

7/8/1988

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS**



State of Oregon
**Department of
Environmental
Quality**

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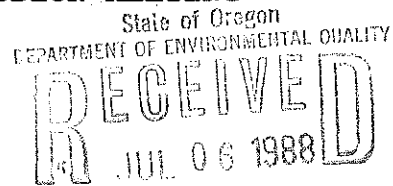
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N. K. Kila

Daily monitoring in Band
Clean initiative petition

OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

July 8, 1988
Conference Room 4
811 S. W. Sixth Avenue
Portland, Oregon 97204



AGENDA

AIR QUALITY CONTROL

8:00 a.m. - CONSENT ITEMS (NOTE TIME CHANGE)

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 June 10, 1988, EQC Meeting.
- B. Monthly Activity Report for May 1988.
- C. Tax Credits for Approval.
- D. Election of Officers - First Order of Business

8:15 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.

Guest Speaker: Ms. Kristine Gebbie, Administrator
Oregon State Health Division

HEARING AUTHORIZATIONS

- E. Request for Authorization to Conduct a Public Hearing on Proposed New Administrative Rules for the Waste Tire Program, OAR 340-62: Reimbursement for Use and Cleanup of Waste Tires.

9:00 a.m. - 10:00 a.m.: SPECIAL ACTION ITEM

- F. Proposed Adoption of Rules Defining Loading Capacity (LA), Waste Load Allocation (WLA), Load Allocation (LA), and Total Maximum Daily Load (TMDL) (OAR 340-41-006) and Proposed Adoption of Rules Establishing Total Maximum Daily Loads, Load Allocations, and Waste Load Allocations for Total Phosphorus and Ammonia in the Tualatin River Basin (340-41-470).

DEQ staff and designated persons will make brief presentations.

10:00 a.m. - Noon: EQC discussion of the Tualatin River Staff Report.

Noon to 12:30 p.m.: LUNCH BREAK

12:30 p.m. - 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.

- *G. Proposed Adoption of New Administrative Rules for the Waste Tire Program, OAR 340-62: Permit Procedures and Standards for Waste Tire Storage Sites and Waste Tire Carriers.
- *H. Proposed Adoption of Additions to Solid Waste Rules Regarding Financial Assurance at Regional Disposal Sites, OAR 340-61-010 and 029.
- I. Public Hearing and Proposed Adoption of Temporary Rule OAR 340-60-100 for Certification of In-state Recycling Programs under ORS 459.305.
- *J. Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Division 100, 102 and 104.
- K. Appeal of On-Site Sewage Treatment and Disposal System Variance Denial by Lester W. Fread and Norma J. Fread.
- L. Review of Amendments to Portland's Assessment Deferral Loan Program.

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 8:15 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, Conference Room 4, Portland. Agenda items may be discussed at breakfast. The Commission will also have lunch at the DEQ offices.

The next Commission meeting will be August 19, 1988, in Portland, 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.

july8

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

**Minutes of the One Hundred Eighty-Eighth Meeting
June 10, 1988**

**Fourth Floor Conference Room
811 S. W. Sixth Avenue
Portland, Oregon 97204**

Commission Members Present:

James Petersen, Chairman
Wallace Brill
Bill Hutchison
Mary Bishop
Emery Castle

Department of Environmental Quality Staff Present:

Fred Hansen, Director
Michael Huston and Kurt Burkholder, Department of Justice
Program Staff Members

NOTE: Staff reports presented at this meeting, which contain the Director's recommendations, are on file at the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97024. Written material submitted at this meeting is made a part of this record and is on file at the above address.

BREAKFAST MEETING

LEGISLATIVE CONCEPTS: Bob Danko, Hazardous and Solid Waste Division, described the latest legislative concept sent to the Commission for their review. The concept is about establishing a hazardous substance and groundwater protection fund. The Department has several programs that address or are proposed to address hazardous substances and groundwater protection. These programs include the Department's hazardous site clean up and hazardous waste reduction program and multi-agency programs that

address hazardous materials spill response and groundwater protection. Through this concept, the Department is proposing assessments on hazardous substances, including petroleum, to provide the needed funds.

A subcommittee of the Joint Legislative Interim Committee on Environment and Hazardous Materials has also been looking at options for funding. They are considering assessments similar to the Department's proposed legislative concept.

SIP CALLS: Director Hansen told the Commission about the U. S. Environmental Protection Agency's (EPA) intent to declare State Implementation Plans (SIP) to be "substantially inadequate." Though SIPs for Medford, Grants Pass and Portland had been approved by EPA in 1984 and 1985, the average of exceedances during 1985, 1986 and 1987, in EPA's view, negates the possibility of attainment as of December 31, 1987. The Department strongly disagrees with the validity and appropriateness of EPA's action.

Commissioner Bishop asked about Portland's air quality violations and if Washington State had contributed to those violations. Director Hansen said there appears to be hot spots on the Vancouver side. He further stated that the issue of vehicle inspection needed to be addressed by Washington.

Commissioner Hutchison asked what will happen when the SIPs are called. **Nick Nikkila**, Air Quality Administrator, responded that resources which would otherwise be used for high priority health-related issues such as PM₁₀ would have to be redirected in order to satisfy EPA's requirements for additional data and plan revisions. He said a SIP call would give the wrong message to those moving here.

Director Hansen indicated that he would keep the Commission informed of new developments in this matter.

TUALATIN RIVER TMDLs: **Dick Nichols**, Water Quality Administrator, asked the Commission about holding a special EQC meeting to take testimony on Total Maximum Daily Load (TMDL) rules. The consent agreement entered into by EPA and Northwest Environmental Defense Center (NEDC) calls for rule adoption by June 30, 1988. The Commission decided to hold the hearing either the Thursday before the next EQC meeting scheduled

for July 8, or depending on the length of the agenda for that meeting, to hold the hearing on the same day as the July 8 EQC meeting.

FORMAL MEETING

Chairman Petersen introduced Dr. Emery Castle. Dr. Castle is the new commissioner replacing Vice-Chairman Arno Denecke. Dr. Castle is chairman of the graduate faculty of economics at Oregon State University in Corvallis.

April 29, 1988
A. Minutes of the June 10, 1988, EQC Meeting.

Commissioner Hutchison indicated that page 5, fourth line of the Director's Recommendation, Agenda Item G, read as follows:

...for regional disposal <disp9osal> ...

and that Agenda Item H, Request for Authorization to Conduct a Public Hearing on Proposed New Rules Relating to the Opportunity to Recycle Yard Debris, include the following wording under **ACTION**:

Action: Commissioner Hutchison MOVED that action on this item be deferred and asked the staff to revised the rules to:

1. More clearly define a minimum acceptable yard debris program;
2. Rely less on performance standards; and
3. Emphasize ways to stimulate the supply and demand for yard debris products.

The motion was seconded by Commissioner Bishop and passed unanimously that this agenda item be deferred until the June 10, 1988, EQC meeting.

Action: It was MOVED by Commissioner Bishop, seconded by Commissioner Hutchison and passed unanimously that the corrected minutes of the June 10, 1988, meeting be approved.

April 29, 1988
B. Monthly Activity Reports for March and April 1988.

ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the March and April 1988 Monthly Activity Reports be approved.

C. Tax Credits

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

1. Issue tax credit certificates for pollution control facilities:

<u>Appl</u> <u>No.</u>	<u>Applicant</u>	<u>Facility</u>
2141	Portland General Electric	Oil spill containment system , Liberty Substation
2170	Portland General Electric	Oil spill containment system, Oswego Substation
2172	Portland General Electric	Oil spill containment system, Sheridan Substation
2179	Portland General Electric	Oil spill containment system, Orient Substation
2349	Portland General Electric	Replacement and disposal of PCB-filled pole mounted capacitors with non-PCB capacitors

<u>Appl</u> <u>No.</u>	<u>Applicant</u>	<u>Facility</u>
2393	Gregory Affiliates, Inc.	Installation of Burley Scrubbers on two veneer dryers

2. Revoke Pollution Control Facility Certificate Number 650, held by National Metallurgical Corporation and reissue to Dow Corning Corporation.

Revoke Pollution Control Facility Certificate Number 876, held by Kawecky Berylco Industries, Incorporated and reissue to Dow Corning Corporation.

Bob Buchanan, Director, State Department of Agriculture, was the guest speaker for this EQC meeting. Director Hansen told the Commission that he had appeared before the Economic Development Commission. From this opportunity, the idea was created to have other natural resource directors speak to the Commission about their coordinating activities with DEQ.

Mr. Buchanan provided an overview of the Department of Agriculture's structure and functions. Next, Mr. Buchanan described the areas of coordination and programs between the Agriculture Department and DEQ. In the smoke management program, Agriculture provides public policy and management over the sky watch, communication and monitoring activities relating to the field burning program. Agriculture is involved with confined animal feedlot operations. Further, Mr. Buchanan spoke to the Commission about the new issue of groundwater contamination. He said to address this complex problem a financing mechanism must be found for investigations as well as for solutions to groundwater problems.

Chairman Petersen asked Mr. Buchanan about his statement that the grass seed industry was clean. Mr. Buchanan responded that grass seed was clean since it did not cause soil erosion. Chairman Petersen further asked Mr. Buchanan about the voluntary field burning program in Central Oregon. Mr. Buchanan said that Agriculture is reviewing the program. He said they will

try to expand the Willamette Valley type of program in that area and will try to streamline the program so that it will be cost effective.

Chairman Petersen also asked Mr. Buchanan if the Department of Agriculture worked with manufacturers of chemical companies to reduce their effect on groundwater. Mr. Buchanan replied that Oregon State University is doing some work; however, the main control of chemicals is through applicator licensing and use restrictions. Mr. Buchanan said that new methodologies need to be explored. Chairman Petersen indicated this might be a topic to be discussed among the natural resource agency heads. Mr. Buchanan added that groundwater issues need to be placed on the national agenda and to receive federal funding for program plan development. He said EPA and Congress need to work with private industry so that further studies can occur. **Commissioner Castle** asked if other state agencies were involved in a coordinated groundwater study. **Director Hansen** and Mr. Buchanan responded that the Department of Agriculture, OSU, Water Resources Department, DEQ and the Health Division are involved in a coordinated approach to groundwater monitoring.

Commissioner Hutchison complimented the work of the Watershed Enhancement Board.

PUBLIC FORUM

Dale Sherbourne, Citizens Concerned with Wastewater Management, spoke to the Commission about his concern over the use of chlorine as a disinfectant of treated sewage. As an employee of the City of Portland, Mr. Sherbourne said he was concerned about accidents at the Portland sewage treatment plant. He believes these accidents have and will continue to threaten the health and safety of plant workers and people living near the plant. Mr. Sherbourne spoke about the water quality and toxic effects of chlorinated effluents and stated he believed there were safer, alternative disinfection methods available. Mr. Sherbourne asked the Commission to direct the Department to adopt regulations requiring the use of alternative disinfection methods.

Richard Nichols, Water Quality Administrator, stated the Department recognized the disadvantages and hazards of chlorine as a disinfectant. However, Mr. Nichols said, other methods of disinfection have inherent

disadvantages. The Department has proposed to review the disinfection policy in the state during the next biennium. The Department believes that since chlorine disinfection is of national interest, EPA should take the lead in developing needed information to help states address this issue. At this time, EPA has not indicated an interest in this issue.

Terry Jenkins and **John Pointer**, Citizens Concerned with Wastewater Management, spoke to the Commission about their concerns with the back-up system of the City of Portland's sewage treatment plants. Messrs. Jenkins and Pointer questioned the Department's failure to cite the City of Portland for sewage bypasses that have occurred. **Director Hansen** indicated the Department's role was to achieve compliance through schedules; however, if bypasses occurred through negligence or oversight, a notice of violation would be given to the City. Mr. Pointer listed several areas of a response to his previous questions that he believed the Department did not answer. **Chairman Petersen** asked Mr. Pointer to develop those issues into a list for the Department and that the Department would respond further. Chairman Petersen also indicated that after Department review of the issues, Mr. Pointer's concerns may be brought before the Commission as an agenda item. **Commissioner Hutchison** asked **Michael Huston**, Assistant Attorney General, to provide a legal opinion of ORS 165.540, which Mr. Pointer quoted as his defense for taping *both personal &* telephone conversations with DEQ staff.

Jean Orcutt spoke to the Commission about her concerns relating to the threat to drinking water. She questioned the appropriateness of waiver language being used by Portland in mid-county sewer Bancroft bond proceedings.

Colleen Obrist, Don Obrist Trucking and Excavating, told the Commission about the frustration she and her husband had experienced with the Department. Mrs. Obrist said they had received conflicting opinions from the Department about the level of contamination of the material they were removing. She believed their questions had been responded to with vagueness and rudeness. **Director Hansen** said the material contained cold tar and that when left alone, would not affect groundwater. Mrs. Obrist also asked when new monitoring wells could be installed. DEQ staff responded that the plans for and locations of the wells had been approved. **Chairman Petersen** asked that Mrs. Obrist again state her concerns in writing to the

Department, and the Department provide to the Commission a copy of its response to Mrs. Obrist.

HEARING AUTHORIZATIONS

D. Request for Authorization to Conduct a Public Hearing on Proposed Amendments and New Rules Relating to the Opportunity to Recycle Yard Debris, OAR 340-60-015 through 125.

At the December 11, 1987, meeting, the Commission directed the Department to develop additional rules which clarified the range of acceptable alternative methods for providing the opportunity to recycle yard debris. These rules also include the responsibility for yard debris recycling to local government. Outlined in the rules is a planning and implementation process for linking the development of yard debris collection programs to the demand for yard debris from the processors. The rules contain performance standards for providing the opportunity to recycle yard debris.

Commission Bishop asked that a typo on page 1 of the rules be noted and corrected. Additionally, Commissioner Bishop asked staff to simplify wording on page 1 of the rule, 340-60-015 (7) and to remove the word **and** from 340-60-075, sixth line.

Chairman Petersen asked Director Hansen to summarize the process of local governments developing and implementing a yard debris program. Director Hansen said that local governments first determine their goals, then meet at the local level to develop alternatives to accomplish their goals.

Director's Recommendation: Based upon the report summation, it is recommended the Commission authorize a public hearing on the proposed rule changes related to yard debris recycling programs as proposed by the Department.

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

E. Request for Authorization to Conduct a Public Hearing on Revisions of Oregon Administrative Rule, Chapter 340, Division 12, Civil Penalties, and Revisions to the Clean Air Act State Implementation Plan (SIP).

Revisions to this rule would establish civil penalty schedules for the disposal of PCBs (polychlorinated biphenols) and hazardous waste remedial action, would list recently created categories of violations such as waste tire storage and disposal and would revise Oregon's air quality State Implementation Plan.

Commissioner Hutchison asked the Department why this rule had not been enforced before. Director Hansen indicated this rule was a result of 1987 legislation. **Yone McNally**, Enforcement Section, said the 1985 Legislature gave authority for civil penalty rules on PCB disposal only.

Director's Recommendation: Based upon the report summation, it is recommended the Commission authorize a public hearing to take testimony on the proposed revisions to the civil penalty rules, OAR Chapter 340, Division 12 and proposed revisions to the SIP.

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

F. This item was removed from the agenda.

G. Request for Authorization to Conduct Public Hearings on Vehicle Inspection Program Operating Rules, Test Procedure and Licensed Exhaust Gas Analyzers, OAR 340-24-300 through 24-350.

Vehicle Inspection Program operating rules are reviewed periodically; review is completed, and a number of changes are proposed. As a first step in implementing these changes, the Department is requesting authorization to conduct a series of public hearings. The purpose of the hearings is to gather public input on the suggested changes to the operating rules for the Vehicle Inspection Program.

Proposed changes include easing the tampering portion of the inspection for 1975-1979 vehicles and the start of decertification of the older series of exhaust gas analyzers used by the licensed fleets. The Department is also asking the Commission to affirm the current criteria in the rule for fleets to be licensed for self-inspection.

Commissioner Brill asked if the Department had difficulty with citizens registering their vehicles at addresses outside of the vehicle inspection boundary. **Bill Jasper**, Vehicle Inspection Program, said there is about a 10-plus percent rate of improperly registered vehicles. **Commissioner Castle** asked Mr. Jasper how the Department developed this percentage. Mr. Jasper explained several procedures (parking lot surveys together with normal cross-checking of vehicle violations and drivers' license records). **Chairman Petersen** said he would like the Department to actively pursue the process of identifying improperly registered vehicles.

Director's Recommendation: Based upon the report summation, the Director recommends the Commission authorize the Department to schedule public hearings to receive testimony on the Vehicle Inspection Rules.

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

H. Request for Authorization to Conduct a Public Hearing on Proposed Remedial Action Rules Regarding Degree of Clean Up and Selection of the Remedial Action, OAR Chapter 340, Division 122.

The Oregon superfund law establishes a comprehensive program for the identification, investigation and clean up of sites contaminated by hazardous substances. Site clean ups under this law range from simple soil removals to complex and massive groundwater clean ups of hazardous substances. Consequently, the proposed rules must provide flexibility to work with a wide range of sites; the proposed rules identify the basic investigatory activities and clean up options as well as the criteria and decisions needed to determine the clean up level and to select remedial action.

Chairman Petersen thanked **Allan Solares**, Hazardous and Solid Waste Division, and the Remedial Action Advisory Committee for their hard work and dedication.

Director's Recommendation: Based upon the report summation, it is recommended the Commission authorize the Department to conduct a public hearing and to take testimony on the proposed remedial action rules regarding degree of clean up and selection of the remedial action.

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

ACTION ITEMS

I. Proposed Adoption of Amendments to the Solid Waste Fee Rules, OAR Chapter 340, Division 61.

The 1987 Legislature granted the Department a 20 percent increase in Solid Waste Permit Fees. A draft fee schedule was approved by the Executive Department and the Legislature. Public hearings were held in Baker, Bend, Medford and Portland. The fee schedule is based on the amount of time spent on sites in the various fee categories. Without the fee increase, 10 percent of the program would be lost, affecting compliance assurance activities.

Commissioner Bishop asked if there was any way to avoid the complaint about non-notification of public hearing voiced by one operator. **Robert Brown**, Hazardous and Solid Waste Division, responded that all permittees were notified; however, two contract operators in charge of paying fees and other administrative functions at landfills had not been notified by the permittee. DEQ has since added the two operators to the mailing list. However, he said, this could occur again unless a permittee notified the Department that their contract operator was in charge of all business transactions.

Director's Recommendation: Based upon the report summation, it is recommended the Commission adopt the proposed amendments to

the solid wastes and recycling implementation fee rules in OAR Chapter 340, Division 61.

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

J. Proposed Adoption of Amendments to Procedures for Issuance, Denial, Modification and Revocation of Permits (OAR 340-14-005 through 050), Air Contaminant Discharge Permit Notice Policy (OAR 340-20-150), New Source Review Air Contaminant Discharge Permit Procedural Requirements (OAR 340-20-230), and Issuance of NPDES Permits (OAR 340-45-035).

The Department issues, modifies and denies various permits according to general regulations set forth in Division 14 of the Oregon Administrative Rules. Although the Department follows both written and unwritten procedures for holding public hearings on proposed permit actions, the general rules in Division 14 contain no public hearing requirements or guidance. The Department identified the need to promulgate uniform public hearing rules while involved in the settlement of a law suit. The Department offered in the settlement agreement to amend its general permitting regulations to require a public hearing upon receipt of written requests from ten or more persons, or an organization representing ten or more persons.

Director Hansen proposed a change to the last sentence of the last paragraph of the rule, page 5, as follows:

Public notice shall include the name and quantities of new or increased emissions for which permit limits are proposed, or new or increased emissions which exceed significant emission rates established by the Department.

This change would require publication of names and quantities of emissions for permitted sources exceeding significant emission rates or operating under permit limits.

David Blount, representing International Raw Materials, asked the Commission to include in this rule notices on permit transfers. Mr. Blount stated the public should be allowed to review corporate structure and history when a change of ownership occurs to a permitted source.

Chairman Petersen responded he was opposed to that suggestion. However, **Commissioner Hutchison** requested the Department include permit transfers in their monthly activity report.

Jean Meddaugh, Oregon Environmental Council, told the Commission OEC supported the amendment Director Hansen had suggested.

Director's Recommendation: Based on the report summation, it is recommended the EQC adopt the proposed amendments to the Department's general permitting procedures.

Action: It was MOVED by Commissioner Castle, seconded by Commissioner Hutchison and passed unanimously that the Director's Recommendation as amended above be approved.

K. Request for Issuance of an Environmental Quality Commission Compliance Order for the City of Estacada, Oregon.

Estacada's sewage treatment plant is unable to meet secondary treatment effluent limits prior to discharge to the Clackamas River. The Order is needed to establish interim limits and a schedule for construction of improved and expanded sewage treatment facilities that are to be operational by December 1, 1989. Once completed, the treatment system will meet stringent effluent criteria established for the Clackamas River sub-basin.

Commissioner Hutchison asked if the City would act to perform its treatment obligations in consideration of this concession by the EQC. **David Mann**, Water Quality Division, answered that the City and its engineers have been very responsive through the plant design review process and that staff anticipates continued cooperation.

Director's Recommendation: Based on the report summation, the Director recommends the Commission issue the Compliance Order as discussed in Alternative 3 by signing the document prepared as Attachment B of the staff report.

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

L. Request for Increased Load Allocation Under OAR, 340-41-026(2) from Portland General Electric for an Expansion of the Sewage Treatment Plant Serving the Trojan Nuclear Power Plant.

Portland General Electric operates a small sewage treatment facility to serve its Trojan Nuclear Power Plant. The sewage treatment plant is too small to adequately treat the increased wastewater loads from the plant. Wastewater loads have increased due to a larger work force at the plant.

The company has evaluated the options available to them for increasing their ability to treat sewage at the plant and had requested approval be granted for increasing its allowable discharge limit by a monthly average of 8.3 pounds to a total of 12.5 pounds of biochemical oxygen demand and total suspended solids. The company's evaluation of other alternatives which would not increase loads discharged were more expensive or impractical. Under the Commission's rules, additional load allocations must be specifically approved by the Commission.

John Charles, Oregon Environmental Council, submitted a letter to the Commission stating that he hoped the Commission would assess this request concurrently with review of the pollution control tax credits in Agenda Item C. Mr. Charles wrote that he believes Portland General Electric should put money back into the their system to protect the water quality of the Columbia River. The letter is made a part of this meeting record.

Richard Nichols, Water Quality Administrator, said he would be responding to Mr. Charles letter and addressing his concerns.

Chairman Petersen said he would like to see the Department and the Commission be consistent about this type of modification. Several Commissioners expressed the need to develop further criteria for equitable evaluation of such proposals.

Director's Recommendation: The Director recommends the Commission grant the requested increase for 8.3 pounds of additional loading to Portland General Electric for the Trojan Nuclear Power Plant, and that the Department modify the NPDES (National Pollutant Discharge Elimination System) permit as appropriate.

Action: It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed four to one, with Commission Hutchison voting NO, that the Director's Recommendation be approved.

M. Informational Report: Implementation Status of the Total Suspended Particulate (TSP) Air Pollution Control Strategy in the Medford-Ashland Air Quality Maintenance Area.

At the EQC meeting in Medford on April 29, 1988, the Commission directed the Department to prepare a report on what occurred in the implementation of the Medford-Ashland 1983 particulate control strategy. Additionally, the Commission asked the Department what could be done to correct any implementation problems and to prevent similar problems in the future.

As discussed in the staff report, there are a number of options available to individual citizens or units of government to motivate or force implementation of the control measures in the Medford-Ashland particulate strategy. The Department believes that locally shaped and enforced strategies to deal with residential woodsmoke pollution problems are still highly preferable over state or federal sanctions. However, in order to prevent similar implementation problems in the future, either EPA may need to pursue its legal remedies or state authority may be needed from the Oregon Legislature to impose automatic restrictions that would effectively reduce future residential woodsmoke emissions in areas that failed to develop or implement the necessary control strategy.

Director Hansen said that Alaska and Idaho had allowed local governments to regulate residential woodstove burning, and this regulation had occurred

without great outrage from the citizens. **Commissioner Petersen** also stated that a strong education program was needed and asked the Department how it was proceeding with their educational program. **Director Hansen** indicated that **Carolyn Young**, Public Affairs, was coordinating a special information project made possible by a grant from EPA.

Director's Recommendation: This report is provided for information only; no Commission action is required at this time.

N. Informational Report: Air Quality Offset Rule (OAR 340-20-240).

At the April 29, 1988, EQC meeting in Medford, the Commission requested the Department to prepare an informational report on the air quality offset rule. Concern had been expressed by several people commenting before the Commission that the offset rule allowed industry to move into areas that exceed air quality standards. The report includes the following:

1. Background of the offset rule and discussion of available options which include continuing the present offset policy, adopting a growth margin approach and adopting a no-growth approach.
2. Minor changes which could be considered, such as increasing the offset ratio or considering various economic development strategies.

Chairman Petersen stated he would like to see the Department pursue the 1.3-to-1 offset ratio.

Action: It is recommended the Commission take no action now. The Department is planning to propose new control strategies for PM₁₀ non-attainment areas in the near future. One possible strategy being considered is an increase in the offset ratio. It is recommended the Commission consider this proposed revision at the time the control strategies are brought before the Commission.

O. Review of applications for Assessment Deferral Loan Program Revolving Funds.

In 1987, the Legislature created the Assessment Deferral Loan Program to provide assistance to property owners who will experience extreme financial hardship resulting from sewer assessments for sewer connections required by a federal grant agreement or an order issued by a state commission or agency. Under this new program, public agencies apply to the Department for a loan and in turn provide loans to individual property owners.

The Department has received applications for loan funds from Portland, Gresham and Eugene. Each of the City's proposed programs have been reviewed by the Department. An errata sheet was added to the staff report.

Jean Orcutt spoke to the Commission about her concerns with Bancroft agreements that were being proposed. Ms. Orcutt also asked if the Department had reviewed and approved Portland and Gresham's safety net program. **Richard Nichols**, Water Quality Administrator, responded that the Department had reviewed the programs as they related to requirements of the statutes allowing the sewer assessment deferral loan program. Issues related to the program that were outside the statutory requirements of the loan program were not addressed. **Chairman Petersen** expressed concern about what would happen to the loan at the death of the owner. **Bonnie Morris**, City of Portland, said the City program requires repayment upon title transfer.

Chairman Petersen requested Commission review of amendments to the safety net programs.

Director's Recommendation: Based on the report summation, it is recommended the Commission approve the proposed assessment deferral loan programs for Portland, Gresham and Eugene.

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

There was no further business and the meeting adjourned at 1:05 p.m.

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Commissioner Hutchison expressed thanks and appreciation to Chairman Petersen and Commissioner Bishop for their diligent and hard work during their tenure on the Commission.

Approved _____
Approved with Corrections _____
Corrections made _____

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Eighty-Ninth Meeting
July 8, 1988

Department of Environmental Quality
Conference Room 4
811 SW Sixth Avenue
Portland, Oregon 97204

Commission Members Present:

Bill Hutchison
Wallace Brill
Emery Castle
Genevieve Pisarski Sage
William Wessinger*

*Appointment effective July 17, 1988

Department of Environmental Quality Staff Present:

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

NOTE: Staff reports presented at this meeting, which contain the Director's recommendations, are on file in the Office of the Director, Department of Environmental Quality, 811 SW 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

Metro's Solid Waste Reduction Program: The EQC approved Metro's Solid Waste Reduction Plan on June 27, 1986. Metro has now submitted a biennial report on the status of the implementation plan which is currently being reviewed by DEQ staff and will be submitted to the interim legislative committee in September 1988. The report with staff recommendations will be scheduled for EQC review at the meeting following the September 9 meeting.

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There was a discussion of SW education/promotion standards--should there be performance standards in rules--this subject will be reviewed again at the September meeting.

Dave Rozell presented a slide show on waste reduction.

FORMAL MEETING

CONSENT ITEMS:

Agenda Item D: Election of Officers.

Action: It was moved by Commissioner Brill, seconded by Commissioner Castle, and unanimously passed to elect Commissioner Hutchison as chair for the Commission.

It was moved by Commissioner Brill, seconded by Commissioner Sage, and unanimously passed to elect Commissioner Castle as vice-chair for the Commission.

Chairman Hutchison introduced the members of the Commission. He noted that William Wessinger was joining the Commission at the table although he had not yet been confirmed by the Senate and would not be voting on issues at this meeting.

Agenda Item A: Minutes of the June 10, 1988 EQC Meeting.

Commissioner Sage indicated that the June 10, 1988 date appearing twice on page 3 should be April 29, 1988.

Commissioner Hutchison indicated that the reference to taping of conversations on page 7 should refer to taping of both personal and telephone conversations.

Action: It was moved by Commissioner Brill, seconded by Commissioner Castle, and passed unanimously that the corrected minutes of the June 10, 1988 meeting be approved.

Agenda Item B: Monthly Activity Report for May 1988.

Director Hansen briefly explained the nature and purpose of the activity reports and suggested further discussion at the upcoming Commission retreat.

Action: It was moved by Commissioner Castle, seconded by Commissioner Sage, and passed unanimously that the May 1988 Monthly Activity Report be approved.

Agenda Item C: Tax Credits.

Director Hansen discussed some of the basics of the tax credit program and the changes which will be effective in 1989. The program is intended to offset the cost of environmental protection equipment with a 50% credit against income over a 10 year period. In 1989 the percentage will drop to 25% and projects must be complete by 12/31/90. The program is scheduled to phase out December 31, 1990. All tax credits must be approved by the Commission.

Commissioner Castle asked how the department determined the facility to be certified under T-2297 was at 48% of cost. Lydia Taylor explained that the facility had some return on investment and that percentage allocable was established using tables in the rules.

Chairman Hutchison advised that he would abstain on application T-2104 because his law firm represented the applicant company.

Action: It was moved by Commissioner Sage, seconded by Commissioner Brill, and passed unanimously to approve the tax credits for applications T-1890, T-2297, and T-2418.

It was moved by Commissioner Sage, seconded by Commissioner Brill, and passed with 3 votes that application T-2104 be approved; Chairman Hutchison abstained.

PUBLIC FORUM

Joe Weller, American Lung Association, spoke to the Commission about daily air quality monitoring in the Bend area. He stated that during the winter (heating) season, monitoring is conducted on a daily basis. During the summer season, however, monitoring is conducted only every six days. Mr. Weller feels that this sampling schedule allows violations of particulates to occur and would like to encourage daily monitoring during both summer and winter months.

Mr. Weller also informed the Commission that they have collected more than 90,000 signatures for a "Clean Indoor Air" initiative which advocated the prohibition of smoking in indoor environments.

He urged the Commission to continue to pursue a legislative concept on this issue as a backup to the initiative measure.

Director Hansen advised that the department would explore the feasibility of additional monitoring in the Bend area and will report back to the Commission.

Gary Newkirk, private citizen, told the Commission that he has had an ongoing problem with the sewage system in Twin Rocks. Mr. Newkirk owns an historic building which is located at a point lower than the lowest point of the Twin Rocks system. As a consequence, if the system has problems, his house gets flooded with raw sewage. This has happened on seven occasions since 1980. Gary requested DEQ investigation of the 7th backup. He also requested investigation of historic building provisions of the federal grants to the Twin Rocks District. Mr. Newkirk further requested the following: an improved monitoring system (specifically for the Twin Rocks system); a report on the current status of the system; installation of an alarm system with an emergency telephone number which is always manned; and that the Commission declare a clear and present danger to Tillamook Bay and public health and do what was within its power to take corrective or enforcement action. A letter from Mr. Newkirk is made part of this meeting's record.

The department was asked to report back to the Commission on the problem.

The department was also asked to report back to the Commission regarding DEQ's responsibility under grant conditions relative to historic buildings.

Claudia Wade, private citizen, expressed her frustration with regulations which prevent her from burning blackberry bushes and other yard debris. She described the proliferation of the bushes and the problems with controlling them. She would like to see blackberry bushes included in the field burning definition.

Commissioner Hutchison told Ms. Wade that although it was not likely berry bushes could be included in field burning definitions, DEQ is taking action to make it easier to dispose of yard debris.

The Commission then proceeded to agenda Item F which was scheduled to begin at 9:00 am.

Agenda Item F: Proposed Adoption of Rules Defining Loading Capacity (LA), Waste Load Allocation (WLA), Load Allocation (LA), and Total Maximum Daily Load (TMDL) (OAR 340-41-006) and Proposed Adoption of Rules Establishing Total Maximum Daily Loads, Load

Allocations, and Waste Load Allocations for Total Phosphorus and Ammonia in the Tualatin River Basin (340-41-470).

This agenda item is about the adoption of proposed rules for the Tualatin River system which would establish Total Maximum Daily Loads (TMDLs), Waste Load Allocations (WLAs), and Load Allocations (LAs) for phosphorus and ammonia-nitrogen, and the implementation plans to achieve the loading limits. The definition of four terms--Loading Capacity (LC), LA, WLA, and TMDL--are also proposed to be added to the section on definitions.

In December 1986 the Northwest Environmental Defense Center (NEDC) filed suit in federal court against EPA to require that total maximum daily loads (TMDLs) be promulgated for those water bodies that fail to meet water quality standards as required by Section 303 of the Clean Water Act. In May 1987 the Environmental Quality Commission approved a process for the department to begin establishing TMDLs beginning with the Tualatin River basin. A consent decree was signed by EPA and NEDC in June 1987 agreeing to a schedule for adopting TMDLs on 11 water bodies over the following years, one of which was the Tualatin River.

Neil Mullane, Planning and Monitoring Manager, described the department's report on the Tualatin River Basin regarding waste load allocations. Neil stated that the proposed rules contain a definition section, concentration identifications, the load calculation process, and an implementation schedule. He further stated that the main issues involved in the study were establishing the phosphorus/ammonia criteria and a time line for implementation, identifying non-point source locations, determining load allocations, and establishing special rules and policies.

Jack Churchill of the Northwest Environmental Defense Center urged support of the Staff report with amendments presented by Jack Smith. He also commented that we now have enough data to make decisions. Mr. Churchill stated that the law is already established and now the polluters must either change the law or comply with it. A copy of Mr. Churchill's testimony is made a part of this meeting's record.

Jack Smith, President of the Northwest Environmental Defense Center, stated that the rules prescribe a method for calculating loads, but do not establish load allocations or guidance on distribution of allocations in overlapping jurisdictions; they only establish target standards. Mr. Smith made specific suggestions to change the rules. He also stated that while the department considers container nurseries to be non-point sources, NEDC considers them to be point sources.

Darlene Hooley, Commissioner of Clackamas County, said that she supports the standards but feels that dates of compliance need to be established, that a data base is needed for the entire basin, and that all government entities need to cooperate on this project.

Don Burdick of the Lake Oswego Corporation recommended adoption of the rules and said they will work with USA and the department to comply with and enforce the rules. A letter from Mr. Burdick is made part of this meeting's record. He noted that the Lake Oswego drainage is not part of the Tualatin River drainage and the rules may be adjusted to specifically identify the Lake Oswego drainage basin.

Gary Krahmer, Manager of United Sewerage Agency noted that all want good water quality. He expressed disappointment that USA modelling efforts and recommendations were not better considered.

Gordon Culp, consulting engineer for USA, reviewed his experience with phosphorus removal projects and stated that the success of these projects is uncertain. Mr. Culp stated that the phosphorus limitations proposed are not attainable, that models to predict algal growths are not precise, and that other factors affecting water quality should also be considered. A copy of Mr. Culp's testimony is made a part of this meeting's record.

Bonnie Hays representing Unified Sewerage Agency (USA), stated that removing phosphorus from the river will not necessarily reduce the chlorophyll which is the major reason for unclear water. Bonnie presented samples of water with various levels of chlorophyll to demonstrate what the numbers represented in the proposal. Bonnie further stated that the county and USA have already begun various processes for controlling ammonia. She feels there are problems with establishing time lines for the storm water plans as the summer of 1990. Bonnie feels that the charter of Washington County slows the process to the point where they might be unable to comply with that deadline. A letter from Ms. Hays is made part of this meeting's record.

Lorrie Skurdahl, legal counsel for USA, stated that the existing "nuisance algae rule" was not being appropriately applied to the Tualatin River, that TMDLs should be adopted immediately, that USA's proposed TMDLs are technically sound, and that limits should be applied based on calendar year plus river flow and temperature. A copy of Ms. Skurdahl's testimony is made part of this meeting's record.

In response to questions from the Commission, Mike Gearhard, EPA, advised that if the Commission fails to adopt both criteria and an

implementation plan, EPA is required to publish its own proposals in the Federal Register within 90 days.

Cal Kramer, Manager of the Tualatin Valley Irrigation District stated that the biggest issue involved in the rule process is money. He felt that the standards established are not achievable and recommended that they be delayed for five years. Mr. Kramer felt that background levels needed to be established. He further stated that agencies have been designated to address nonpoint source pollution, but that section H of the proposal was not in line with previously established designations.

Richard Barazono, a private land owner, recommended consideration of a higher level of phosphates and stated that the Lake Oswego dam should put water back into the river.

John Brooms with the Wetlands Conservancy stated that they support the proposal. He stated that the issues involved economics, wildlife, and health as well as aesthetics. He also noted that they are not asking for guaranteed results, but improvements in water quality.

Michael McKillip, City Engineer for the City of Tualatin, submitted a letter from the Mayor of Tualatin. The letter is made part of this meeting's record.

Kenneth Wright, of the Lower Tualatin Valley Home Owners Association stated that the association agreed with much of DEQ's report. He suggested focusing more attention on the problem of storm drains, silt from property development, nonpoint pollution sources, and the potential for winter flooding. A letter of his testimony is made a part of this meeting's record.

Tom Donaca of Associated Oregon Industries said that economic impact statements are necessary for rules and that without specific statements, the potential for litigation is great.

Also part of this meeting's record are a statement from Kenneth Fink, of the Stafford Lower Tualatin CPO, and a report prepared by Scientific Resources, Inc. entitled "Lake Oswego Lake and Watershed Assessment 1986-1987: Diagnostic and Restoration Analysis".

The Chairman then closed the public hearing on this matter.

Neil Mullane and Bob Baumgartner were asked to make a department response to the public comments.

Bob stated that of the four variables affecting water clarity, temperature and sunlight were uncontrollable while nutrients and

streamflow were controllable. The strategy proposed by USA was not adopted because chlorophyll A levels would not be reduced sufficiently to meet the target level of 15 micrograms per liter. The USA treatment options are good but have not yet been evaluated with regard to wetlands.

The suggested amendments to the proposed rules were then reviewed and considered by the Commission. The department was instructed to return later in the meeting with revisions to the rule language to incorporate a June 30, 1993 completion date, incorporate selected other wording changes recommended in testimony, and remove the implementation section for reconsideration at a subsequent public hearing.

Further consideration of this agenda item followed agenda item L.

Agenda Item E: Request for Authorization to Conduct a Public Hearing on Proposed New Administrative Rules for the Waste Tire Program, OAR 340-62: Reimbursement for Use and Cleanup of Waste Tires.

The 1987 Legislature passed a Waste Tire Bill (HB 2022) which requires regulation of waste tires, and imposes a \$1 fee on new replacement tires to create a Waste Tire Recycling Account. The account is to be used for a reimbursement program to stimulate the market for recycling of waste tires, and to provide cleanup funds for some tire piles. The department has worked with a task force of affected parties to develop administrative rules for the Waste Tire Program. This request was for public hearings to take testimony on the second part of those rules; those rules covering the use of reimbursement and cleanup program funds.

Commissioner-designate Wessinger asked how Items G and E were related.

Deanna Mueller-Krispin stated that rules to implement the waste tire program passed by the last legislature were being developed in 2 phases. Item G concerned the permitting aspect of waste tire regulation while Item E was specific to the reimbursement use of waste tire recycling program money, that is the \$1 charge per tire for new tire purchases.

Commissioner Hutchison questioned the need for an annual review.

Deanna Mueller-Krispin said that the review did not necessarily mean there would be changes to the rule, only that the process should be monitored.

Director's Recommendation: Based on the summation, it is recommended that the Commission authorize public hearings to take testimony on the proposed rule to implement the use of the Waste Tire Recycling Account, OAR 340-62, as presented.

Action: It was moved by Commissioner Castle, seconded by Commissioner Sage, and unanimously passed to approve the director's recommendation.

Agenda Item G: Proposed Adoption of New Administrative Rules for the Waste Tire Program, OAR 340-62: Permit Procedures and Standards for Waste Tire Storage Sites and Waste Tire Carriers.

