
20 spill because it came from Mr. Slocum's property, Mr.  
21 Slocum was here and could have been ab - would have had  
22 the opportunity to say, yes, this spill came from my  
23 property or no, it did not come from my property. That's  
24 what I'm saying.

25 MR. ONKEN: But Mr. Slocum testified that he - he

1 didn't realize anything was going on until he noticed the  
2 cleanup.

3 Questioning of Mr. Briggs by Referee Girgis resumed:

4 Q And again, Mr. Briggs, since this cost you in the  
5 neighborhood of \$6,000, did you do anything to recover any  
6 of this amount from Mr. Slocum?

7 A At this point I have not. I'm not sure what my  
8 damages are gonna be at this point. I determined that I'd  
9 have another \$3,500 --

10 Q Okay.

11 A --fine against me, that's all I know.

12 Q Okay. Are there any circumstances that you would like  
13 me to consider in determining the amount of civil penalty  
14 if - again, that's an if. Underline if 100 times. I have  
15 not made up my mind yet. But if I determine that you are  
16 liable for it, any circumstances that you want me to  
17 consider in determining the penalty?

18 A Yes.

19 Q Okay. Why don't you tell me about those.

20 A Well, the - the DEQ file reflects that we did not  
21 report these spills in a timely and orderly manner. That  
22 is an incorrect - I'd say it's almost flagrant, but it's  
23 certainly incorrect.

24 Q Okay. Anything else?

25 A And - and every time when it happened we reported it

1 the same day we were aware of it. The second thing is  
2 that - that as long as the State of Oregon and - have  
3 clearly stated that the DEQ and the EPA are gonna make  
4 every effort possible to work with recyclers - reclaimers,  
5 to clean up the material within our country, we question -  
6 and when we've handled 70 million gallons of material  
7 since 1979 in and out of there, we question what they've  
8 done to help us cooperate in that manner. We've done  
9 everything asked of us and more each time. Every time  
10 that something's happened we've not only cleaned up the  
11 site without expended - expenditure to them, but we've  
12 tried to improve based on what we've learned. Each and  
13 every time you will find in the file that instead of doing  
14 one thing, we've tried to do four or five things more to  
15 improve it once we could determine what the problem was.  
16 So in every case, we've reported it. In every case, we've  
17 made every attempt to be sure that it doesn't happen  
18 again. In each case - in each spill you'll find it was  
19 some different thing and your exposure when you handle  
20 that kind of material is going to be at a higher rate than  
21 someone that only - that only handles a few gallons every  
22 year.

23 Q Okay. The - the Order here that was appealed says  
24 that respondent is under Chapter 11 Bankruptcy. Is that  
25 correct --

1 A That is not correct. That's another error.

2 Q Okay. Would you care to elaborate on that?

3 A Merit USA filed for Chapter 7 in 1984, and I think it  
4 was finally actually - it should have been done in about  
5 '85, but the clerk in the law office for some reason  
6 didn't file it and when we reminded him that it wasn't  
7 filed, then just recently - isn't that correct?

8 MR. ONKEN: Could I clarify --

9 REFEREE: Mr. Onken, go ahead, sir.

10 MR. ONKEN: Merit USA was put into involuntary  
11 Chapter 7 by First Interstate and a couple of other  
12 creditors that went through and secured creditors, in  
13 essence, were left to pursue their remedies and the  
14 bankruptcy was closed some time ago. It didn't get closed  
15 for a period of time because of just a clerical error in  
16 the Bankruptcy Court, but it is now closed and has been  
17 for several months.

18 REFEREE: Okay. So this is not a consideration  
19 then at this point?

20 MR. ONKEN: I don't believe it is.

21 Questioning of Mr. Briggs by Referee Girgis resumed:

22 Q Okay. The document also indicates that respondent was  
23 negligent in not taking all feasible steps or procedures  
24 to prevent the spills. Were there any steps that you  
25 could have taken to prevent this spill?