The department is going through a two-stage rule making procedure to implement the program governing storage, transportation, and disposal of waste tires. This rule deals with permitting requirement for waste tire storage sites, waste tire carries, and chipping standards for tires to be landfilled in sold waste disposal sites. Public hearings were held in Pendleton, Bend, Springfield, Medford, and Oregon City. Eighteen persons testified and nine submitted written testimony. This rule establishes permit requirements and chipping standards.

In response to a question from Chairman Hutchison, Deanne Mueller-Krispin stated that this legislation does not have a special category for auto wreckers. If they acquire over 100 tires, they become a tire storage site and need a permit.

Director's Recommendation: It is recommended that the Commission adopt the proposed new rule governing permitting of waste tire storage sites, waste tire carriers, and chipping standards for landfill disposal of waste tires in OAR Chapter 340, Division 62.

Action: It was moved by Commissioner Castle, seconded by Commissioner Brill and unanimously passed to approve the director's recommendation.

Agenda Item H: Proposed Adoption of Additions to Solid Waste Rules Regarding Financial Assurance at Regional Disposal Sites, OAR 340-61-010 and 029.

The 1987 Legislature passed HB 2619 which requires any regional disposal site to provide financial assurance. The law also requires the Commission to set the types and amount of financial assurance.

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July 8, 1988
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The department drafted rules which require, in addition to closure and post-closure funding, an additional amount of financial assurance to cover unexpected remedial action.

Commissioner Brill asked if the financial assurance required by this rule was enough to cover major cleanup projects and who would be responsible for illegal releases which occurred after 25 years.

Steve Greenwood and Bob Brown, solid waste section, responded that there would not be enough money in the financial assurance account to correct the problem. It would however fund a start on study and cleanup. Ultimately the permittee would be held responsible for correction.

Director's Recommendation: It is recommended that the Commission adopt the proposed additions to Solid Waste Rules OAR 340-61-010 and 029.

Action: It was moved by Commissioner Castle, seconded by Commissioner Sage, and unanimously passed to approve the director's recommendation.

Agenda Item I: Public Hearing and Proposed Adoption of Temporary Rule OAR 340-60-100 for Certification of In-state Recycling Program under ORS 459.305.

ORS 459.305, passed as part of HB 2619 by the 1987 Oregon Legislature, requires that regional landfills not accept any wastes after July 1, 1988 from any local or regional government unit located within or outside of Oregon unless the government's units have been certified by the department as having implemented an opportunity to recycle that satisfies the requirements of the Oregon Recycling Opportunity Act.

For out-of-state wastes, because of a possible conflict with federal law regarding interstate commerce, the department is waiting guidance from the Oregon Attorney General before proceeding with rule adoption. The proposed temporary rule regards only in-state waste, and uses the existing system for recycling report approvals as the method for determining certification.

Director Hansen stated that the proposal is for a temporary rule, and that the department is working with the attorney general to draft the best possible permanent rules for implementing the recycling certification program required by the 1987 legislature.

David Rozell responded to a question by stating that we expect to

bring a proposal for permanent rules governing Recycling Certification to the next EQC meeting.

Director's Recommendation: It is recommended that the Commission adopt the proposed temporary rule OAR 340-60-100.

Action: It was moved by Commissioner Brill, seconded by Commissioner Castle, and unanimously passed to approve the director's recommendation.

Agenda Item J: Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Division 100, 102, and 104.

This is the third in a series of proposed rule-makings 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 proposes to repeal an existing state rule which is more stringent than federal rules. It is also taking this opportunity to propose amendments to the existing state reporting requirements for hazardous waste generators and management facilities. Some of these amendments are more stringent than federal requirements.

Commissioner Castle asked if the survey requirement provided reliable information.

Gary Calaba stated that the information improves the data base. He also stated that there have been changes in federal rules and that the proposed amendments were aimed at bringing our rules into compliance with federal rules.

Director's Recommendation: To maintain authorization equivalency with the federal program, it is recommended that the Commission adopt the proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102, and 104.

Action: It was moved by Commissioner Castle, seconded by Commissioner Sage, and unanimously passed to approve the director's recommendation.

Agenda Item K: Appeal of On-Site Sewage Treatment and Disposal System Variance Denial by Lester W. Fread and Norma J. Fread.

The Freads are appealing a decision made by the department's variance officer, Sherman Olson, which denies granting variances

to rules governing the minimum required separation distance between wells and on-site sewage treatment and disposal systems.

At the director's recommendation, the commission, by consensus, elected to defer action the Fread variance denial appeal until its September 9, 1988 meeting. This action was taken to assure Mr. and Mrs. Fread had an opportunity to review the Staff Report containing the director's recommendation to the Commission and to be sure the Fread's were given ample opportunity to appear before the Commission. Action on the Agenda Item was deferred when Mr. Fread advised staff (via telephone conversation immediately before the Commission was to consider the Agenda Item) that he had not received a copy of the Staff Report.

Agenda Item L: Review of amendments to Portland's Assessment Deferral Loan Program.

Portland submitted amendments to the EQC approved assessment deferral loan program. The department found the amendments provide a workable program consistent with the requirement of the rules and statutes related to Assessment Deferral Loan programs.

Director's Recommendation: It is recommended that the Commission approve the proposed amendments to Portland's Sewer Assessment Deferral Loan program.

Action: It was moved by Commissioner Brill, seconded by Commissioner Castle, and unanimously passed to approve the director's recommendation.

The Commission then returned to agenda item F regarding the Tualatin. The department provided wording for proposed rule amendments showing changes from the initial director's recommendation.

Action: It was moved by Commission Castle, seconded by Commissioner Sage and passed unanimously that the Commission adopt additional definitions in OAR 340-41-006 as presented in the initial director recommendation and new rule language OAR 340-41-470(3)(a)-(e) as presented in revision to the director's recommendation.

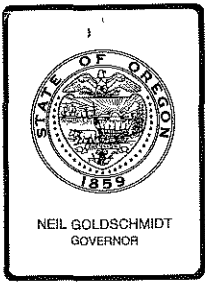
It was further moved by Commissioner Castle, seconded by Commissioner Brill, and passed unanimously that the balance of the proposal dealing with implementation be taken back to public hearing with amendments as necessary to be consistent with the adopted rules and Commission discussion.

It was moved by Commissioner Sage, seconded by Commissioner Brill, and passed unanimously that the further rules be

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returned for adoption at the next Commission meeting
scheduled for September 9, 1988.

mlr



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, July 8, 1988, EQC Meeting
May, 1988 Activity Report

Discussion

Attached are the May, 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:

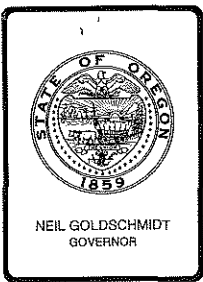
1. To provide information to the Commission regarding the status of reported activities and an historical record of project plans and permit actions;
2. To obtain confirming approval from the Commission on actions taken by the Department relative to air contaminant source plans and specifications; and
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.

Fred Hansen

MP1495



Environmental Quality Commission

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

EXECUTIVE SUMMARY

TO: Environmental Quality Commission

FROM: Fred Hansen, Director

SUBJECT: Agenda Item B, July 8, 1988, EQC Meeting
May 1988 Activity Report

The report provides information to the Commission on the status of DEQ activities. In addition, the report contains a listing of plans and specifications for construction of air contaminant sources which by statute require Commission approval. Other plans and specifications reviewed by the Department do not require Commission approval.

C. Nuttall:y
(503) 229-6484
June 16, 1988
Attachment
MY7186

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

MAY 1988

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality, Water Quality,
Hazardous and Solid Waste Divisions
 (Reporting Unit)

May 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	11	80	1	83	0	0	20
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	11	80	1	83	0	0	20
<u>Water</u>							
Municipal	19	96	16	142	0	0	30
Industrial	13	64	8	58	0	0	9
Total	32	160	24	200	0	0	39
<u>Solid Waste</u>							
Gen. Refuse	2	24	2	11	2	4	27
Demolition	-	2	-	-	-	2	1
Industrial	2	9	-	8	-	2	12
Sludge	-	2	-	1	-	-	2
Total	4	37	2	20	2	8	42
<u>Hazardous Wastes</u>							
	-	-	-	-	-	-	-
<u>GRAND TOTAL</u>	47	277	27	303	2	8	101

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
18	0006 JELD-WEN INC.	KLAMATH	01 02/29/88	COMPLETED-APKVD	05/20/88

TOTAL NUMBER QUICK LOOK REPORT LINES 1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

May 1988
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	2	29	3	30	18		
Existing	0	15	2	18	6		
Renewals	12	81	14	73	56		
Modifications	<u>6</u>	<u>71</u>	<u>8</u>	<u>88</u>	<u>15</u>		
Total	20	196	27	209	95	1398	1422
<u>Indirect Sources</u>							
New	1	11	1	13	3		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>6</u>	<u>1</u>	<u>5</u>	<u>0</u>		
Total	<u>1</u>	<u>17</u>	<u>2</u>	<u>18</u>	<u>3</u>	<u>284</u>	<u>287</u>
<u>GRAND TOTALS</u>	21	213	29	227	98	1682	1709

Number of
Pending Permits

Comments

11	To be reviewed by Northwest Region
16	To be reviewed by Willamette Valley Region
10	To be reviewed by Southwest Region
5	To be reviewed by Central Region
3	To be reviewed by Eastern Region
9	To be reviewed by Program Operations Section
21	Awaiting Public Notice
<u>20</u>	Awaiting end of 30-day Public Notice Period
95	

MAR. 5
AA5323 (6/88)

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	47	00/00/00	PERMIT ISSUED	05/18/88	MOD
02	2159	EVANITE FIBER CORPORATION	BENTON	06	05/10/88	PERMIT ISSUED	05/25/88	MOD
02	2459	CORVALLIS SENIOR HS	BENTON	04	05/02/88	PERMIT ISSUED	05/25/88	RNW
02	2490	EVANITE FIBER CORPORATION	BENTON	11	05/10/88	PERMIT ISSUED	05/27/88	MOD
02	2515	EVANITE FIBER CORPORATION	BENTON	34	05/10/88	PERMIT ISSUED	05/25/88	MOD
02	6009	HULL OAKES LUMBER COMPANY	BENTON	21	04/29/88	PERMIT ISSUED	05/25/88	RNW
02	7002	MARYS RIVER LUMBER CO	BENTON	05	05/06/88	PERMIT ISSUED	05/25/88	RNW
04	0004	JAMES RIVER II	CLATSOP	40	05/02/88	PERMIT ISSUED	05/13/88	MOD
05	2572	LAMMI SAND & ROCK PRODCTS	COLUMBIA	07	04/01/88	PERMIT ISSUED	05/10/88	RNW
10	0119	MERCY CARE CENTER	DOUGLAS	07	04/21/88	PERMIT ISSUED	05/10/88	MOD
15	0111	ROGUE VALLEY MANOR	JACKSON	06	04/04/88	PERMIT ISSUED	05/25/88	RNW
15	0124	PACIFIC WOOD FIBERS	JACKSON	27	04/04/88	PERMIT ISSUED	05/10/88	RNW
22	2523	FREERES LUMBER CO., INC.	LINN	10	05/02/88	PERMIT ISSUED	05/13/88	MOD
22	6309	STAYTON ROCK PRODUCTS INC	LINN	19	03/14/88	PERMIT ISSUED	05/10/88	RNW
25	0020	KINZUA CORP	MORROW	21	08/24/87	PERMIT ISSUED	05/13/88	RNW
26	1851	REYNOLDS ALUMINUM	MULTNOMAH	19	01/07/85	PERMIT ISSUED	05/27/88	RNW
26	1865	OREGON STEEL MILLS, INC.	MULTNOMAH	16	05/01/86	PERMIT ISSUED	05/19/88	RNW
26	1909	LONE STAR NORTHWEST	MULTNOMAH	22	04/22/88	PERMIT ISSUED	05/27/88	RNW
26	3038	CASCADE CORPORATION	MULTNOMAH	18	11/09/87	PERMIT ISSUED	05/13/88	MOD
26	3045	OREGONIAN PUBLISHING CO.	MULTNOMAH	14	01/15/88	PERMIT ISSUED	05/27/88	RNW
26	3110	TREASURE CHEST ADVRTSNG	MULTNOMAH	15	11/13/87	PERMIT ISSUED	05/19/88	EXT
34	2641	OREGON ROSES	WASHINGTON	15	10/08/87	PERMIT ISSUED	05/13/88	RNW
34	2744	TIMES LITHO, INC.	WASHINGTON	01	11/04/87	PERMIT ISSUED	05/11/88	EXT
37	0205	WASCO COUNTY ROAD DEPT.	PORT.SOURCE	15	04/14/88	PERMIT ISSUED	05/10/88	RNW
37	0295	BALL, BALL & BROSAMER INC	PORT.SOURCE	04	02/26/88	PERMIT ISSUED	05/27/88	NEW
37	0383	MEARS FERTILIZER	PORT.SOURCE	01	12/22/87	PERMIT ISSUED	04/25/88	NEW
37	0385	GUTHRIE MACHINERY COMPANY	PORT.SOURCE	01	03/03/88	PERMIT ISSUED	05/27/88	NEW

TOTAL NUMBER QUICK LOOK REPORT LINES

27

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division
(Reporting Unit)

May 1988
(Month and Year)

PERMIT ACTIONS COMPLETED

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

Indirect Sources

Marion	Kuebler Blvd./Cordon Rd. File No. 24-8801	05/09/88	Final Permit Issued
Washington	Koll Center Creekside +42 Spaces (Modification) File No. 34-8310	05/09/88	Final Permit (Addendum No. 2) Issued

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division
(Reporting Unit)

May 1988
(Month and Year)

PLAN ACTIONS COMPLETED

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

INDUSTRIAL WASTE SOURCES - 8

Multnomah	Reynolds Metals Company Fluoride Compounds Treatment Facility	4-18-88	Approved
Linn	Santiam Meat Packers Wastewater Treatment Facility	5-6-88	Withdrawn
Tillamook	Terry O'Dell Manure Control Facility	5-13-88	Approved
Washington	Tektronix, Inc. Wastewater Treatment Facility	5-23-88	Approved
Tillamook	Demos Cordeiro Manure Control Facility	5-26-88	Approved
Lane	Hemenway Farm Manure Control Facility	5-27-88	Approved
Clackamas	Portland General Electric Company Oil Stop Valve & Catch Basin	5-31-88	Approved
Coos	Pacific Power & Light Co. Berm, Oil/Water Separator	5-31-88	Approved

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division	May 1988			
(Reporting Unit)	(Month and Year)			
<u>PLAN ACTIONS COMPLETED</u>				
* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 16

Multnomah	DOT (South Umpqua SRA) Drainfield Addition 1000 Lineal Feet	6-3-88	Provisional Approval
Lincoln	Newport NW 17th - Oceanview Drive	6-9-88	Provisional Approval
Clackamas	Canby Township Village, Phase I	6-3-88	Provisional Approval
Jackson	Ashland Mill Pond PUD, Phase III	5-31-88	Provisional Approval
Columbia	Scappoose Sunrise Estates Subdivision	6-2-88	Provisional Approval
Lincoln	Newport Longview Hills Mobile Park (PUD)	5-31-88	Provisional Approval
Douglas	Myrtle Creek o Lisa Way Ext. o Woodcrest Ext.	5-31-88	Provisional Approval
Clatsop	Seaside S.E. Sewer 1988 Addition	5-31-88	Provisional Approval
Clackamas	Milwaukie o Stanley Ave. L.I.D. o Johnson Cr. Blvd. L.I.D.	5-31-88	Provisional Approval
Josephine	Grants Pass Siphon No. 2 Replacement	5-16-88	Provisional Approval
Curry	Harbour Sanitary District Miles Meadows Subdivision (Jack Nelson)	6-3-88	Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY ACTIVITY REPORT

Water Quality Division

(Reporting Unit)

May 1988

(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*
Jackson	BCVSA o Brookside Court Apts. (Phoenix) o Whetstone Laterals, Phase II, Schedules A and B	6-3-88	Provisional Approval	
Marion	City of Salem - Pringle Creek Interceptor Final Bid Documents	6-13-88	Provisional Approval	

Summary of Actions Taken
On Water Permit Applications in MAY 88

8 JUN 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				3	20			3		1	26	2	5	13				
RW				1						1			1					
RWO	4	3		50	26		8	1		35	28		63	31				
MW				2									3					
MWO	1			2	1		2			22	5		2	2				
Total	5	3		58	47		10	4		59	59	2	74	46		224	195	31
Industrial																		
NEW	1		7	2	11	38		1	5	1	12	43	3	13	8			
RW																		
RWO	2	4		22	24		2	4		17	18		19	19				
MW	1			4	1						1		5					
MWO	3	1		10	6	6	3	2		13	9	2		1	1			
Total	7	5	7	38	42	44	5	7	5	31	40	45	27	33	9	161	136	410
Agricultural																		
NEW						2			3			546						
RW																		
RWO		1		1	2						1		1	1				
MW																		
MWO																		
Total		1		1	2	2			3		1	546	1	1		2	9	600
Grand Total	12	9	7	97	91	46	15	11	8	90	100	593	102	80	9	387	340	1041

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-MAY-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
<u>General: Filter Backwash</u>							
IND	200 GEN02 NEW	OR002985-8	30060/A FLORENCE, CITY OF	FLORENCE	LANE/WVR	03-MAY-88	31-DEC-90
<u>General: Boiler Blowdown</u>							
IND	500 GEN05 NEW	OR003252-2	12355/A BURKLAND LUMBER COMPANY	TURNER	MARION/WVR	06-MAY-88	31-JUL-91
<u>General: Suction Dredges</u>							
IND	700 GEN07 NEW		103809/A GUTHRIE, WILLIAM & ROGERS, DON		MOBILE SRC/ALL	11-MAY-88	31-JUL-91
IND	700 GEN07 NEW		103816/A SHANE, IAN		MOBILE SRC/ALL	16-MAY-88	31-JUL-91
IND	700 GEN07 NEW		103820/A GADDY, ROMA D.		MOBILE SRC/ALL	25-MAY-88	31-JUL-91
<u>General: Confined Animal Feeding</u>							
AGR	800 GEN08 NEW		103808/A DOGS FOR THE DEAF, INC.	CENTRAL POINT	JACKSON/SWR	09-MAY-88	31-JUL-92
AGR	800 GEN08 NEW		103815/A FLETCHER DAIRY, ANDY	TILLAMOOK	TILLAMOOK/NWR	13-MAY-88	31-JUL-92
AGR	800 GEN08 NEW		103819/A DEHAAN, PETER	SALEM	MARION/WVR	18-MAY-88	31-JUL-92

PERMIT CAT NUMBER	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>NPDES</u>								
IND 3754	NPDES MWO	OR000079-5	21328/A	JAMES RIVER II, INC.	CLATSKANIE	CLATSOP/NWR	05-MAY-88	30-SEP-88
DOM 100468	NPDES RWO	OR002044-3	41513/A	INDEPENDENCE, CITY OF	INDEPENDENCE	POLK/WVR	09-MAY-88	28-FEB-93
DOM 100470	NPDES RWO	OR002276-4	97952/A	WILSONVILLE, CITY OF	WILSONVILLE	CLACKAMAS/NWR	10-MAY-88	30-APR-93
DOM 100471	NPDES RWO	OR002023-1	16872/A	CLATSKANIE, CITY OF	CLATSKANIE	COLUMBIA/NWR	10-MAY-88	28-FEB-93
IND 100384	NPDES MWO	OR000078-7	21489/A	JAMES RIVER II, INC.	WEST LINN	CLACKAMAS/NWR	12-MAY-88	31-JUL-92
DOM 100474	NPDES RWO	OR002056-7	27514/A	ENTERPRISE, CITY OF	ENTERPRISE	WALLOWA/ER	12-MAY-88	28-FEB-93
IND 100024	NPDES MWO	OR000029-9	28476/A	EVANITE FIBER CORPORATION	CORVALLIS	BENTON/WVR	13-MAY-88	30-NOV-89
DOM 100476	NPDES RWO	OR002271-3	97397/A	WILLAMINA, CITY OF	WILLAMINA	YAMHILL/WVR	17-MAY-88	28-FEB-93
DOM 100200	NPDES MWO	OR002966-1	96385/A	BUNN, DAN E. & ROBERT AND ADAMS, GREGG	TRAIL	JACKSON/SWR	26-MAY-88	31-MAY-91
DOM 100046	NPDES MWO	OR002803-7	96010/B	MEADOW LAKE PROPERTY OWNERS ASSOCIATION	BUTTEVILLE	MARION/WVR	27-MAY-88	31-DEC-89
DOM 100477	NPDES RWO	OR002697-2	84405/A	STANFIELD, CITY OF	STANFIELD	UMATILLA/ER	27-MAY-88	31-MAR-93
IND 100478	NPDES RWO	OR000056-6	72634/A	SMURFIT NEWSPRINT CORPORATION	OREGON CITY	CLACKAMAS/NWR	27-MAY-88	30-APR-93
DOM 100480	NPDES RWO	OR002291-8	70615/A	PORT OF TILLAMOOK BAY	TILLAMOOK	TILLAMOOK/NWR	31-MAY-88	31-MAR-93
DOM 100481	NPDES RWO	OR002621-2	2772/A	AMITY, CITY OF	AMITY	YAMHILL/WVR	31-MAY-88	30-APR-93
IND 100484	NPDES RWO	OR000179-1	15825/B	GEORGIA-PACIFIC CORPORATION	LEBANON	LINN/WVR	31-MAY-88	31-MAY-93
<u>WPCF</u>								
IND 100466	WPCF NEW		103746/A	COOS BAY LUMBER CO.	HAUSER	COOS/SWR	05-MAY-88	31-MAR-93

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PERMIT CAT	NUMBER	TYPE	SUB- TYPE	OR NUMBER	FACILITY FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
IND	100270	WPCF	MWO		100167/A JOHNSON, D.R., LUMBER CO.	RIDDLE	DOUGLAS/SWR	06-MAY-88	31-DEC-91
DOM	100469	WPCF	RWO		75750/A ROCK CREEK COUNTRY CLUB, INC.	SOMMERSET	WASHINGTON/NWR	10-MAY-88	28-FEB-93
DOM	100472	WPCF	NEW		103305/A OREGON DEPARTMENT OF TRANSPORTATION	TILLAMOOK	TILLAMOOK/NWR	10-MAY-88	31-JAN-93
IND	100473	WPCF	RWO		19957/A COOS HEAD TIMBER CO	COOS BAY	COOS/SWR	10-MAY-88	28-FEB-93
IND	100400	WPCF	MWO		59790/A NATIONAL FROZEN FOODS CORPORATION	ALBANY	LINN/WVR	12-MAY-88	31-OCT-92
DOM	100475	WPCF	NEW		103627/A NORTH CLACKAMAS SCHOOL DISTRICT #12	PORTLAND	CLACKAMAS/NWR	12-MAY-88	30-APR-93
DOM	100479	WPCF	NEW		103013/A OREGON DEPARTMENT OF TRANSPORTATION		DOUGLAS/SWR	27-MAY-88	31-MAY-93
IND	100482	WPCF	RWO		50776/A LININGER & SONS, M. C., INC.	CENTRAL POINT	JACKSON/SWR	31-MAY-88	30-APR-93
IND	100483	WPCF	RWO		11126/A YOUNG, EDWARD J.	ROGUE RIVER	JACKSON/SWR	31-MAY-88	31-MAR-93
IND	100485	WPCF	RWO		11839/A BRYANT, J. ARLIE, INC.	HOOD RIVER	HOOD RIVER/CR	31-MAY-88	31-MAR-93

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

May 1988
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Malheur	Harper TS	5/2/88	Plan Approved	*
Douglas	Lemolo TS	5/5/88	Plan Disapproved	*
Multnomah	St Johns Landfill	5/23/88	Closure Plan Disapproved	*
Jackson	Ashland	5/31/88	Plan Approved	*

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

May 1988
(Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

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

INSPECTIONS

	COMPLETED		PLANNED
	No. This Month	No. FYTD	No. in FY 88
Generator	0	34	45
TSD	1	20	29

CLOSURES

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

SB5285.A
MAR.2 (6/88)

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Malheur	Harper Landfill	8/17/87	8/17/87	(C) 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	3/3/88	(N) Supplemental 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
Josephine	Grants Pass	5/2/88	5/2/88	(R) Plans Received	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(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 - 12

Klamath	Weyerhaeuser, Klamath Falls	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Multnomah	Penwalt Corp.	4/2/86	5/1/88	Holding	HQ
Linn	Willamette Industries, Inc. Lime Rejects Site Closure	7/3/86	7/3/86	(C) Plan received	RO
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
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Plan received	HQ
Linn	James River, Lebanon	1/22/88	4/21/88	(C) Additional information requested.	HQ
Columbia	Boise Cascade St. Helens	4/6/88	4/6/88	(N) As built plans received.	HQ
Marion	Silverton Forest Products	5/5/88	5/5/88	(C) Plan Received	HQ
Douglas	IP Gardiner	5/10/88	5/10/88	(N) Plans Received	HQ

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

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

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

May 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	5	1	3	4		
Closures	-	1	-	-	5		
Renewals	-	5	-	4	16		
Modifications	-	23	-	21	1		
Total	1	34	1	28	26	179	179
<u>Demolition</u>							
New	-	2	-	2	-		
Closures	-	-	-	-	-		
Renewals	-	1	-	2	1		
Modifications	-	2	-	1	1		
Total	0	5	0	5	2	11	11
<u>Industrial</u>							
New	2	10	1	9	7		
Closures	-	-	-	-	1		
Renewals	-	3	-	2	5		
Modifications	4	17	4	17	-		
Total	6	30	5	28	12	107	107
<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	7	77	6	65	44	314	314

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

May 1988
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Jackson	John Williams	5/2/88	Letter Authorization Issued	*
Gilliam	Oregon Waste Systems, Inc. Gilliam County Landfill	5/18/88	Permit Issued	*
Linn	Freres Lumber Cedar Road Landfill	5/18/88	Addendum Issued	*
Linn	James River II, Inc. Lebanon Landfill	5/26/88	Addendum Issued	*
Clatsop	James River II, Inc. Wauna Sludge Landfill	5/26/88	Addendum Issued	*
Clatsop	James River II, Inc. Wauna Landfill	5/26/88	Addendum Issued	*

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division
(Reporting Unit)

May 1988
(Month and Year)

PERMIT ACTIONS PENDING - 44

* 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	5/31/88	(R) Applicant Review	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	5/5/88	(R) Applicant Review	HQ
Multnomah	St. Johns Landfill	12/17/86	5/23/88	(C) Applicant Review	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	5/2/88	(N) Applicant Review	HQ
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

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Malheur	Harper Landfill	8/17/87	8/17/87	(C) Application filed	RO
Grant	Hendrix Landfill	9/17/87	3/30/88	(R) Draft received	HQ
Lane	Florence Landfill	9/21/87	1/12/88	(R) Draft received	HQ
Morrow	Tidewater Barge Lines (Finley Butte Landfill)	10/15/87	10/15/87	(N) Application filed	HQ
Douglas	Roseburg Landfill	10/21/87	10/21/87	(R) Application filed	RO
Curry	Port Orford Lndfl.	12/14/87	4/8/88	(R) Draft received	HQ
Washington	Hillsboro TS	1/15/88	4/12/88	(N) Draft received	HQ
Umatilla	Pendleton Lndfl.	3/10/88	3/10/88	(A) Application received	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Application Received	RO/HQ

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	3/15/88	(N) Applicant review	HQ
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 *
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Multnomah	Penwalt	4/2/86	5/1/88	(N) Holding	
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
Clatsop	Nygaard Logging	11/17/87	3/3/88	(N) Draft received	HQ
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO
Douglas	Glide Lumber Prod.	3/8/88	3/8/88	(R) Application filed	RO
Marion	Silverton Forest Products	5/5/88	5/5/88	(C) Application Filed	HQ

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	4/12/88	(N) Applicant review	HQ

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program May, 1988
 (Reporting Unit) (Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

<u>Source Category</u>	<u>New Actions Initiated</u>		<u>Final Actions Completed</u>		<u>Actions Pending</u>	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	12	100	14	148	198	200
Airports			2	15	0	2

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

FINAL NOISE CONTROL ACTIONS

<u>County</u>	<u>* Name of Source and Location</u>	<u>* Date</u>	<u>* Action</u>
Clackamas	Stanley-Proto Industrial Tools Milwaukie	5/88	In compliance
Multnomah	Buffalo Gap Tavern, Portland	5/88	Referred to O.L.C.C.
Multnomah	Dublin Pub Tavern, Portland	5/88	Referred to O.L.C.C.
Multnomah	Middle East Bakery, Portland	5/88	Referred to City of Portland
Washington	Diamond Cabinets, Hillsboro	5/88	In compliance
Washington	Lone Star Quarry, Beaverton	5/88	No violation
Washington	Mike's Custom Cabinets,	5/88	In compliance
Coos	Charleston Independent Ice Co.	5/88	No violation
Curry	Gold Beach Plywood, Gold Beach	5/88	In compliance
Douglas	B & B Roads, Steinhauer Road near Roseburg	5/88	Source closed pending LUBA appeal in '89
Douglas	Beaverstate Sand & Gravel, Little Valley Road, Roseburg	5/88	In compliance
Douglas	Superior Tire Company, Roseburg	5/88	In compliance
Josephine	Town & Country Market, Grants Pass	5/88	In compliance

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program	May, 1988
(Reporting Unit)	(Month and Year)

FINAL NOISE CONTROL ACTIONS

County	* Name of Source and Location	* Date	* Action
Jackson	Medford-Jackson County Airport Medford	5/88	Informal res- olution of petition
Douglas	Heaven's Gate Ranch (Woods) Airport, near Roseburg	5/88	Complaint investigation on operation- al parameters No violation

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1988

CIVIL PENALTIES ASSESSED DURING MONTH OF MAY, 1988:

<u>Name and Location of Violation</u>	<u>Case No. & Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
James E. Christopherson Gaston, Oregon	OS-WVR-88-42 Installed an on-site sewage disposal system without being licensed as a sewage disposal service.	5/13/88	\$250	Did not respond to notice. Defaulted on 6/13/88.
Neu-Glo Candles, Inc. Scappoose, Oregon	AQAQ-NWR-88-33 Failed to properly remove and handle materials contain- ing asbestos.	5/25/88	\$1,000	Contested 6/9/88.

GB7597

June, 1988
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	1	2
Discovery	0	0
Settlement Action	2	5
Hearing to be scheduled	0	0
Department reviewing penalty	0	0
Hearing scheduled	3	2
HO's Decision Due	0	1
Briefing	0	0
Inactive	<u>4</u>	<u>0</u>
SUBTOTAL of cases before hearings officer.	10	10
HO's Decision Out/Option for EQC Appeal	0	0
Appealed to EQC	0	0
EQC Appeal Complete/Option for Court Review	1	0
Court Review Option Taken	0	1
Case Closed	<u>4</u>	<u>1</u>
TOTAL Cases	15	12

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

§ Civil Penalty Amount

ACDP Air Contaminant Discharge Permit

AG1 Attorney General 1

AQ Air Quality Division

AQOB Air Quality, Open Burning

CR Central Region

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

ER Eastern Region

FB Field Burning

HW Hazardous Waste

HSW Hazardous and Solid Waste Division

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

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

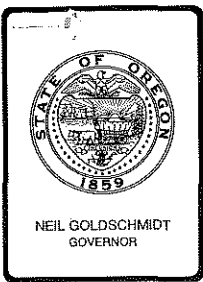
June, 1988
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
WAH CHANG	04/78	04/78		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	<u>New permit under negotiation. May resolve contested issues.</u>
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	<u>New permit under negotiation. May resolve contested issues.</u>
DANT & RUSSELL, INC.	05/31/85	05/31/85	03/21/86	DEQ	15-HW-NWR-85-60 Hazardous waste disposal Civil Penalty of \$2,500	<u>Settlement agreement submitted to Bankruptcy Court for approval.</u>
34 BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	Prtys	23-HSW-85 Declaratory Ruling	EQC issued declaratory ruling July 25, 1986. Settlement action.
MERIT USA, INC.	05/30/87	06/10/87	09/14/87	Resp	4-WQ-NWR-87-27 \$3500 civil penalt	<u>EQC decision appealed to Court of Appeals.</u>
CITY OF KLAMATH FALLS			05/03/88	DEQ	1-P-WQ-88 Salt Caves	<u>Appeal of 1987 application abated pending approval or denial of new application.</u>
Container-Care Portland-----	01/25/88	01/27/88	05/27/88-----	Prtys	6-HW-NWR-87-83 \$2,500-civil-penalty	<u>EQC approved settlement conditionally waiving \$2,000 of penalty and requiring clean- up. Case closed.</u>
Richard Doerfler	01/08/88	01/11/88	05/19/88	Hrgs	4-AQ-FB-87-05	Decision due.

June, 1988
DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rqst</u>	<u>Hrng Rfrl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type & No.</u>	<u>Case Status</u>
Zelmer, dba Rivergate Auto	3/2/88	3/3/88	<u>07/12/88</u>	Prtys	AQOB-NWR-88-03 \$1,000 Civil Penalty	<u>Hearing rescheduled.</u>
Markee	4/1/88	4/11/88		<u>Resp</u>	WQ-WVR-88-22 Civil Penalty	Settlement Action. <u>Community service to substitute for civil penalty.</u>
CSSI	3/31/88	4/19/88		Prtys	Permit 089-452-353	<u>Stipulated Order staying contested permit conditions signed May 16, 1988. Appeal of this joint state/EPA permit will be heard under both state and federal administrative procedures.</u>
<u>Neu-Glo Candles</u>	<u>6/9/88</u>		<u>07/25/88</u>	<u>Prtys</u>	<u>AQAB-NWR-88-33 Asbestos \$1,000 Civil Penalty</u>	<u>Hearing scheduled.</u>

35



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, July 8, 1988, EQC Meeting

TAX CREDIT APPLICATIONS

Director's Recommendation

It is recommended that the Commission take the following action:

1. Issue tax credit certificate for pollution control facility:

Appl. No.	Applicant	Facility
T-1890	Teledyne Industries, Inc.	Reduction Retort Wash Station
T-2104	Columbia Steel Casting Co., Inc.	Bag filter, associated ductwork support structure and electrical
T-2297	Valentine & Dolores A. Miller	Straw Storage Shed
T-2418	David J. Bielenberg	Conventional Straw Stacker

Proposed July 8, 1988 Totals:

Air Quality	\$ 106,943
Water Quality	-0-
Hazardous/Solid Waste	-0-
Noise	<u>-0-</u>
Total	\$ 106,943

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

Air Quality	\$ 5,712,203
Water Quality	428,877
Hazardous/Solid Waste	167,142
Noise	<u>-0-</u>
Total	\$ 6,308,222



Fred Hansen

C. Nuttall:y
(503) 229-6484
June 15, 1988
MY7183

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Teledyne Industries, Inc.
Teledyne Wah Chang Albany
P.O. Box 460
Albany, OR 97321

The applicant owns and operates a zirconium, hafnium, tantalum and niobium production plant at 1600 Old Salem Road, Albany, Oregon.

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

2. Description of Facility

Reduction Retort Wash Station

This tax credit is for the cost of pollution control equipment being added on to the existing control equipment (i.e. wet scrubber). Basically, this equipment collects additional HCl and Cl that was previously emitted to the atmosphere with the former system. HCl and Cl collected in the wash water is neutralized and discharged to the sewer. There is little or no additional zirconium or magnesium material collected in the wash water.

Claimed Facility Cost: \$61,389
(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 June 5, 1985, more than 30 days before construction, commenced in August 1985.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction, of the facility was substantially completed in September, 1985 and the application for final certification was found to be complete on July 22, 1987 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 Department order to reduce fugitive emissions consisting of an HCl fume (toxic) and particulate. The reduction of emissions was achieved by modifying an existing vertical single retort wash station to a horizontal dual retort wash station. This modification allowed a more efficient, longer wash period, which reduced retort residue, thus preventing fugitive emissions from retorts after removal from the wash station. To prevent emissions from the retorts to the atmosphere during the wash cycle, revised hooding was provided to capture and treat the fugitive emissions in an existing venturi scrubber.

The modification also included the necessary tank, pumps and catch basins to recycle the wash water thereby reducing the waste water discharge. Pumps are also included to pump sludges to existing residue recovery equipment.

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 retort involved is a large reuseable steel pressure vessel with 3" walls for the production of zirconium from zirconium tetrachloride and magnesium metal. The facility involved simply washes the retort after each batch.

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

The facility does not generate any additional income above that generated by the replaced facility and the annual operating expenses have not changed. Therefore, there is no annual percent return on the investment in the facility.

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

The method chosen is the accepted method for control of fugitive HCl emissions from zirconium reduction retorts.

- 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 principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air pollution.
- c. The facility complies with DEQ statutes and rules, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$61,389 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1890.

William J. Fuller:cdj

AD2630

(503) 229-5749

April 28, 1988

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Columbia Steel Casting Co., Inc.
10425 North Bloss Avenue
Portland OR 97203

The applicant owns and operates a steel foundry at 10425 North Bloss Avenue, Portland, Oregon.

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

2. Description of Facility

Bag filter dust collector, associated ductwork, support structure, and electrical.

Claimed Facility Cost: \$31,254.04.
(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 May 20, 1986, more than 30 days before construction, commenced on July 11, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on August 11, 1986, and the application for final certification was found to be complete on May 3, 1986, 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 from the roto-blast operation. This prevention is accomplished by replacing an old 1938 shaker type baghouse, which was rusted out and difficult to maintain, with a modern reverse pulse jet type baghouse. The replaced baghouse was never certified for tax credit.

The facility has been inspected by Department personnel and was found to be operating in compliance with Department regulations and permit conditions.

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. All material collected by the facility is disposed of in a landfill.

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

There is no return on the investment in the facility. The sole purpose of the facility is to prevent air pollution.

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

The method chosen is the accepted method for control of particulate.

- 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 \$6,500.00 annually.

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

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

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 replacement of an old rusted out baghouse.
- 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 \$31,254.04 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2104.

W.J. Fuller:d
AD2656
(503) 229-5749
May 5, 1988

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Valentine & Dolores A. Miller
8626 Wabash Drive NE
Brooks, Oregon 97305

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

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

2. Description of Facility

The facility described in this application is a straw storage shed (44' x 60' x 22') located at 8626 Wabash Drive NE, two miles east of Hwy 99E, near Gervais, Oregon. The building will provide cover for 175 tons of straw per year. The land and building are owned by the applicant. The straw is exported to Japan for feed.

Claimed Facility Cost: \$10,800.00
(Accountant's Certification was provided).

3. Procedural Requirements

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

The facility has met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 22, 1987, less than 30 days before construction commenced on June 22, 1987. However, according to the process provided in OAR 340-16-015(1)(b), the application was received by DEQ staff and the applicant was notified that the application was complete, and 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 20, 1987, and the application for final certification was found to be complete on February 9, 1988 within two 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 reduce a substantial quantity of air pollution.

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

- b. Eligible Cost Findings

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

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

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

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

Using Table 1 of OAR 340-16-030 for a life of 20 years, the annual percent return on investment is 8.5%.

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

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

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

There is no savings or increase in costs as a result of the facility 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 48%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 48%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$10,800.00 with 48% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2297.

B. Finneran:ka
AP1604
(503) 686-7837
April 12, 1988

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

SECTION IV
SIGNIFICANT DATES
AND INFORMATION

(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes _____, please explain. No X

(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes _____, please explain. No X

SECTION V
ALLOCATION OF COSTS

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

a. Actual cost of the claimed facility \$ 10,800.00

b. Salvage value of any facility removed from service \$ 200.00

c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	<u>\$ 11,460.00</u>	<u>187.70</u>	<u>\$ 958.00</u>
2-	<u>1150.00</u>	<u>66.00</u>	<u>1084.00</u>
3-	<u>1150.00</u>	<u>38.00</u>	<u>1112.00</u>
4-	<u>1150.00</u>	<u>66.00</u>	<u>1084.00</u>
5-	<u>1150.00</u>	<u>38.00</u>	<u>1112.00</u>
TOTALS	<u>57,460.00</u>	<u>395.70</u>	<u>5,350.00</u>

d. Average annual cash flow \$ 1070.00

Calculate by using the following formula:

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility 20 years

f. Return on investment factor \$ 10.009 (10.093)

Calculate by using the following formula:

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) 7.75 % (8.514)

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) (16.4) % Built in 1987

i. Portion of actual costs properly allocable to pollution control 48.08 %

Calculate by using the following formula:

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

*Attach calculations for each of the first five years.