1 A No. Since it did not come from the pond, there was no  
2 more steps I could take. I believe the testimony was on  
3 that we couldn't put more freeboard around the pond. If  
4 the pond didn't overflow, then how did that affect - how  
5 could we have done that to --

6 Q Okay. There was testimony today that - and it's also  
7 noted here in the file in this document that the spill was  
8 estimated at - conservatively according to the witness  
9 today at 100 gallons of oil. Would you agree with that?

10 A Yes, I would certainly agree that it was 100.

11 Q Is it conceivable that all this would come just from  
12 oil sitting beneath the tires?

13 A Absolutely. Hydraulic systems on those chippers hold  
14 250 gallons. If you're blowing two or three or four  
15 times, it's - it's a lot of oil.

16 Q How would that oil have been there in the first place?

17 A Well, in the middle of this tire pile where they've  
18 been sitting a big powerful chipper like an 18-wheel  
19 trailer with a big chipper on it. And they put a whole  
20 tire into the - into this chipper, and when it comes out  
21 there then it comes out in chips like this. It's a big  
22 powerful machine. There are hydraulic hoses that make  
23 this machine operate. Through vibration, neglect, or  
24 whatever, they do have a tendency to break or blow up  
25 occasionally. And it's from their operation, not my

1 operation.

2 Q Whose operation?

3 A Petrotech, one of the people that went bankrupt on  
4 that site that were making tire oil and carbon and gas  
5 from chipping up tires and putting them through a --

6 MR. ONKEN: If I might, I think it's Petro  
7 Innertech, and I don't believe they're in bankruptcy.

8 MR. SILVER: Petro Innertech is not.

9 MR. ONKEN: Yeah, it's --

10 MR. SILVER: (unintelligible).

11 REFEREE: Okay. I don't have any further  
12 questions. Mr. Onken, do you have any further questions  
13 of this witness?

14 MR. ONKEN: No.

15 REFEREE: And, Mr. Silver?

16 MR. SILVER: I don't know how the Examiner wants  
17 to proceed, Mr. Girgis. I think it important to put  
18 Mr. Volpel back on before Mr. Onken goes to his next  
19 witness. But I'll defer your judgment. However you want  
20 to handle it.

21 REFEREE: Well, I have no objection to that.  
22 Mr. Volpel, come in here again, please, and --

23

24

- - - - -

25



1 control of that whole tire pile. That was the impression  
2 I got.

3 MR. SILVER: Okay. I have nothing further of  
4 Mr. Volpel, Mr. Girgis, if - that was the only question I  
5 had of - regarding the tire pile.

6 - - - - -

7 EXAMINATION

8 BY THE REFEREE:

9 Q Okay. Mr. Volpel, were you able to determine the  
10 source of this spill, whether it came from the pond or  
11 whether it came from those tires?

12 A I find the pond is a lot more likely source than the  
13 tires.

14 Q Why?

15 A Because if there was oil in those tires, it should  
16 have come up a long time ago. Those tires have been there  
17 several years.

18 Q Did Mr. Briggs at any time tell you that those tires  
19 were located on property that was not his?

20 A No. Not until after the spill through the letter.

21 REFEREE: Okay. Mr. Onken?

22  
23 - - - - -  
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25

CROSS-EXAMINATION

BY MR. ONKEN:

Q Just prior to this spill, as we found it, the rains had been particularly heavy, had they not?

A Yes, they had.

Q You were informed sometime after the spill that Mr. Briggs didn't own the land?

A It was after his Spill Report - or, in fact, it was actually his response to the penalty.

Q Okay. And had you had prior opportunities then to discuss the boundary line?

A Yes, we had.

MR. ONKEN: No more questions.

REFEREE: Okay.

MR. SILVER: Thank you, Mr. Girgis, for allowing me to recall him.

REFEREE: Yes, sir. Okay. Mr. Mitchoff now.

- - - - -

ROBERT MITCHOFF,

called as a witness for the Merit USA, Incorporated, being first duly sworn, testified as follows:

REFEREE: State your name and spell your last name, please.

WITNESS: Robert Mitchoff, M-I-T-C-H-O-F-F.

REFEREE: Mr. Onken, you may proceed.