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

David J. Bielenberg
16425 Herigstad Road NE
Silverton, Oregon 97381

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

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

2. Description of Facility

The equipment described in this application is a conventional straw stacker (stack wagon) used to remove straw from fields that would otherwise be open burned. The equipment is owned by the applicant.

Claimed Facility Cost: \$3,500.00
(Accountant's Certification was provided).

3. Procedural Requirements

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

The facility has met all statutory deadlines in that:

- a. The request for preliminary certification was filed May 28, 1987, less than 30 days before purchase on June 26, 1987. However, according to the process provided in OAR 340-16-015(1)(b), the application was received by DEQ staff and the applicant was notified that the application was complete, and purchase could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Purchase of the equipment was substantially completed on June 26, 1987, and the application for final certification was found to be complete on February 12, 1988 within two years of substantial purchase of the equipment.

4. Evaluation of Application

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

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

- b. Eligible Cost Findings

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

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

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

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

Using Table 1 of OAR 340-16-030 for a life of 10 years, the annual percent return on investment is -4.9%.

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

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

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

There is a savings of \$350.00 annually from the use of the equipment. The cost of maintaining and operating the equipment is \$1,450.00 annually.

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

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

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

5. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the sole purpose of the equipment is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The 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 \$3,500.00 with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application No. T-2418.

B. Finneran:ka
AP1605
(503) 686-7837
April 13, 1988

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

SECTION IV
SIGNIFICANT DATES
AND INFORMATION

- (12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes X, please explain. No _____
ORIGINAL APPLICATION WAS SAID TO BE ON INCORRECT FORM. THIS APPLICATION IS ON THE PROPER FORM I AM INFORMED.
- (13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes _____, please explain. No X

SECTION V
ALLOCATION OF COSTS

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

- a. Actual cost of the claimed facility \$ 3,500.00
- b. Salvage value of any facility removed from service \$ NONE
- c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	<u>there is no</u>	<u>\$350⁰⁰ LABOR</u>	<u>It will</u>
2-	<u>income generated</u>	<u>\$400⁰⁰ MAINTENANCE</u>	<u>take \$1100⁰⁰</u>
3-	<u>by this equipment</u>	<u>\$700⁰⁰ TRACTOR to</u>	<u>to run this</u>
4-		<u>Power Machine</u>	<u>machine each</u>
5-		<u>\$1450⁰⁰</u>	<u>year and it</u>
		<u>- 350⁰⁰ Reduced field</u>	<u>will generate</u>
		<u>\$1100⁰⁰ Annual ^{draining} fees</u>	<u>NO INCOME.</u>
		<u>operating costs</u>	
TOTALS			

d. Average annual cash flow \$ -1100⁰⁰

Calculate by using the following formula:

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility 10 years

f. Return on investment factor -3.18

Calculate by using the following formula:

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) -8.45 %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) _____ %

i. Portion of actual costs properly allocable to pollution control _____ %

Calculate by using the following formula:

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

NOT FOUND ON table furnished with application
- NO MATTER WHAT h. IS THE VALUE FOR i. WILL BE GREATER THAN 100% BECAUSE g. IS A NEGATIVE NUMBER!

*Attach calculations for each of the first five years.

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

SECTION IV
SIGNIFICANT DATES
AND INFORMATION

(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes _____, please explain. No _____

(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes _____, please explain. No _____

SECTION V
ALLOCATION OF COSTS

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

- a. Actual cost of the claimed facility \$ 3,500
- b. Salvage value of any facility removed from service \$ 0
- c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	_____	_____	_____
2-	_____	_____	_____
3-	_____	_____	_____
4-	_____	_____	_____
5-	_____	_____	_____
TOTALS	<u>350</u>	<u>\$ 1,450</u>	<u><\$ 1,100></u>

d. Average annual cash flow \$ <220>

Calculate by using the following formula:

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility 10 years

f. Return on investment factor \$ -15.91

Calculate by using the following formula:

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) -4.879 %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) 16.4 %

i. Portion of actual costs properly allocable to pollution control 100 %

Calculate by using the following formula:

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

*Attach calculations for each of the first five years.

*Computed for clarification
by Field Barring Staff.
4/12/88*



Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission
From: Director *Jeel*
Subject: Agenda Item E, 7/8/88 EQC Meeting

Executive Summary of Staff Report on Request for
Authorization to Conduct Public Hearings on Proposed New
Administrative Rules for the Waste Tire Program, OAR 340-62:
Reimbursement for Use and Cleanup of Waste Tires

Background

The 1987 Legislature passed HB 2022 (ORS 459.705 - 459.790) establishing a comprehensive program dealing with waste tires. A separate rule has already been proposed which deals with permitting requirements for waste tire storage sites and waste tire carriers (see Agenda Item G). The other part of the program deals with use of funds from the Waste Tire Recycling Account, funded by a \$1 fee on new replacement tires. Use of the Account is the subject of the present proposed rule. The Account may be used to partially reimburse persons who use waste tires, and to fund cleanup of some tire piles. It also funds the Department's administrative costs to run the program.

The Department's schedule is for this rule to be adopted in early October, so funds from the Account would be available for waste tires used during the last quarter of 1988.

Problem to be Resolved

Waste tires cause environmental problems. They provide compaction problems if landfilled whole. Tire fires are very difficult to control, and emit toxic substances. The waste tire program was established to deal with these problems. The purpose of the reimbursement is to enhance the market for waste tires, and thus provide alternatives to storage or landfill disposal.

Implementation

The Department created a Waste Tire Task Force to help develop rules for this program. The Department hired an economic consultant to prepare an economic analysis of the effects of the reimbursement. The consultant's paper is attached.

Summary of Staff Report Key Issues

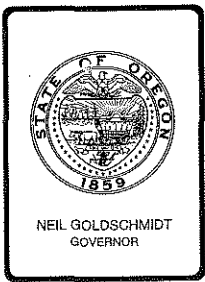
The rule gives priority to reimbursement rather than cleanup.

The Department estimates that about \$1.4 million will be available for reimbursement and cleanup through June 30, 1989. The reimbursement structure would be a flat rate for all uses of waste tires, based on \$.01 per pound of rubber used. This would be disbursed quarterly. The person receiving the reimbursement would be the last person to use the waste tires, tire chips, or similar materials. Applications for reimbursement would be approved by the Director. If insufficient funds are available to cover all requests for reimbursement, the Commission prorates available funds.

Priority use of cleanup funds would be for sites offering the greatest potential environmental risks. Any use of cleanup funds to help waste tire storage site permittees clean up their site must be approved by the Commission. The Department may order site owners to clean up sites posing an environmental risk.

It is recommended that the Commission authorize public hearings to take testimony on the proposed rule to implement the use of the Waste Tire Recycling Account.

SB76272



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item E, July 8, 1988, EQC Meeting

Request for Authorization to Conduct Public Hearings on
Proposed New Administrative Rules for the Waste Tire Program,
OAR 340-62: Reimbursement for Use and Cleanup of Waste Tires

BACKGROUND

Some 2 million waste tires are generated each year in Oregon. About 10 percent are used for retreading. An additional 55 percent are otherwise reused or recycled. The rest find their way into landfills or are burned or dumped illegally.

Tires pose environmental problems as they present compaction problems for solid waste disposal sites. Also, once they catch on fire, they are nearly uncontrollable. Tire fires emit many toxic compounds. Tires also offer a breeding ground for mosquitoes and other vectors.

Although waste tires have a resource value which can be recovered, landfilling or otherwise "getting rid of" them is usually cheaper for the person who generates the waste tire. The reuse and recycling of waste tires has also been restricted by a lack of developed markets.

Policy

In developing rules for the Waste Tire Program, the Department has had to consider the interrelationships between waste tire cleanup, disposal, storage and reuse. The Department's priority is the reuse and recycling of waste tires. The Department anticipates that over time, storage will be confined to temporary rather than permanent storage. The purpose of the reimbursement to users of waste tires is to encourage reuse and recycling. This is intended to increase the demand for waste tires so that the Department's involvement in cleanup of tire piles can be minimized. The highest priority for use of cleanup funds would be for sites posing the greatest hazard to health and the environment.

Waste Tire Program

The 1987 Oregon Legislature passed HB 2022 (ORS 459.705 through 459.790) (Attachment VII) to address the waste tire disposal problem, and to enhance the market for waste tires. The Department previously drafted rules on the permitting of waste tire storage sites and waste tire carriers (Agenda Item G). Those rules deal with controlling the storage and transportation of waste tires so that illegal dumping is eliminated, and the tires do not cause environmental hazards.

The legislation also establishes a mechanism to deal with the "demand" side for waste tires. It establishes a Waste Tire Recycling Account, funded by a \$1.00 fee on the sale of all new replacement tires sold in Oregon, beginning January 1, 1988. The fee sunsets June 30, 1991. It is collected by retail tire dealers and paid to the Oregon Department of Revenue (DOR). The tire dealers keep \$.15 per tire. DOR deducts their administrative expenses from the fund. The rest goes into the Waste Tire Recycling Account, administered by the DEQ.

The Waste Tire Recycling Account may be used for:

1. Partial reimbursement to users of waste tires or tire chips.
2. To help finance the cleanup of some waste tire sites.
3. To pay for DEQ's administrative costs.

The Department's fiscal analysis of HB 2022 estimated the amount of funds available in the 1987-89 biennium from the account. This takes into consideration that tire dealers have 30 days after the end of the quarter to submit funds to Department of Revenue, and assumes five quarters of fee collection. It is based on 1,750,000 new replacement tires sold annually.

Estimated receipts:	\$2,200,000
Less \$.15/tire kept by retailer	(330,000)
Less administrative costs:	
Department of Revenue	(190,000)
Department of Environmental Quality	(260,000)
Available for reimbursements & cleanup (through June 30, 1989)	\$1,420,000

Because reimbursements to users of waste tires, and cleanup of tire sites will be funded from the same source, the Department has developed a proposed rule covering both. In addition, there is a limited amount of funds available.

Reimbursement

ORS 459.770 states that:

- "(1) Any person who purchases waste tires generated in Oregon or tire chips or similar materials from waste tires generated in Oregon and who uses the tires or chips or similar material for energy recovery or other appropriate uses may apply for partial reimbursement of the cost of purchasing the tires or chips or similar materials."
- "(2) Any person who uses, but does not purchase, waste tires or chips or similar materials, for energy recovery or another appropriate use, may apply for a reimbursement of part of the cost of such use."

The intent of the reimbursement "is to promote the use of waste tires by enhancing markets for waste tires..." Reimbursing users of waste tires will make it cheaper to use waste tires compared with competing materials. This should in turn increase demand for the waste tires.

The Commission is charged with determining the types of energy recovery or other appropriate uses which will be eligible for the reimbursement. The EQC must also establish the amount of the reimbursement.

Cleanup of Waste Tire Piles

As a permit condition, the Department may require a waste tire storage site permittee to remove or process the waste tires. The Department may also abate any danger or nuisance created by waste tires. Such abatement would consist of removing or processing the tires if the person responsible for the tires did not act to do so following an order from the Department.

Monies from the Account may be used to pay for cleanup by the Department in the following situations:

1. To assist a permitted waste tire site in removing or processing the waste tires if the EQC finds that:
 - a. Special circumstances make such assistance appropriate; or
 - b. Compliance with the waste tire law would cause severe financial hardship for the permittee.
2. To contract to abate a danger or nuisance created by waste tires, after an enforcement order by the Director.
3. To reimburse a local government for the cost of abatement of a waste tire problem.

Waste Tire Task Force

DEQ created a Waste Tire Task Force to help in developing proposed rules for the program. The Task Force consists of representatives of interested parties. Three working subcommittees were formed (Attachment I), one of them being the Reimbursement Subcommittee. The Reimbursement Subcommittee has met a total of three times. This Subcommittee compiled information on the market potential for the reuse of waste tires. That information was included in the Waste Tire Market Analysis as Attachment II to Agenda Item I, at the April 29, 1988, EQC meeting.

More recently the Subcommittee has helped develop the proposed rule. The Subcommittee proposed a basic structure and eligibilities of the reimbursement: an across-the-board reimbursement for all uses, based on \$.01 per pound of rubber used, with the reimbursement going to the person first processing the tire into a good with economic value. Staff drafted a rule incorporating those concepts, which was subsequently revised and approved by the full Task Force at its May 17 meeting.

Markets for Waste Tires

Market options for waste tires include reuse of whole tires; mechanical processing into rubber chips or crumbs for use in manufactured goods; chemical or thermal processing to reclaim rubber or generate other salable products; and incineration of tires to reclaim their energy value. These options were examined by the Reimbursement Subcommittee in the Waste Tire Market Analysis mentioned in the preceding section.

At present fewer than half of the waste tires generated annually in Oregon are reused. Of those used, the great majority are chipped to become "tire-derived fuel" (TDF), and burned in industrial boilers. A relatively small number of tires serve as raw materials for small business and other useful purposes.

It appears that use as TDF offers the greatest near-term potential for absorbing significant additional amounts of waste tires in the state. See next section, and the attached economic analysis by ECO Northwest, Inc. (Attachment VI).

Consultant's Report on Reimbursement

Staff felt that an independent economic analysis of the proposed reimbursement rule would be very useful in estimating the effect of the reimbursement fund on the market for waste tires. The Department issued a Request for Proposals for such an analysis, and awarded the contract to ECO Northwest. The contractor completed its report (Attachment VI) on June 20, and presented findings to the Task Force on June 21. A representative of the contractor, ECO Northwest, Inc., will be available at the July 8 EQC meeting to answer questions.

Major conclusions and recommendations of the report include:

- Energy recovery (combustion) offers by far the largest opportunity for increased use of waste tires in the near future.
- A subsidy of \$.01 per pound of rubber used (or \$20 per ton) should stimulate annual use of about 2.3 million tires for combustion.
- Uses other than energy recovery will take longer to grow regardless of any reimbursement.
- The reimbursement should be a flat fee payable to all persons who can demonstrate tire use.
- The initial amount of the reimbursement should be set at \$20 per ton.

Role of the Commission

In addition to adopting rules which establish the structure, amount and eligibilities of the reimbursement, the statute requires the Commission to do several things connected with use of the Waste Tire Recycling Account.

Reimbursement:

1. The Commission is to prorate the amount of all reimbursements if applications for reimbursement during a period of time exceed the amount in the account. (ORS 459.770 (3)) The proposed rule provides for the Department to calculate the total reimbursement requested during a year. If this exceeds the amount of funds available, the Commission shall prorate those funds among all applicants.
2. The Commission is to limit or eliminate reimbursements if it "finds that they are not necessary to promote the use of waste tires." (ORS 459.770 (4)) The majority of waste tires are not now being used. Therefore no such finding is appropriate at this time, and the reimbursement should be set to stimulate maximum reuse of waste tires.

Cleanup:

1. The Commission must make a finding before cleanup funds may be used to help a waste tire site permittee clean up his or her site. (ORS 459.780) The finding must either be that special circumstances make this assistance appropriate; or that complying

with the Waste Tire law would cause an extreme financial hardship on the permittee. The proposed rule would have the Department make recommendations for use of these funds for permittees to the Commission, based on criteria in the rule.

Major Elements in Proposed Rule

The present proposed rule covers use of the Waste Tire Recycling Account for reimbursement to users of waste tires, and to clean up tire piles. This rule would be added to the rule on tire storage site and carrier permitting.

The rule as drafted includes the following main elements: a policy on priority uses of the Waste Tire Recycling Account; eligible and ineligible uses of waste tires for the reimbursement; eligible applicants; application procedures; how the amount of the reimbursement will be determined; and criteria and procedures for use of cleanup monies.

1. Policy on Use of Waste Tire Recycling Account Funds. Since a limited amount of funds are available, priorities on use of these funds must be set. There was considerable discussion by members of the Task Force on which to do first: clean up existing tire piles, or to try to stimulate the market for waste tires. Several persons noted that we would not gain much by spending a lot of the Account monies cleaning up existing tire sites, if there was no mechanism in place to properly absorb "new" waste tires generated each year. They would simply create new tire piles.

The recommendation is for the Department to give priority to reimbursement over cleanup, and to begin reimbursing for waste tires used in the fourth quarter of 1988. This will get the reimbursement in place as a market stimulus at the time many smaller sites are trying to clean up their tires to avoid getting a DEQ Stage II waste tire storage site permit.

2. Uses of Waste Tires Eligible for Reimbursement. Appropriate uses of waste tires include: energy recovery, using tire chips to manufacture new rubber products, using granulated rubber in rubberized asphalt, and stamping out products from the tire casing. The statute specifies that artificial reefs are an eligible use.

There are two methods of recovering the energy from waste tires: incineration of whole tires or tire chips in industrial boilers; and pyrolysis of tires to produce steam or electricity. If air quality standards are not exceeded, either use is appropriate to receive the reimbursement. Tire-derived fuel (tires chipped to burn in boilers, often along with other fuels such as wood waste in pulp and paper mills) probably has the greatest potential to use large amounts of waste tires in the short term.

The only exclusion from the reimbursement recommended by the Task Force was products which use buffings from tire retread operations. Buffings are generated when the tread is ground off a casing to prepare it for retreading. There is already a scarcity of supply of buffings in the market, since retreading is a declining industry. Such buffings only constitute a small percentage of the weight of the tire. If the buffed casing is not used for retreading, then it must be landfilled.

The Department is also recommending that some uses of whole tires be excluded from the reimbursement. Such uses include use as riprap, erosion control, tire fences, ornamental planters, and other uses where the user incurs little or no cost, and the use is of limited economic value. Since these uses often take place outside a market, offering a reimbursement for them would not "enhance the market" for waste tires. Conversely, the preceding are examples of "useful economic purposes" which would be exempt from DEQ regulation as waste tires if they meet vector and fire control concerns, and do not conflict with local ordinances (See proposed OAR 340-62-015(7)).

3. Waste Tires Generated in Oregon. For a tire to receive the reimbursement, it must be generated in Oregon. The rule defines this to mean that Oregon must be the place in which a tire first becomes a waste tire.
4. Definition of "User". How to determine who is the "user" of the waste tires was the area creating the most discussion among the Task Force. It is the user to whom the reimbursement goes. The statute states that "Any person...who uses the tires or chips or similar material for energy recovery or other appropriate uses may apply for partial reimbursement of the cost..." (emphasis added).

There was consensus among those involved with developing the legislation that the intent was for the reimbursement to go to: 1) users of tire-derived fuel; and 2) manufacturers of products using waste tires. The Legislature established the reimbursement to encourage recycling rather than landfilling of waste tires. The reimbursement should be structured to make the largest impact on the reuse of waste tires. The ECO Northwest report suggests that it may not make too much difference which "user" gets the reimbursement, since any user will have to share some of the reimbursement with the supplier to ensure supply.

The present recommendation is the end user is the person who last uses the tires, chips, or similar material either to recover their energy or to produce another product (which is not a tire, chip, or similar material). The ECO Northwest report supports this, noting that the end user can probably better bear the carrying costs involved.

A dissenting view on the Task Force was that the reimbursement should in all cases go to the processor, or the person who adds economic value. A problem with that view is that in some processes value is added at several points (when the tire is chipped; when it is re-chipped to crumb rubber; then when it is actually used to manufacture a new product). There was also some sentiment that if the "end user" was the purchaser/burner of tire-derived fuel, then the "end user" of manufactured rubber products should also be the person who purchases those products from the factory. However, the latter is still an intermediary, with the consumer being the retail purchaser.

There was general agreement that the user of the waste tires would not have to be located in Oregon.

5. Basis of Reimbursement. The Task Force discussed two possible bases for the reimbursement: a flat rate based on the amount of rubber used from waste tires; and a case-by-case reimbursement, where the user would apply for reimbursement for the cost differential between using rubber from waste tires, and his or her costs (presumably less) of using other materials such as competing fuels (for energy recovery) or virgin rubber (for manufacturing). The Task Force felt strongly that the flat rate was preferable. It makes the reimbursement predictable for the applicant. It makes the reimbursement equally available to all uses of waste tires, so that the best economic use would receive the most reimbursement. It simplifies administration. A case-by-case reimbursement based on the individual's own costs of using waste tires would reward inefficient producers. In many cases, the costs would have to be based on speculation about costs of using alternative materials.
6. Amount of Reimbursement. The Task Force recommended that the reimbursement be \$.01 per pound of waste tires actually used. This would be based on the documented amount of waste tires used in the product actually sold. In many cases, all of the tire is not used in the product, but some waste remains to be landfilled (steel or fabric belting, or the carcass of the tire after products have been stamped out of it). People should not be reimbursed for waste materials from the tire that still have to be disposed of.

The \$.01/pound level was arrived at after comparing the amount of reimbursement monies likely to be available in any one year from the Waste Tire Recycling Account (net of funds used for cleanup), with the amount (pounds) of waste tires generated per year. This level of reimbursement would be sufficient to cover all waste tires generated. We also estimate that this level of

reimbursement would be sufficient to induce mills to significantly increase their use of tire-derived fuel.

If the amount of applications for the reimbursement exceed the amount of money available in the Fund for a given time period, the EQC is to prorate the amount of all reimbursements. Based on staff calculations, prorating should not be necessary at the proposed incentive level. Enough funds should be available to cover even a high level of waste tire reuse, with some monies going for cleanup. About two million waste tires are generated each year in Oregon, in addition to some four million tires in existing piles around the state. Thus, it would be mathematically impossible for more than six million tires to be used in one year. Given the time necessary for industries to gear up for the program, DEQ staff estimates it is unlikely that more than 4 million tires would be reused in one year. At \$.01/pound, that would require a reimbursement of about \$800,000. It is anticipated that through June 30, 1989, about \$1,420,000 will be available for reimbursement and cleanup (after DOR and DEQ expenses are deducted).

7. Procedure for Reimbursement. The Task Force recommended that there be an advance certification procedure. Under this, an applicant could apply to the Department to have their use approved in advance. They would then come back in at the end of a given time period and document the numbers of tires actually used. The Department would issue its reimbursement at that time.
8. Timing for Reimbursement. The Department recommends that reimbursements be issued every quarter for waste tires used in that quarter. An alternative would be reimbursement on an annual basis. However if the reimbursement is to stimulate the market, a delay of over a year for the applicant to receive the reimbursement monies may not be effective.
9. Criteria for Use of Cleanup Funds. The law states that funds may be used in "special circumstances" to assist a permittee in cleaning up waste tire storage sites. The Task Force recommended that "special circumstances" be defined as those sites offering the greatest potential environmental risk. The Department would prioritize its recommendations to the Commission on sites for cleanup based on the degree of risk created by the tire pile. Criteria in priority order are fire danger (based on size of tire pile, impact on nearby population including air quality concerns), and other characteristics of the site contributing to environmental risk, including possible mosquito infestations.

The proposed criteria will emphasize cleanup of larger sites near populated areas. This will result in few funds being used for small sites whose operators may lack financial resources of their

own for cleanup. The Task Force felt cleanup funds would be better used to clean up larger sites, since they pose the greatest potential risks. This policy if adopted is likely to result in some controversy, as owners of small sites have shown great interest in receiving cleanup funds.

The same criteria would be applied to all sites requesting cleanup funds, including sites cleaned up by local governments. The criteria would also be used to determine on which sites the Department would order a danger or nuisance abated. If the site owner did not comply, then the Department could use cleanup funds to contract for abatement of the nuisance.

10. Financial Hardship. The law provides that financial hardship on the part of the waste tire storage site permittee may be grounds for its receiving cleanup fund monies. The Task Force recommended that financial hardship be considered as a criterion for receiving funds only for sites already meeting the "high environmental risk" criteria.

Authority to Act

HB 2022 requires the Commission to do several things concerning use of the Waste Tire Recycling Account:

1. Adopt rules to carry out the provisions of the section creating the reimbursement, which govern the types of energy recovery and other uses appropriate for the reimbursement; establish the procedure for the reimbursement; and the amount of the reimbursement (ORS 459.770 (5)).
2. Adopt rules to carry out the provisions of the Waste Tire Program (ORS 459.785).

The proposed new rule is included as Attachment II.

ALTERNATIVES AND EVALUATION

The alternatives are as follows:

1. Authorize the Department to conduct public hearings on the proposed rule.
2. Do not authorize public hearings.

The Department may get further comments on the definition of "user" of waste tires, which governs who receives the reimbursement. Unanimity on this issue was not reached among Task Force members. DEQ feels it is nevertheless important to move ahead with this rule. Reimbursement funds

need to be available as soon as possible so that market alternatives to storage and disposal of waste tires can be developed.

The Department believes that public hearings are needed to solicit comments from affected members of the public, and to identify additional issues regarding use of the Waste Tire Recycling Account. Public testimony assists the Department staff in preparing the proposed rule to be presented for Commission consideration and possible adoption.

SUMMATION

1. The Waste Tire Program passed by the 1987 Legislature gives DEQ responsibilities to implement a comprehensive program regulating waste tires. This includes using funds from the Waste Tire Recycling Account to reimburse people using waste tires, and to clean up some waste tire storage sites.
2. The Department established the Waste Tire Task Force to help develop the proposed rule.
3. The Commission is required to prorate available funds if the amount of reimbursement requests exceeds the amount in the Waste Tire Recycling Account; and to make findings before funds can be used for cleanup of permitted waste tire storage sites.
4. The proposed rule covers uses of waste tires eligible to receive reimbursement funds; who is eligible to apply for the reimbursement; amount of reimbursement; procedure to apply for the reimbursement; and criteria on which to base use of the cleanup funds.
5. The rule proposes to reimburse users of waste tires at a flat rate based on number of pounds of rubber used.
6. The amount of the reimbursement would be \$.01 per pound of rubber used.
7. The rule would give priority for use of funds to reimbursement over use for cleanup of tire piles.
8. In order to enhance the market for waste tires, and to provide alternatives for cleaning up existing tire piles, the reimbursement should be in place no later than the last quarter of 1988.
9. Many people have already expressed in interest in how the reimbursement and cleanup funds will be distributed. Hearings will allow the public to raise additional concerns which will be considered in drafting a final rule.

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DIRECTOR'S RECOMMENDATION

Based on the Summation, it is recommended that the Commission authorize public hearings to take testimony on the proposed rule to implement the use of the Waste Tire Recycling Account, OAR 340-62, as presented in Attachment II.



Fred Hansen

- Attachments:
- I. Waste Tire Task Force Subcommittees
 - II. Draft Rule OAR 340-62
 - III. Draft Hearings Notice
 - IV. Draft Statement of Need for Rulemaking
 - V. Draft Fiscal and Economic Impact,
and Land Use Consistency
 - VI. Economic Analysis of Reimbursement by ECO
Northwest, Inc.
 - VII. HB 2022

Deanna Mueller-Crispin:dmc
229-5808
May 25, 1988

SF3177

Waste Tire Task Force Subcommittees

A task force has been assembled to help the Department of Environmental Quality (DEQ) develop rules for the waste tire program. Members include representatives of the major groups affected by the new law, and public representatives. Three working subcommittees have been formed to deal with the major areas of the program:

- (1) permitting and cleanup of waste tire storage sites;
- (2) permitting of waste tire carriers; and
- (3) the reimbursement to users of waste tires.

A list of subcommittee members follows.

Tire Site Permitting and Cleanup Subcommittee

	<u>Group represented</u>
Mike Doyle Les Schwab Tires Prineville, OR	retail tire dealers retreaders tire carriers
Dave Phillips Clackamas County Department of Transportation & Development Oregon City, OR	county solid waste
Joyce Martinak Tangent, OR	League of Women Voters (public interest)
Cecilia DeSantis-Urbani Salem City Planning Department Salem, OR	city planner
Dennis Mulvihill Metro Portland, OR	landfill operator
Marilyn Adams Commercial Retread Salem, OR	retreader
Keith Rowbotham Northwest Tire Dealers Association Ellensburg, WA	retail tire dealers

Ken Erickson, County Engineer
Douglas County Courthouse
Roseburg, OR

solid waste regulator

Brad Prior
Jackson County
Medford, OR

solid waste regulator

Tire Carrier Permitting Subcommittee

Mike Doyle
Les Schwab Tires
Prineville, OR

retail tire dealers
retreaders
tire carriers

Marilyn Adams
Commercial Retread
Salem, OR

retreader

Dave Phillips
Clackamas County
Department of Transportation & Development
Oregon City, OR

county solid waste

Keith Rowbotham
Northwest Tire Dealers Association
Ellensburg, WA

retail tire dealers

Doug Carothers
Carother's Tire
Hillsboro, OR

tire carrier

Paul Henry
Public Utility Commission
Salem, OR

transportation regulatory
agency

Mark Hope
Waste Recovery, Inc.
Portland, OR

tire-derived fuel manufacturer

Reimbursement Subcommittee

Mark Hope
Waste Recovery, Inc.
Portland, OR

tire-derived fuel manufacturer

Joyce Martinak
Tangent, OR

League of Women Voters
(public interest)

Attachment I
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Page 3

Ken Sandusky
Lane County Waste Management Division
Eugene, OR

county solid waste,
and recyclers

Beverly Johnson
Oregon Department of Revenue
Salem, OR

tire fee collection program

Mike Harrington
Pave Tech Corporation
Seattle, WA

manufacturer, rubberized
asphalt

Gary Vosler
Willamette Industries
Albany, OR

user of tire-derived fuel

Bob Wheeler
Smurfit
Newberg, OR

user, tire-derived fuel

Fred Hermann
Riedel/Omni Products, Inc.
Portland, OR

manufacturer, using rubber
crumbs

SF3171

DRAFT RULE

REIMBURSEMENT AND CLEANUP, WASTE TIRE PROGRAM

6/9/88

(Add to Definitions 340-62-010:)

(1) "Buffings" -- a product of mechanically scarifying a tire surface, removing all trace of the surface tread, to prepare the casing to be retreaded.

(6) "End user":

(a) For energy recovery: the person who utilizes the heat content or other forms of energy from the incineration or pyrolysis of waste tires, chips or similar materials.

(b) For other eligible uses of waste tires: the last person who uses the tires, chips, or similar materials to make a product with economic value. If the waste tire is processed by more than one person in becoming a product, the "end user" is the last person to use the tire as a tire, as tire chips, or as similar materials. A person who produces tire chips or similar materials and gives or sells them to another person to use is not an end user.

(7) "Energy recovery" -- recovery in which all or a part of the waste tire is processed to utilize the heat content, or other forms of energy, of or from the waste tire.

(22) "Waste Tires Generated in Oregon" -- Oregon is the place at which the tire first becomes a waste tire. Examples of waste tires generated in Oregon include but are not limited to:

(a) Tires accepted by an Oregon tire retailer in exchange for new replacement tires.

(b) Tires removed from a junked auto at an auto wrecking yard in Oregon.

Policy on Use of Waste Tire Recycling Account Funds

340-62-090 Waste tires have a resource value to society that is lost if they are landfilled. One goal of the Waste Tire Program is to control the transportation and storage of waste tires so that illegal dumping is eliminated, and the tires do not cause environmental hazards. The major tools for this are the permitting requirements for tire sites and tire carriers, and civil penalties for illegal tire storage/disposal.

Another program goal is to enhance the market for reuse of waste tires so that their value is recovered, and the market helps divert the stream of waste tires from being landfilled. For this to happen, an economically attractive alternative to landfilling must be in place. The major tool for this is a reimbursement to users of waste tires from the Waste Tire Recycling Account. However, some existing sites will need financial help, or they will never be cleaned up. The Waste Tire Recycling Account also addresses this need, but under limited circumstances. Thus the priority order of uses to which the Waste Tire Recycling Account should be put is as follows:

- (1) Reimbursement to people who use waste tires.
- (2) Cleanup of permitted or non-permitted waste tire storage sites, following criteria established in OAR 340-62-155. Priority shall be given to abating a danger or nuisance created by waste tires, pursuant to OAR 340-62-155.

Reimbursement for Use of Waste Tires

340-62-100 (1) Funds in the Waste Tire Recycling Account may be used to reimburse persons for the costs of using waste tires or chips or similar materials.

(2) A person may apply to the Department for partial reimbursement from the Account for using waste tires. To be eligible for the reimbursement, the tires must:

- (a) Be waste tires generated in Oregon;
- (b) Be tire chips or similar materials from waste tires generated in Oregon; and
- (c) Be used for energy recovery or other appropriate uses as specified in 340-62-110.

Uses of Waste Tires Eligible for Reimbursement

340-62-110 (1) Uses of waste tires which may be eligible for the reimbursement include:

- (a) Energy recovery. Energy recovery shall include:
 - (A) Burning of whole or chipped tires as tire-derived fuel. The tire-derived fuel shall be burned only in boilers which have submitted test burn data to the Department and whose air quality permits are not violated by burning tire-derived fuel in the quantities for which reimbursement is requested.

(B) Incineration or pyrolysis of whole tires or tire chips to produce electricity or process heat or steam, either for use on-site, or for sale.

(b) Other eligible uses. Other eligible uses shall include:

(A) Pyrolysis of tires to produce combustible hydrocarbons and other salable products.

(B) Use of tire chips as road bed base, driveway cover, and the like.

(C) Recycling of waste tire strips, chips, shreds, or crumbs to manufacture a new product. The new product may be produced by physical or chemical processes such as:

(i) Weaving from strips of waste tires.

(ii) Stamping out products from the tire casing.

(iii) Physically blending tire chips with another material such as asphalt.

(iv) Physically or chemically bonding tire chips or crumbs with another material to form a new product such as tire chocks.

(D) Use of whole tires:

(i) In artificial fishing reefs, pursuant to OAR 340-46.

(ii) For the manufacture of new products which have a market value such as buoys.

(2) If a proposed use of waste tires would in the Department's opinion cause environmental, safety or health hazards, the Department may disallow the partial reimbursement. An example of a health hazard would be use of tire chips for playground cover without removing the steel shreds.

(3) The following uses are not considered appropriate for use of the reimbursement, and shall not be eligible for the reimbursement:

(a) Reuse as a vehicle tire.

(b) Retreading.

(c) Use of tires as riprap.

(d) Use of whole or split tires for erosion control.

(e) Use of whole or split tires for tire fences, barriers, dock and racetrack bumpers, ornamental planters, agricultural uses such as raised

beds, or other uses in which the user incurs little or no cost, the use is of limited economic value, or the use does not take place within a market.

(f) Use of tire buffings.

Who May Apply for a Reimbursement

340-62-115 (1) A person who uses waste tires generated in Oregon may apply to the Department for a partial reimbursement.

(2) To be eligible for the reimbursement, the user of a waste tire shall be the end user of the waste tires, chips or similar material for energy recovery or other appropriate uses pursuant to OAR 340-62-110. The end user need not be located in Oregon.

(3) For purposes of the reimbursement, the end user shall document the number of pounds of waste tires, chips or similar used by proof of purchase or sale, as appropriate, of the waste tires, chips or similar materials to or from another person.

Application for Reimbursement

340-62-120 (1) Application for reimbursement for use of waste tires shall be made on a form provided by the Department.

(2) An applicant may apply in advance for certification ("advance certification") from the Department that his or her proposed use of waste tires shall be eligible for reimbursement.

(a) Such advance certification may be issued by the Department if the applicant proves to the Department's satisfaction that:

(A) The use being proposed is an eligible use under OAR 340-62-110;

(B) The applicant is an eligible end user under OAR 340-62-010 (6) and OAR 340-62-115;

(C) The applicant will be able to document that the waste tires used were generated in Oregon; and

(D) The applicant will be able to document the number of pounds of waste tires used.

(b) The applicant must still apply to the Department for reimbursement for waste tires actually used, and document the amount of that use, pursuant to subsections (3) and (4) of this section.

(c) Advance certification issued by the Department to an applicant shall not guarantee that the applicant shall receive any reimbursement funds. The burden of proof shall be on the applicant to document that the use for which reimbursement is requested actually took place, and corresponds to the use described in the advance certification.

(3) An applicant may apply to the Department directly for the reimbursement each quarter without applying for advance certification. The application shall be on a form provided by the Department.

(4) To apply for reimbursement for the use of waste tires an applicant shall:

(a) Apply to the Department no later than thirty (30) days after the end of the quarter in which the waste tires were used.

(b) Unless the applicant holds an advance certification for the use of waste tires for which they are applying, prove to the Department's satisfaction that:

(A) The use being proposed is an eligible use under OAR 340-62-110;
and

(B) The applicant is an eligible end user under OAR 340-62-010(6) and OAR 340-62-115.

(c) Provide documentation acceptable to the Department, such as bills of lading, that the tires, chips or similar materials used were from waste tires generated in Oregon.

(d) Provide documentation acceptable to the Department of the net amount of pounds of waste tires used (including embedded energy from waste tires) in the quantity of product sold, purchased or used. Examples of acceptable documentation are:

(A) For tire-derived fuel: receipts showing tons of tire-derived fuel purchased.

(B) For pyrolysis plants producing electricity or process heat or steam: billings showing sales of kilowatt hours or tons of steam produced by the tire pyrolysis, calculations certified by a professional engineer showing how many net pounds of tires were required to generate that amount of energy, and receipts or bills of lading for the number of waste tires actually used to produce the energy.

(C) For pyrolysis technologies producing combustible hydrocarbons and other salable products: billings to customers showing amounts of pyrolysis-derived products sold (gallons, pounds, etc.) with the number of net pounds of waste tires, including embedded energy, used to produce those products.

(D) For end users of tire strips, chunks, rubber chips, crumbs and the like in the manufacture of another product: billings to purchasers for the product sold, showing net pounds of rubber used to manufacture the amount of product sold.

(E) For end users of tire chips in rubberized asphalt, or as road bed material, driveway cover and the like: billings or receipts showing the pounds of rubber used.

(F) For end users of whole tires: documentation of the weight of the tires used, exclusive of any added materials such as ballast or ties.

(5) The Department may require any other information necessary to determine whether the proposed use is in accordance with Department statutes and rules.

(6) An applicant for a reimbursement for use of waste tires, and the person supplying the waste tires, tire chips or similar materials to the applicant, for which the reimbursement is requested, are subject to audit by the Department (or Secretary of State) and shall allow the Department access to all records during normal business hours for the purpose of determining compliance with this rule.

(7) In order to apply for a reimbursement, an applicant must have used an equivalent of at least 5,000 pounds of waste tires or 250 passenger tires.

Basis of Reimbursement

340-62-130 (1) In order to be eligible for reimbursement, the use of waste tires must occur after the effective date of this rule.

(2) Any one waste tire shall be subject to only one request for reimbursement.

(3) The amount of the reimbursement shall be based on \$.01 per pound for rubber derived from waste tires which is used by an applicant. However, if reimbursement requests exceed available funds, the amount of reimbursement shall be prorated, pursuant to OAR 340-62-135 (5).

(4) The amount of rubber used shall be based on sales of product containing the rubber; or if the applicant is an end user who consumes and does not further sell the tires, chips or similar materials, the reimbursement shall be based on pounds of materials used.

(5) Using waste tires in artificial reefs is likely to cost the user much more than \$.01 per pound of rubber used. Persons using waste tires in artificial reefs may apply for partial reimbursement in excess of \$.01 per pound for documented costs they incur in using the waste tires to construct an artificial reef.

(6) The level of reimbursement may be reviewed and changed by the Commission annually should market conditions warrant, beginning for waste tires used in calendar year 1990.

Processing and Approval of Applications

340-62-135 (1) An applicant shall submit a complete application for a reimbursement to the Department within 30 days of the end of the quarter in which the waste tires were used. The Department shall act on an application only if it is complete.

(2) If an application is late or incomplete, the Department shall not act on the application.

(3) The applicant may submit additional information required by the Department to complete the application. However, the Department shall not act on such an application until the end of the following quarter.

(4) The Department shall review a complete reimbursement application form for overall eligibility. The Department shall then determine the eligible number of pounds of rubber used.

(5) When the Department has received and reviewed pursuant to subsection (4) of this section all completed applications for reimbursement for a quarter, the Department shall calculate the total dollar amount of eligible reimbursements requested at \$.01 per pound of rubber used. If that amount exceeds the amount of funds available for reimbursement, the Commission shall prorate the amount of all reimbursements for eligible uses received for that quarter. When the final amount of reimbursement has been determined, the Department shall issue a check in that amount to the applicant.

(6) Within 30 days of the filing of an application for advance certification, the Department shall request any additional information needed to complete the application. The application is not complete until such additional information requested by the Department has been received.

(7) If the Department determines that an application for advance certification is eligible, it shall within 60 days of receipt of a completed application issue an advance certification.

(8) The Department shall process applications for reimbursement which have "advance certification" before acting on other applications.

(9) To ensure that a use continues to be eligible for the reimbursement, the Department may review the eligibility of an approved advance certification form:

- (a) Annually;
- (b) After any revision of this rule; or
- (c) After a finding of the Commission that a reimbursement is not necessary to promote the use of waste tires.

Use of Waste Tire Site Cleanup Funds

340-62-150 (1) The Department may use cleanup funds in the Waste Tire Recycling Account to:

(a) Partially pay to remove or process waste tires from a permitted waste tire storage site, if the Commission finds that such use is appropriate pursuant to OAR 340-62-165.

(b) Pay for abating a danger or nuisance created by a waste tire pile, subject to cost recovery by the attorney general pursuant to OAR 340-62-165.

(c) Partially reimburse a local government unit for the cost it incurred in abating a waste tire danger or nuisance.

(2) Priority in use of cleanup funds shall go to sites ranking high in criteria making them an environmental risk, pursuant to OAR 340-62-155.

(3) For the Department to reimburse a local government for waste tire danger or nuisance abatement, the following must happen:

(a) The Department must determine that the site ranks high in priority criteria for use of cleanup funds, OAR 340-62-155.

(b) The local government and the Department must have an agreement on how the waste tires shall be properly disposed of.

Criteria for Use of Funds to Clean Up Permitted Waste Tire Sites

340-62-155 (1) The Department shall base its recommendations on use of cleanup funds on potential degree of environmental risk created by the tire pile. The following special circumstances shall serve as criteria in determining the degree of environmental risk. The criteria, listed in priority order, include but are not limited to:

(a) Susceptibility of the tire pile to fire. In this, the Department shall consider:

(A) The characteristics of the pile that might make it susceptible to fire, such as how the tires are stored (height and bulk of piles), the absence of fire lanes, lack of emergency equipment, presence of easily combustible materials, and lack of site access control;

(B) How a fire would impact the local air quality; and

(C) How close the pile is to natural resources or property owned by third persons that would be affected by a fire at the tire pile.

(b) Other characteristics of the site contributing to environmental risk, including susceptibility to mosquito infestation.

(2) In determining the degree of environmental risk involved in the two criteria above, the Department shall consider:

(a) Size of the tire pile (number of waste tires).

(b) How close the tire pile is to population centers. The Department shall especially consider the population density within five miles of the pile, and location of any particularly susceptible populations such as hospitals.

(3) Financial hardship on the part of the permittee shall be an additional criterion in the Department's determination. Financial hardship means that strict compliance with OAR 340-62-005 through 340-62-045 would result in substantial curtailment or closing of the permittee's business or operation, or the bankruptcy of the permittee. The burden of proof of such financial hardship is on the permittee.

Procedure for Use of Cleanup Funds for a Permitted Waste Tire Storage Site

340-62-160. (1) The Department may recommend to the Commission that cleanup funds be made available to partially pay for cleanup of a permitted waste tire storage site, if all of the following are met:

(a) The site ranks high in the criteria making it an environmental risk, pursuant to OAR 340-62-155.

(b) The permittee submits to the Department a compliance plan to remove or process the waste tires. The plan shall include:

(A) A detailed description of the permittee's proposed actions;

(B) A time schedule for the removal and or processing, including interim dates by when part of the tires will be removed or processed.

(C) An estimate of the net cost of removing or processing the waste tires using the most cost-effective alternative. This estimate must be documented.

(c) The plan receives approval from the Department.

(2) A permittee claiming financial hardship under OAR 340-62-155 (3) must document such claim through submittal of the permittee's state and federal tax returns for the past three years, business statement of net worth, and similar materials. If the permittee is a business, the income and net worth of other business enterprises in which the principals of the permittee's business must also be submitted.

(3) If the Commission finds that use of cleanup funds is appropriate, the Department shall contract to pay part of the costs of a contractor who shall remove or process the waste tires. Final payment shall be withheld until the Department's final inspection and confirmation that the tires have been removed or processed pursuant to the cleanup contract.

Use of Cleanup Funds for Abatement by the Department

340-62-165. (1) The Department may use funds in the Account to contract for the abatement of:

(a) A tire pile for which a person has failed to apply for or obtain a waste tire storage site permit.

(b) A permitted waste tire storage site if the permittee fails to meet the conditions of such permit.

(2) The Department may abate any danger or nuisance created by waste tires by removing or processing the tires. The Department shall follow criteria in OAR 340-62-155 in determining which sites shall be subject to abatement.

(3) Before taking any action to abate the danger or nuisance, the Department shall give any persons having the care, custody or control of the waste tires, or owning the property upon which the tires are located, notice of the Department's intentions and order the person to abate the danger or nuisance in a manner approved by the Department.

(4) Any order issued by the Department under this subsection shall be subject to appeal to the Commission and judicial review of a final order under the applicable provisions of ORS 183.310 to 183.550.

(5) If a person fails to take action as required under subsection (3) of this section within the time specified, the Director may contract to abate the danger or nuisance.

(6) The order issued under subsection (3) of this section may include entering the property where the danger or nuisance is located, taking the tires into public custody and providing for their processing or removal.

(7) The Department may request the attorney general to bring an action to recover any reasonable and necessary expenses incurred by the Department for abatement costs, including administrative and legal expenses. The Department's certification of expenses shall be prima facie evidence that the expenses are reasonable and necessary.

SF3178

A CHANCE TO COMMENT ON...

Proposed Rules Relating to Reimbursements to Users of Waste Tires, and Cleanup funds for Tire Storage Sites

Hearing Date: August 15, 1988
August 16, 1988
August 17, 1988
August 18, 1988
Comments Due: August 24, 1988

WHO IS AFFECTED: Persons using waste tires or tire chips for energy recovery or other uses. Owners and operators of sites where more than 100 waste tires are stored. Owners and operators of retail tire stores and retread shops. Local governments. Auto wreckers. Vector control districts.

WHAT IS PROPOSED: The Department proposes to adopt new Administrative Rules, Division 340, Section 62, to use funds in the waste tire recycling account. The rule would establish procedures to partially reimburse people who use waste tires or tire chips; to determine what uses are eligible for reimbursement; and to set criteria for use of waste tire site cleanup funds.

WHAT ARE THE HIGHLIGHTS: The rules would establish policy that use of funds for reimbursement is to receive priority over cleanup. Uses of tires eligible for reimbursement include energy recovery, pyrolysis, manufacture of new products and artificial reefs. Some uses of whole tires would be excluded. The user of the tire would include a manufacturer or person who burns tires for their energy value. The amount of the reimbursement would be \$.01 per pound of rubber used. Priority use of cleanup funds would be for tire piles creating a fire or vector hazard.

HOW TO COMMENT: Public Hearings will be held before a hearings officer at:

7:00 p.m.
Monday, August 15, 1988
Eastern Oregon State College
Hoke Bldg., Room 309
8th and K Street
LaGrande, OR 97850

7:00 p.m.
Tuesday, August 16, 1988
School Administration Bldg. #314
520 N.W. Wall Street
Bend, OR 97701

7:00 p.m.
Wednesday, August 17, 1988
Jackson Co. Courthouse
Auditorium, Main & Oakdale
Medford, OR 97501

7:00 p.m.
Thursday, August 18, 1988
State Office Bldg, Room 26
1400 S.W. 5th Ave.
Portland, OR 97201

(OVER)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

INFORMATIONAL MEETINGS will be held prior to the hearings, from 4 p.m. to 5:30 p.m., on the same day and place.

Written or oral comments may be presented at the hearings. Written comments may also be sent to the Department of Environmental Quality, Hazardous and Solid Waste Division, Attn: Deanna Mueller-Crispin, 811 S.W. 6th Avenue, Portland, OR 97204, and must be received no later than 5:00 p.m., Wednesday, August 24, 1988.

For a copy of the PROPOSED RULE PACKAGE, contact the DEQ Hazardous and Solid Waste Division. For further information, contact Deanna Mueller-Crispin at 229-5808, or toll-free at 1-800-452-4011.

**WHAT IS THE
NEXT STEP:**

The Environmental Quality Commission may adopt new rules identical to ones proposed, adopt modified rules as a result of testimony received, or may decline to adopt rules. The Commission will consider the proposed new rules at its meeting on October 7, 1988.

SF3163

RULEMAKING STATEMENTS
for
Proposed New Rules
Pertaining to the Use of the Waste Tire Recycling Account
OAR Chapter 340, Division 62

Pursuant to ORS 183.335, these statements provide information on the intended action to adopt a rule.

STATEMENT OF NEED:

Legal Authority

The 1987 Oregon Legislature passed the Waste Tire Act regulating the storage and disposal of waste tires, and creating a Waste Tire Recycling Account. ORS 459.785 requires the Commission to adopt rules and regulations necessary to carry out the provisions of ORS 459.705 to 459.790. The Commission is adopting new rules which are necessary to carry out the provisions of the Waste Tire Act.

Need for the Rule

Improper storage and disposal of waste tires represents a significant problem throughout the State. The Waste Tire Act establishes a comprehensive program to regulate the storage of waste tires. It also establishes a Waste Tire Recycling Account to create financial incentives for people to reuse waste tires, and to help pay for the cleanup of some tire piles. Rules from the Commission are needed to set procedures and requirements for use of the Waste Tire Recycling Account. The rule now proposed deals with: application procedures for a reimbursement to people who use waste tires; who may receive the reimbursement; which uses will be eligible for the reimbursement; the amount of the reimbursement; and criteria for use of cleanup funds.

Principal Documents Relied Upon

- a. Oregon Revised Statutes, Chapter 459.
- b. Oregon Administrative Rules, Chapter 340, Divisions 60 and 62 (proposed).
- c. Report to Minnesota Pollution Control Agency on Scrap Tires in Minnesota, October 1987, prepared by Waste Recovery, Inc.
- d. Proceedings of a Workshop on Disposal Techniques with Energy Recovery for Scrapped Vehicle Tires, sponsored by US Dept. of Energy et al, November 1987.

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- e. Waste Tire Permitting Rules as Proposed by the Minnesota Waste Management Board, Minn. Rules Parts 9220.0200 to 9220.0835.
- f. Waste Tire Market Analysis, Oregon Department of Environmental Quality, March 31, 1988.
- g. Economic Analysis of a Reimbursement to Users of Waste Tires, ECO Northwest, June 20, 1988.

SF3175

FISCAL AND ECONOMIC IMPACT STATEMENT:

Implementation of this action will require .5 full-time equivalent employee (Waste Tire Program Coordinator) to implement procedures for reimbursement and cleanup, and to review applications, plus associated clerical support. It will also cause additional work for other Waste Tire Program staff in determining cleanup priorities. It may cause some additional work for the Department's Regional staff. These positions are included in the Department's approved budget.

This action will have a positive economic impact on private businesses, the public, and local government.

Over the duration of the program (through June 30, 1991), approximately \$4 million will be available from the Waste Tire Recycling Account for reimbursement and cleanup. The money comes from a \$1 fee charged on the sale of all new replacement tires in Oregon. Persons using waste tires and tire chips will be eligible for partial reimbursement for such use. Large users may be eligible for substantial funds. The availability of the reimbursement may encourage new business activity in Oregon. Operators of waste tire storage sites may receive cleanup funds if they meet criteria. Local governments which abate tire pile nuisances may also receive cleanup funds under some circumstances. The reimbursement is meant to enhance the market for waste tires. It should result in creating alternatives to landfill for disposal of waste tires. This should eventually reduce the cost of tire disposal for the public from what it otherwise would have been.

A small business which uses waste tires would be eligible for the partial reimbursement for such use. There are a number of small manufacturers who will likely be eligible. Some of the people now storing waste tires are small businesses. Rather than undergo the expense of operating a waste tire storage site, they may choose to clean up their tire piles. If their site meets program criteria, they may be eligible for some cleanup funds to assist in this.

LAND USE CONSISTENCY STATEMENT:

The proposed rules appear to affect land use and appear to be consistent with Statewide Planning Goals and Guidelines.

With regard to Goal 6 (Air, Water and Land Resources Quality), the rules provide for cleanup funds to help get rid of improperly stored waste tires. This should help eliminate or reduce potential tire fires, a source of air pollution, as well as keep waste tires out of waterways. Waste tires are often stored in conflict with local land use rules. As tire sites are cleaned up, land use compliance should improve.

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With regard to Goal 11 (Public Facilities and Services), the rules allow for local governments to be partially reimbursed for their costs of abatement of a waste tire nuisance. The Department may also use funds for such abatement. The availability of these funds for nuisance abatement will improve the public health, safety and welfare.

The rules do not appear to conflict with other Goals.

Public comment on any land use issue involved is welcome and may be submitted in the manner described in the accompanying NOTICE OF PUBLIC HEARING.

It is requested that local, state and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

SF3173

ECONOMIC ANALYSIS OF A REIMBURSEMENT TO USERS OF WASTE TIRES

Prepared for:

**Oregon Department Of Environmental Quality
Hazardous and Solid Waste Division
811 S.W. 6th Avenue
Portland, Oregon 97204
Telephone: (503) 229-5808**

by:

**ECO Northwest
99 West 10th, Suite 400
Eugene, Oregon 97401
Telephone: (503) 687-0051**

20 June 1988

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PREFACE

Under the provisions of House Bill 2022 (adopted in 1987), the Oregon Legislature directed the Department of Environmental Quality (DEQ) to develop regulations to encourage the productive use of waste tires. The legislation also imposes a one-dollar fee on each new replacement tire sold in the state and directs that the proceeds collected should be used to induce greater use of waste tires as fuel and in other appropriate uses and to clean up waste-tire storage sites. The inducements will be provided through reimbursements to users of waste tires.

On 27 May 1988 DEQ contracted with ECO Northwest to assist with an economic analysis of alternatives for providing reimbursements to users of waste tires in Oregon. The primary goal of the study is to determine how DEQ can administer the reimbursement funds to accomplish the most efficient use of waste tires, subject to legal constraints and DEQ's concerns about equity and the environmental implications of alternative uses. The secondary goal is to provide DEQ with direction for structuring the reimbursement program so it effectively addresses the short-run problem of reducing the current inventory of waste tires in Oregon and makes a smooth transition to addressing the long-run problem of managing future additions to the inventory.

This document is our final report. It was prepared by Ernie Niemi (Project Manager) and Carl Batten. We gratefully acknowledge the assistance of the many individuals who provided us with information and other assistance. We especially appreciate the information and insights from the members of the Waste Tire Task Force, and the assistance of Deanna Mueller-Crispin, the Waste Tire Program Coordinator for DEQ, who supervised the study.

EXECUTIVE SUMMARY

Oregonians generate approximately 2 million new waste tires each year. Nobody knows exactly how many tires various legal and illegal storage sites around the state contain, but DEQ has documented an inventory of approximately 4 million. The goal of DEQ's reimbursement program is to stimulate market demand for waste tires in the short run by providing a subsidy to users of waste tires, thereby developing viable markets that will continue to demand waste tires and tire-derived products after the reimbursement program ends. This report examines the economics of the market for waste tires and the likely effects of various reimbursement schemes and amounts.

Currently and in the near future, energy recovery (combustion) offers by far the largest opportunity for increased use for waste tires. The use of tires in rubber-modified asphalt and other products probably will eventually exceed use for energy recovery, but such uses will take time to grow regardless of any reimbursement. A reimbursement will reduce a user's cost of using waste tires. In the range of the reimbursement amounts being considered, the percentage increase in the use of waste tires for fuel stimulated by the reimbursement will be approximately twice the percentage decrease in the user's effective cost. The change in the user's effective cost of using waste tires, though, will be less than the reimbursement amount, as part of the reimbursement will end up in the hands of suppliers of waste tires, especially after the most accessible tires have been used and the cost of seeking out additional tires increases.

We evaluated flat-rate and variable reimbursement schemes using four types of economic criteria: administrative, performance, efficiency, and equity. The flat-rate reimbursement dominates the alternatives according to all four economic criteria. It costs less to administer, promotes the development of a viable and efficient market structure, and treats all eligible users equally.

We recommend that DEQ adopt a flat-rate reimbursement for users who use a minimum number of tires and that the rate initially be set at \$20 per ton (one cent per pound). Because so little information about the responsiveness of waste-tire users to price changes exists, considerable uncertainty surrounds any estimates about the likely effects of any reimbursement program. We therefore strongly recommend that DEQ closely monitor the progress of the program and react by adjusting the reimbursement amount, the eligibility requirements, and the allocation of funds between the reimbursement program and cleanup activities, as required.

CHAPTER 1

OVERVIEW OF THE MARKET FOR OREGON'S WASTE TIRES

In this chapter we summarize information on the supply and demand for waste tires to provide an overview of the market for waste tires in Oregon. We begin by briefly describing the existing inventory of waste tires in the state and the number of tires generated annually. We then outline the alternative uses of waste tires and estimate the demand stemming from each. To the extent that the available data allow, we look at the current level of demand, describe the past, current, and expected trends, and explain the factors that determine whether demand is stable, growing, or declining. Finally, we relate the number of waste tires to the amount of reimbursement funds available.

Nobody knows with certainty the number and location of the inventory of waste tires currently stored in Oregon or the number and location of additional waste tires generated annually in the state. Better information will become available soon, however, as DEQ fully implements the waste-tire program and collects data on the number of tires sold, the transportation of tires within the state, and the contents of storage piles.

Inventory: DEQ estimates that there currently are approximately 4 million waste tires stored at known storage sites. An unknown number of additional tires exist in piles not yet catalogued by DEQ and strewn throughout the state. The distribution, by county, of piles identified by DEQ during a preliminary survey in May, 1988, is shown in Table 1-1. Table 1-2 identifies the 14 known piles with 10,000 or more tires. Three piles, in Deschutes, Klamath, and Jackson Counties, account for more than 3 million tires.

Each tire, on average, weighs 20 pounds. Thus, the catalogued inventory of waste tires contains approximately 40,000 tons (80 million pounds) of waste-tire material.

TABLE 1-1
TIRE SITES BY SIZE AND COUNTY

----- Number of Tires per Site -----

COUNTY	100-499	500-599	1,000-4,999	5,000-9,999	10,000+
BAKER	3	0	1	0	0
BENTON	0	0	0	0	0
CLACKAMAS	4	0	5	4	1
CLATSOP	0	0	0	0	0
COLUMBIA	1	1	0	0	2
COOS	1	1	0	0	0
CROOK	0	0	1	0	0
CURRY	0	0	0	0	0
DESCHUTES	13	4	0	2	1
DOUGLAS	3	1	1	0	0
GILLIAM	0	0	0	0	0
GRANT	0	0	0	0	0
HARNEY	0	0	0	0	1
HOOD RIVER	1	0	1	0	0
JACKSON	2	0	3	1	1
JEFFERSON	0	0	0	0	0
JOSEPHINE	2	1	0	1	0
KLAMATH	5	0	2	0	1
LAKE	0	0	0	0	0
LANE	2	3	3	1	2
LINCOLN	2	0	0	0	0
LINN	0	1	1	0	0
MALHEUR	0	0	2	0	0
MARION	1	2	2	3	0
MORROW	0	0	0	0	0
MULTNOMAH	9	3	9	9	9
POLK	2	1	4	0	2
SHERMAN	0	0	0	0	0
TILLAMOOK	0	0	4	0	0
UMATILLA	0	0	0	0	1
UNION	0	0	2	0	0
WALLOWA	0	0	0	0	0
WASCO	4	3	2	0	0
WASHINGTON	1	0	0	0	0
WHEELER	0	0	0	0	0
YAMHILL	0	0	0	0	2

Source: Oregon Department of Environmental Quality

TABLE 1-2
SITES WITH 10,000 OR MORE TIRES

SITE OWNER	COUNTY	NUMBER OF TIRES
LES SCHWAB	DESCHUTES	OVER 1,000,000
HARPOLD	KLAMATH	OVER 1,000,000
WILSON	JACKSON	OVER 1,000,000
SCIENTIFIC DEVELOPMENT	LANE	4 ACRES
RAUCH	COLUMBIA	100,000
ALBANY TIRE	POLK	50,000
MISHLER	YAMHILL	50,000
REMIOR	YAMHILL	50,000
KRENIK	LANE	40,000
MOLLALLA DISCOUNT TIRES	CLACKAMAS	20,000 TO 30,000
J&M TOWING	UMATILLA	10,000
TRI CITY WRECKERS	POLK	10,000
B&S AUTO WRECKERS	HARNEY	10,000
DUBOIS AUTO WRECKERS	COLUMBIA	10,000

Source: Oregon Department of Environmental Quality

Annual Supply: Approximately 2 million waste tires are generated annually within Oregon. Results from the first three months of the dollar-per-tire fee indicate that about 1.5 million replacement tires other than retreads will be sold this year in Oregon. We assume that the number of retreads sold equals the number of tires used to make retreads (net imports of casings equal net exports of retreads). Additional waste tires will be generated as about 100,000 cars (each with 4 or 5 tires) are retired from service each year. Based on these estimates, we conclude that approximately 2 million waste tires will be generated in Oregon each year. By comparison, the Minnesota study¹ states that approximately 0.8 tires are generated per resident per year. With a population of 2.7 million, Oregon should generate

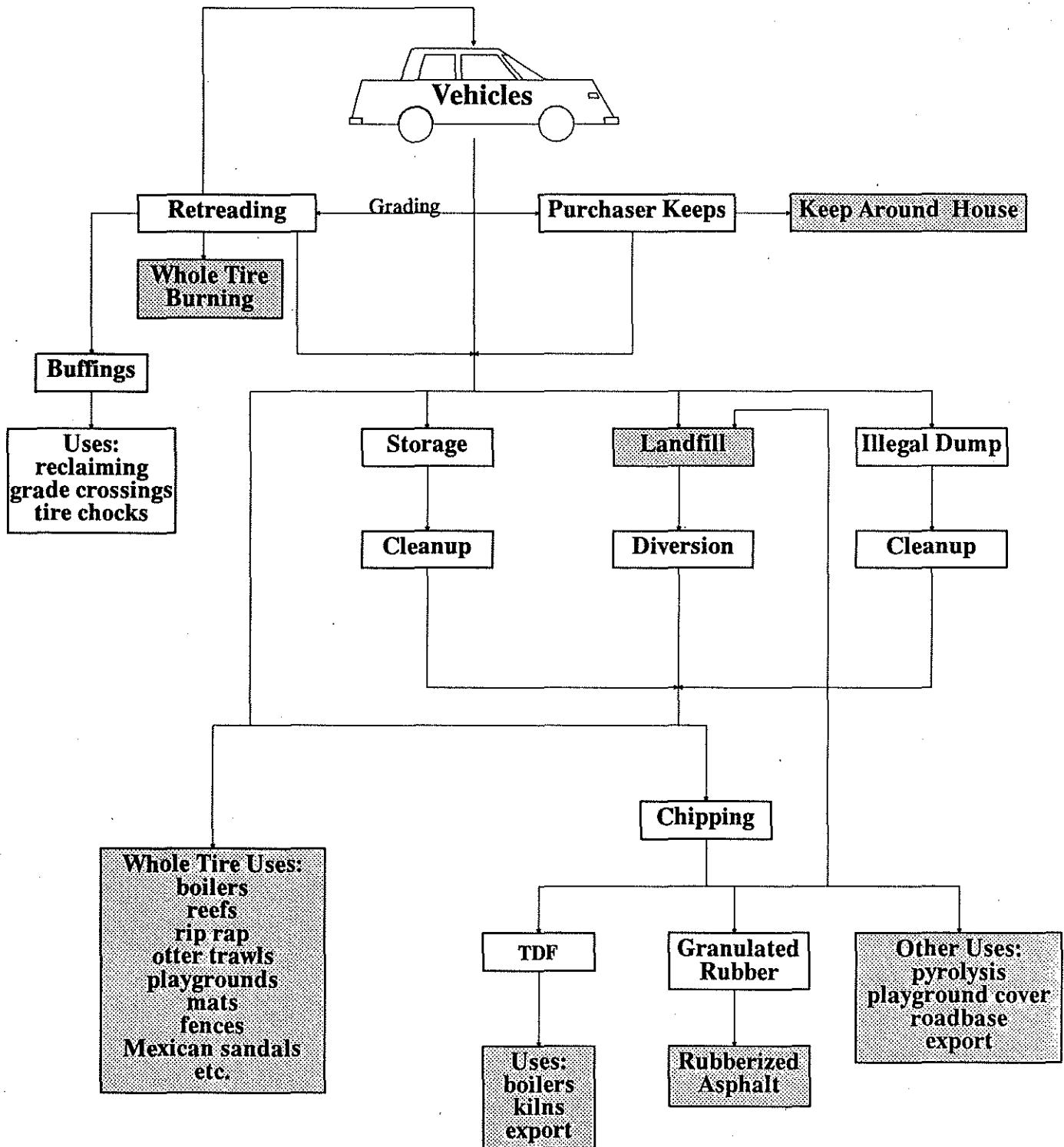
¹Hope, Mark W. and Charles Lederer. (1985). Scrap Tires in Minnesota. St. Paul, MN: Minnesota Pollution Control Agency.

2.16 million tires, of which about 10 percent or 216,000 will be returned to service as retreads, leaving 1.94 million waste tires.

Figure 1 depicts the current flow of waste tires in Oregon:

1. Approximately 216,000 (10%) are reused for retreading (and ineligible for the reimbursement).
2. Approximately 1.1 million are burned or converted to other products. Waste Recovery, Inc. supplies tire-derived fuel (TDF) made from about 1.78 million tires per year to its customers in Oregon and Washington, including a cement kiln that recently began using TDF at a rate of about 482,000 tires per year. Currently, about 60 percent of these originate in Oregon. A large number of other uses currently consume relatively few tires.
3. Approximately 800,000 are not used. No one knows exactly where they go. DEQ estimates that about 100,000 are retained by individuals, 200,000 get landfilled, and the rest go to storage sites or illegal dumps. If all the rest went to the known stockpiles, the stockpiles would be larger. Hence, some must go to unknown stockpiles or illegal dump sites. With implementation of the waste tire program, we expect that there will be fewer leakages from the controlled system.

**FIGURE 1
WASTE TIRE FLOW IN OREGON**



CHAPTER 2

ANALYSIS OF THE MARKET FOR WASTE TIRES IN OREGON

In this chapter we lay the analytical groundwork for evaluating alternative reimbursement schemes. We begin by seeing if changes in the price of waste tires, occasioned by reimbursements from DEQ, will lead to changes in the consumption of tires. Specifically, we examine the price elasticity of demand for waste tires, which measures the sensitivity of different users' demand for waste tires to changes in their price. We then discuss the extent to which users of waste tires actually will realize price reductions stemming from the reimbursement program.

Throughout this report we use the term "users" to mean those who consume tires (by incineration) or transform tires into non-tire products (such as asphalt concrete or fuel oil). Note that the user does not have to produce a final good. For example, when TDF is used as an input into the production of paper pulp, the pulp mill is the user rather than the person who buys the paper or the person who chops up the tires. We use the term "suppliers" to mean those who supply whole or processed tires to users.

A. HOW WILL USERS OF WASTE TIRES RESPOND TO PRICE REDUCTIONS?

A.1 THE CONCEPT OF PRICE ELASTICITY

A central issue related to the design of a reimbursement scheme is the responsiveness of individual users to the change in price it brings about. The more one knows about the responses various changes in price will stimulate, the more accurately one may tailor the reimbursement to achieve the desired effect. If the reimbursement is too small to stimulate sufficient change in users' demand for tires, the program will not be able to achieve its goals; if it is too large, it will waste reimbursement funds. Also, by knowing how different users are likely to respond to price incentives, DEQ can more

accurately evaluate the merits of targeting reimbursements to just those users most responsive to price.

Economists use the term, own-price elasticity of demand, to describe the relationship between proportional changes in the price of a good and the resulting proportional changes in the quantity of that good demanded in the market. For example, if a good's own-price elasticity of demand is -1.5, a one-percent decrease in the price of that good will lead to a 1.5 percent increase in the quantity demanded of that good.² In the remainder of this report, we use the shortened term, elasticity, to mean own-price elasticity of demand, ignoring the other elasticities that relate demand to income, output, the price of other goods, and other variables.

Economists typically estimate elasticities either directly from the production functions of each current and potential user and the supply schedule for every possible substitute, or from a statistical analysis of sample data for a large number of users over a sufficient time to see how each user responds to price changes. Because of the budgetary and time constraints of this study it was impossible to gather the necessary information to apply either of these approaches. Instead, we conducted interviews with major current and potential users.

We specifically attempted to identify major differences among various current and potential users that should make the demand of one user (or group of users) more or less elastic than the demand of another. Factors that can exert a major influence on a user's price elasticity include:

- * The fixed costs associated with converting to or increasing the use of waste tires or tire-products.

New users of tires (or intermediate tire-derived products, such as TDF) and many current users cannot increase their use of tires

²The negative sign indicates that the change in demand and the change in price move in opposite directions (i.e., a decrease in the price of tires leads to an increase in demand).

without incurring capital costs to adjust their productive processes, secure regulatory permits, or otherwise facilitate the expansion.

The less it costs to make the changes necessary to consume more tires, the greater the responsiveness to reductions in the price of tires. The cost of switching away from using tires sometime in the future also affects elasticity; users, thus, will evaluate the likelihood that the favorable reductions in the price of tires will persist long enough to recoup the initial fixed costs.

- * The price of substitutes for waste tires or tire-derived products.

In general, the elasticity of demand for tires will be greater, the higher the price of substitutes. One must go beyond a simple comparison of the prices of tires (or intermediate tire-derived products) and their substitutes, however, because most markets are dynamic and a reduction in the price of tires may stimulate a price response from the suppliers of substitutes attempting to protect their markets.

The market is especially complicated in the pulp-and-paper industry because of the current surplus of hogged fuel, the primary substitute for tire-derived fuel. Some suppliers of the wood chips that constitute the primary ingredient of pulp are refusing to sell chips unless the mill also buys hogged fuel, and some mills are owned by forest-products companies that have large amounts of hogged fuel on their hands.

- * Uncertainty about the price of waste tires (and intermediate tire-derived products) and the price of substitutes.

If users perceive that the future price of waste tires will be more (less) volatile than the price of substitutes, they generally will be less (more) likely to increase their demand for tires in response to reimbursements from DEQ.

- * Environmental and other regulatory constraints.

Most boilers in the Pacific Northwest that currently burn TDF face air-pollution constraints that limit their ability to expand their use of TDF; others face water-pollution constraints. Potential new burners of TDF may face similar limitations that would make them less sensitive to price reductions.

Other regulatory constraints can work to make users more sensitive to price reductions. For example, the regulations accompanying the reimbursement program that make it more costly to store waste tires (in permitted storage sites or in illegal dumps) should enhance the market's response to the reimbursements.

- * Physical and engineering constraints on increased tire use.

For example, while some tire-derived fuel increases the grate temperature enough to improve combustion efficiency in a hogged-fuel boiler, too much may raise the temperature or pressure to the point where the boiler is damaged, thus limiting the user's ability to increase consumption of waste tires in response to a price reduction.

A.2 THE ELASTICITIES OF DIFFERENT USERS

Tire-derived fuel (TDF): TDF currently costs between \$35 and \$40 per delivered ton (see Table 2-1). This is for rubber chips between one and two inches in diameter with most of the steel removed. Waste Recovery, Inc., appears to be the only supplier of TDF currently meeting these specifications in Oregon. Others offer lower-quality fuel (larger chunks and more wire) in the spot market, but the demand for this product as fuel is small and appears unlikely to grow in the foreseeable future. An export market for these larger chips may exist.

Some boilers can utilize whole tires as fuel. Both the larger chips and whole tires are less costly than the TDF sold by Waste Recovery, Inc. The

demand for whole tires, though currently limited, may grow in the future if new boilers capable of handling them are constructed.

With a heat content of approximately 15,500 BTU/lb (British Thermal Units per pound), the current price of TDF represents a heating cost of \$1.13 to \$1.29 per million BTU (MBTU). Hogged fuel, the primary substitute for TDF used by pulp and paper mills, currently costs \$5.00 to \$6.50 per ton (wet) and has a heat content of 4,500 BTU/lb, yielding a heating cost of \$0.56 to \$0.72 per MBTU. Coal currently costs \$30 to \$45 per ton, has a heat content of about 11,000 BTU/lb, and a heating cost of \$1.36 to \$2.04 per MBTU.

A comparison of heating costs indicates that TDF is currently competitive with coal, but approximately twice as costly as hogged fuel. The last entry in Table 2-1 indicates that a reduction of \$20 per ton (one cent per pound) in the price of TDF would render its heating cost approximately equal to that of hogged fuel and considerably lower than that of coal.³

Converting to the use of TDF generally entails some fixed costs. To use TDF, a boiler should be of the traveling-grate variety and fed by a conveyor system into which the tire chips can be continuously metered. Metering equipment costs at least \$40,000. Waste Recovery, Inc., helps its customers to select, install, and in some cases, finance the purchase of metering equipment.

The use of TDF also can cause a user to come up against environmental constraints, generally manifesting themselves in air-quality permits. Mills that have tested TDF report that, depending on their equipment and air-quality permit, those with wet scrubbers can handle 2 to 5 percent TDF by weight, and those with baghouses up to 10 percent. Several mills thought they could go to 10 percent or more with additional modifications, but they might have to obtain a PSD air-quality permit. Above 10 percent, both air-quality and engineering constraints effectively preclude additional TDF use in most cases.

³In the next section we discuss the likelihood that a reimbursement of one-cent per pound would reduce the users' cost by an equivalent amount.

TABLE 2-1
COMPARATIVE COSTS OF TIRE-DERIVED FUEL AND SUBSTITUTE FUELS

FUEL	----- \$/Ton	PRICE Cents/lb	----- \$/MBTU
Hogged Fuel	5.00-6.50	0.25-0.32	0.56-0.72
Coal	30-45	1.50-2.25	1.36-2.04
Tire-Derived Fuel:			
Current Price	35-40	1.75-2.00	1.13-1.29
With \$20/Ton Reduction	15-20	0.75-1.00	0.49-0.65

Source: ECO Northwest

The only operating cement kiln in Oregon, in Durkee, recently began burning TDF supplied by Waste Recovery, Inc. It now uses about 4 percent TDF and its operators have indicated that with some modifications to their process, they could go as high as 15 percent. In a cement kiln, TDF replaces coal.

Two factors complicate the estimation of the price elasticity of demand for TDF. First, hogged fuel burns more efficiently in the presence of TDF. Thus, the use of 1 to 2 percent TDF may be cost-effective even when the cost per BTU is significantly higher. Second, some suppliers of wood chips to pulp and paper mills have been refusing to sell chips unless the mill also takes hogged fuel. At a delivered price of \$5 per ton for hogged fuel, suppliers are basically giving it away for the cost of hauling.

We estimate that, in the range of the reimbursement being considered (\$20 per ton or about 50 percent of the current price), the price elasticity for TDF as sold by Waste Recovery, Inc. is approximately -2. That is, the

percentage increase in use will be approximately twice as large as the percentage reduction in price. Hence, if the cost to users is reduced 50 percent, we expect that use will double.

Smaller or larger reductions in the price will elicit different elasticities in demand. Based on interviews with current and potential users, we estimate that a reduction in price of less than 30 percent or so will have almost no effect on demand (i.e., the elasticity will be approximately zero). Conversely, reducing the price by more than 50 percent should result in an even greater response in demand (i.e., the elasticity will exceed -2).

Until there have been tests of the market's response to price changes, these estimates necessarily embody considerable uncertainty. Furthermore, it is impossible to predict accurately how quickly demand will respond to price changes. Despite this uncertainty, these estimates reflect the representations of current participants in the market who are familiar with DEQ's efforts to implement a reimbursement program. Thus, we anticipate that these estimates offer a reasonable portrayal of how the market will respond to reimbursement-induced price reductions, and that the market will begin to respond immediately.

Les Schwab operates a boiler that burns up to 500 whole tires per day as a part of his retreading facility in Prineville. This boiler burns tires that were selected for retreading by dealers but rejected at the retreading facility. The reimbursement will not stimulate additional use by this boiler as it now operates at or near capacity.

Ralph Gilbert of East County Recycling in Portland has indicated that a lumber mill somewhere in Oregon is planning to install new boilers capable of burning whole tires. The steam would be used to generate electricity for the mill and for sale to a utility. Mr. Gilbert could not give any details other than that, with the right reimbursement, they could burn all the waste tires generated in the state. We have been unable to confirm this report or to obtain sufficient information to estimate the elasticity of their demand for waste tires.

Rubber-Modified Asphalt: Two types of products fall into the category of rubber-modified asphalt: one uses approximately one percent finely-ground crumb rubber melted into the oil as a binder, and the other uses approximately three percent granulated tires as an additive replacing some of the aggregate in the mix. Neither formula currently enjoys widespread application in Oregon, primarily because public highway agencies have not adjusted their standards to incorporate them. We concentrated on the second type, called PlusRide, for several reasons: it has been tested in Oregon, it uses more tires, and it uses the whole tire.

Conventional Type B asphalt costs about \$17 per ton (not including application costs) and PlusRide costs about \$35 per ton in the quantities used for the test sections. The granulated tires now cost 12 cents per pound, or \$7.20 per ton of mix; it likely would cost less if it were made in Oregon rather than shipped in from other states. For small batches, mixing costs about \$6 per ton more because the aggregate must be graded differently and the mixing process, while not inherently more expensive, is different and must be controlled manually. If large quantities were being mixed, the mixing costs would be the same. A royalty fee of \$4.50 per ton goes to the PaveTech Corporation to cover the cost of training the contractor, designing the mix, providing an engineer at the site, and to recover research and development costs. This fee would be lower per ton if a larger quantity were being produced. The cost of laying the asphalt is the same for both types.

Testing by researchers at Oregon State University's Transportation Research Institute on roads near Mount Saint Helens and by the Alaska Department of Transportation on Alaskan highways has indicated that when used as an overlay, 2 inches of PlusRide perform roughly the same as 3.6 inches of conventional asphalt. Further testing will be required, however, before engineers are willing to specify significantly thinner layers of PlusRide. Testing has also indicated longer useful life and lower maintenance costs, mostly because as rubber-modified asphalt expands and contracts, it does not crack like conventional asphalt does. Evidence gathered to date suggests that PlusRide could be cost-effective on a per-ton basis without a reimbursement. That is, the present discounted value of all costs associated with construction and maintenance over the lifetime of comparable sections of conventional

asphalt and PlusRide appear to be lower for PlusRide even though the initial costs are significantly higher.

In the short run, the price elasticity of demand for rubber-modified asphalt appears to be near zero because of the reluctance of those who build roads to accept new products, especially new products that cost more initially. Mike Harrington of PaveTech believes that a reimbursement of \$100 to \$140 per ton of tires (5 to 7 cents per pound) would stimulate some short-run demand. A reimbursement of \$300 to \$400 per ton of tires (15 to 20 cents per pound) would be required to make PlusRide generally competitive with conventional asphalt as long as highway engineers do not allow thinner layers of PlusRide to replace thicker layers of conventional asphalt and do not consider long-run costs when specifying surfacing materials.

In the long run, PlusRide appears to have the potential to become well-accepted. However, in the short run, when DEQ wants to clean up waste tires, this application of waste tires appears unlikely to increase as a result of a reimbursement in the range DEQ is considering.

Should someone begin to produce granulated tires in Oregon, a reimbursement on the order of one cent per pound could make granulated Oregon tires competitive in rubber-modified asphalt throughout the West. Thus, the reimbursement program, by inducing a (potential) local producer of granulated tires to displace supplies currently produced in other states, could stimulate demand for granulated Oregon tires without stimulating additional use of granulated tires. We discuss this issue in greater detail in the next chapter.

Pyrolysis: During the last decade several firms have attempted to convert waste tires into derivative products, including oil and carbon black through a process called pyrolysis. Many were stimulated by past high energy prices, governmental subsidies, or both. No pyrolysis facility is currently operating routinely in the Pacific Northwest, although several start-ups are rumored. Until Oregon and the region gains experience from the on-going operation of one or more plants, it is impossible to estimate the elasticity of their demand with respect to DEQ's reimbursement.