1 DIRECT EXAMINATION

2 BY MR. ONKEN:

3 Q Mr. Mitchoff, can you tell me your employment?

4 A I take care of the clean oil side of the business,  
5 manufacturing, blending, and selling lubricating and power  
6 transmission products.

7 Q And were you on duty on - whether it's March 8, 9, or  
8 whenever this spill was --

9 A Yes.

10 Q --discovered? And how did you learn of it?

11 A May I refer to my notes for a minute?

12 Q I have no objection. Go ahead.

13 A The only reason I am is because of the names. Two  
14 gentlemen visited with me, it was a Mr. Gray and a  
15 Mr. Davis, I think. And they made me aware of the - of  
16 the spill. I was not aware of it prior to that and this  
17 was quite early in the morning.

18 Q And did you ever speak with Mr. Volpel about this?

19 A Yes.

20 Q Now, he's testified that you told him that it was most  
21 likely that the treatment pond had overflowed. Is that  
22 true?

23 A At that time I didn't disagree with him.

24 Q Did you tell him that?

25 A To be real honest with you, I - I would think that I

1 would not say that. There would certainly be  
2 speculation.

3 Q Did you - do you know think that that treatment pond  
4 overflowed?

5 A In cleaning it up - I was primarily responsible for  
6 cleaning the oil spill up, and as we were cleaning the oil  
7 spill, a great deal of oil came out from under the tires  
8 while we were working. And my opinion became, as I was  
9 working it, that the problem didn't exist where we  
10 actually thought it did, but in an area slightly south of  
11 that, which was the tire pile itself, and that's what we  
12 built our containment - we found the major portion of the  
13 oil had come from.

14 Q So you found the major portion of that oil to come  
15 from beneath these tires?

16 A Yes.

17 MR. ONKEN: No more questions.

18 REFEREE: Mr. Silver?

19 - - - - -

20 CROSS-EXAMINATION

21 BY MR. SILVER:

22 Q Mr. Mitchoff, what's your relationship with  
23 Mr. Briggs?

24 A Partner.

25 Q Partner?

- 1 A Yes, stockholder - stock owner.
- 2 Q Well, help me out. Are you a partner or a  
3 shareholder? There is a difference.
- 4 A I am a partner.
- 5 Q You are a partner with Mr. Briggs?
- 6 A Yes, in a portion of the business, not in the total  
7 business.
- 8 Q Are you a partner with Mr. Briggs personally or a  
9 partner with Mr. Briggs' corporation?
- 10 A The corporation.
- 11 Q Have you had a chance to talk to Mr. Briggs since this  
12 spill happened about your statement that most likely the  
13 pond overflowed?
- 14 A Would you repeat that?
- 15 Q Have you talked to Mr. Briggs since this spill  
16 occurred about your statement that the pond overflowed?
- 17 A May have. Do not recall.
- 18 Q You don't recall talking to Mr. Briggs at all about  
19 your statement prior to this hearing?
- 20 A Not about the statement, no.
- 21 Q What did you talk to Mr. Briggs about?
- 22 A At what period of time, sir?
- 23 Q About the spill between March and presently that the  
24 spill occurred --
- 25 A Mr. Briggs was in Hawaii at the time and I contacted



1 him by phone and told him that I had instigated the Spill  
2 Plan and that we were in the process of cleaning the spill  
3 up, and upon his return I didn't - because I was out of  
4 town, did not see him for a couple of days. When we came  
5 back we did discuss the - the spill and the plan and how  
6 it was going, and we basically felt that - that the  
7 cleanup was pretty much on schedule.

8 Q Did your investigation or Mr. Briggs' investigation in  
9 conjunction with yours lead you to go talk to Mr. Slocum  
10 about oil from the tires?

11 A No, sir, not to my knowledge.

12 Q Did you ever talk to Mr. Slocum about the oil coming  
13 from these tires?

14 A No, sir.

15 Q Can you help us at all about these tires, who owns the  
16 tires? Do you know anything about these tires?

17 A No, sir, that was - the tires were there when I  
18 basically came on board with Fuel Processors and I  
19 honestly don't know.