Crumb Rubber and Buffings: During the retreading process the tread of a used tire is buffed off. The crumb rubber and buffings from this process are used in a wide variety of products, generally as substitutes for virgin rubber. Currently, it appears that local demand generally outstrips supply, leading some to conclude that a reimbursement is unnecessary to stimulate demand. As we explain below, however, a reimbursement must stimulate both demand and supply to increase the use of waste tires. It is possible, therefore, that if allowed, a reimbursement would stimulate this segment of the market, perhaps by inducing the establishment of an additional supplier. However, if more tires were buffed than retreaded, the unused casings would pose almost a great a disposal problem as the original waste tires. Scientific Developments, Inc. in Eugene has collected a large number of tires and has shredded some. They intend to utilize the shredded tires in products similar to those they now produce from buffings, but have not yet been able to do so. There currently does not exist sufficient evidence to estimate price elasticity for this segment of the market.

Other Uses: Other uses either currently consume or promise to consume relatively small numbers of Oregon's waste tires. These include plans by Northwest Tire Disposal Services, Inc., to export cut-up tires overseas and to Canada. There does not exist sufficient evidence currently, however, to estimate price elasticity for this segment of the market.

In summary, it appears that the short-run elasticities are highest for fuel users and lowest where there exist technical or economic impediments to increased use of tires--virtually all other uses. Fuel-related elasticities are volatile, however, because of the competition from other fuels and the volatility of their prices. In the long-run, we expect that other uses will displace combustion as the primary use of waste tires.

B. HOW WILL PRICES RESPOND TO A REIMBURSEMENT?

When DEQ gives a waste-tire user a reimbursement of one cent per pound, the user is unlikely to retain all of the reimbursement and to realize a full one-cent per pound reduction in the price of waste tires.⁴ Instead, the user probably will have to share the reimbursement with some or all of the other parties involved with the generation, storage, and disposal of waste tires: the automobile owner who purchases replacement tires, tire dealers, owners of storage piles, firms that dismember whole tires or otherwise produce intermediate tire-derived products, and consumers of the products that have tires (or intermediate tire-derived products) as an input.

It is important to know the actual change in price the user will realize so one can estimate how demand will change in response to the price change. Several factors will influence the extent to which the decline in a user's price will equal the reimbursement:

- * The ability of the user to retain the proceeds from the reimbursement.

In general, it is reasonable to assume that the market for waste tires, consisting of a supplier of waste tires (or intermediate tire-derived products), such as Waste Recovery, Inc., and a user of tires, such as a pulp mill, is in equilibrium, i.e., the supplier of waste tires supplies just enough to satisfy demand at the current market price.⁵ When DEQ lowers a user's effective price of waste tires, by giving a reimbursement for each tire used, the user will seek to buy additional tires. The supplier, though, may not be willing to supply more tires unless it receives a higher price. Thus, demand and supply can regain equilibrium only if the user,

⁴We assume here that DEQ gives the reimbursement to the user who transforms the tire or intermediate tire-derived product into a non-tire product (e.g., energy used to make paper pulp), since this is DEQ's current proposal. We discuss below the implications of giving the reimbursement to the processor who transforms whole tires into intermediate tire-derived products (e.g., TDF).

⁵In economics parlance, the market operates at the intersection of the demand and supply curves, with only slight movements in price and inventory.

who initially received the reimbursement, shares some of it with the supplier. Similar sharing of the reimbursement may occur throughout the chain of demanders and suppliers involved with the generation and use of waste tires.

The extent to which the user can retain the reimbursement and, hence, realize the full reduction in price will be determined by the elasticity of supply relative to the elasticity of demand. The elasticity of supply, in turn, stems from two primary factors: (1) how rapidly the supplier's costs increase as the quantity supplied increases, and (2) the degree of monopolistic market power the supplier has relative to the user.

In general, the suppliers of waste tires (or tire-derived products) do not seem to exhibit either rapidly increasing costs or strong market power. The major possible exception is Waste Recovery, Inc. which dominates the supply of TDF. However, Waste Recovery, Inc., has indicated that it could double its output without increasing its capacity and we believe people will continue to pay Waste Recovery, Inc. to take waste tires off their hands. Also, although it is essentially the only major supplier in the state, it appears that it has not wantonly exercised any monopolistic market power, in part because other potential suppliers seem to exist just over the horizon. Furthermore, Waste Recovery, Inc., appears to have adopted a market strategy that entails successfully demonstrating the use of TDF in Oregon to stimulate new markets in other states. Thus, although it is possible that Waste Recovery, Inc., might exercise its market power to capture much of the reimbursement, we anticipate that it will not do so. Only time will tell.

- * The coincident price effects resulting from regulations affecting the storage and disposal of waste tires and DEQ's efforts to clean up noxious storage sites.

These will tend to increase the costs of storing waste tires, force more tires into the market, and lower the price of waste tires and tire-derived products.

- * Administrative and other costs imposed by the reimbursement program.

Participants in the reimbursement program will incur costs to document each tire's origin and use. Furthermore, they will incur financial (carrying) costs while waiting for the reimbursement check. The greater these costs, the smaller the response to the reimbursement program.

At first glance, it seems that the sharing of the reimbursement does not depend on who initially receives the reimbursement. If the reimbursement goes to the supplier or processor, he will be willing to supply more tires or intermediate tire-derived products, but will not see additional demand until he shares the reimbursement by reducing the price he charges. If it goes to the user, he will want to consume more, but will not see additional supplies offered until he raises the price he is willing to pay. These symmetrical processes should yield the same result.

This relationship can break down, however, if participation in the reimbursement program imposes asymmetrical costs on suppliers, processors, or users. It probably will. Whoever receives the reimbursement will incur carrying costs, i.e., the costs suppliers (users) will incur between the time they sell (buy) waste tires and when they receive the reimbursement from DEQ. The carrying costs for suppliers, as a percentage of total production costs, probably are greater than for users.

Waste Recovery, Inc., for example, has indicated a preference for giving the reimbursement to its clients rather than to itself. This makes sense given that, with the reimbursement, it would have to simultaneously lower its revenue and increase its costs (it would have to lower its prices to stimulate demand and at the same time acquire and process more tires) in order to earn the reimbursement, but would not receive the reimbursement until later. A

reimbursement that significantly reduced the price of its product could have a severe impact on its cash flow while it waited, but the same reimbursement would, if paid to its customers, impose a very small burden, as the costs of waste-tire products represent only a small fraction of its customers' cash flows.

Giving the reimbursement to one party rather than another also could make a difference if they imposed widely different administrative costs on DEQ. This is unlikely. The number of users is not much different than the number of suppliers and neither is likely to change much even if the program is successful.

Hence, giving reimbursements to users generally should promote the program. Concerns have been raised about the possibility of reimbursing users for consuming tires only to learn later that their products were unmarketable and were introduced to the waste stream. This should not be a large problem. If the users in question do not have a viable product, they will not be able to consume very many tires without other subsidies. If other governmental entities choose to subsidize processes that are not viable, it is probably not DEQ's role to thwart them unless environmental quality is threatened. There may also be legal problems associated with DEQ's saying to an industry, "You can't participate like other industries because we have decreed *a priori* that you aren't viable."

CHAPTER 3

EVALUATION OF ALTERNATIVE REIMBURSEMENT SCHEMES

In this chapter we first identify economic criteria for evaluating alternative reimbursement schemes and then apply the criteria to three alternatives. We also evaluate DEQ's proposed cleanup program, since it will compete with the reimbursement program for available funding.

A. ECONOMIC CRITERIA FOR EVALUATING ALTERNATIVE REIMBURSEMENT SCHEMES

There are four types of economic criteria applicable to this study: administrative, performance, efficiency, and equity criteria.

1. Administrative criteria: All else being equal, DEQ should prefer the alternative that minimizes administrative costs. This generally means a preference for alternatives that exploit market forces rather than those that rely on enforcing complex administrative regulations. DEQ should implement a reimbursement program that, at a minimum, can be administered and enforced with available staff and budget.
2. Performance criteria: All else being equal, DEQ should prefer the alternative that has the greatest impact on the use of waste tires, the clean-up of undocumented sites, and the clean-up of the most noxious sites. Note that it appears the primary concern is the elimination of whole tires from noxious sites (i.e., sites that pose health or fire risks) rather than the stimulation of any particular use.
3. Efficiency criteria: All else being equal, DEQ should prefer the alternative that, upon termination, leaves the market in the best condition to handle future waste-tire flows and that creates the fewest perverse incentives during its implementation. Incentives are perverse if

they lead to an allocation of resources to uses with lower value to society than would otherwise occur. When markets work properly, a resource always goes to the use society values most highly, because that use offers the highest price to suppliers of the resource. The smaller the extent to which the reimbursement program distorts the market, the greater the market's overall economic efficiency.

4. Equity criteria: All else being equal, DEQ should prefer the alternative that treats different parties fairly, i.e., that (1) gives the same financial incentive to parties that make equivalent contributions to the clean-up of waste tires, and (2) does not give any party market power over competitors.

Note that the criteria can conflict. For example, DEQ may have to sacrifice some performance efficiencies (such as not requiring absolute documentation of waste-tire flows) to keep the administrative costs reasonable. Similarly, DEQ might have to give up some performance (i.e., take a little longer to use up all the tires now stockpiled) to avoid stimulating excessive investment in tire-processing capabilities and leaving the market with gross overcapacity at the end of the reimbursement program.

B. ALTERNATIVES

Flat reimbursement amount: Under a flat reimbursement scheme, anyone who uses waste tires or intermediate tire-derived products in such a way that they are either consumed or transformed into a marketable non-tire product will receive a flat amount for every ton of tire he uses. The Task Force has discussed a one-cent per pound (\$20 per ton) reimbursement. We use this amount as a reference point when evaluating the flat reimbursement alternative, but do not limit our analysis to any particular amount. We also express the reimbursement amount in terms of dollars per ton rather than cents per pound because, for most people, it is easier to understand the difference between \$19 per ton and \$20 per ton than between 95 hundredths of a cent per pound and one cent per pound.

The flat reimbursement scheme may be modified to facilitate administration or promote other objectives. For example, a minimum usage may be set below which DEQ would offer no reimbursement. This would alleviate the administrative burden of dealing with a large number of reimbursements for those who use only a very few tires. Certain uses could be made ineligible for reimbursement if DEQ does not wish to encourage those uses.

Variable reimbursement based on cost: DEQ asked us to consider a variable reimbursement designed to equal some proportion of the difference between the cost of using waste tires and the cost of currently-used inputs for which tires may be substituted in a production process. Under such a scheme, those industries best-suited to the use of waste tires would receive the smallest reimbursement (because the cost difference is small) and those for whom the use of waste tires is least efficient would receive the largest (because the difference is large). Such a scheme would target precisely those industries least likely to be viable markets for waste tires after the program ends as the recipients of the largest reimbursements.

Variable reimbursement based on efficiency: An alternative approach to variable reimbursement would promote the efficient use of reimbursement funds rather than inefficient production technologies. To accomplish this, DEQ might offer a graduated scale of reimbursement based on the amount by which use is increased under the reimbursement program. The more a user increases his use, the larger his per-ton reimbursement.

Another way to vary the reimbursement, for greater efficiency would involve discriminating among users (targeting). By identifying in advance (through elasticity analysis) those users most sensitive to change in price, DEQ could target the reimbursements to those users and thus get the most response from limited reimbursement funds. The analysis on which this method would rely is, in essence, a prediction of the results of the graduated-scale reimbursement above.

Cleanup: Cleanup is not a reimbursement alternative, but a successful reimbursement program is an alternative to some (or all) potential cleanup activities. By evaluating cleanup on the same criteria as the reimbursement schemes, we intend to help DEQ better understand the tradeoffs involved when allocating funds between the two activities.

C. EVALUATION OF THE ALTERNATIVES

Here we evaluate each of the alternatives described above by applying the four criteria: administrative, performance, efficiency, and equity.

Flat reimbursement amount: This scheme should entail the lowest administrative cost. By treating all eligible applicants for reimbursement equally, administration would be much simpler than under a variable reimbursement scheme. The responsibility for providing accurate and verifiable records documenting the tires' origin and disposition would lie with the applicants.

We estimate that a flat reimbursement sufficient to reduce the cost of using waste tires by \$20 per ton would stimulate enough new use to dispose of the entire flow of waste tires generated in Oregon during the reimbursement period as well as most of the approximately four million tires currently in stockpiles documented by DEQ.

The nominal reimbursement amount necessary to achieve a \$20 per ton reduction in the effective price paid by users of waste tires will have to be higher than \$20 per ton. How much higher depends in part on the details of the administrative rules adopted by DEQ.

The only large-scale use now being made of waste tires generated in Oregon is for fuel. Tire-derived fuel is also the only use we expect to increase significantly in response to the reimbursement program.

Waste Recovery, Inc. currently processes 1.5 to 2 million tires per year, of which about 60 percent, or 0.9 to 1.2 million, originate in Oregon. Two mills in Oregon consume TDF equivalent to about 750,000 tires per year at current prices. A cement kiln in Oregon has used TDF since March 1988 and, although it is still experimenting, it expects to use TDF equivalent to around 480,000 tires per year at current prices. Mills in Washington now use TDF from at least 550,000 tires per year. The flow of tires through Waste Recovery's facility in Portland nearly equals the flow of waste tires generated in Oregon each year.

To be eligible for reimbursement, a user of waste tires would have to provide documentation proving that they originated in Oregon. If DEQ requires that chips from Oregon tires be kept separate from chips from other tires, the cost of obtaining tire chips eligible for reimbursement may rise substantially because of increased costs imposed on the supplier. However, if DEQ is willing to allow intermixing, suppliers' costs should not increase significantly. For example, if of 5,000 tons of chips in inventory, 3,000 tons came from Oregon tires, then the supplier could sell up to 3,000 tons with documentation certifying origin in Oregon without having to keep separate inventories.

It remains unclear how suppliers will respond. Will they provide documentation for 60 percent of each customer's deliveries or will they provide some customers with documentation and not others? How much of a premium would suppliers charge for documented chips? Three factors indicate that suppliers will allow users to keep at least two-thirds of the reimbursement. First, the threat of effective competition from smaller suppliers who handle only Oregon tires will provide strong incentive not to charge a premium, at least within the geographic market of the competitors. Second, suppliers should have little difficulty obtaining more Oregon tires than they do now, especially as rules on landfilling and storing tires in Oregon are tightened. Third, suppliers have a long-run interest in maximizing the extent to which the market for tire chips grows under the reimbursement program. Smaller suppliers want to be left with a market large enough to support more than one supplier and Waste Recovery, Inc. should be especially

interested in ensuring the success of the Oregon program as they could then convince other states to undertake similar programs.

Apparently, the threat of effective competition to Waste Recovery, Inc. is real. All of Waste Recovery's present customers said they had been approached by other suppliers. Most have not purchased from other suppliers because of quality problems (oversize chunks and too much wire) and the perception that other suppliers could not reliably provide large quantities on a timely basis, but they indicated that Waste Recovery, Inc. prices its product to stay competitive. Waste Recovery, Inc. must maintain its superior quality and service levels and keep its price competitive to retain the loyalty of its customers.

If Washington, which has a more severe waste-tire problem than Oregon, makes disposal and storage of tires significantly more expensive or if it begins to subsidize the use of waste tires while Oregon's reimbursement program is in effect, these changes in the market may affect the efficacy of any program in Oregon. For the purpose of this analysis, we assume that such changes will not occur.

Whatever portion of the reimbursement Waste Recovery, Inc. and other suppliers of processed tires extract from users, they will have to share at least part of that portion with those who supply them with whole tires. Waste Recovery, Inc. now charges a tipping fee of about 40 cents per tire for tires delivered to its Portland facility. In order to obtain more tires it probably will have to lower that fee, as nearby supplies become depleted and they seek tires from beyond the Willamette valley. For example, it costs about 28 cents to ship a tire 300 miles when 1500 tires at a time are shipped and a backhaul can be arranged. All else being equal, Waste Recovery, Inc. will not be able to acquire waste tires from Medford, Klamath Falls, and other distant places unless it pays some of these transportation costs, perhaps by reducing its tipping fee. As DEQ's proposed regulations increase a stockpiler's cost of holding onto waste tires, though, the economics will change. Only time will tell how the market will respond, who will bear the cost of cleaning up the stockpiles, and who will receive the benefit of the reimbursement.

Only a very few Oregon tires have been used in rubber-modified asphalt. The granulated tires used in the test sections laid in Corvallis and North Albany were shipped in from the Everett, Washington. Thus, it appears that the market for granulated tires is region-wide. If Oregon processors choose to produce granulated tires, a \$20 per ton reimbursement to users might result in their capturing a share of the market, even if no additional asphalt is produced as a result of the reimbursement.

We have no way to estimate the extent to which Oregon tires will be used in rubber-modified asphalt in the future because no one knows if anyone will begin producing granulated tires here (or if Rubber Granulators in Everett would find it worthwhile to obtain Oregon tires) and because the market for rubber-modified asphalt depends more on the willingness of engineers to try a new product than on any difference in price a reimbursement could make. Similarly, we cannot estimate the future use of Oregon tires for pyrolysis, export, or other uses.

Table 3-1 shows our estimates for various gross reimbursement amounts of the number of waste tires that will be consumed, the dollar cost of the reimbursement, and the number of years it would take to eliminate four million stockpiled tires without landfilling.

TABLE 3-1
ESTIMATED EFFECT OF VARIOUS REIMBURSEMENT AMOUNTS

REIMBURSEMENT AMOUNT	TIRES PER YEAR	DOLLARS PER YEAR	YEARS TO ELIMINATE
\$15/ton	1,910,000	286,500	36.4
\$20/ton	2,310,000	462,000	7.8
\$25/ton	2,820,000	705,000	3.9
\$30/ton	3,090,000	927,000	3.1
\$35/ton	3,540,000	1,239,000	2.3
\$40/ton	4,050,000	1,620,000	1.8

Source: ECO Northwest

We relied on several assumptions to calculate the figures shown in Table 3-1. We assumed that 1.8 million new waste tires per year will be made available (not kept by individuals or put to non-reimbursible uses), that users will retain two-thirds of the reimbursement amount, and that tires weigh an average of 20 pounds each.

The total annual cost of the reimbursement program cannot exceed the funds available from the \$1 per replacement tire fee. The legislation specifies that if claims exceed funds, the reimbursement must be prorated. The threat of this occurring could significantly reduce the impact of the reimbursement offer, as users are less likely to respond to a chance of getting a reimbursement than to a certain reimbursement. Information available so far from the Department of Revenue suggests that the fee will generate \$1.5 million dollars per year. Of this, 15 percent will be retained by the dealers and about \$200,000 per year will be used for administration by DOR and DEQ, leaving \$1,075,000 to be split between reimbursement and cleanup. Given this amount of funds available, the estimates in Table 3-1 indicate that reimbursement amounts greater than \$30 per ton are out of the question.

The additional reimbursement expense incurred by increasing the reimbursement amount from \$20 to \$25 per ton would clean up an additional 510,000 tires per year at a cost of 48 cents per additional tire. This cost should be compared to the cost per tire of cleanup activities when deciding how funds will be allocated between cleanup and reimbursement.

Of the alternatives being considered, the flat-rate reimbursement scheme poses the least threat of creating an inefficient market structure. It alters the price of waste tires equally for all users and allows the forces of the otherwise undistorted market to determine what happens to them. The markets that will grow most under the flat-rate reimbursement are those that are most likely to remain strong after the reimbursement is terminated.

Equity criteria also are best satisfied by the flat-rate reimbursement. The flat rate applies equally to all eligible users and none is given an unfair advantage.

Variable reimbursement based on cost: Variable reimbursement based on cost falls short on all of the evaluative criteria. Administration would be much more difficult because DEQ staff would have to establish production costs at each plant with and without waste-tire use (or with and without increased waste-tire use) and then set each user's reimbursement at some proportion of the difference in cost.

If that proportion were less than one, any user for whom waste tires are not now cost-effective would still lose money using waste tires. In any case, the lower the feasibility of using tires in a production process, the higher the subsidy offered. The cost-based variable reimbursement would offer the most reimbursement to those users least able to contribute to the solution of the problem and who would be in the worst position to continue using waste tires when the program ends.

Variable reimbursement based on efficiency: Variable reimbursement based on efficiency would result in the largest increase in waste tire use for a given total reimbursement amount by directing the reimbursement to those users most sensitive to changes in the effective price of waste tires.

We described two variations on this scheme above in section B of this chapter. In one, DEQ staff would have to accurately identify in advance the potential for different users to increase their use and vary the reimbursement offered each user accordingly. In the other, larger reimbursements would be specified for users who increased their use more and targeted users would self-select. Presumably, the end result would be the same either way.

Successful administration would be difficult in either case. In the first case, DEQ staff would have to do a much more thorough analysis of the type we provide in Chapter 2 and the data to accomplish this simply do not exist. In the second case, DEQ staff would have to determine how many tires users would have used in the absence of the reimbursement. Even users who now use large quantities of tires could claim that they intended to stop using tires

until the reimbursement came along and DEQ would have difficulty disproving such claims. The administrative problems would be similar to those agriculture officials encounter when determining how much corn farmers didn't grow when farmers are paid to not grow corn.

Economic efficiency could suffer if those who get subsidies bid up the price of waste tires to the point where other users who are now using waste tires to the full extent of their capacity reduce their usage. Inaccurate targeting could unfairly distribute reimbursement benefits.

Cleanup: The experience of the Environmental Protection Agency with Superfund sites and of other agencies attempting to clean up waste sites indicates that such programs tend to be costly and slow to achieve results. To the extent that market forces can be exploited to remove tires at less cost and more quickly than through cleanup efforts, funds should be allocated to reimbursement rather than to cleanup.

Information on the cost of cleaning up waste-tire storage sites is not available. The cost depends in part on the characteristics of the individual sites. Waste Recovery, Inc. has indicated that they would have to charge at least 75 cents per tire under current market conditions. We estimate that by increasing the reimbursement from \$20 per ton to \$25 per ton (an increase of one fourth of one cent per pound), an additional 510,000 tires per year would be cleaned up at a cost of 48 cents per tire.

Cleanup funds should be directed--at least in the first year--only to sites posing significant danger to public health and safety. Illegal dumps on public lands or on private lands where the owner has taken reasonable steps to prevent dumping will probably require cleanup funds, but such sites do not contain great numbers of tires.

Cleanup activities will certainly cost much more per tire to administer than the reimbursement program, especially if legal action becomes necessary. Experience suggests that the performance of cleanup activities will be disappointing. Cleanup should have no effect on economic efficiency. Owners

of noxious storage sites likely will be made to feel worse off (most believe their tires will be valuable someday) and nearby residents now exposed to the risk of disease and fire will be made better off. In the case of cleanup, the equity effects are clearly in the public interest.

D. SUMMARY

The flat-rate reimbursement scheme dominates the alternatives according to the economic criteria. It costs less to administer, promotes the development of an efficient market structure, and treats all eligible users equally. In theory, a variable reimbursement based on efficiency could remove more tires for less total expenditure, but such a scheme would be difficult or impossible to administer. We believe that, in the real world, a flat-rate reimbursement scheme will perform better than the alternatives.

CHAPTER 4

POLICY RECOMMENDATIONS

In the previous chapters we described the current market for waste tires in Oregon, analyzed how it is likely to respond to a reimbursement program, and evaluated several alternative programs. Here we step back and discuss the implications of our findings for the program's implementation.

Basically, our findings indicate that there exists a strong likelihood that the proposed reimbursement program will stimulate considerable progress during the next two years toward accomplishing the goals of the waste-tire program: greater use of the waste tires generated annually in the state and cleanup of the existing stockpiles of tires. This progress will come primarily through greater use of tire-derived fuels. Considerable uncertainty surrounds this conclusion, however. The market may respond sluggishly to the program, fuel prices might change dramatically, fuel-users may not behave as they indicated, other users may prove unexpectedly responsive to the reimbursement, or suppliers may capture most of the proceeds from the reimbursements.

To cope with this uncertainty we recommend that DEQ take a conservative, reactive approach to implementing the program. Specifically, we recommend that DEQ should:

- * Implement a flat-fee reimbursement payable to all firms or individuals who can demonstrate they have consumed, exported, or converted waste tires originating in Oregon (or tire-derived products, such as chips) into new non-tire products.

- * Set the fee initially at \$20 per ton (one cent per pound). Whatever rate DEQ sets initially, experience gained after implementation probably will indicate that it should be changed. Raising the reimbursement amount later will cause fewer problems than having to prorate the

reimbursement. Too low an initial rate will fail to stimulate the necessary investment in metering equipment and air-quality testing, but if DEQ communicates to users that the rate is being set at a level that should obviate proration and that the rate may increase, users should feel more confident about making the necessary investment than if there is reason to worry that the promised reimbursement will not materialize.

- * Require that an applicant use a minimum number of tires before being eligible for the reimbursement. This number should be determined so that the administrative costs of processing additional claim forms do not exceed the public benefits from the applicant's disposal of waste tires.
- * Activate the cleanup program only when DEQ concludes (1) that the market and regulatory forces activated under the waste-tire program will not stimulate cleanup of a storage site and (2) that the site poses a great enough threat to the public health and safety to warrant direct intervention. Otherwise, funds should be dedicated to the reimbursement program. Do not set an arbitrary division between reimbursement and cleanup funds in advance.
- * Adjust the reimbursement fee every six months, informing potential applicants that the fee will remain fixed throughout the next six months (so long as the total claims through 1991 do not exceed total revenues). DEQ should monitor the market to acquire reliable information about the market's responsiveness to the reimbursement and about the extent to which recipients must share the reimbursement with others. It should set the reimbursement fee at the level that promises to yield the greatest use of waste tires during the next six months and the greatest use of tires through 1991 without triggering proration. This approach will reduce applicants' uncertainty about the rate they will realize and encourage potential applicants to participate sooner rather than later.
- * Adjust the eligibility requirements every twelve months, targeting the reimbursement to specific users only if it becomes apparent that the initial program, if continued, would be significantly less effective.

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CHAPTER 706

AN ACT

Relating to tire recycling; creating new provisions; amending ORS 459.995; appropriating money; and limiting expenditures.

Be It Enacted by the People of the State of Oregon:

SECTION 1. As used in sections 1 to 18 of this Act:

- (1) "Commission" means the Environmental Quality Commission.
- (2) "Consumer" means a person who purchases a new tire to satisfy a direct need, rather than for resale.
- (3) "Department" means the Department of Environmental Quality.
- (4) "Director" means the Director of the Department of Environmental Quality.
- (5) "Dispose" means to deposit, dump, spill or place any waste tire on any land or into any waters of the state as defined by ORS 468.700.
- (6) "Person" means the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.
- (7) "Store" or "storage" means the placing of waste tires in a manner that does not constitute disposal of the waste tires.
- (8) "Tire" means a continuous solid or pneumatic rubber covering encircling the wheel of a vehicle in which a person or property is or may be transported in or drawn by upon a highway.
- (9) "Tire carrier" means any person engaged in picking up or transporting waste tires for the purpose of storage or disposal. This does not include solid waste collectors operating under a license or franchise from any local government unit and who transport fewer than 10 tires at any one time or persons transporting fewer than five tires with their own solid waste for disposal.
- (10) "Tire retailer" means any person engaged in the business of selling new replacement tires.
- (11) "Waste tire" means a tire that is no longer suitable for its original intended purpose because of wear, damage or defect.

SECTION 2. (1) Except as provided in subsection (2) of this section, after July 1, 1989, no person shall dispose of waste tires in a land disposal site, as defined in ORS 459.005.

- (2) After July 1, 1989, a person may dispose of waste tires in a land disposal site permitted by the department if:
 - (a) The waste tires are chipped in accordance with standards established by the Environmental Quality Commission;
 - (b) The waste tires were located for disposal before July 1, 1989, at a land disposal site permitted by the department;
 - (c) The commission finds that the reuse or recycling of waste tires is not economically feasible;

- (d) The waste tires are received from a solid waste collector, operating under a license or franchise from any local government unit, who transports fewer than 10 tires at any one time; or
- (e) The waste tires are received from a person transporting fewer than five tires in combination with the person's own solid waste for disposal.

SECTION 3. (1) After July 1, 1988, no person shall store more than 100 waste tires anywhere in this state except at a ~~waste tire storage site operated under a permit~~ issued under sections 3 to 12 of this Act.

(2) Subsection (1) of this section shall not apply to:

- (a) A solid waste disposal site permitted by the department if the permit has been modified by the department to authorize the storage of tires;
- (b) A tire retailer with not more than 1,500 waste tires in storage; or
- (c) A tire retreader with not more than 3,000 waste tires stored outside.

SECTION 4. (1) Each waste tire storage site permittee shall be required to do the following as a condition to holding the permit:

(a) Report periodically to the department on numbers of waste tires received and the manner of disposition.

(b) Maintain current contingency plans to minimize damage from fire or other accidental or intentional event.

(c) Maintain financial assurance acceptable to the department and in such amounts as determined by the department to be reasonably necessary for waste tire removal processing, fire suppression or other measures to protect the environment and the health, safety and welfare of the people of this state.

(d) Maintain other plans and exhibits pertaining to the site and its operation as determined by the department to be reasonably necessary to protect the public health, welfare or safety or the environment.

(2) The department may waive any of the requirements of subsection (1) of this section for a waste tire storage site in existence on or before January 1, 1988.

SECTION 5. (1) The department shall furnish an application form to anyone who wishes to operate a waste tire storage site or to be a waste tire carrier.

(2) In addition to information requested on the application form, the department also shall require the submission of such information relating to the construction, development or establishment of a proposed waste tire storage site and facilities to be operated in conjunction therewith and such additional information, data and reports as it considers necessary to make a decision granting or denying a permit.

SECTION 6. (1) Permit applications submitted to the department for operating a waste tire storage site shall contain the following:

(a) The management program for the operation of the site, including the person to be responsible for the operation of the site, the proposed method of disposal and the proposed emergency measures to be provided at the site.

(b) A description of the size and type of facilities to be constructed upon the site, including the height and type of fencing to be used, the size and construction of structures or buildings, warning signs, notices and alarms to be used.

(c) The exact location and place where the applicant proposes to operate and maintain the site, including the legal description of the lands included within the site.

(d) An application fee, as determined by the commission to be adequate to pay for the department's costs in investigating and processing the application.

(e) Any additional information requested by the department.

(2) A permit application submitted to the department for operating as a waste tire carrier shall include the following:

(a) The name and place of business of the applicant.

(b) A description and license number of each truck used for transporting waste tires.

(c) The locations of the sites at which waste tires will be stored or disposed.

(d) A bond in the sum of \$5,000 in favor of the State of Oregon. In lieu of the bond, the applicant may submit financial assurance acceptable to the department.

(e) An application fee, as determined by the commission to be adequate to pay for the department's costs in investigating and processing the application.

(f) Any additional information requested by the department.

(3) The bond required under subsection (2) of this section shall be executed by the applicant as principal and by a surety company authorized to transact a surety business within the State of Oregon. The bond shall be filed with the department and shall provide that:

(a) In performing services as a waste tire carrier, the applicant shall comply with the provisions of sections 1 to 18 of this Act and rules adopted by the commission regarding tire carriers; and

(b) Any person injured by the failure of the applicant to comply with the provisions of sections 1 to 18 of this Act or the rules adopted by the commission regarding waste tire carriers shall have a right of action on the bond in the name of the person, provided that written claim of such right of action shall be made to the principal or the surety company within two years after the injury.

SECTION 7. (1) Following the submittal of a waste tire storage site permit application, the director shall cause notice to be given in the county where the proposed site is located in a manner reasonably calculated to notify interested and affected persons of the permit application.

(2) The notice shall contain information regarding the location of the site and the type and amount of waste tires intended for storage at the site, and may fix a time and place for a public hearing. In addition, the notice shall give any person substantially affected by the proposed site an opportunity to comment on the permit application.

SECTION 8. The department may conduct a public hearing in the county where a proposed waste tire storage site is located and may conduct hearings at other places as the department considers suitable. At the hearing the applicant may present the application and the public may appear or be represented in support of or in opposition to the application.

SECTION 9. Based upon the department's review of the waste tire storage site or waste tire carrier permit application, and any public comments received by the department, the director shall issue or deny the permit. The director's decision shall be subject to appeal to the commission and judicial review under ORS 183.310 to 183.550.

SECTION 10. A fee may be required of every permittee under sections 3 to 12 of this Act. The fee shall be in an amount determined by the commission to be adequate, less any federal funds budgeted therefor by legislative action, to carry on the monitoring, inspection and surveillance program established under section 12 of this Act and to cover related administrative costs.

SECTION 11. The director may revoke any permit issued under sections 3 to 12 of this Act upon a finding that the permittee has violated any provision of sections 3 to 12 of this Act or rules adopted pursuant thereto or any material condition of the permit, subject to appeal to the commission and judicial review under ORS 183.310 to 183.550.

SECTION 12. The department shall establish and operate a monitoring, inspection and surveillance program over all waste tire storage sites and all waste tire carriers or may contract with any qualified public or private agency to do so. After reasonable notice, owners and operators of these facilities must allow necessary access to the site of waste tire storage and to its records, including those required by other public agencies, for the monitoring, inspection and surveillance program to operate.

SECTION 12a. Fees received by the department pursuant to sections 6 and 10 of this Act shall be deposited in the State Treasury and credited to the department and are continuously appropriated to carry out the provisions of sections 4 to 12 of this Act.

SECTION 13. (1) Any person who purchases waste tires generated in Oregon or tire chips or similar materials from waste tires generated in Oregon and who uses the tires or chips or similar material for energy recovery or other appropriate uses may apply for partial reimbursement of the cost of purchasing the tires or chips or similar materials.

(2) Any person who uses, but does not purchase, waste tires or chips or similar materials, for energy recovery or another appropriate use, may apply for a reimbursement of part of the cost of such use.

(3) Any costs reimbursed under this section shall not exceed the amount in the Waste Tire Recycling Account. If applications for reimbursement during a period specified by the commission exceed the amount in the account, the commission shall prorate the amount of all reimbursements.

(4) The intent of the partial reimbursement of costs under this section is to promote the use of waste tires by enhancing markets for waste tires or chips or similar materials. The commission shall limit or eliminate reimbursements if the commission finds they are not necessary to promote the use of waste tires.

(5) The commission shall adopt rules to carry out the provisions of this section. The rules shall:

(a) Govern the types of energy recovery or other appropriate uses eligible for reimbursement, including but not limited to recycling other than retreading, or use for artificial fishing reefs;

(b) Establish the procedure for applying for a reimbursement; and

(c) Establish the amount of reimbursement.

SECTION 14. The Waste Tire Recycling Account is established in the State Treasury, separate and distinct from the General Fund. All moneys received by the Department of Revenue under sections 20 to 43 of this Act shall be deposited to the credit of the account. Moneys in the account are appropriated continuously to the Department of Environmental Quality to be used:

(1) For expenses in cleaning up waste tire piles as provided in section 15 of this Act;

(2) To reimburse persons for the costs of using waste tires or chips or similar materials; and

(3) For expenses incurred by the Department of Environmental Quality in carrying out the provisions of sections 2, 3 and 13 to 18 of this Act.

SECTION 15. (1) The department, as a condition of a waste-tire-storage-site permit issued under sections 3 to 12 of this Act, may require the permittee to remove or process the waste tires according to a plan approved by the department.

(2) The department may use moneys from the Waste Tire Recycling Account to assist a permittee in removing or processing the waste tires. Moneys may be used only after the commission finds that:

(a) Special circumstances make such assistance appropriate; or

(b) Strict compliance with the provisions of sections 1 to 18 of this Act would result in substantial curtailment or closing of the permittee's business or operation or the bankruptcy of the permittee.

(3) The department may use subsections (4) to (7) of this section if:

(a) A person fails to apply for or obtain a waste tire storage site permit under sections 3 to 12 of this Act; or

(b) A permittee fails to meet the conditions of such permit.

(4) The department may abate any danger or nuisance created by waste tires by removing or processing the tires. Before taking any action to abate the danger or nuisance, the department shall give any persons having the care, custody or control of the waste tires, or owning the property upon which the tires are located, notice of the department's intentions and order the person to abate the danger or nuisance in a manner approved by the department. Any order issued by the department under this subsection shall be subject to appeal to the commission and judicial review of a final order under the applicable provisions of ORS 183.310 to 183.550.

(5) If a person fails to take action as required under subsection (4) of this section within the time specified the director may abate the danger or nuisance. The order issued under subsection (4) of this section may include entering the property where the danger or nuisance is located, taking the tires into public custody and providing for their processing or removal.

(6) The department may request the Attorney General to bring an action to recover any reasonable and necessary expenses incurred by the department for abatement costs, including administrative and legal expenses. The department's certification of expenses shall be prima facie evidence that the expenses are reasonable and necessary.

(7) Nothing in sections 1 to 18 of this Act shall affect the right of any person or local government unit to abate a danger or nuisance or to recover for damages to real property or personal injury related to the transportation, storage or disposal of waste tires. The department may reimburse a person or local government unit for the cost of abatement.

SECTION 16. In accordance with the applicable provisions of ORS 183.310 to 183.550, the commission shall adopt rules necessary to carry out the provisions of sections 1 to 18 of this Act.

NOTE: Section 17 was deleted by amendment. Subsequent sections were not renumbered.

SECTION 18. The provisions of sections 1 to 17 of this Act do not apply to tires from:

- (1) Any device moved exclusively by human power.
- (2) Any device used exclusively upon stationary rails or tracks.
- (3) A motorcycle.
- (4) An all-terrain vehicle.
- (5) Any device used exclusively for farming purposes, except a farm truck.

SECTION 19. ORS 459.995 is amended to read:

459.995. (1) In addition to any other penalty provided by law, any person who violates ORS 459.205, 459.270 or the provisions of ORS 459.180, 459.188, 459.190, [or] 459.195 or section 2 or 3 of this 1987 Act or any rule or order of the Environmental Quality Commission pertaining to the disposal, collection, storage or reuse or recycling of solid wastes, as defined by ORS 459.005, shall incur a civil penalty not to exceed \$500 a day for each day of the violation.

(2) The civil penalty authorized by subsection (1) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed and collected under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapter 468.

SECTION 20. As used in sections 20 to 43 of this Act, unless the context otherwise requires:

(1) "Business" means any trade, occupation, activity or enterprise engaged in for the purpose of selling new tires in this state.

(2) "Department" means the Department of Revenue.

(3) "Place of business" means any place where new tires are sold.

(4) "Retail dealer" means every person who is engaged in the business of selling to ultimate consumers new tires.

(5) "Sale" means any transfer, exchange or barter, in any manner or by any means whatsoever, for a consideration, and includes and means all sales made by any person. It includes a gift by a person engaged in the business of selling new tires, for advertising, as a means of evading the provisions of sections 20 to 43 of this Act, or for any other purposes whatsoever.

(6) "Tire" has the meaning given that term in section 1 of this Act.

(7) "Wholesale sales price" means the established price for which a manufacturer sells a tire to a distributor, after any discount or other reduction for quantity or cash.

SECTION 21. (1) Beginning January 1, 1988, and ending June 30, 1991, a fee is hereby imposed upon the retail sale of all new replacement tires in this state of \$1 per tire sold. The fee shall be imposed on retail dealers at the time the retail dealer sells a new replacement tire to the ultimate consumer.

(2) The amount remitted to the Department of Revenue by the retail dealer for each quarter shall be equal to 85 percent of the total fees due and payable by the retail dealer for the quarter.

SECTION 22. The fee imposed under sections 20 to 43 of this Act shall not apply to new tires for:

- (1) Any device moved exclusively by human power.
- (2) Any device used exclusively upon stationary rails or tracks.
- (3) A motorcycle.
- (4) An all-terrain vehicle.
- (5) Any device used exclusively for farming purposes, except a farm truck.

SECTION 23. (1) Except as otherwise provided in sections 20 to 43 of this Act, the fee imposed by section 21 of this Act shall be paid by each retail dealer to the department on or before the last day of January, April, July and October of each year for the preceding calendar quarter.

(2) With each quarterly payment, the retail dealer shall submit a return to the department, in such form and containing such information as the department shall prescribe.

(3) The fee, penalties and interest imposed by sections 20 to 43 of this Act shall be a personal debt, from the time liability is incurred, owed by the retail dealer to the State of Oregon until paid.

(4) The returns required of retail dealers under this section shall be filed by all such retail dealers regardless of whether any fee is owed by them.

(5) The department for good cause may extend for not to exceed one month the time for making any return and paying any fee due with a return under sections 20 to 43 of this Act. The extension may be granted at any time if a written request therefor is filed with the department within or prior to the period for which the extension may be granted. When the time for filing a return and payment of fee is extended at the request of a retail dealer, interest at the rate established under ORS 305.220, for each month, or fraction of a month, from the time the return was originally required to be filed to the time of payment, shall be added and paid.

SECTION 24. The fee imposed by section 21 of this Act does not apply with respect to any new tires which under the Constitution and laws of the United States may not be made the subject of taxation by the state.

SECTION 25. Every person desiring to engage in the sale of new tires as a retail dealer, except a person who desires merely to sell or accept orders for new tires which are to be transported from a point outside this state to a consumer within this state, shall file with the department an application, in such form as the department may prescribe, for a certificate. A retail dealer shall apply for and obtain a certificate for each place of business at which the retail dealer engages in the business of selling new tires. No fee shall be charged for such certificate.

SECTION 26. (1) If the department considers such action necessary to insure compliance with sections 20 to 43 of this Act, it may require any person subject to sections 20 to 43 of this Act to place with the department such security as the department may determine.

(2) The amount of the security shall be fixed by the department but, except as provided in subsection (3) of this section, may not be greater than twice the estimated liability for fees of a person for the reporting period under sections 20 to 43 of this Act determined in such manner as the department considers proper.

(3) In the case of a person who, pursuant to section 28 of this Act, has been given notice of proposed revocation or suspension of certificate, the amount of the security may not be greater than twice the liability of the person for the reporting period under sections 20 to 43 of this Act determined in such manner as the department considers proper, up to \$10,000.

(4) The limitations provided in this section apply regardless of the type of security placed with the department. The required amount of the security may be increased or decreased by the department subject to the limitations provided in this section.

SECTION 27. Upon receipt of a completed application and such security as may be required by the department under sections 20 to 43 of this Act, the department shall issue to the applicant a certificate as a retail dealer. A separate certificate shall be issued for each place of business of the retail dealer within the state. A certificate is valid only for engaging in business as a retail dealer at the place designated thereon, and it shall at all times be conspicuously displayed at the place for which issued. The certificate is not transferable and is valid until canceled, suspended or revoked.

SECTION 28. (1) If any person fails to comply with any provision of sections 20 to 43 of this Act relating to the fee or any rule of the department relating to the fee adopted under sections 20 to 43 of this Act, the department may suspend or revoke the certificate held by the person. The department shall not issue a new certificate after the revocation of a certificate unless it is satisfied that the former holder of the certificate will comply with the provisions of sections 20 to 43 of this Act relating to the fee and the rules of the department.

(2) If the department proposes to refuse to issue or renew a certificate, or proposes to suspend or revoke a certificate, the department shall give notice of the proposed refusal, suspension or revocation at least 30 days before the refusal, suspension or revocation will be final. Appeal following the notice of the determination may be taken to the director in the manner provided in ORS 305.275 within the time provided in ORS 305.280 (1).

(3) An appeal from the director's order sustaining a proposed refusal to issue or renew, or suspension or revocation, may be taken by the person by filing an appeal to the Oregon Tax Court following the procedure provided in ORS chapter 305 within the time prescribed under ORS 305.560.

SECTION 29. (1) Every retail dealer shall keep at each registered place of business complete and accurate records for that place of business, including itemized invoices, of new tire products held, purchased, manufactured, brought in or caused to be brought in from without the state or shipped or transported to retail dealers in this state, and of all new tire sales made to the ultimate consumer.

(2) The records required by subsection (1) of this section shall show the names and addresses of purchasers, the inventory of all new tires on hand on January 1, 1988, and other pertinent papers and documents relating to the sale of new tires.

(3) When a certified retail dealer sells new tires exclusively to the ultimate consumer at the address given in the certificate, itemized invoices shall be made of all new tires sold by that certified retail dealer.

(4)(a) All books, records and other papers and documents required by this section to be kept shall be preserved for a period of at least three years after the initial date of the books, records and other papers or documents, or the date of entries appearing therein, unless the Department of Revenue, in writing, authorizes their destruction or disposal at an earlier date.

(b) The department or its authorized representative, upon oral or written reasonable notice, may make such examinations of the books, papers, records and equipment required to be kept under this section as it may deem necessary in carrying out the provisions of sections 20 to 43 of this Act.

(c) If the department, or any of its agents or employees, are denied free access or are hindered or interfered with in making such examination, the certificate of the retail dealer at such premises shall be subject to revocation by the department.

SECTION 30. Every person who sells new tires to the ultimate consumer shall render with each sale itemized invoices showing the seller's name and address, the date of sale, the fee collected and all prices and discounts. The person shall preserve legible copies of all such invoices for three years from the date of sale.

SECTION 31. Every retail dealer shall procure itemized invoices of all tires purchased. The invoices shall show the name and address of the seller and the date of purchase. The retail dealer shall preserve a legible copy of each such invoice for three years from the date of purchase. Invoices shall be available for inspection by the Department of Revenue or its authorized agents or employees at the retail dealer's place of business.

SECTION 32. The department shall administer and enforce sections 20 to 43 of this Act. The department is authorized to establish those rules and procedures for the implementation and enforcement of sections 20 to 43 of this Act that are consistent with its provisions and as are considered necessary and appropriate.

SECTION 33. (1) No person shall:

(a) Fail to furnish any return required to be made pursuant to sections 20 to 43 of this Act;

(b) Fail to furnish a supplemental return or other data required by the department; or

(c) Render a false or fraudulent return, report or claim for refund.

(2) No person who is required to make, render, sign or verify any report or return under sections 20 to 43 of this Act shall make a false or fraudulent report or return with intent to defeat or evade the determination of an amount due required by law.

SECTION 34. (1) If there is a failure to file a return required under sections 20 to 43 of this Act or a failure to pay a fee at the time the fee becomes due, and no extension is granted under section 23 of this Act, or if the time granted as an extension has expired and there is a failure to

file a return or pay a fee, there shall be added to the amount of fee required to be shown on the return a delinquency penalty of five percent of the amount of the fee.

(2) If the failure to file a return continues for a period in excess of three months after the due date:

(a) There shall be added to the fee required to be shown on the return a failure to file penalty of 20 percent of the amount of such fee; and

(b) Thereafter, the department may send a notice and demand to the person to file a return within 30 days of the mailing of the notice. If after such notice and demand no return is filed within the 30 days, the department may determine the fee according to the best of its information and belief, assess the fee with appropriate penalty and interest, plus an additional penalty of 25 percent of the fee deficiency determined by the department, and give written notice of the determination and assessment to the person required to make the filing.

(3) A penalty equal to 100 percent of any deficiency determined by the department shall be assessed and collected if:

(a) There is a failure to file a return with intent to evade the fee; or

(b) A return was falsely prepared and filed with intent to evade the fee.

(4) Interest shall be collected on the unpaid fee at the rate established under ORS 305.220, for each month or fraction of a month, computed from the time the fee became due, during which the fee remains unpaid.

(5) Each penalty imposed under this section is in addition to any other penalty imposed under this section. However, the total amount of penalty imposed under this section with respect to any deficiency shall not exceed 100 percent of the deficiency.

SECTION 35. (1) If a person fails to file a report or return within 60 days of the time prescribed under sections 20 to 43 of this Act, the department may petition the Oregon Tax Court for an order requiring the person to show cause why the person is not required to file the report or return.

(2) Within 10 days after the filing of the petition, the tax court shall enter an order directing the person to appear and show cause why no report or return is required to be filed. The petition and order shall be served upon the person in the manner provided by law. Not later than 20 days after service, the person shall:

(a) File the requested report or return with the department;

(b) Request from the court an order granting reasonable time within which to file the requested report or return with the department; or

(c) File with the court an answer to the petition showing cause why such report or return is not required to be filed.

(3) If an answer is filed, the court shall set the matter for hearing within 20 days from the filing of the answer, and shall determine the matter in an expeditious manner, consistent with the rights of the parties.

(4) An appeal may be taken to the Supreme Court as provided in ORS 305.445, from an order of the tax court made and entered after a hearing and determination under subsection (3) of this section.

(5) Costs shall be awarded to the prevailing party.

SECTION 36. The provisions of ORS chapters 305 and 314 as to the audit and examination of returns, periods of limitations, determination of and notices of deficiencies, assessments, liens, delinquencies, claims for refund and refunds, conferences, appeals to the director of the department, appeals to the Oregon Tax Court, stay of collection pending appeal, confidentiality of returns and the penalties relative thereto, and the procedures relating thereto, shall apply to the determinations of fees, penalties and interest under sections 20 to 43 of this Act, except where the context requires otherwise.

SECTION 37. If, under sections 20 to 43 of this Act, the department is not satisfied with the return of the fee or as to the amount of fee required to be paid to this state by any person, it may compute and determine the amount required to be paid upon the basis of the facts contained in the return or upon the basis of any information within its possession or that may come into its pos-

session. One or more deficiency determinations may be made of the amount due for one or for more than one period. Notices of deficiency shall be given and interest on deficiencies shall be computed as provided in ORS 305.265. Subject to ORS 314.421 and 314.423, liens for fees or deficiencies shall arise at the time of assessment, shall continue until the fees, interest and penalties are fully satisfied and may be recorded and collected in the manner provided for the collection of delinquent income taxes.

SECTION 38. If the department believes that the collection of any fee imposed under sections 20 to 43 of this Act or any amount of the fee required to be collected and paid to the state or of any determination will be jeopardized by delay, it shall make a determination of the fee or amount of fee required to be collected, noting that fact upon the determination. The amount determined is immediately due and payable and the department shall assess the fees, notify the person and proceed to collect the fee in the same manner and using the same procedures as for the collection of income taxes under ORS 314.440.

SECTION 39. (1) If any fee imposed under sections 20 to 43 of this Act or any portion of the fee is not paid within the time provided by law and no provision is made to secure the payment of the fee by bond, deposit or otherwise, pursuant to rules adopted by the department, the department may issue a warrant under its official seal directed to the sheriff of any county of the state commanding the sheriff to levy upon and sell the real and personal property of the retail dealer found within the county, for the payment of the amount of the fee, with the added penalties, interest and the sheriff's cost of executing the warrant, and to return the warrant to the department and pay to it the money collected from the sale, within 60 days after the date of receipt of the warrant.

(2) The sheriff shall, within five days after the receipt of the warrant, record with the clerk of the county a copy of the warrant, and the clerk shall immediately enter in the County Clerk Lien Record the name of the retail dealer mentioned in the warrant, the amount of the fee or portion of the fee and penalties for which the warrant is issued and the date the copy is recorded. The amount of the warrant so recorded shall become a lien upon the title to and interest in real property of the retail dealer against whom it is issued in the same manner as a judgment duly docketed. The sheriff immediately shall proceed upon the warrant in all respects, with like effect and in the same manner prescribed by law in respect to executions issued against property upon judgment of a court of record, and shall be entitled to the same fees for services in executing the warrant, to be added to and collected as a part of the warrant liability.

(3) In the discretion of the department a warrant of like terms, force and effect may be issued and directed to any agent authorized to collect the fees imposed by sections 20 to 43 of this Act. In the execution of the warrant, the agent shall have all the powers conferred by law upon sheriffs, but is entitled to no fee or compensation in excess of actual expenses paid in the performance of such duty.

(4) If a warrant is returned not satisfied in full, the department shall have the same remedies to enforce the claim for fees against the retail dealer as if the people of the state had recovered judgment against the retail dealer for the amount of the fee.

SECTION 40. (1) The director is authorized to enter into a tire fee refund agreement with the governing body of any Indian reservation in Oregon. The agreement may provide for a mutually agreed upon amount as a refund to the governing body of any tire fee collected under sections 20 to 43 of this Act in connection with the sale of new tires on the Indian reservation. This provision is in addition to other laws allowing refunds of fees or taxes.

(2) There is annually appropriated to the director from the suspense account established under ORS 293.445 and section 42 of this Act, the amounts necessary to make the refunds provided by subsection (1) of this section.

SECTION 41. The remedies of the state provided for in sections 20 to 43 of this Act are cumulative, and no action taken by the department or Attorney General constitutes an election by the state to pursue any remedy to the exclusion of any other remedy for which provision is made in sections 20 to 43 of this Act.

SECTION 42. All moneys received by the Department of Revenue under sections 20 to 43 of this Act shall be deposited in the State Treasury and credited to a suspense account established under ORS 293.445. After payment of administration expenses incurred by the department in the administration of sections 20 to 43 of this Act and of refunds or credits arising from erroneous overpayments, the balance of the money shall be credited to the Waste Tire Recycling Account established under section 14 of this Act.

SECTION 43. (1) The fees imposed by section 21 of this Act are in addition to all other state, county or municipal fees on the sale of new tires.

(2) Any new tire with respect to which a fee has once been imposed under section 21 of this Act shall not be subject upon a subsequent sale to the fees imposed by section 21 of this Act.

SECTION 44. (1) If a person or an officer or employe of a corporation or a member or employe of a partnership violates paragraph (a) or (b) of subsection (1) of section 33 of this Act, the Department of Revenue shall assess against the person a civil penalty of not more than \$1,000. The penalty shall be recovered as provided in subsection (4) of this section.

(2) A person or an officer or employe of a corporation or a member or employe of a partnership who violates paragraph (c) of subsection (1) or (2) of section 33 of this Act, is liable to a penalty of not more than \$1,000, to be recovered in the manner provided in subsection (4) of this section.

(3) If any person violates any provision of sections 20 to 43 of this Act other than section 33 of this Act, the department shall assess against the person a civil penalty of not more than \$1,000, to be recovered as provided in subsection (4) of this section.

(4) Any person against whom a penalty is assessed under this section may appeal to the director as provided in ORS 305.275. If the penalty is not paid within 10 days after the order of the department becomes final, the department may record the order and collect the amount assessed in the same manner as income tax deficiencies are recorded and collected under ORS 314.430.

SECTION 45. In addition to and not in lieu of any other expenditure limitation imposed by law, the amount of \$258,473 is established for the biennium beginning July 1, 1987, as the maximum limit for payment of expenses from fees collected or received by the Department of Environmental Quality for the administration of this Act.

SECTION 46. In addition to and not in lieu of any other expenditure limitation imposed by law, the amount of \$189,913 is established for the biennium beginning July 1, 1987, as the maximum limit for payment of expenses from fees collected by the Department of Revenue for administration of this Act.

Passed by House May 28, 1987

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Chief Clerk of House

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Speaker of House

Passed by Senate June 12, 1987

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President of Senate

Received by Governor:

.....M,....., 1987

Approved:

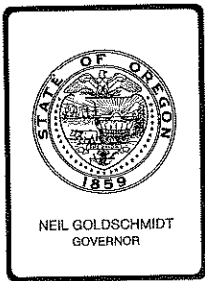
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Governor

Filed by Office of Secretary of State:

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Secretary of State



Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission
From: Fred Hansen, Director *Fel*
Subject: Agenda Item No. F, July 8, 1988, EQC Meeting

Proposed Adoption of Rules Defining Loading Capacity (LC), Waste Load Allocation (WLA), Load Allocation (LA), and Total Maximum Daily Loads (TMDL) (OAR 340-41-006) and Proposed Adoption of Rules Establishing Total Maximum Daily Loads, Load Allocations, and Waste Load Allocations for Total Phosphorus and Ammonia in the Tualatin River Basin (340-41-470).

In December, 1986, the Northwest Environmental Defense Center (NEDC) filed suit in Federal Court against EPA to require that total maximum daily loads (TMDLs) be promulgated for those water bodies that fail to meet water quality standards as required by Section 303 of the Clean Water Act. In March, 1987, the Environmental Quality Commission approved a process for the Department to begin establishing TMDLs beginning with the Tualatin River basin. A consent decree was signed by EPA and NEDC in June, 1987 agreeing to a schedule for adopting TMDLs on 11 water bodies over the following years, one of which was the Tualatin River.

The development of TMDLs will signify a major shift in how the Department approaches water quality management and wastewater treatment. Historically, the Department has based its permit program primarily on a case-by-case technology-driven process that concentrated on minimizing the discharge of oxygen consuming wastes as measured by the parameter biochemical oxygen demand (BOD-5). Very little attention was given to other pollutant parameters such as phosphorus that also cause water quality problems. In considering this proposed rule which will establish a TMDL for total phosphorus and ammonia in the Tualatin, the Commission will signify that parameters other than BOD-5 are important for protecting water quality. More significantly, however, the Commission will be recognizing the limited capacity of a receiving water body to accept and assimilate wastes and will be establishing a process to allocate the available capacity among the sources within the basin on a comprehensive rather than piece-meal basis. The proposed rule also emphasizes the significance of urban and agricultural runoff as an important component of waste loading in the Tualatin River. Such nonpoint source pollution must be controlled in order for water quality standards to be achieved.

Since 1987, much effort has been put in to a technical analysis of the water quality problems in the Tualatin. Basically, two water quality problems need to be addressed: substandard dissolved oxygen and nuisance algae growth. The dissolved oxygen problem is due primarily to excessive ammonia discharged from the Rock Creek Sewage Treatment Plant. The nuisance algae problem is caused by excessive quantities of nutrients in the river. There are a number of factors that contribute to the growth of algae: nutrients including phosphates, flow time, temperature, and sunlight. Of these, phosphate is the only one which can reasonably be controlled to limit the growth of algae.

In resolving these water quality problems, the Department spent considerable time conducting field investigations, laboratory algal assays and evaluating site-specific data for the Tualatin. The Department's analyses show that total phosphate must be reduced in the warmer summer months if the algal levels in the lower river are to be reduced to acceptable levels. Acceptable algae levels are described by the nuisance phytoplankton growth rule, OAR 340-41-150. This rule uses an average of 15 ug/l chlorophyll a, a pigment produced by algae, to indicate nuisance algal growth conditions in rivers. The Department believes that a level of 15 ug/l or less of chlorophyll a represents an acceptable level of algae for the lower Tualatin. The Department believes that an instream concentration of 70 ug/l is necessary to achieve a chlorophyll a level of 15 ug/l. The ammonia level necessary to meet the dissolved oxygen level is 100 ug/l.

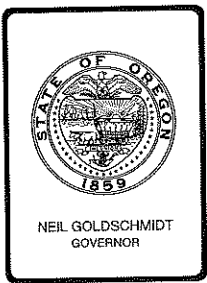
Establishing the concentrations necessary to meet water quality standards is only the first step in addressing the water quality problems. The second step will be to determine what needs to be done to achieve the standards. The Department is proposing rules that will require the Unified Sewerage Agency of Washington County to develop a plan on how they intend to meet the more stringent rules proposed by the Department. In addition, the Department is proposing that both Clackamas and Washington Counties and the incorporated cities within in the basin submit plans on how to address the pollution problems from urban nonpoint sources. The proposed rule also requests the two counties designate an agency to address pollution problems caused by agricultural activities. Under the proposed rules, the Commission will be required to review these plans when submitted to assure that the plans will adequately meet the requirements of the rules within a reasonable time. If the Commission determines that they do not, the Commission may request the plan be modified and resubmitted for approval.

The Commission may approve the proposed rules as drafted, may decline to approve the proposed rules, may modify the rules, or may delay adoption until another meeting. The Department recommends that the rules be adopted as proposed. The Department, however, wishes to point out that, as a result of public testimony, the proposed rules have been significantly changed from those that went to public hearing. These changes will affect

Executive Summary
July 8, 1988
Page 3

persons and local governments that were previously unaffected and who may need additional time to review the issues and impacts of the proposed rules.

The Department would expect to spend at least one full time equivalent worth of resource in reviewing plans required by this rule, holding hearings and preparing staff reports to the Commission. The Department is proposing to ask the legislature for one additional position to help with this work.



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. F, July 8, 1988, EQC meeting

Proposed Adoption of Rules Defining Loading Capacity (LC), Waste Load Allocation (WLA), Load Allocation (LA), and Total Maximum Daily Load (TMDL) (OAR 340-41-006) and Proposed Adoption of Rules Establishing Total Maximum Daily Loads, Load Allocations, and Waste Load Allocations for Total Phosphorus and Ammonia in the Tualatin River Basin (340-41-470).

Background/Problem Statement

This staff report recommends the adoption of rules which will establish total maximum daily loads (TMDLs) for specific pollutants discharged to the Tualatin River, that have lead to the violation of water quality standards in the basin. The goal of limiting discharges to the allocations proposed is to achieve a phosphorus concentration of 70 ug/l and an ammonia concentration of 1000 ug/l. This will allow the Tualatin River Basin to meet water quality standards for nuisance algal growth and dissolved oxygen. The proposed rule also identifies specific implementation steps which will need to be taken to reduce pollution loads from both point and nonpoint sources to levels where water quality standards are met. The process for developing the TMDLs is a new water quality management process in Oregon, and, therefore, the background portion of the staff report will provide some detail on the reason for establishing TMDLs and how they were specifically developed for the Tualatin. Additional detailed discussion of the Tualatin study and the critical issues is contained in the Hearings Officer's Report (Attachment C).

The water quality management program in Oregon has undergone considerable change in the last two years. The major program change has been the agency's shift from technology based permit decisions to water quality based permit decisions. In other words, the emphasis has shifted and will continue to shift from the discharging facility to the receiving water, from facility treatment processes to the overall chemical, physical, and biological health of the receiving waterbody. Moving from an emphasis on the traditional organic pollutants, such as Biological Oxygen Demand (BOD), to an emphasis on a wider range of pollutants including nutrients, metals, and toxics. The key influence on this change has been the need to establish total maximum daily loads (TMDLs) for identified "water quality limited" stream segments in Oregon.

Historically, the Department of Environmental Quality has implemented water quality control activities in accordance with a general management plan. This

plan sets forth an overall program to preserve and enhance water quality statewide and to provide for the beneficial uses of the water resource. The plan is intended to fulfill the policy of the State of Oregon regarding water pollution control as expressed in the Oregon statutes. This management plan is also designed to satisfy water quality planning and management activities identified in the Federal Clean Water Act (CWA) of 1972.

Section 303 of the CWA (Attachment D) contains the basic federal requirements for water quality management planning. This section deals specifically with water quality standards and implementation plans, and introduces the concept of TMDLs. According to the CWA, TMDLs are to be developed on those waters where minimum treatment controls for point sources are not stringent enough to meet the established water quality standards. These waters are said to be "water quality limited". Water quality limited stream segments are reaches that do not meet standards, in either numerical or narrative form, even after technology based limitations have been applied.

A TMDL has several components. These components are defined in federal regulations as follows:

Loading Capacity (LC): The greatest amount of loading that a water can receive without violating water quality standards.

Load Allocation (LA): The portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources.

Wasteload Allocation (WLA): The portion of a receiving waters loading capacity that is allocated to one of its existing or future point sources of pollution. WLA constitute a water quality-based effluent limitation.

Total Maximum Daily Load (TMDL): The sum of the individual WLAs for point sources and LAs for nonpoint sources and background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

A TMDL is basically equivalent to the loading capacity of a waterbody. The loading capacity is the greatest amount of pollutant loading that a waterbody can receive without violating water quality standards.

The loading capacity (LC) is equal to the assimilative capacity of a stream for a particular parameter. Assimilation is the process of self purification. This process is dependent on the physical and biological nature of the stream. As assimilation occurs the ability of a stream to accept pollutant loadings is regenerated. For example, dissolved oxygen is added to a stream by reaeration. The decay of ammonia removes oxygen from a stream. When the ammonia demand for oxygen exceeds the oxygen supplied by reaeration, instream oxygen is depleted.

When decayed reaeration rates are equal, the instream oxygen concentration remains stable. After the ammonia has decayed, reaeration replaces the lost oxygen. The capacity of the stream to receive ammonia loads has been regenerated and assimilation has occurred.

Some parameters will not be assimilated by a stream. These parameters, such as dissolved solids, are termed conservative. For conservative parameters, the mass loadings to a stream can simply be added. Other parameters, such as ammonia and phosphorus, may be assimilated by a stream and are termed non-conservative. For non-conservation parameters, the loading capacity of a stream may be regeneration due to instream assimilation. This dynamic process needs to be accounted for in establishing the TMDL.

On December 12, 1986, the Northwest Environmental Defense Center (NEDC) filed suit in the Federal District Court of Oregon against Lee Thomas, Administrator of EPA, to require him to ensure that TMDLs were established and implemented for waters within Oregon identified as being "water quality limited" (Attachment E). That suit specifically identified the Tualatin River and generally other streams in Oregon designated as water quality limiting. Subsequently, NEDC filed a "Notice of Intent" to sue, naming 27 other waterbodies requiring TMDLs (Attachment F).

The lawsuit contended that Section 303 requires EPA to establish TMDLs on "water quality limited" stream segments and that this is a non-discretionary function. Therefore, EPA was obligated by statute to establish TMDLs. The Department reviewed the suit with the State Attorney General's office to establish a legal position. Essentially, the Department had two alternatives:

1. Develop the TMDLs/WLAs/LAs consistent with a state developed process and available resources, or
2. Have EPA develop the TMDLs/WLAs/LAs.

The Department believed that establishing TMDLs and, particularly, WLAs, would be quite controversial. There would be discussion over the loads given to difference sources and there would be a number of different alternatives for achieving the WLAs including flow augmentation, modified treatment method, no discharge, land application, or a combination of these or other alternatives. Because of this, a process had to be developed that would involve as much public participation as practicable, so that all potential alternative WLAs/LAs and potential implementation strategies would be given appropriate evaluation. EPA's approach, as established by Federal Guidance and regulation, would not allow for more than minimal public participation.

The Department felt that it would be more consistent with the overall approach of the state's environmental control program that the Department take the lead in establishing TMDLs/WLAs/LAs. Therefore, it actively participated in the negotiations between EPA and NEDC to develop an acceptable approach to settle the suit.

On February 10, 1987, the Department met with the U.S. Justice Department and EPA to finalize a settlement proposal. The Justice Department and EPA presented the proposal developed to NEDC on February 11, 1987.

The proposed approach consisted of the following key elements:

1. Identify the water quality limited stream segments on which TMDLs/WLAs/LAs would be developed and describe how other waterbodies will be assessed and additional "water quality limited" segments would be identified, ranked, and addressed in the future.
2. Describe how TMDLs/WLAs/LAs would be developed.
3. Establish a generic process to be used by the Department to develop and adopt the TMDLs/WLAs/LAs for each "water quality limited" segment.
4. Describe how the Department would address applications for discharge permits during the period from the time a water quality limited segment is identified and the time TMDLs/WLAs/LAs are adopted.
5. Describe the basic procedure for developing strategies which would be used to implement the TMDLs/WLAs/LAs through the NPDES permit process.

As negotiation continued between EPA/NEDC/U.S. Justice Department, the Department proceeded to implement this approach. Department staff evaluated the 1986 305(b) report, the NEDC suit, and the NEDC "Notice of Intent" to file suit to determine the "water quality limited" segments due to point source discharges. The segments identified as the most appropriate water bodies for the initial TMDL efforts are listed below:

Tualatin River
Yamhill River
Bear Creek
South Umpqua River
Coquille River
Pudding River
Garrison Lake
Klamath River
Umatilla River
Calapooia River
Grande Ronde River

In addition to these eleven (11) waterbodies, the Department identified sixteen (16) waterbodies where further study was necessary before a decision could be made as to whether these waterbodies were point source limited or nonpoint source limited. These sixteen (16) waterbodies include:

Neacoxie Creek
Necanicum River
Nestucca River and Nestucca Bay

Schooner Creek and Siletz Bay
Yaquina River and Yaquina Bay
North Florence Groundwater Aquifer
Calapooya Creek
Coast Fork Willamette River
Mary's River
Columbia Slough
Deschutes River
Crooked River
John Day River
Powder River
Malheur River
Owyhee River

The Department then put together an approach on how to proceed with the development of TMDLs/WLAs/LAs for the eleven "water quality limited" segments. The process was divided into four phases as follows:

- Phase 1. Department staff develops interim TMDLs and they are placed on public notice for comment. Public comment is reviewed and appropriate changes are made in the TMDLs.
- Phase 2. Department establishes local advisory committees to review the TMDLs and consider various alternative to achieve TMDLs; conducts detailed water quality study of the segment; prepares staff report proposing final TMDLs and requesting authorization to hold public hearing and holds public hearing.
- Phase 3. Department evaluates public testimony, prepares final staff report and recommends rule adoption for TMDLs/WLAs/LAs to be established by the EQC.
- Phase 4. Department implements rules adopted.

The Department developed this process in February 1987. In March 1987, the EQC approved this process. As the settlement negotiations continued, it was decided that the Department would proceed to implement the TMDL process on the Tualatin River and it was decided that in subsequent years, the annual State/EPA Agreement (SEA) would be used to identify what TMDL work would be conducted in that year. The final consent decree (Attachment G) was signed on June 3, 1987. The primary provisions of the consent decree are as summarized below:

1. DEQ will complete phase 1 of its process on all eleven of the water quality limited segments by June 1988.
2. DEQ will work to complete all phases of its process on twenty percent (20%) of the water quality limited segments, but not less than 2, each year.

3. DEQ will further assess the water quality limited status of the remaining waterbodies by August 1988.

Tualatin River Basin

In November 1985, before the NEDC suit and the need arose to develop TMDLs, the Department began an intensive assessment of water quality and pollution sources in the Tualatin Basin. One purpose of the Tualatin study was to develop water quality management tools to be used in other Oregon basins. Consequently, after the NEDC lawsuit, the Tualatin River became the most appropriate area for initiating TMDLs in Oregon. The stretch of the Tualatin River below Rock Creek currently violates the dissolved oxygen standard during summer low flow. Nuisance algal growth also occurs in the lower Tualatin and Lake Oswego.

To assist the Department in developing a water quality plan for the Tualatin, the Director appointed two advisory committees. 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.

The purpose of the study was to investigate the dissolved oxygen and algal growth problems: to determine the factors leading to the summer time standards violations, to set total maximum daily loads for the factors identified and to identify the implementation steps necessary to meet water quality standards in the future. The technical investigation included extensive sampling efforts each month and intensive sampling efforts during key storm events. The study also included conducting algal assays and evaluating computer models.

Water quality standards are established to protect the beneficial uses. In the Tualatin Basin, there is a numerical standard of 6 mg/l for dissolved oxygen and a narrative standard for aesthetics. Additionally, the nuisance phytoplankton growth rule, OAR 340-41-150, identifies the chlorophyll a concentration used to indicate nuisance phytoplankton growth conditions.

The study identified ammonia as the key factor causing dissolved oxygen problems below Rock Creek. It also identified phosphorus as the nutrient most responsible for the algal growth problems in the Tualatin River.

To control these factors, the Department worked to identify the load limits necessary to meet water quality standards. Considerable work was conducted to evaluate various phosphorus and ammonia concentration levels. This included extensive stream sampling, algal assays, and modeling. Based on this data and evaluation, the Department developed proposed rules. These rules set a phosphorus standard of 100 ug/l and an ammonia standards of 1000 ug/l.

During and after the discussion on appropriate phosphorus and ammonia limits, the TAC and CAC discussed the various point and nonpoint source management alternatives available to meet these limits. The point source alternatives included land irrigation, wetlands treatment, out-of-basin discharge either to

the Columbia or Willamette Rivers, and high lime treatment. Costs for these various alternatives ranged from several million to over 100 million dollars. Likewise, nonpoint source control alternatives were discussed, but accurate cost figures could not be developed for these alternatives. The proposed rules set the standards and identified schedules for the development of implementation plans. The Department believed that the implementation plans would identify the various control alternatives available and the schedule for evaluating their technical feasibility and cost and the timing of their implementation.

The proposed rule required point sources to submit implementation schedules within 90 days of rule adoption and nonpoint source management agencies to submit implementation plans within one year of their designation as management agencies.

At the March 11, 1988, EQC meeting, the Department requested authorization to take the proposed rules to public hearing. These proposed rules are contained in Attachment A.

Hearing Testimony

The proposed rules were taken to three public hearings and a total of 94 individual respondents submitted oral or written testimony and the Hearings Officer's Report summarizes and responds to the testimony (Attachment C). The testimony covers the major alternatives to establishing TMDLs for the Tualatin Basin. The major issues included the phosphorus criteria and time period of its application, the ammonia criteria and time period of its application, nonpoint source controls, wasteload allocations for tributary basins, compliance schedules, and whether the rule should appear as standards or special rules and policies. In the following section of the report, the Department will identify the testimony received on these specific issues, evaluate that testimony, and describe any changes which were made in the rules taken to hearing and the final proposed rules. It should be noted that these are very complex technical issues and additional discussions and evaluations of these issues are contained in the Hearings Officer's Report (Attachment C).

Phosphorus Criteria:

Much of the testimony during the hearings focused on the phosphorus criteria. A group of respondents felt that in order to achieve a restoration of the Tualatin River, lower numerical limits for phosphorus would have to be defined. The limit suggested most often was 50 ug/l. Alternative phosphorus and flow related criteria were proposed by CH2M-Hill and supported by USA, Washington County, and several cities in Washington County.

The time period for application of the phosphorus time period was questioned. Annual limits were proposed by NEDC and one individual. The Lake Oswego Corporation proposed initiating limits earlier in the spring to improve water quality conditions in the lake.

Department's Evaluation:

The following evaluation examines this testimony by reviewing the information collected during the study and that submitted at the hearings. This evaluation will discuss the relative merits of each issue in light of the data and determine whether a change in the proposed rule is needed.

The first phosphorus issue is in regards to the phosphorus concentration needed to control algal growth. Several methods are used to make this determination including algal assays, modeling and comparison studies from other rivers. Algal assays are controlled laboratory experiments. The purpose of the algal assay is to determine the limiting nutrient, to measure algal growth potential, and to quantitatively estimate the effect of nutrient reduction on the productivity of the receiving water. The algal assay is based on the premise that maximum yield is proportional to the amount of a nutrient which is present and biologically available in minimal quantity. EPA states that when point sources overwhelm a river system with nutrients, as currently exists in the Tualatin River, the algal assay, rather than expensive modeling and long term studies, may provide a sufficient basis for determining the required nutrient reductions (Rasche R.L. and Shultz D.A., 1987).

Assays have been found to be sensitive to subtle differences in nutrient content of various waters sampled (Green et. al. 1975). The reliability of the assay test has been demonstrated by its repeated ability to accurately predict the effects of wastewater upon algal growth in natural waters and to determine the primary limiting nutrient in receiving waters (Ram and Plotkin, 1982).

Results of the Tualatin River algal assays show that phosphorus criteria below 150 ug/l are required to control algal growth. Concentrations at 150 ug/l or above would not be expected to reduce algal growth. Concentrations of 100 ug/l would be expected to result in a noticeable change in the algal growth in the Tualatin River. Concentrations approaching 50 ug/l would be expected to result in low algal growth conditions in the Tualatin River.

Several methods have been suggested by the technical advisory committee for fitting lines through the results of the algal assays. NEDC offered suggestions for estimating maximum algal growth. The expected algal growth potential changes little due to the methods used to fit a line to the results. The fundamental conclusions, as shown in Table 1, drawn from these results, do not change due the method employed.

Resultant water quality descriptions are based on the assays ability to prediction algal growth conditions. Additionally, research conducted by Lee and Jones (1986), indicated that algal growth reductions in lakes, as measured by chlorophyll a, are not noticeable at less than 20 percent reduction.

Table 1.

<u>Phosphorus Concentration</u>	<u>Estimated Reduction in Algal Growth Potential by:</u>		<u>Resultant Water Quality</u>
	<u>DEQ</u>	<u>NEDC</u>	
150 ug/l	10-20%	10-15%	High algal growth, no visible effect
100 ug/l	40-45%	35-40%	Moderate algal growth, effect would be obvious
70 ug/l	60-65%	---	Moderate-to-low algal growth, effect would be obvious
50 ug/l	80-85%	85-90%	Low algal growth, effect would be obvious

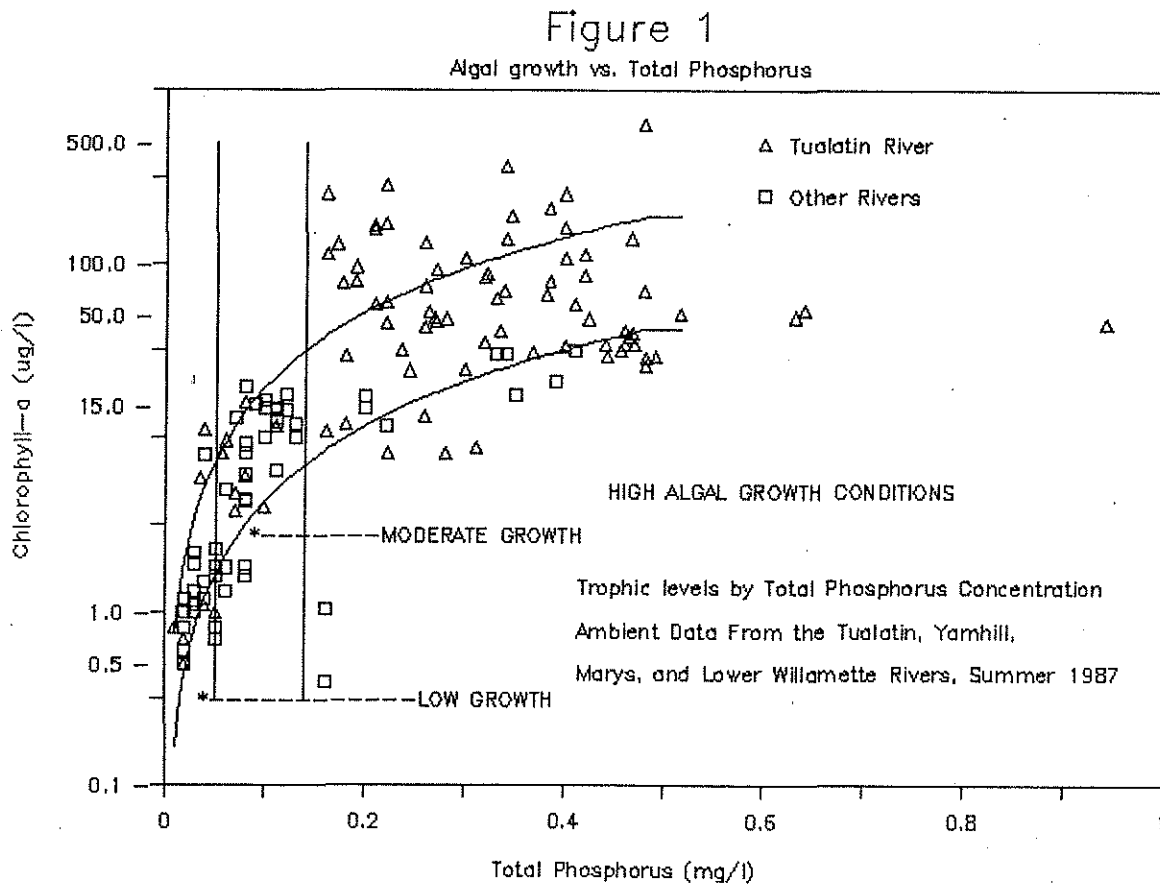
Empirical comparison of water quality in the Tualatin provides a qualitative indication of the phosphorus concentrations in similar basins and the level of algal growth supported by water quality in similar basins. Based on studies conducted in Oregon, ecoregions provide a geographic framework for classifying stream systems. Ecoregions classify streams based on climate, land use, and ecological similarities. In Oregon, water chemistry, trophic level, productivity, and fish assemblages for Willamette Valley streams tend to be like other streams in the valley and unlike streams in other regions. Based on this and similar studies, the lower Tualatin River can be qualitatively compared to similar streams in the Willamette Valley. Table 2 compares the drainage characteristics, phosphorus concentration, and trophic level of several Willamette Valley streams.

Table 2

<u>Stream Name</u>	<u>Drainage Characteristics</u>	<u>Median Total Phosphorus Concentration</u>	<u>Trophic Level (Median - Max Chlorophyll a)</u>
Tualatin at Elsner	Agriculture Urban - STP	240	High Algal Growth 30 - 100 +
Mary's River	Agriculture Urban	75	Moderate Algal Growth 7 - 15 ug/l
Calapooia	Agriculture	60	Moderate Algal Growth 5 - 15 ug/l
Luckiamute	Agriculture	40	Low Algal Growth 1 - 5 ug/l
South Yamhill Above STP	Agriculture	40	Low Algal Growth 1 - 10 ug/l
Yamhill River	Agriculture Urban - STP	210	High Algal Growth 13 - 50 (1987)

Streams rising in the Willamette Valley are relatively warm, enriched, turbid, and have deep pools. Willamette Valley streams have the greatest fish species richness and diversity, largest numbers of exotic species, and fewest salmonids (Whittier and Hughs, 1988).