20 Q You don't know anything about those tires --

21 A No.

22 Q Just seen the - just always kind of been there, huh?

23 A As far as I know.

24 Q Do you have any idea of - or the - how much tires are  
25 on Mister - I guess, Briggs' property, how much is on

1 Mr. Slocum's property? How to figure that out?

2 A No, sir.

3 Q How long have you been there?

4 A August 1983.

5 Q Ever notice any oil leaking out of the tires between  
6 1983 and now?

7 A Mr. Silver, I don't go back on that side of the  
8 property because it's not in my area of business.

9 Q Just sort of hang around your own side of the  
10 property?

11 A Well, yes.

12 REFEREE: Okay. Just a second. Let me change  
13 the tape.

14 (END OF SIDE B TAPE 1)

15 This is Tape 3 in the Merit USA case, and the case was not  
16 discussed off the record. Go ahead, Mr. Silver.

17 MR. SILVER: Mr. Girgis, I think I have nothing  
18 further of Mr. Mitchoff.

19 REFEREE: Okay. Thank you. Mr. Onken, do you  
20 have anything further?

21 MR. ONKEN: Nothing.

22 (PAUSE)

23 REFEREE: Any other witnesses, Mr. Silver?

24 MR. SILVER: No further witnesses, Mr. Girgis.

25 REFEREE: How about you, Mr. Onken?

1 MR. ONKEN: No further witnesses.

2 REFEREE: Okay.

3 - - - - -

4 RICHARD J. VOLPEL (RECALLED)

5 EXAMINATION

6 BY THE REFEREE:

7 Q Mr. Volpel, just another question or so if you can move  
8 here, and you're still under oath. I just wanted you to think  
9 back to this period of time that we're discussing today. I  
10 understand that sometimes it's difficult to recall exactly what  
11 was said. But as far as you can tell of this conversation  
12 between you and Mr. Mitchoff regarding the spill that we're  
13 talking about today, can you tell me what you told him and what  
14 he told you?

15 A Well, not really. Basically we just talked about the spill  
16 and he told me about the cleanup that they were going to do and  
17 gave me a Spill Plan. I had a lot of sympathy for getting the  
18 Cat stuck, 'cause it was stuck, and --

19 Q Was there any mention by Mr. Mitchoff of the source of the  
20 spill?

21 A Well, like I said before, he speculated that the pond  
22 overflowed.

23 Q He speculated but he was not sure, is that correct?

24 A Right. He said something to the effect, "I think that's  
25 what happened. I think the pond overflowed" or "It looks like

1 the pond overflowed" - you know, that - he based it just on his  
2 observation. He says, "I don't know what else would cause  
3 it."

4 Q And you apparently checked the pond at that time?

5 A Uh-huh.

6 Q Could you determine whether it did, in fact, overflow?

7 A Not - not - no, I couldn't. I based my observations on the  
8 pools of oil throughout the property.

9 Q Could this spill have been caused by more than one source  
10 or - I mean, in other words, coming from the tires as well as  
11 the pond, or could it have just come either from the pond or  
12 from the tires?

13 A It could come from probably both. Oil could have been put  
14 in that tire pile somewhere else.

15 REFEREE: Mr. Silver.

16 MR. SILVER: Yes, Mr. Girgis.

17 REFEREE: Do you have any closing statements that you  
18 would like to make? I don't know what the procedures are here,  
19 but --

20 MR. SILVER: I just --

21 REFEREE: --I will give you an opportunity to make -  
22 make a closing statement.

23 MR. SILVER: I just have a very short one,  
24 Mr. Girgis. Despite Mr. Briggs' observation that the DEQ -  
25 that he doesn't have much confidence in the DEQ. DEQ isn't