Figure 1 provides a qualitative assessment of the trophic levels of several streams in the Willamette Valley by different phosphorus concentration. Site specific relationships, such as travel time, can greatly influence the relationship between algal growth and nutrient concentration. Because of site specific differences, it is difficult to predict the algal growth response in the Tualatin based on other basins. A modeling analysis was used by CH2M-Hill to evaluate the site specific data for the Tualatin River.



Simulation modeling uses a known set of conditions and circumstances to predict what results would most likely be if various conditions or circumstances were changed. It is not an exact science. As pointed out by NEDC, there are concerns with literal translation of the results. The results do not portray exact results. However, it is a professionally acknowledged method useful for predictive purposes.

The modeling results presented by CH2M-Hill focus on describing the relationships between flow (travel-time), phosphorus concentration, and average chlorophyll-a concentration. The model assumes all the phosphorus present is biologically available. This is never true in the environment. To reflect the proposed rule, the model's bio-available phosphorus must be converted to total phosphorus.

To predict the impact of lower phosphorus in the Elsner-Stafford area of the Tualatin River, the relationship between bio-available and total phosphorus was developed from field study data at Elsner-Stafford. Table 3 describes the analysis provided by CH2M-Hill and reviewed by the Department. Model results are consistent in estimating that:

Table 3

<u>Total Phosphorus Concentration</u>	<u>Result in</u>
125 ug/l	Chlorophyll <u>a</u> in excess of 15 ug/l
100 ug/l	Chlorophyll <u>a</u> in excess of 15 ug/l when flows are below 160 cfs. When flows are above 160 cfs, average Chlorophyll <u>a</u> concentration would approach 15 ug/l
70 ug/l	Chlorophyll <u>a</u> concentrations below 15 ug/l at current flow conditions. (Department's Conversion to Total Phosphorus) and at median flows by all analysis provided.
50 ug/l	Chlorophyll <u>a</u> concentrations below 15 ug/l at current flow conditions. (CH2M-Hill's Conversion to total phosphorus)

Figures 2 and 3 illustrate the modeling results provided by CH2M-Hill. Figure 2 converted the total phosphorus based directly on the relationship between ortho and total phosphorus in the lower Tualatin River. Figure 3 provided by CH2M-Hill used the same relationship, but rounded values off to represent the range of phosphorus criteria proposed.

The Tualatin in 1987 had a mean summer (May - October) flow of 168 cfs, and a minimum weekly average flow of 80 cfs. Based on a comparison of flows at Farmington, these flows represent the lowest flow conditions for the past ten years. The phosphorus criteria must be set to limit algal growth at current flow conditions.

Flow affects the residence time of water in the lower Tualatin River. Residence time effects the amount of time that algae have to grow and multiply in the lower Tualatin River. The above figures illustrate the effect of flow on estimated algal growth at Elsner. This relationship would be much different for the Tualatin River further downstream near Stafford due to the much longer residence times.

Figure 2

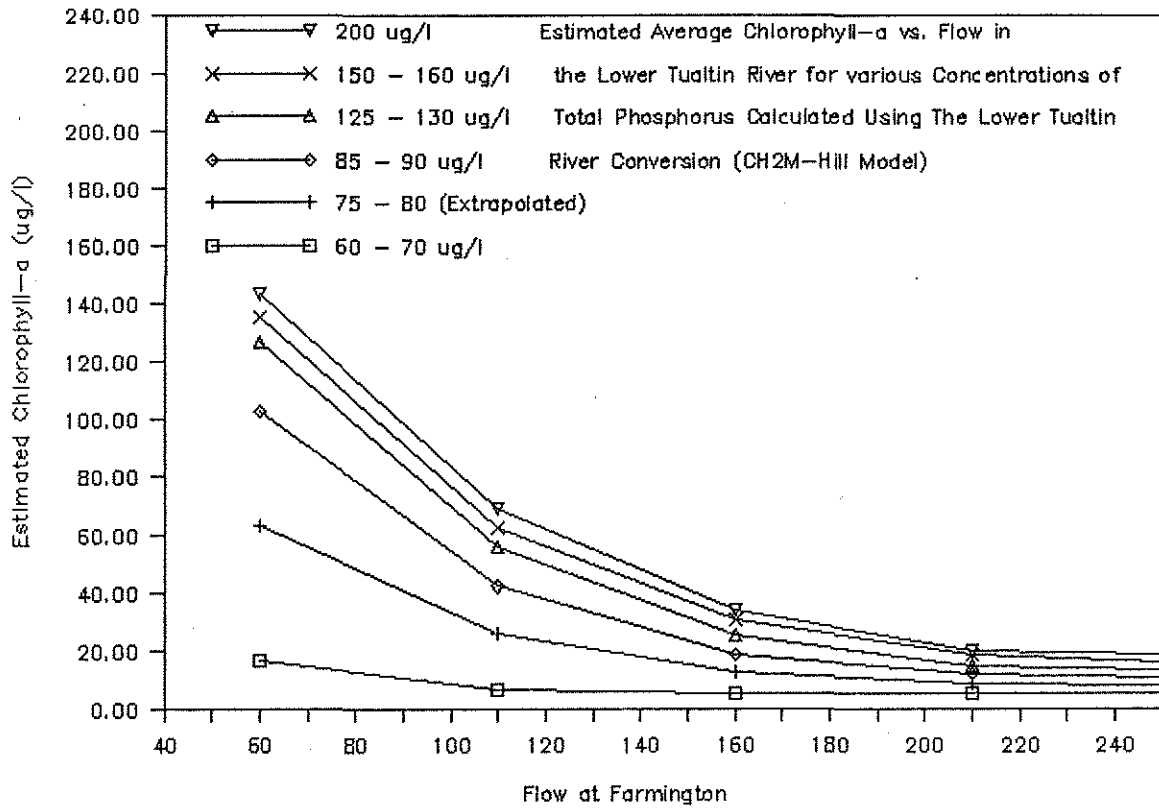
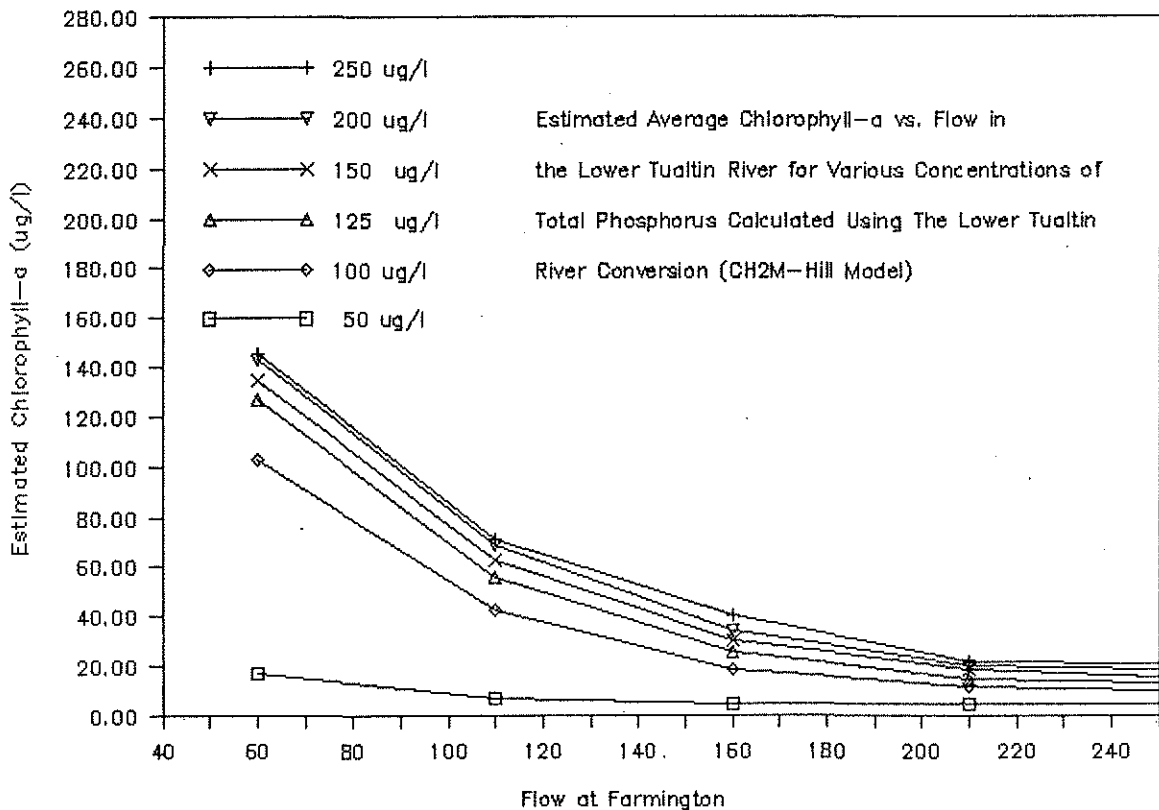


Figure 3



Decreasing travel can reduce algal growth in any given section of the river. the river. However, phosphorus reduction is still necessary to control nuisance algal growth. No technical justification is presented for regulating phosphorus at levels greater than that needed for algal growth.

CH2M-Hill proposed an individual control strategy (ICS) which varies the instream total phosphorus criteria depending on flow. Review of the criteria proposed by CH2M-Hill for USA indicates that the chlorophyll a levels would be expected to exceed the 15 ug/l target and that algal growth conditions would be similar to existing conditions in the lower river at Elsner.

Under the Individual Control Strategy (ICS) suggested by USA, CH2M-Hill, and Washington County, the following limits were proposed:

Table 4

<u>Flow CFS</u>	<u>Phosphorus Load Pounds per Day</u>	<u>Predicted Total Phosphorus at Elsner</u>	<u>Estimated Average Chlorophyll a*</u>
70 or less	19	50 ug/l	15
100	38	70 ug/l	20
125	61	90 ug/l	30
150	117	145 ug/l	35
165 or greater	222	250 ug/l	35
(Median Conditions, Tualatin River at Elsner, Low Flow Conditions 1987)			
168	218	240 ug/l	35
(Median conditions, Tualatin River at Elsner for the Time Period Modeled)			
174	225	240 ug/l	38

* Estimated by CH2M-Hill using model results

Based on predicted results shown in Table 4, the ICS fails to achieve a noticeable reduction in algal growth in the lower Tualatin River at Elsner.

CH2M-Hill also provided model estimates to the Department of water quality conditions following proposed nitrification-biological nutrient removal-wetlands polishing treatment at the Rock Creek Wastewater Treatment Plant (RCWTP). The analysis provided by USA suggests that the 15 ug/l chlorophyll a target may be achieved with the system at river flows exceeding 160 cfs.

The control option of nitrification -- biological phosphorus removal -- wetlands polishing is certainly an option that needs to be evaluated as a

management option for the Tualatin point sources. However, prior to selecting any option there needs to be a full review of all available options. All available options have not been defined. A full review of any single option has not been completed. Definition and review of management options will be a component of the compliance schedule for USA.

There are several concerns with the proposed ICS plan. Prior to final review, the wetlands treatment assumptions need to be verified with site specific pilot projects. USA is currently planning pilot projects for wetland assessments. Available data shows an increase in phosphorus in the Tualatin River near the Jackson Bottom Wetlands. These wetlands and effluent irrigation return flows are potential sources of this phosphorus. Location of potential wetlands needs to be further assessed.

The phosphorus limit needs to cover the entire low flow period during which nuisance algal growth conditions could occur. During the winter, physical conditions such as cold temperature, high flows, and low light availability limit algal growth.

For the Tualatin River, the historical growth period is from June through August. The rule taken to hearing proposed a time period from June 1 to September 15 for the application of the phosphorus limits. The intensive data collection during the low flow conditions in 1987 shows that algal growth can exceed the 15 ug/l chlorophyll a action level through October. Historical temperature data also indicates maximum temperature may not limit algal growth between May and October. Similarly, historical data indicates that minimum stream flow may not limit algal growth between May and November. Based on this information, the time period for the phosphorus limit should be from May 1 through October 31.

Annual limits were suggested by some respondents during the hearing. However, this would not direct planning efforts at defined water quality problems in the Tualatin Basin. Annual criteria to prevent algal growth in Lake Oswego are below background concentrations in the upper watershed and are unachievable. Spring limits would reduce currently existing algal growth in Lake Oswego. Primary advantages would be in providing water quality management options for Lake Oswego. The proposed TMDLs do not apply to earlier spring limits. The Department believes that the Lake Oswego Corporation needs to develop a lake management plan in coordination with USA. This plan should provide for lake maintenance refill to coincide with phosphorus removal from USA's treatment plants.

Department's Response:

The Department has concluded, after careful evaluation of the algal assay, empirical analysis, the modeling results provided by CH2M-Hill and other testimony, that to assure that nuisance algal growth conditions are prevented at current flow conditions the proposed phosphorus criteria must be lowered from the 100 ug/l original proposed to 70 ug/l. The Department feels that this

reduction is necessary to assure the prevention of nuisance algal growths at all currently existing flow conditions in the Tualatin River.

The Department has concluded that to assure that nutrient limits are in place when physical conditions may not limit algal growth, the proposed time period of phosphorus limit application should be extended from the originally proposed June 1 to September 15 to May 1 through October 31.

The Department has concluded that to address early spring limits for Lake Oswego, the final proposed rule must require USA and the Lake Oswego Corporation to develop a management plan for the spring filling which would reduce the amount of phosphorus brought into the lake.

The Department has concluded that annual phosphorus limits would not direct efforts at the defined water quality problems of summer time algal growths. Therefore, the Department does not propose annual phosphorus limits. However, the Department does believe that Lake Oswego could benefit if a lake management plan were developed and implemented. The final proposed rule requires the development of such a management plan.

Ammonia Criteria:

The second major issue discussed at the hearings was the ammonia criteria. Several respondents felt that the Department needed to evaluate ammonia toxicity criteria prior to establishing the instream criteria. NEDC, EPA, and Larry Everson felt that the timing of the ammonia criteria needed to be extended to prevent dissolved oxygen violations. Larry Everson suggested annual limits to prevent ammonia toxicity.

Department's Evaluation:

Ammonia exists in two basic forms, the ammonium ion and un-ionized ammonia. The principle toxic form is the un-ionized ammonia. The degree of toxicity depends primarily on the concentration of ammonia, the pH, and stream temperature.

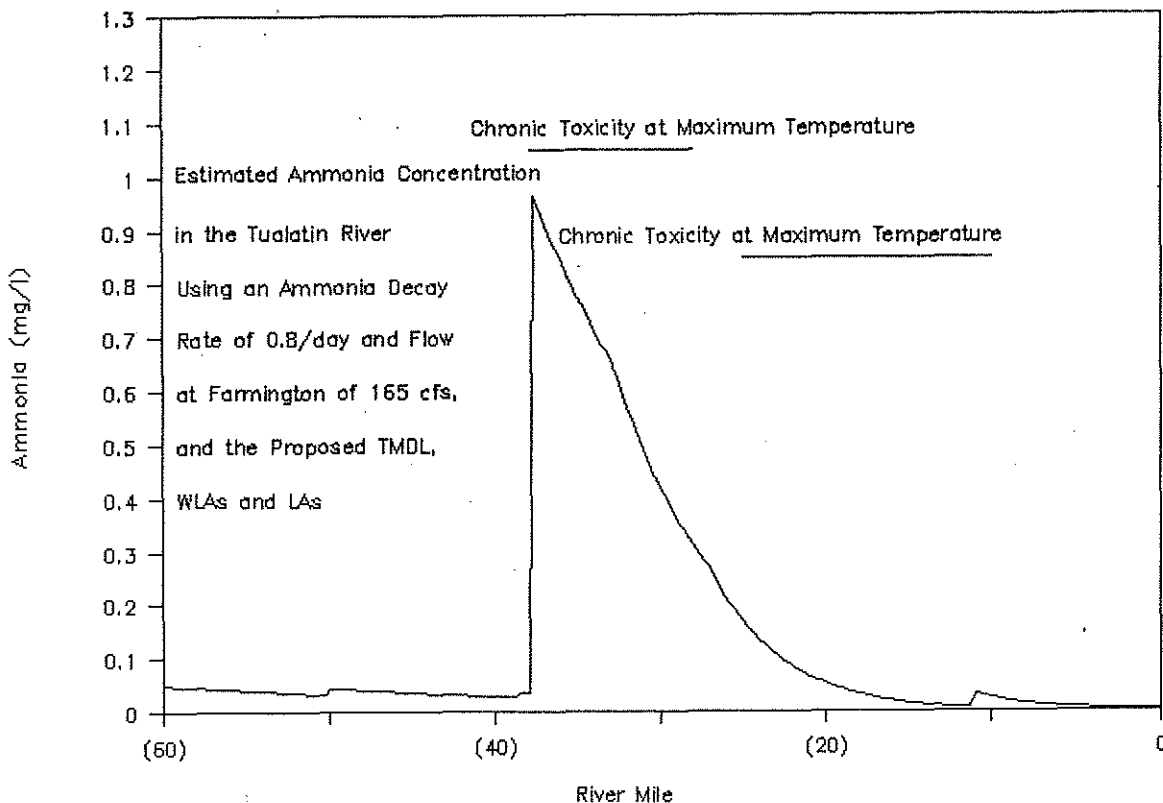
Current levels of ammonia in the Tualatin River at Farmington routinely exceed the EPA 4-day average toxicity criteria level during summer low flow conditions. The 4-day average ammonia toxicity criteria is occasionally exceeded in the lower Tualatin River at Elsner and Tualatin during summer low flow conditions. One hour maximum ammonia toxicity values are not exceeded in the Tualatin River.

The primary source of ammonia in the Tualatin Basin is RCWTP. Below RCWTP ammonia is rapidly converted to nitrate. The highest concentrations, and the greatest exceedance of the EPA criteria occur below the RCWTP as measured at Farmington. The critical site for establishing an ammonia standard is below the RCWTP at Farmington.

Based on the maximum temperature observed at Farmington (22° C) and the maximum pH (7.5), the proposed 1000 ug/l (1.0 mg/l) ammonia criteria would maintain maximum ammonia concentrations below the EPA 4-day average criteria value in the Tualatin River. Ammonia levels required to achieve the dissolved oxygen standard are restrictive enough to prevent chronic toxicity levels of ammonia.

As the Tualatin River moves downstream during the summer, it warms up. Due to increased temperature near Elsner and Stafford lower instream ammonia criteria are needed to prevent chronic toxicity. The load allocation is therefore lower at Elsner and Stafford than at Farmington. Instream assimilation will assure that the ammonia discharged above Farmington will be well below chronic levels by the time the river reaches Elsner. Figure 4 illustrates the predicted ammonia concentration in the Tualatin River based on a calculated ammonia decay rate, a flow of 160 cfs at Farmington, and the proposed TMDL, WLA, and LAs.

Figure 4



Historical data show that dissolved oxygen violations occur from early June through mid November. Ammonia concentrations routinely exceed EPA 4-day average toxicity criteria at Farmington from June through October. Ammonia concentrations occasionally exceed EPA 4-day average toxicity criteria in November. The ammonia criteria to be expanded to include low flow conditions occurring between May 1 through November 15.

The Department's objective is to establish guidelines through OAR which address existing problems in the Tualatin River Basin. Defined water quality problems associated with ammonia are low dissolved oxygen and chronic ammonia toxicity. Both problems occur during low flow conditions. The Department is not aware of ammonia toxicity concerns in the Tualatin River, or tributaries during winter high flow conditions. Data indicates that ammonia concentrations are well below EPA recommended criteria during winter high flow conditions.

As stated, the Department sees TMDLs as tools to achieving water quality standards where existing rules and regulations fail to attain water quality objectives. Toxic levels of ammonia are prevented according to OAR 340-41-445 (2)(o)(B). This rule states that levels of toxic substances shall not exceed the most recent criteria values for organic and inorganic pollutants established by EPA and published in Quality Criteria for Water (1986). The Department intends that these levels apply to all Tualatin tributaries.

A TMDL based on the proposed 1000 ug/l (1.00 mg/l) of ammonia provides an appropriate margin of safety. All analysis indicate that this concentration will prevent substandard oxygen concentration and prevent chronic levels of ammonia toxicity in the Tualatin River below Farmington.

Department's Response:

Chronic ammonia toxicity levels are currently exceeded in the Tualatin during low flow conditions. During high flows and cold temperatures of winter conditions ambient concentrations are below chronic toxicity levels. The proposed ammonia criteria will reduce ammonia levels to below the chronic toxicity levels. The Department therefore does not propose to change the ammonia concentration criteria in the proposed rule.

The Department has concluded, based on the above evaluation and to assure that all potential dissolved oxygen violations are prevented, that the proposed time period for application for the ammonia TMDL should be extended from the originally proposed June 1 to September 15 to May 1 through November 15.

Nonpoint Source Controls:

During the hearing, one of the most discussed weaknesses in the proposed rules was the approach to control nonpoint sources. Many commenters noted the need for better nonpoint source pollution controls in the Tualatin Basin. Several commenters felt that these controls were neglected in the proposed rule.

Several commenters felt that LAs needed to be established for all nonpoint sources of pollution. Respondents suggested that establishing LAs on all major tributaries as an initial starting point for establishing guidelines for nonpoint source pollution control plans was a necessity.

One commenter stated that wasteload allocations needed to be established for all permitted and non-permitted point sources. Specific sources mentioned included all storm water discharges, all sewer overflows and bypasses, and container nurseries.

Department's Evaluation:

During the Tualatin study, the Department collected a number of water quality samples at tributary streams monthly and intensively during selected storm events. The data shows that the Tualatin and its tributaries are adversely effected by nonpoint source pollution discharges. The nonpoint sources contributing to the problem include urban stormwater runoff and agricultural discharges. The control of these existing sources and the prevention of future nonpoint source problems is imperative if water quality standards are to be met in the Tualatin Basin.

The Department has the statutory responsibility to control all discharges of pollutants to state waters. To accomplish this, the Department has developed and currently implements a permit program for point source discharges. This includes permitting industrial and municipal wastewater discharges as well as those from dairy operations. The 1987 amendments to the Clean Water Act also included a permit approach for urban stormwater discharges, which had up until that point been primarily considered as nonpoint source problems.

The Department's approach for addressing nonpoint source problems is to identify the most appropriate agency which has responsibility for controlling the land management activities related to a specific nonpoint source and working with that agency to develop and implement the needed pollution control program. For example, in forested areas, where water quality may be adversely affected by timber harvesting activities, the Department has worked closely with the State Department of Forestry, U.S. Forest Service, and the Bureau of Land Management to develop nonpoint source pollution control programs.

Once an adequate control program is developed, an agency is designated as the management agency for that particular nonpoint source problem. The State Department of Forestry has been designated as the agency responsible for implementing a nonpoint source pollution control program for state and private forest lands.

In the Tualatin Basin, nonpoint source controls are needed for urban stormwater runoff and agricultural activities. In the rules taken to hearing, it was stated that within one year of being designated, an agency had to submit a plan and implementation schedule for bringing that pollution source into compliance with the rule. During the public hearing, testimony received stated that this

did not provide an adequate approach to controlling nonpoint source problems. The rules did not actually designate responsible agencies nor set a time period in which such designation would take place.

The hearing testimony also suggested that in order to provide guidelines for nonpoint source pollution control plans, it was necessary to establish LAs for all major tributaries. The LAs would give the designated management agencies initial starting points for their control programs. During the study, the Department collected information on the phosphorus and ammonia concentration at the major tributaries.

Department's Response:

The Department agrees that additional emphasis and guidance needs to be given the nonpoint source program. Therefore, specific requirements for urban stormwater runoff and agricultural discharges have been added to the rules. Washington and Clackamas Counties and the incorporated cities of these counties within the Tualatin Basin have been charged with the responsibility of developing plans within specific time frames for controlling urban stormwater runoff. These plans are to address existing problems and contain provisions for preventing future problems.

The final proposed rule also contains requirements for Washington and Clackamas Counties to designate an agency responsible for agriculture nonpoint sources within their county in the Tualatin Basin. Specific time periods are established for completing these designations and conducting subsequent reviews and approvals by the EQC.

The Department agrees that LAs for the major tributary basins are appropriate and these have been established in sections (a) and (c) of the proposed rule.

Compliance Schedule:

Testimony received suggested that the compliance period was inadequately addressed in the proposed rule. Commenters felt that compliance schedules were needed to define the Department's allocation of effort and time schedule for refining LAs for nonpoint sources by tributary reach, for assigning WLAs to all point sources including stormwater discharges, sewage bypass and overflows, and container nurseries.

A 3-5 year compliance period for full attainment of the TMDLs, LAs, and WLAs was suggested.

Department's Evaluation:

After review of the public testimony, the Department agrees that further clarification of compliance schedules, for both point and nonpoint sources, is necessary. The Department's requirements need to be stated to assure that steady progress is made towards addressing water quality problems in the

Tualatin Basin. The proposed rule has been modified to reflect these requirements.

Department's Response:

The Department believes that 90 days is an adequate time period for USA to develop and submit to the Department for approval, a plan and schedule of how USA will comply with the proposed rule.

Nonpoint source compliance schedules will be addressed by Washington County, Clackamas County, incorporated cities, and designated lead agencies. The Department believes that one year is adequate time for the counties and cities to develop plans and time schedules for controlling the quality of stormwater discharged to public water in the Tualatin Basin. This plan needs to provide an inventory of sewage bypass locations and describe a process for complying with the proposed rule.

The counties, subject to Commission approval, will designate a lead agency to be responsible for the control of nonpoint source pollution outside of the urban growth boundaries. The Department believes that 90 days is sufficient time for the county to designate a lead agency. The Department also believes that 180 days is sufficient time to develop and submit a plan and time schedule for achieving the goals of the proposed rule.

Hearings will be held to obtain public input on all proposed plans. Following these hearing, the Environmental Quality Commission will either accept or reject the submitted plans. Plans will be rejected if the Commission determines that it will not meet the goals of the proposed rule within a reasonable time period. If the plan is rejected, the Commission will specify a compliance schedule for resubmittal of the plan for approval.

TMDLs, WLAs, and LAs:

Washington County and USA testified that TMDLs, WLAs, and LAs would be more appropriately addressed under the special policies and guidelines section for basin plans rather than as standards.

Department's Evaluation:

Standards already exist to protect the beneficial uses of the Tualatin River. The proposed phosphate and ammonia criteria provide means to achieve the standard. The TMDLs are perceived as criteria necessary to achieve existing standards. The existing standards, when achieved, will protect the beneficial uses of the Tualatin River.

Department's Response:

The Department agrees that TMDLs, WLAs, and LAs are better addressed under the special policies and guidelines section for basin plans rather than as

standards. The Department changes the proposed location of the TMDLs to special rules and policies section of the OARs.

Final Proposed Rules:

The two final proposed rules are in Attachment A. The first proposed rule, OAR 340-41-006, defines the water quality terms used in the second rule. The proposed definitions for LC, WLA, LA, and TMDL are taken from the Federal Register, 40 CFR Ch. 1 (7-1-87 Edition) 130.2 definitions. The second proposed rule, OAR 340-41-470, establishes water quality criteria for phosphorus and ammonia in the Tualatin Basin. Because of the many changes made in the rule taken to public hearing and moving it to a different section in the rules, the Department has deleted the entire proposed rule originally taken to hearing.

The final proposed rule allocates ammonia and phosphorus loads by reach of the mainstem Tualatin and by major tributary basin. The proposed allocations are established at levels necessary to attain water quality standards, they are adjusted for seasonal variation, and provide a reasonable margin of safety. The final proposed rule describes the requirements for developing both point and nonpoint source management plans.

The Environmental Quality Commission has three alternatives:

1. Adopt the rule as proposed;
2. Adopt the rule with modifications; or
3. Do not adopt the rule.

The Department believes that the final proposed rules will lead to achievement of water quality standards in the Tualatin Basin and comply with the consent decree agreed to between NEDC and EPA. If the Commission does not adopt the rule or a modification of the proposed rules, the Department will not comply with the terms of the consent decree. The consent decree states that EPA will place 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 development of an ammonia criteria, establishing LAs for tributaries, or extending the time periods for applying the phosphorus and ammonia limits were not controversial. However, establishing a phosphorus criteria remains controversial. Several options were discussed throughout the project and again during the public testimony. The range of options were evaluated in the Hearings Officers Report (Attachment C).

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 1985.
4. The Northwest Environmental Defense Center (NEDC), and Mr. Jack Churchill, 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 interim TMDLs for ammonia and total phosphorus in April 1987, to address the dissolved oxygen and nuisance algal growth problems in the Tualatin.
7. The Director appointed a citizens and technical advisory committee to assist in developing an appropriate standards for defining the TMDLs.
8. NEDC and EPA settled the suit by consent decree in June 1987; consequentially, the Department is committed to developing TMDLs on water quality limited stream segments in Oregon.
9. After extensive review of laboratory algal assay and Tualatin River data, the Department proposed a phosphorus concentration of 100 ug/l and an ammonia concentration of 1000 ug/l to protect the beneficial uses of the Tualatin 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 criteria.
11. On March 11, 1988, the Environmental Quality Commission authorized the Department to hold public hearings on the proposed rules.
12. After reviewing the extensive material presented during the public hearings, the Department modified the proposed rule. Modifications in response to testimony submitted include lower phosphorus criteria, load allocations for tributary basins to provide nonpoint source planning objectives, an extended time period for requiring ammonia and phosphorus limits, and a refined description of the requirements for point and nonpoint source planning efforts. The proposed rule is presented as a special policy and guidelines for the Tualatin Basin rather than a standard.

Major Changes to the Rule:

- a. Definitions moved to OAR 340-41-006, Definitions for Water Quality.
- b. Location of the final proposed rule is moved from the Standards section of the basin plan to the Special Policies and Guidelines section.
- c. Phosphorus criteria decreased from a median value of 100 ug/l to a median value of 70 ug/l.
- d. Time frame for application of the phosphorus criteria was extended from the originally proposed June 1 through September 15 to May 1 through October 31.
- e. Time frame for application of the ammonia criteria was extended from the originally proposed June 1 through September 15 to May 1 through November 15.
- f. IAs are defined for major tributaries and reaches of the mainstem Tualatin River.

Director's Recommendation

Based on the summation, it is recommended that the Commission adopt the proposed rules.



Fred Hansen

Attachments (7)

- Attachment A - Draft Rule
- Attachment B - Need for Rulemaking
- Attachment C - Hearings Officer's Report
- Attachment D - Section 303 of the Clean Water Act
- Attachment E - NEDC Suit
- Attachment F - NEDC Notice of Intent
- Attachment G - Final Consent Decree

Neil Mullane:kjc
229-5284
WJ751
June 17, 1988

23

The originally proposed rule is deleted in its entirety and replaced by two separate rules.

[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."

[(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.]

WJ262

DEFINITIONS

340-41-006

Definitions applicable to all basins unless context requires otherwise:

- (18) Loading Capacity (LC): The greatest amount of loading that a water can receive without violating water quality standards.
- (19) Load Allocation (LA): The portion of a receiving water's loading capacity that is attributed either to one of its existing or future non-point sources of pollution or to natural background sources. Load allocations are best estimates of the loading, which may range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting loading. Wherever possible, natural and nonpoint source loads should be distinguished.
- (20) Wasteload Allocation (WLA): The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.
- (21) Total Maximum Daily Load (TMDL): The sum of the individual WLAs for point sources and LAs for nonpoint sources and background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. If Best Management Practices (BMPs) or other nonpoint source pollution controls make more stringent load allocations practicable, then wasteload allocations can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs.

Note: New language is underlined

WC3413

SPECIAL POLICIES AND GUIDELINES

340-41-470

(3) In order to improve water quality within the Tualatin River subbasin to meet the existing water quality standard for dissolved oxygen, and the 15 ug/l chlorophyll a action level stated in OAR 340-41-150, the following special rules for total maximum daily loads, waste load allocations, load allocations, and implementation plans are established.

(a) After completion of wastewater control facilities and implementation of best management practices required by sections (f), (g) and (h) of this rule, no activities shall be allowed and no wastewater shall be discharged to the Tualatin River or its tributaries that cause the median concentration of total phosphorus at the mouths of the tributaries listed below and the specified points along the mainstem of the Tualatin River, as measured during the low flow period between May 1 and October 31 of each year, to exceed the following criteria:

<u>Mainstem (RM)</u>	<u>ug/l</u>	<u>Tributaries</u>	<u>ug/l</u>
<u>Cherry Grove (67.8)</u>	<u>20</u>	<u>Scoggins</u>	<u>60</u>
<u>Dilley (58.8)</u>	<u>40</u>	<u>Gales Cr.</u>	<u>45</u>
<u>Golf Course Rd. (52.8)</u>	<u>45</u>	<u>Dairy Creek</u>	<u>45</u>
<u>Rood Rd. (38.5)</u>	<u>50</u>	<u>McKay Cr.</u>	<u>45</u>
<u>Farmington (33.3)</u>	<u>70</u>	<u>Rock Cr.</u>	<u>70</u>
<u>Elsner (16.2)</u>	<u>70</u>	<u>Fanno Cr.</u>	<u>70</u>
<u>Stafford (5.4)</u>	<u>70</u>	<u>Chicken Cr.</u>	<u>70</u>

Tributary load allocations can be converted to pounds per day by multiplying the instream criteria by flow in the tributary in cfs and by the conversion factor 0.00538. Load allocations for existing or future nonpoint sources to the mainstem Tualatin River not allocated in a tributary load allocation may be calculated as the difference between the mass (criteria multiplied by flow) leaving a segment minus the mass entering the segment (criteria multiplied by flow) from all sources plus instream assimilation.

(b) The waste load allocation (WLA) for the Unified Sewerage Agency of Washington County (USA) is determined by subtracting the sum of the calculated loads at Rood Road and Rock Creek from the load at Farmington.

(c) After completion of wastewater control facilities and implementation of best management practices required by sections (f), (g) and (h) of this rule, no activities shall be allowed and no discharge of wastewater to the Tualatin River or its tributaries shall be allowed that causes the concentration of ammonia-nitrogen at the mouths of the tributaries listed below and the specified points along the mainstem of the Tualatin River, as

measured between May 1 and November 15, to exceed the following target concentrations:

<u>Mainstem (RM)</u>	<u>ug/l</u>	<u>Tributaries</u>	<u>ug/l</u>
<u>Cherry Grove (67.8)</u>	<u>30</u>	<u>Scoggins</u>	<u>30</u>
<u>Dilley (58.8)</u>	<u>30</u>	<u>Gales Cr.</u>	<u>40</u>
<u>Golf Course Rd. (52.8)</u>	<u>40</u>	<u>Dairy Creek</u>	<u>40</u>
<u>Rood Rd. (38.5)</u>	<u>50</u>	<u>McKay Cr.</u>	<u>40</u>
<u>Farmington (33.3)</u>	<u>1000</u>	<u>Rock Cr.</u>	<u>100</u>
<u>Elsner (16.2)</u>	<u>850</u>	<u>Fanno Cr.</u>	<u>100</u>
<u>Stafford (5.4)</u>	<u>850</u>		

Tributary load allocations can be converted to pounds per day by multiplying the instream criteria by flow in the tributary in cfs and by the conversion factor 0.00538. Load allocations for existing or future nonpoint sources to the mainstem Tualatin River not allocated in a tributary load allocation may be calculated as the difference between the mass (criteria multiplied by flow) leaving a segment minus the mass entering the segment (criteria multiplied by flow) from all sources plus instream assimilation.

- (d) The waste load allocation for United Sewerage Agency of Washington County is determined by subtracting the sum of the calculated load at Rood Road and Rock Creek from the load at Farmington.
- (e) The Director may issue new waste discharge permits containing additional waste load allocations and approve nonpoint source activities containing additional load allocations for total phosphate and ammonia-nitrogen provided the Department can show that the concentrations specified in sections (a) and (c) will not be exceeded.
- (f) Within 90 days of the adoption of these rules, the Unified Sewerage Agency of Washington County shall submit a plan and time schedule to the Department describing how and when the Agency will modify its sewerage facilities to comply with this rule. The plan shall include provisions and time schedule for developing and implementing a management plan under an agreement with the Lake Oswego Corporation for addressing nuisance algal growths in Lake Oswego.
- (g) Within twelve (12) months after the adoption of these rules, Washington and Clackamas Counties and the incorporated cities within these two counties shall submit plans and time schedules for controlling the quality of stormwater discharged to public waters in the Tualatin River subbasin from within urban growth boundaries. The plans shall show how the quality of storm water will be controlled to meet the concentrations specified in sections (a) and (c) of this rule.

Cities and/or counties may submit joint plans if they desire. Each plan shall include:

- (A) An inventory of all sewage system by-pass points and urban stormwater points that discharge into the Tualatin River and its tributaries. The discharge points within the Unified Sewerage Agency of Washington County sewer system shall include all collection system lines owned and operated by United Sewerage Agency of Washington County and those city and district systems under contract with United Sewerage Agency of Washington County.
- (B) A process including enabling ordinances that assures that all new development projects receiving county/city approval after August 1, 1989, are provided with stormwater control facilities capable of complying with sections (a) and (c) of this rule. The process shall:
- (i) Apply to all development of five (5) acres or greater at a minimum;
 - (ii) Include a means for containing maintenance and operation of the control systems; and
 - (iii) Shall provide for mechanisms to control erosion during and after construction of the development project.
- (h) Within 90 days after adoption of these rules, Washington and Clackamas Counties shall designate an agency or agencies within their respective counties for controlling nonpoint source pollution from agricultural practices. Such designation shall be subject to the review of the Department and the approval by the Environmental Quality Commission. Within 180 days after approval by the Environmental Quality Commission, the designated agency shall submit a plan and time schedule to the Commission for achieving the requirements of this rule. The plan shall include:
- (A) An inventory of the pollutant discharges associated with agricultural runoff in the respective counties;
 - (B) A list of best management practices to control these discharges; and
 - (C) A program to control container nursery discharges to the Tualatin River and its tributaries.
- (i) The Commission shall review all plans, plan amendments, and agency designations required by sections (f), (g) and (h) as follows:
- (A) Before any plan or agency designation required by this rule may be implemented, it shall be approved by the Environmental Quality Commission.
 - (B) Before the Environmental Quality Commission may approve any plan or agency designation required by this rule, a public hearing shall be held to receive public testimony concerning the proposal.

(C) Within one hundred twenty (120) days of submittal of the plan or agency designation and within sixty (60) days of the public hearing, the Environmental Quality Commission shall either approve or reject the plan or designation. If the Commission rejects the plan or designation, it shall specify a compliance schedule for resubmittal for approval and shall specify the reasons for the rejection. The Commission shall reject the plan if it determines that the plan will not meet the requirements of this rule within a reasonable amount of time. The Commission shall reject an agency designation if it determines the agency would not be able to conduct an effective nonpoint source program.

(j) Within one hundred eighty (180) days of approval of each plan and time schedule required by sections (f), (g) and (h), the significant portions of the approved plan and time schedule shall be placed either in a waste discharge permit issued to or in a memorandum of agreement with the affected city, county, or agency. The permit or memorandum of agreement shall include appropriate waste load and load allocations consistent with the provisions of this rule. The choice of waste discharge permit or memorandum of agreement will be determined by the Commission when the plan is approved.

(Note: Proposed new language is underscored.)

WJ757

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):

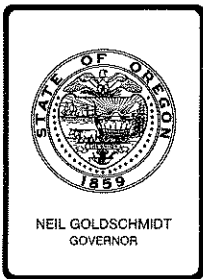
Compliance with these proposed rules, if adopted, would require Unified Sewerage Agency of Washington County to provide additional sewerage facilities.

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



Department of Environmental Quality

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

MEMORANDUM

To: Environmental Quality Commission

From: ^{NMM} Neil Mullane and ^{RJ} Richard Nichols

Subject: Agenda Item F, July 8, 1988, EQC Meeting

Hearings Officer's Report on The Proposed Rule Establishing Total Maximum Daily Loads (TMDLs), Waste Load Allocations (WLAs) and Load Allocations (LAs) for Total Phosphorus and Ammonia Nitrogen in the Tualatin River.

Background:

The Tualatin River below the Unified Sewerage Agency's (USA) Rock Creek Wastewater Treatment Plant (RCWTP) routinely violates the dissolved oxygen standard during low flow conditions.

Concentrations of chlorophyll a exceed the action level described in OAR 340-41-150 used to indicate nuisance phytoplankton growth conditions. This rule states that if the chlorophyll a content 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; and develop a proposed control strategy for attaining compliance where technically and economically practicable.