1 interested in punishing Mr. Briggs or punishing his  
2 corporation. What the DEQ is interested in is keeping oil out  
3 of the public waters of the state and they feel that they have  
4 a responsibility to do that. And it's unfortunate that  
5 Mr. Briggs has felt that he's been singled out in this  
6 endeavor, but he hasn't. There are other people that the  
7 Department are after to protect the environment. I would just  
8 leave you with three thoughts that are perhaps maybe somewhat  
9 inconsistent, but one being very rarely that a businessman  
10 engaged in any activity in the goodness of his heart and for  
11 the love of his citizens is going to expend \$1,100 - \$1,200, or  
12 more to clean up oil that he isn't responsible for. I think  
13 it's commendable that he did it and the other side of the coin  
14 is, is the fact that they did expend the money to go out and  
15 clean up the oil. I think he should be commended and not  
16 punished for that fact. But the fact that they did do - did  
17 expend it is somewhat inconsistent with the proposition that  
18 they didn't do it. I also don't want to leave the Examiner  
19 with the impression that the oil has to come necessarily from  
20 the pond overflow. Sloppy practices at this operation could  
21 have just as well have been responsible for this oil entering  
22 the water. There's pools of oil all scattered throughout it -  
23 throughout the property. We've heard testimony --

24 MR. ONKEN: Objection. I don't think there's  
25 testimony to that effect.

1           MR. SILVER: Yes, there was. There's pools of oil  
2 scattered all throughout the property.

3           REFEREE: Well, I believe his witness testified to  
4 that, Mr. Volpel.

5           MR. SILVER: Heavy - heavy rainfall - heavy rainfall  
6 and runoff - surface runoff, Mr. Examiner, can cause the oil to  
7 enter the water. I don't know how else to respond to the tire  
8 problem, because I'll be very honest with you, I'm puzzled by  
9 the ownership of the tires. I understand some tires are on  
10 Mr. Slocum's property, some tires are on Mr. Briggs'  
11 property. Mr. Briggs says that there's a lessee of the  
12 property that the tires - or the lessee of the tires, there's a  
13 bankrupt company. I just don't know how to respond to that  
14 intelligently. The only thing I can tell you is that our  
15 witness was informed at one time by Mr. Briggs that the tires  
16 on Mr. Slocum's property were either owned or leased by  
17 Mr. Briggs. But personally I think it's a Red Herring. What  
18 difference does it make about the tires - you know, if - if  
19 there was oil in those tires I think the evidence would have  
20 shown that the water would have brought that oil up some time  
21 ago. Those tires have been there since 1983 or prior to that  
22 date. I don't know how long. But if there was oil that was  
23 gonna be raised by some heavy rainfall, it would have come up a  
24 long time ago. I don't think they would have come up at this  
25 particular time. I appreciate the Examiner listening to this

1 case. I know it's the Examiner's first case, and I appreciate  
2 it and hope that we've been able to make the case fairly clear  
3 to you. Thank you.

4 REFEREE: Okay. Would you care to address the amount  
5 of the civil penalty as to why it's \$3,500 and not less or  
6 more?

7 MR. SILVER: I can only address that generally,  
8 Mr. Examiner, because ordinarily I don't look at myself as an  
9 advocate for a specific amount of a penalty. I don't try to  
10 advocate for the penalty. But I can explain to you the  
11 Department's position to the best of my knowledge. There have  
12 been three spills at this location. One spill was settled by  
13 agreement between Mr. Briggs and the Department with a lower  
14 civil penalty than originally proposed. Another spill occurred  
15 that Mr. Briggs was not fined by the Department because of his  
16 very good cooperative efforts in cleaning up the spill. The  
17 other factors involved, I believe - the Department's position  
18 is that these spills could have been prevented by better  
19 surface channeling in order to collect excess oil from around  
20 the property, that perhaps there could have been better  
21 protective controls around the pond to prevent it, in the  
22 Department's opinion, from overflowing. (Pause) And I think -  
23 I think that pretty well summarizes it. I just think it's the  
24 general history at the area. And the lack of surface - lack of  
25 control efforts that - to prevent these types of episodes from

1 occurring. The \$3,500 fine is just accumulative history of the  
2 previous activities.

3 REFeree: Okay. Thank you, sir. Mr. Onken, do you  
4 have any statements?

5 MR. ONKEN: Yes, I do. I think we have a case where  
6 it's probably a evidentiary problem. The basic source of oil  
7 is this treatment pond and there's no evidence that treatment  
8 pond overflowed other than some speculation. The evidence  
9 against Mr. Briggs for this being his fault, or oil under his  
10 control is one, he's in the oil business; and two, he showed up  
11 promptly and cleaned this up. Now, he's been questioned about  
12 why would you do that? Why would a businessman do that? Well,  
13 a businessman who's been around who's in the oil business, and  
14 has been around - around the block a few times with oil spill  
15 and is in Hawaii, and suddenly there's an oil spill after a  
16 heavy rain, probably thinks it's his and he'd better get out  
17 there. I mean, look at the downside risk of not doing it. And  
18 that's what they did. In getting out there they discovered  
19 eventually that this oil had not come out of their - their  
20 treatment pond, had not flowed down there. But it is not  
21 incredible for someone in that position to take action  
22 immediately to clean it up rather than, well, let's hang around  
23 and let it get really bad and decide between the two of us, my  
24 neighbor and I, who's financially responsible. The hardwood  
25 man can't go do it. It's the people with the booms and who are



1 in this business. Well, other than the fact that he cleaned it  
2 up, there's been no evidence by the DEQ that the source was on  
3 his property. It wasn't tested. It was looked at and said,  
4 there's some oil. There's Mr. Briggs, he's in the oil  
5 business. That's not a basis for finding him liable in this  
6 case. I mean, they could have investigated this. They can -  
7 we have water quality tests all up and down the line. They can  
8 take this stuff apart and tell you everything that's in it.  
9 The only thing we have is, there's oil over there, I can - it  
10 looks like oil, and there's some oil up here, not whether it's  
11 the same, there's no indication of a flow down from this pond  
12 or any other place and the people involved who are actually  
13 doing the cleanup as opposed to standing there speculating on,  
14 well, maybe it came from here are finding that the water is  
15 seeping out from tires under property that's not Mr. Briggs.  
16 Now, we can't come in - we are not able today to come in and  
17 say, "Here's the source of this. We've got who did it." But  
18 there's a variety of sources. There's a tire - tire  
19 gasification machine and there's - there's this testimony all  
20 over there was drainage from the whole area. It was a marshy  
21 area. It could have come from anyplace, even quite some time  
22 ago. The testimony is that there were heavy rains. It could  
23 have been sitting there for quite some time and ooze up. So I  
24 think that they just fail as a matter of proof, in any way,  
25 tracing any of the oil to Mr. Briggs' property - to any oil on

1 Mr. Briggs' property. There's just been no evidence to that  
2 effect. What they've said, "Well, you cleaned it up, so you're  
3 gonna be fined because that means you probably did it." I  
4 don't think that's fault. And we have here in regard to the  
5 amount of the fine. Well, it's the Department's policy that  
6 there have been sloppy practices and better protection could  
7 have solved the problem. Better control. No, we have had no  
8 evidence of that today. It's just a statement in closing. I  
9 don't think anyone's even tried to put on evidence of - of  
10 whether there's been negligent or sloppy practices. I think  
11 Mr. Briggs has testified that - that no liquid left that  
12 property even in the heavy rains. And the - and the Department  
13 has simply put on nothing to refute that. Nothing more.

14 REFeree: Okay. I'm now going to end the hearing and  
15 prepare a Decision and mail it as soon as possible.


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CERTIFICATE

I, JILL BISHOP, hereby certify that I am a transcribing machine operator and I prepared from a mechanical recording the foregoing typewritten transcript of the testimony and proceedings had upon the hearing of the above entitled matter (Case No. 4-WQ-NWR-87-27) at the time and place set forth in the caption hereof; and that the foregoing pages, which are numbered 1 to 96, both inclusive, contain a full, true and correct record of all the testimony adduced in behalf of the respective parties, and all other oral proceedings had upon the said hearing, except where specifically directed by the Referee to be off the record.

WITNESS my hand as transcribing machine operator this 7th day of November 1987.

  
\_\_\_\_\_  
Transcribing Machine Operator

Proofreader/Editor: LEM/JRB