The Federal Clean Water Act, under Section 303, requires that total maximum daily loads (TMDLs) be established for "water quality limited" stream segments. Water quality limited stream segments are reaches that do not meet standards, in either numerical or narrative form, even after technology based limitations have been applied.

A TMDL has several components. These components are defined as follows:

- o **Loading Capacity (LC):** The greatest amount of loading that a water can receive without violating water quality standards.
- o **Load Allocation (LA):** The portion of a receiving water's loading capacity that is attributed either to one of its existing or future non-point sources of pollution or to natural background sources. Load allocations are best estimates of the loading, which may range from reasonably

Hearings Officer's Report
July 8, 1988

accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting loading. Wherever possible, natural and nonpoint source loads should be distinguished.

- o **Wasteload Allocation (WLA):** The portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLA constitute a type of water quality-based effluent limitation.
- o **Total Maximum Daily Load (TMDL):** The sum of the individual WLAs for point sources and LAs for nonpoint sources and background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. If Best Management Practices (BMPs) or other nonpoint source pollution controls make more stringent load allocations practicable, then wasteload allocations can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs.

In 1985, the Department initiated an intensive assessment of water quality and pollution sources in the Tualatin River Basin. Dissolved oxygen violations are due primarily to ammonia discharged from RCWTP. Phosphorus was found to be a key nutrient supporting the nuisance algal growth.

In December 1986, the Northwest Environmental Defense Center (NEDC) filed suit in the Federal District Court against the Environmental Protection Agency (EPA) to ensure that TMDLs would be established and implemented for waters in Oregon identified as being "water quality limited". This suit specifically identified the Tualatin River. A subsequent notice to file suit by NEDC listed an additional 27 water quality limited segments needing TMDLs. The Department actively participated in negotiations with NEDC, EPA, and the U.S. Justice Department to develop an acceptable approach for 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 interim TMDLs for total phosphorus and ammonia in the Tualatin River. On March 11, 1988, the Department submitted final proposed phosphorus and ammonia standards to the EQC and requested authorization to hold public hearings. Three public hearings were held in late April 1988. Over 90 individuals presented written and/or oral testimony at these hearings. Exhibit 1 of this report identifies the commenters and their areas of concern. The remainder of this report summarizes the Department's response to the testimony. To lay the framework

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for the Department's response to comments, it is important to first reiterate the purpose of the project and the study methodology.

Project Goals:

The purpose of establishing TMDLs is to protect the beneficial uses of water in the Tualatin Basin. The Department has identified degraded water quality adversely affecting two beneficial uses: 1) aquatic-life through substandard dissolved oxygen and potential chronic ammonia toxicity during low flow conditions, and 2) aesthetics through nuisance algal growth during summer low flow conditions.

Water quality standards are established to protect the beneficial uses. In the Tualatin Basin, there is a numerical standard of 6 mg/l for dissolved oxygen and a narrative standard for aesthetics. Additionally, the nuisance phytoplankton growth rule, OAR 340-41-150, identifies the chlorophyll a concentration used to indicate nuisance phytoplankton growth conditions.

The existing water quality standards are not met and have not lead to the achievement of the desired water quality in the Tualatin Basin. It is a reasonable approach to refine water quality criteria necessary to achieve standards and protect the beneficial uses of water in the basin.

Establishing TMDLs for phosphorus and ammonia concentration will focus implementation plans on solving the defined water quality problems in the Tualatin Basin. The TMDLs are proposed as special policies and guidelines for the Tualatin Basin in OAR 340-41-470.

The goal of the ammonia TMDL is to attain the dissolved oxygen standard of 6 mg/l in the lower Tualatin River and to prevent chronic ammonia toxicity.

The goal of the phosphorus TMDL is to reduce the current nuisance algal growth in the lower Tualatin River to a level that is aesthetically acceptable. Acceptable aesthetic conditions are based on the nuisance phytoplankton growth rule. The objective is to achieve a summer average chlorophyll a concentration of less than 15 ug/l in the lower Tualatin River based on current flow conditions.

Establishment of TMDLs is a technical issue. Limits will be based on a technical evaluation of the available information. Following the establishment of the TMDLs, strategies and options for attaining the limits will be defined, reviewed, and implemented.

Technical Approach:

Phosphorus has been identified as the key nutrient supporting the excessive algal growth in the Tualatin River and Lake Oswego. All nutrients are known to be important in influencing algal growth. Of all the nutrient elements,

only phosphorus is controllable by man. Carbon is too ubiquitous and is not controllable and nitrogen only partly so. There are several reasons why nitrogen is only partly controllable. Nitrogen in its various forms (as nitrate, ammonia, and organic) enters water bodies from natural and cultural sources much more readily than phosphorus. These avenues include fixation of atmospheric nitrogen by some blue-green algae and other microorganisms (Bartsch A.F., USEPA 1972).

The EPA provides a rationale, based on the best available scientific judgment, for establishing phosphorus criteria to prevent nuisance algal growth. However, EPA provides no national criteria for phosphorus concentration to control algal growth in rivers. There are several factors that may occur which justify selecting a phosphorus value different than the EPA suggested criterion. When available, site specific information should be used to establish phosphorus criteria to control algae.

No standard method is universally accepted for establishing a phosphorus criteria to control eutrophication in rivers. To determine the appropriate level, the Department used three technical assessments: 1) algal assays, 2) inter-basin comparison, and 3) site specific model review.

1. Algal Assay.

The purpose of the algal assay is to determine the limiting nutrient, to measure algal growth potential, and to quantitatively estimate the effect of nutrient reduction on the productivity of the receiving water. The algal assay is based on the premise that maximum yield is proportional to the amount of a nutrient which is present and biologically available in minimal quantity. EPA states that when point sources overwhelm a river system with nutrients, as currently exists in the Tualatin River, the algal assay, rather than expensive modeling and long-term studies, may provide a sufficient basis for determining the required nutrient reductions (Rasche R.L. and Shultz D.A., 1987).

Assays have been found to be sensitive to subtle differences in nutrient content of various waters sampled (Green et. al., 1975). The reliability of the assay has been demonstrated by its repeated ability to accurately predict the effects of wastewater upon algal growth in natural waters and to determine the primary limiting nutrient in receiving waters (Ram and Plotkin, 1982).

The standard algal assay is widely accepted as the best measurement of bio-available phosphorus (Rasche R.L. and Shultz D.A., 1987; Ram N.R. and Plotkin S., 1982; Bradford M.E. and Peters R.H., 1987; Green J.C., Miller W.E. and Shiroyama T., 1975). There are several forms of phosphorus in a stream. Two are routinely measured by the Department: Total phosphorus and Ortho phosphorus. Total phosphorus represents the sum of the external and internal phosphorus reserves of the system

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(Auer M.T., Kiesser M.S. and Canale R.P, 1986). Ortho phosphorus is generally considered as the readily available phosphorus for algal growth.

Several other forms are available for measurement. The phosphorus form depends on the method used for analyses. Differing methods include filtration, reduction, autoclaving, and enzymatic hydrolysis. Bradford and Hays (1987) found that Total Reactive Phosphorus (autoclaved) provided a consistent correlate of available phosphorus. This form of phosphorus was used by the Department in the algal assays. The assays can be expected to correlate to the bio-available phosphorus in the Tualatin River.

Algal assays measure the maximum potential of algal growth under controlled laboratory conditions with a single species of algae (*Selenastrum capricornutum*). These conditions never fully exist in the field. Therefore, results should be interpreted as a measurement of the maximum growth potential rather than a direct estimate of instream algal production.

Results of the Tualatin River algal assays show that phosphorus criteria below 150 ug/l are required to control algal growth. Phosphorus concentrations at 150 ug/l or above would not be expected to limit algal growth. Concentrations of 100 ug/l would be expected to result in a noticeable change in the algal growth in the Tualatin River. Concentrations approaching 50 ug/l would be expected to result in low algal growth conditions in the Tualatin River.

Several methods have been suggested by the technical advisory committee for fitting lines through the results of the algal assays. NEDC offered suggestions for estimating maximum algal growth. The expected algal growth potential changes little due to the methods used to fit a line to the results. The fundamental conclusions, as shown in Table 1, drawn from these results, do not change due the method employed.

Resultant water quality descriptions are based on the assays' ability to measure algal growth conditions. Additionally, research conducted by Lee and Jones (1986) indicated that algal growth reductions in lakes, as measured by chlorophyll a, are not noticeable at less than 20 percent reduction from the original conditions.

Table 1
Algal Assay Results

<u>Phosphorus Concentration</u>	<u>Estimated Reduction in Algal Growth Potential by:</u>		<u>Resultant Water Quality</u>
	<u>DEQ</u>	<u>NEDC</u>	
0.15 mg/l	10-20%	10-15%	High algal growth, no visible effect.
0.10 mg/l	40-45%	35-40%	Moderate algal growth, effect would be obvious.
0.07 mg/l	60-65%	---	Moderate-to-low algal growth, effect would be obvious.
0.05 mg/l	80-85%	85-90%	Low algal growth, effect would be obvious.

A third algal assay was completed to estimate the reduction in algal growth potential due to dilution of effluent. Results of this assay are described in Table 2. Dilution ratios in these assays varied from no effluent to 5% effluent. Current levels of effluent in the Tualatin River exceed 30% during critical summer low flow conditions. This assay resulted in apparent nitrogen limitation. However, these results do not indicate nitrogen limitation under existing conditions.

Table 2
Reduction in Algal Growth Potential
 due to Effluent Dilution

<u>Percent Effluent in Test Sample</u>	<u>Estimated Reduction in Algal growth potential</u>
0 (Above Known Discharges)	93%
1.0	75%
2.0	67%
3.0	56%
4.0	50%
5.0	43%

2. **Inter-Basin Comparison:**

One of the major problems in predicting the effect of phosphorus reduction on chlorophyll a concentration in the lower Tualatin River is that no site specific data exists at low phosphorus concentrations.

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Comparing basins of similar morphology in the Willamette Valley to the Tualatin provides an indication of the algal growth response to lowered phosphorus concentration.

The basins compared include the Yamhill and the Marys Rivers, which flow west from the Coast range, have long residence times and flat gradients in the lower basin. The Willamette River, which was also included, is substantially larger and may not be a good comparative stream.

To draw any conclusions from this set of data requires the assumption that phosphorus is limiting algal growth, and that the relationship between phosphorus and algal growth is similar for streams in the same geographic region. Assuming phosphorus limitation means that physical factors such as light, temperature, and travel time are not limiting algal growth.

Empirical models comparing algal growth in various lakes is a widely accepted approach for estimating algal growth response due to phosphorus reduction in lakes. No similar empirical method exists for rivers. A prime reason is that a non-geographic basis for such generalizations as the fundamental oligotrophic-eutrophy classification system used for lakes does not exist for rivers (Cushing, et.al., 1980). Bradford and Peters (1987) also found that phosphorus in eutrophic rivers was more variably available than lake phosphorus for algal growth.

Based on studies conducted in Oregon, ecoregions provide a geographic framework for classifying stream systems. Ecoregions classify streams based on climate, land use, and ecological similarities. In Oregon, water chemistry, trophic level, productivity, and fish assemblages for Willamette Valley streams tended to be like other streams in the valley and unlike streams in other regions. Based on this study, the lower Tualatin River can be qualitatively compared to similar streams in the Willamette Valley. Streams rising in the Willamette Valley are relatively warm, enriched, turbid, and have deep pools. Willamette Valley streams have the greatest fish species richness and diversity, largest numbers of exotic species, and fewest salmonids (Whittier and Hughs, 1988).

NEDC suggested that a curve enveloping all the data from these stream provided an indication of the maximum algal growth supported by phosphorus. This envelope would provide an indication of the bio-availability of phosphorus at low concentration. A comparison of similar basins will provide an indication of the maximum algal growth due to bio-available phosphorus.

In basins similar to the Tualatin, phosphorus limitation of algal growth is observed below 100 ug/l. This indicates that the reduction of phosphorus in the Tualatin River can be expected to limit algal growth at similar phosphorus concentration.

3. Site Specific Model-Review

Simulation modeling uses a known set of conditions and circumstances to predict what results would most likely be if various conditions or circumstances were changed. It is not an exact science. As pointed out by NEDC, there are concerns with literal translation of the results. The results do not portray exact conditions. However, it is a professionally acknowledged science for predictive purposes.

The Department, in cooperation with the Unified Sewerage Agency (USA), conducted a series of intensive surveys to describe water quality in the lower Tualatin River. Daily samples were collected to assess the temporal variation in algal growth. This information was used by CH2M-Hill to calibrate a water quality model for the Tualatin River. The model used is the Corps of Engineers' Water Quality Model for Rivers-Reservoirs-Systems (WQRRS). The model has two segments. The "river" segment extends upstream from just below the Durham STP at River Mile 9. The "reservoir" segment extends downstream from River Mile 9 to the Lake Oswego Diversion Dam at River Mile 3.5.

The water quality coefficients were largely taken from the WQRRS documentation as default values. Algal growth rates, settling rates, certain decay rates, and half-saturation constants were modified for the Tualatin River calibration. The model was developed from data collected in 1987 and verified by data collected in 1986. The model calculates algal biomass as the result of nutrients and physical limitations. The relationship between algal biomass and chlorophyll a for the Tualatin River was assumed to be 50:1 or 2 percent by weight.

The modeling results presented by CH2M-Hill focused on describing the relationships between flow (Travel-Time), phosphorus concentration, and average chlorophyll-a concentration. The model assumes all the phosphorus present is biologically available. This is never true in the environment. To reflect the proposed rule, the model's bio-available phosphorus must be converted to total phosphorus. Interpretation of the results depends on the assumption made converting the biologically available phosphorus used in the model to total phosphorus in the Tualatin River. CH2M-Hill assumes that the relationship between Ortho phosphorus and Total phosphorus in the Tualatin River can be used to convert bio-available phosphorus to Total phosphorus.

This conversion method assumes that Ortho phosphorus is similar to biologically available phosphorus. Ortho phosphorus is typically considered as the measurement of readily available phosphorus. Total phosphorus represents the pool of available phosphorus. Since the model allows for internal cycling, this conversion method provides an initial starting point for evaluating phosphorus limitation.

Interpretation of the model results depends on the regression used to convert bio-available phosphorus to total phosphorus. Figures 1 and 2 from CH2M-Hill illustrate different interpretations based on selecting different regressions. Tables 3 and 4 illustrate the conversions used to generate these figures.

Table 3
Conversions of Biologically Available to Total Phosphorus for
 Different Sections of the Tualatin River

Figure 1 Used the Elsner-Stafford Conversion

Location	<u>Ug/l Bio-Available Phosphorus</u>					
	7	26	56	78	114	155
	<u>Converted to Ug/l Total Phosphorus</u>					
Dilley - Cherry Grove	29	176	409	579	858	1176
Farmington - Scholls			29	74	148	232
Elsner - Stafford ¹	70	93	130	157	200	250
Elsner - Stafford ²	60	85	124	153	201	254

Table 4
Conversions of Biologically Available to Total Phosphorus for Different
 Sections of the Tualatin River.

Figure 2 Used the Farmington - Scholls Conversion

Location	<u>Ug/l Bio-Available Phosphorus</u>					
	50	92	103	116	140	163
	<u>Converted to ug/l Total Phosphorus</u>					
Dilley - Cherry Grove	362	688	773	874	1060	1238
Farmington - Scholls			125	152	201	248
Elsner - Stafford ¹	123	174	187	203	232	260
Elsner - Stafford ²	117	172	186	203	235	265

1 = Project Data
 2 = Project + Intensive Data

Figure 1
 TUALATIN RIVER CHLOROPHYLL-a vs. FLOW
 ELSNER-STAFFORD REGRESSION CURVE
 SUMMER AVERAGE CHLOROPHYLL-a, JUNE TO SEPTEMBER

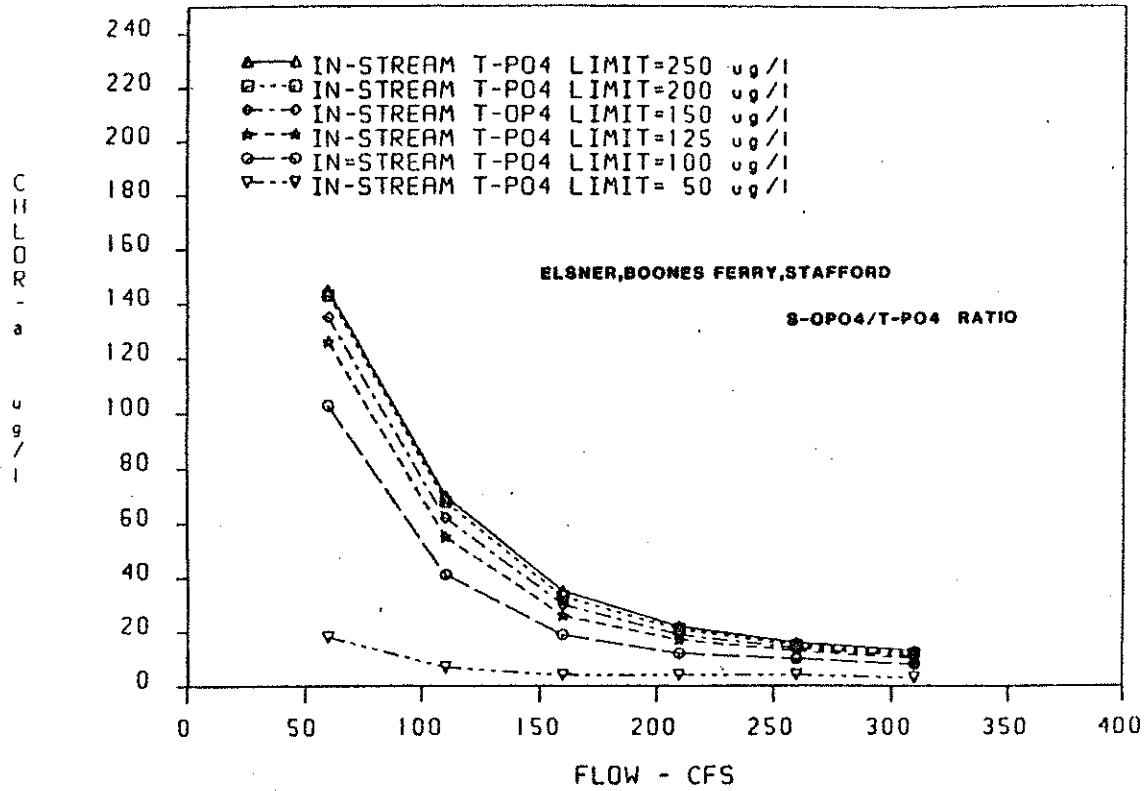
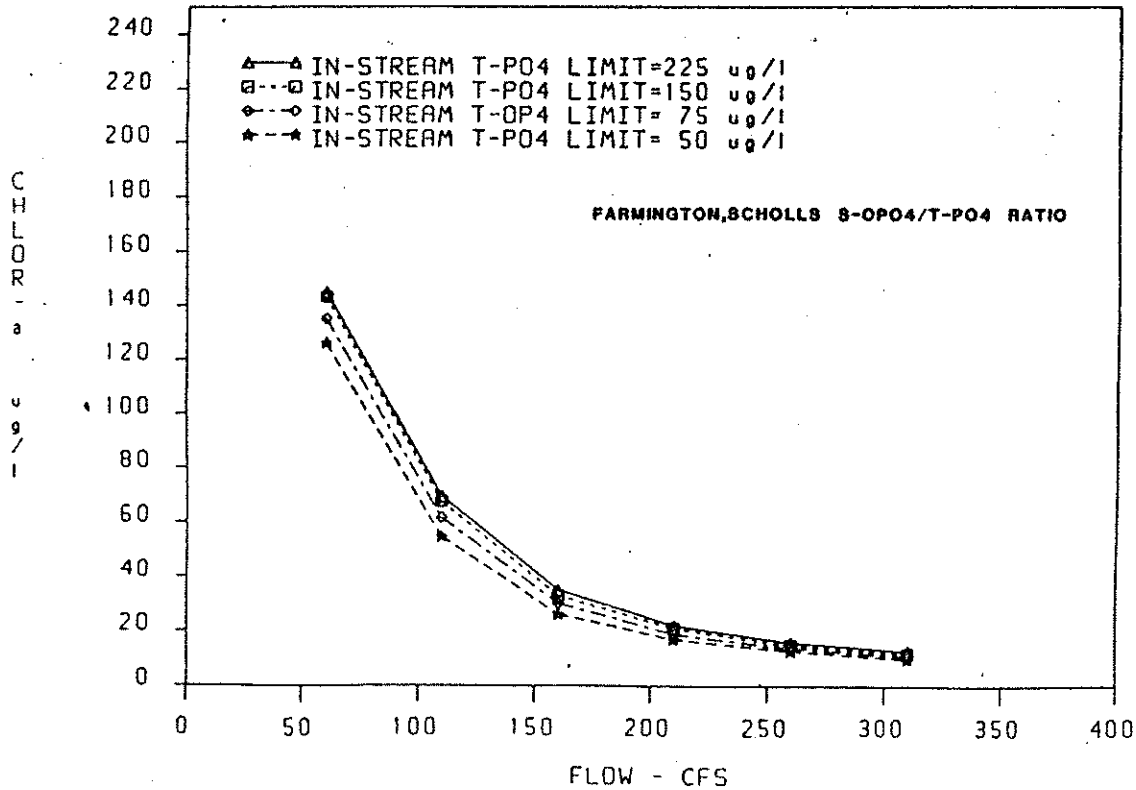


Figure 2
 TUALATIN RIVER CHLOROPHYLL-a vs. FLOW
 FARMINGTON-SCHOLLS REGRESSION CURVE
 SUMMER AVERAGE CHLOROPHYLL-a, JUNE TO SEPTEMBER



To predict the results of lower phosphorus in the Elsner-Stafford area, the conversion relationships at Elsner-Stafford was used. The consistent model results are shown in Table 5.

Table 5
Model Results

<u>Total Phosphorus Concentration</u>	<u>Result in</u>
125 ug/l	Chlorophyll <u>a</u> in excess of 15 ug/l
100 ug/l	Chlorophyll <u>a</u> in excess of 15 ug/l when flows are below 160 cfs. When flows are above 160 cfs, average Chlorophyll <u>a</u> concentration would approach 15 ug/l
70 ug/l	Chlorophyll <u>a</u> concentrations below 15 ug/l at all current flow conditions.
50 ug/l	Chlorophyll <u>a</u> concentrations below 15 ug/l at all flow conditions. (CH2M-Hill's conversion to total phosphorus).

The Tualatin in 1987 had a mean summer (May - October) flow of 168 cfs, and a minimum weekly average flow of 80 cfs. Based on a comparison of flows at Farmington, these flows represent the lowest flow conditions for the past ten years. The phosphorus criteria must be set to limit algal growth at current flow conditions.

Lake Oswego:

The intent of the Tualatin project was to establish TMDLs to address water quality problems in the lower Tualatin River. As part of the study, the Department cooperated in the Lake Oswego Lake and Watershed Assessment conducted by Scientific Resources Inc. The purpose of the assessment was to identify and evaluate feasible lake restoration alternatives.

Lake Oswego is currently an intensively managed lake. The lake is connected to the Tualatin River by a canal. Water is withdrawn from the Tualatin for the purpose of power generation, except for small withdrawals for irrigation and reservoirs maintenance. Approximately 85% of Lake Oswego water comes from the Tualatin River.

The Lake Oswego Corporation controls access to the Lake Oswego through easements, shareholder agreements, and boat registration. The Corporation

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provides for public access to the lake at the Lake Grove swim center and the City of Lake Oswego swim center.

For the past 40 years, copper, as CuSO_4 , has been applied to Lake Oswego to control algal growth. Without this treatment, and during periods of no treatment, Lake Oswego is hyper-eutrophic, having excessive nuisance algal growths.

Several management options for controlling algal growth in Lake Oswego have been reviewed based on the widely accepted empirical Vollenweider model. This is the method suggested by EPA. Results of the analysis from Scientific Resources Inc. (SRI) are listed in Table 6.

Table 6
Predicted Water Quality Conditions in Lake Oswego
for Various Management Strategies

<u>Phosphorus Criteria and Management Strategy</u>	<u>Expected Conditions</u>
Annual limit of 100 ug/l. Continued water diversion at existing levels	Moderate algal growth conditions. Major target conditions achieved for Lake Oswego.
Summer limits of 50 - 100 ug/l total phosphorus with continued water diversion	Excessive algal growth.
Summer limits below 80 - 90 ug/l. Limited water diversion for lake maintenance and irrigation (6.36 cfs)	Moderate algal growth. Target conditions for lake water quality achieved.
February through March 50 - 25 ug/l. Continued water withdrawals	Reduction in the level of algal growth, still excessive. Possible reduction in copper applications due to overall reduction in algal growth.

From the technical analysis conducted to date, it is not possible to establish an annual TMDL which would prevent nuisance algal growth in Lake Oswego. The required criteria of 10 ug/l is below the observed phosphorus concentrations at Cherry Grove, in the upper watershed. It is possible to establish phosphorus criteria which assure options are available to Lake

Oswego to manage for water quality objectives. A seasonal limit of below 80 ug/l would provide Lake Oswego the opportunity to manage for water quality.

Phosphorus criteria initiated earlier in the year would allow Lake Oswego to reduce overall algal growth resulting from refilling the lake after winter draw down. Winter draw down allows Lake Oswego to control nuisance macrophyte growth.

Public Hearing Summary of Major Comments:

1. Clean The River

Several commenters did not propose a specific phosphorus criteria or policy, rather they stated that the Tualatin needs to be cleaned up. These commenters felt that the Department needed to establish criteria that will restore the Tualatin River to its original condition.

From personal histories, several individuals noted that many beneficial uses were not being fully supported in the Tualatin River. Uses not being supported include fishing, and contact recreation as well as aesthetics and aquatic life. This concern is described in testimony from Jim Gilbert and Larry Everson, and was supported by the Tualatin River Watch, a group of concerned citizens.

Department's Response:

The Department initiated a study in 1986 to evaluate the water quality and pollution sources in the Tualatin River. Beneficial uses not supported were identified as aesthetics and aquatic life. Phosphorus and ammonia have been identified as key parameters affecting the beneficial uses. The Department feels that criteria on these parameters, and development of strategies for both point and nonpoint pollution controls are necessary to protect the beneficial uses of the Tualatin River.

2. Permanent Solution:

Several commenters felt that a permanent solution should be developed for the Tualatin River. A comprehensive management plan needs to be developed that prevents short sighted conclusions.

Department's Response:

The Department agrees that a long-term water quality management plan needs to be developed for the Tualatin River. The establishment of TMDLs, WLAs, and LAs identifies key concerns and establishes water quality goals for the Basin. These goals will be used by the

Department, the designated lead agency for nonpoint sources, and the Unified Sewerage Agency to develop long term plans and compliance schedules for the basin.

3. Phosphorus Criteria:

a. Lower Phosphorus Limit of 50 ug/l.

A group of responses supported a lower phosphorus concentration than the proposed 100 ug/l. Three commenters supported the proposed level. An alternative strategy was proposed by CH2M-Hill and supported by USA, Washington County, and one individual.

Lower phosphorus suggestions were based on the assumption that 50 ug/l is an EPA recommended value for rivers discharging to a lake, by an assessment the algal assay result indicating a 90% reduction in algal growth at 50 ug/l total phosphorus, and an interpretation of CH2M-Hill's model.

Responses supporting the 100 ug/l criteria based their assessment on a perceivable change in water quality in the Tualatin River. Other commenters felt a 100 ug/l criteria would protect the beneficial uses of the river and provide more management opportunities.

Department's Response:

The stated goals of the project are to achieve a summer chlorophyll a concentration of 15 ug/l in the lower Tualatin River and to provide opportunities to Lake Oswego control nuisance algal growth. The Department agrees that a lower phosphorus criteria level is required to assure that these goals are achieved. Based on a review of algal assays, comparative basins, site specific models, and the Lake Oswego Restoration Analysis, the stated objectives can be achieved with a 70 ug/l phosphorus TMDL.

The 50 ug/l is not a standard defined by EPA, EPA suggests using site specific data where available. Load limits for Lake Oswego are based on the widely accepted Vollenweider method as suggested by EPA. Phosphorus limits for the Tualatin River are based on a technical analysis using site specific information.

As discussed previously, the algal assays can not be interpreted to suggest that reductions observed under laboratory controlled conditions will occur in the field. This basic fact is discussed by DEQ in the assessment report. Results should be interpreted as a reduction in algal growth potential.

Both EPA and NEDC cite the results of CH2M-Hill's modelling as site specific analysis indicating a need for a lower phosphorus concentration than proposed. The model predicts a concentration of 70 ug/l is required to prevent algal growth at currently existing flows in the Tualatin River. Algal assays predict a 60 - 65% reduction in algal growth potential resulting in noticeable improvements to water quality in the lower Tualatin River. A 70 ug/l phosphorus concentration would also allow Lake Oswego to meet its major target conditions for water quality. The Department, therefore, changes the originally proposed phosphorus criteria of 100 ug/l and proposes a 70 ug/l criteria for total phosphorus.

b. Alternative Criteria:

USA Proposed TMDLs for Various Flows of the Tualatin River:

The limits proposed under the Individual Control Strategy (ICS) suggested by USA, CH2M-Hill, and Washington County, are in Table 7.

Table 7
Tualatin River ICS

<u>Flow CFS</u>	<u>Load Phosphorus Pounds per Day</u>	<u>Predicted TP at Elsner</u>	(CH2M-Hill) Estimated Average <u>Chlorophyll a</u>
70 or less	19	50 ug/l	15
100	38	70 ug/l	20
125	61	90 ug/l	30
150	117	145 ug/l	35
165 or greater	216	250 ug/l	35
(Median Conditions, Tualatin River at Elsner, Low Flow Conditions 1987)			
168	218	240 ug/l	35
(Median conditions, Tualatin River at Elsner for the Time Period Modeled)			
174	225	240 ug/l	38

ICS with Assumed Nitrogen Limitation:

Wetlands have been extensively discussed by the advisory committees to the Tualatin study. USA and CH2M-Hill, in reviewing the nitrification-biological phosphorus removal-wetlands polishing option, have suggested that nitrogen limitation would control algal growth in the lower river following this process. Nitrogen limitation would result in less algal growth than predicted by the phosphorus concentrations used on the ICS review. Based on this conclusion, USA suggests that the Department accept the ICS.

CH2M-Hill provided modeling results to estimate water quality conditions following the nitrification-biological nutrient removal-wetlands polishing wastewater treatment option. These results were run for flow at Farmington in excess of 165 cfs. Their model results are in Table 8.

Table 8
Predicted Water Quality Following USA's Proposed
Nitrification-Biological Nutrient Removal-Wetland Polishing Option

	Run No. 1		Run No. 2	
	<u>Elsner</u>	<u>Stafford</u>	<u>Elsner</u>	<u>Stafford</u>
Ortho P (mg/l)	0.43	0.045	0.031	0.036
Total P (mg/l)	0.12-0.11	0.13-0.11	0.10-0.09	0.11-0.10
Chlorophyll <u>a</u> (ug/l)	13	19	11	15

Department's Response:

The proposed ICS fails to achieve the major objectives of a noticeable change in water quality throughout the lower Tualatin River, a summer average 15 ug/l chlorophyll a, or provide management options for Lake Oswego.

There is a definite relationship between flow and phosphorus concentration in the Tualatin River. The alternative of varying phosphorus concentration with flow conditions to achieve a specified chlorophyll a concentration has some merit. However, no technical justification has been presented for increasing the chlorophyll a target concentration.

The ICS with assumed nitrogen estimates the algal growth in the Tualatin River following a management alternative of nitrification-biological phosphorus removal-wetlands polishing.

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The control option of nitrification-biological phosphorus removal-wetlands polishing is certainly an option that needs to be evaluated as a management option for the Tualatin point sources. However, prior to selecting any option, there needs to be a full review of all available options. All available options have not been defined. A full review of any single option has not been completed. Definition and review of management options will be a component of the compliance schedule for USA.

There are several concerns with the proposed management plan. Prior to final review, the wetlands treatment assumptions need to be verified with site specific pilot projects. Available data indicates that the Jackson Bottoms wetlands may be providing phosphorus to the Tualatin River. Location of potential wetlands needs to be further assessed. Assumptions on nitrogen limitation need to be further reviewed.

CH2M-Hill concludes that nitrogen limitation would not result in a shift to blue-green algae. This conclusion is based on the following statements:

"Many waters in Western Oregon are nitrogen limited and blue-green algae are not common. Blue-greens are associated with the harder eastern Oregon waters.

"We have had a nitrogen limitation since 1980 and have not seen a shift to blue-green algae.

"Blue-green algae are often associated with ammonia as the limiting nutrient.

"Blue-greens generally require molybdenum when nitrogen is limiting. Molybdenum may be a limiting micro-nutrient."

Although, at times, nitrogen is in the lowest proportion of the macro-nutrients, it is not limiting. A shift to nitrogen fixation would only be expected when the available supply is exhausted. This does not occur in the Tualatin. CH2M-Hill suggests that blue-green algae are associated with ammonia limitation, and there is abundant ammonia in the Tualatin. It should also be noted that ammonia is one of the parameters to be limited in the Tualatin River.

The theoretical nitrogen to phosphorus ratio varies between systems and by algae species. An error of greater than 50% can be

expected if chemical analysis is used to assess the limiting nutrient (Rasch R.L. and Schultz D.A., 1987). The average nitrogen to phosphorus ratio cited by CH2M-Hill is within the range considered in nutrient balance by EPA. EPA states that if the ratio of nitrogen to phosphorus is greater than 12:1, phosphorus is considered the limiting nutrient; if the ratio is less than 5:1, then nitrogen is considered the limiting nutrient (USEPA 1983).

Blue-green algae do occur in the Tualatin Basin. When copper applications to Lake Oswego are stopped, blooms of blue-green algae appear in Lake Oswego. Data suggests that the copper additions prevent earlier growths. Although micro-nutrient limitation is suggested by CH2M-Hill, no data presented that would indicate that molybdenum would be limiting for the Tualatin River. The Tualatin River receives significant wastewater discharge and can not be considered a typical western Oregon stream. Research conducted in several streams in Oregon showed that Willamette Valley streams have similar chemical characteristics, and that these characteristics are different than other streams in western Oregon.

No site specific data has been provided which would justify selecting a phosphorus limit at concentrations above which phosphorus prevents nuisance algal growth. Additionally, the higher phosphorus values proposed by CH2M-Hill would limit opportunities for Lake Oswego to attain water quality goals. The Department concludes that a total phosphorus criteria of 70 ug/l provides greater assurance of attaining water quality standards than the ICS plan proposed by CH2M-Hill.

c. Timing of the Phosphorus Limit:

J. D. Smith and Larry Everson suggested a year-round phosphorus criteria. Larry Everson suggests that background concentrations be measured in the Tualatin River above the City of Gaston. Year-round phosphorus limits were suggested to protect the Fisheries resource in the Tualatin. The Lake Oswego Corporation suggested initiating phosphorus limits as early as February to help improve water quality in Lake Oswego. EPA requested a review the justification for the phosphorus time period.

Department's Response:

Year-around limits are proposed by NEDC to prevent potential toxic problems. Larry Everson suggests that phosphorus acts as a surrogate for many toxins. Limiting phosphorus year-round may

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then limit toxins year-round. No data is presented to indicate a toxic concern in the Tualatin River associated with phosphorus discharge. The respondents did not cite literature to support their contention of phosphorus as a surrogate for toxic concerns. No technical support is provided which describes the need to limit phosphorus year-round to prevent undescribed toxic concerns.

A nonpoint source pollution control program needs to be established in the Tualatin Basin. The necessary guidelines for this program will be established by the Department and the appropriate lead agency(ies) for nonpoint source control. However, the proposed phosphorus TMDL is designed to address currently defined water quality problems in the Tualatin Basin. Phosphorus criteria initiated earlier in the year than proposed would benefit Lake Oswego. The water in Lake Oswego is replaced every three to four months. Water entering the lake preceding the summer provides most of the nutrients available during the growing season. Phosphorus limits during February to May would greatly reduce the nutrient supply in Lake Oswego available for algal growth. However, nutrient concentrations would still be adequate to result in high algal growth conditions.

Primary advantages to Lake Oswego of an earlier phosphorus limit are based on the assumption of lower cost to achieve a target level of water quality in the lake. The other primary advantage is that Lake Oswego would be able to maintain power generation during the spring. Alternative options to achieving water quality goals would require not withdrawing water for power generation.

Spring phosphorus removal needs to be evaluated as a control option by USA. Historically, the lowest concentrations in the lower Tualatin River occur in April. Concentration of phosphorus upstream of the major point sources reach their lowest concentrations in April/May. The Lake Corporation needs to establish options for water intake in April/May. USA and the Lake Corporation need to develop a management plan for phosphorus removal to coincide with options for filling Lake Oswego. The goal of this plan is to achieve as early as possible phosphorus reduction the Tualatin River. USA's compliance schedule will include establishing a spring phosphorus removal strategies.

Winter phosphorus limits would not help reduce algal growth in the Tualatin River. During the winter, physical conditions of high flows, cold temperatures, and low light intensity, limit the growth of algae in the Tualatin River. The phosphorus TMDL is required when these factors may not limit algal growth.

For the Tualatin River, the historical growth period is from June through August. The intensive data collection during the low flow conditions in 1987 shows that algal growth can exceed the 15 ug/l chlorophyll a action level through October. Historical temperature data which indicates maximum temperature may not limit algal growth between May and October. Similarly, historical data indicates that minimum stream flow may not limit algal growth between May and November. The Department agrees that the phosphorus limit needs to be expanded. The proposed time period for phosphorus TMDL is May 1 through October 31.

d. LA, WLA and TMDL:

Many commenters felt that nonpoint sources were neglected in the proposed rule. Although further refinement is required, commenters felt that establishing phosphorus and ammonia criteria on the major basins is an appropriate strategy for initiating a nonpoint source plan. Comments suggested that WLAs need to be attributed to all point sources whether permitted or not. Sewage overflows, container nurseries, and stormwater discharge pipes were specifically mentioned as requiring WLAs.

Department's Response:

The Department agrees that establishing goals and objectives for nonpoint source controls is necessary. Although the process for establishing the criteria was described in the proposed rule, further refinement is warranted. Establishing phosphorus and ammonia criteria for the major tributaries is an appropriate place to start.

Tributary target concentrations are equal to the proposed mainstem concentrations at the point where the tributary enters the mainstem Tualatin. Similar to the mainstem limits, the tributary limits vary with flow in the tributary.

To estimate the instream concentrations by mainstem reach, the known and unexplained sources of phosphorus were removed from the existing loads by mass balance. Tributary loads to the mainstem were estimated using the proposed concentrations and existing typical summer flows.

Table 9
LA by Tributary and Mainstem Reach

<u>Mainstem</u>	<u>(ug/l)</u>	<u>Tributaries</u>	<u>(ug/l)</u>
Upper River	20	Scoggins Cr.	60
Dilley	40	Gales Cr.	45
Golf Course Rd.	45	Dairy Cr.	45
Rood Rd.	50	McKay Cr.	45
Farmington	70	Rock Cr.	70
Elsner	70	Fanno Cr.	70
Stafford	70	Chicken Cr.	70

All allocations are presented in ug/l. Tributary load allocations can be converted to pounds per day by multiplying the instream criteria by flow in the tributary in cfs and by the conversion factor of 0.00538. Load allocations for existing or future nonpoint sources to the mainstem Tualatin River not allocated in a tributary load allocation, may be calculated as the difference between the mass (criteria multiplied by flow) leaving a segment minus the mass entering the segment (criteria multiplied by flow) from all sources plus instream assimilation.

For the major point source at Rock Creek, the WLA can be calculated by subtracting the load above the point of discharge (Rood Road) plus the load allocation for the Rock Creek tributary drainage from the load below the discharge (Farmington). Table 10 demonstrates the calculation of the WLA when RCWTP is discharging at 20 cfs and flow in Rock Creek is 10 cfs. The WLA includes all discharges into public water including bypasses and overflows.

Table 10
Phosphorus WLA Calculation

<u>Flow at Farmington cfs</u>	<u>Load at Farmington Lbs/Day</u>	<u>Flow at Rood Rd. cfs</u>	<u>Load at Rood Rd. Lbs/Day</u>	<u>Load at Rock Creek at 10 cfs Lbs/Day</u>	<u>WLA RCWTP 20 cfs Lbs/Day</u>
50	19	20	5	4	10
60	23	30	8	4	11
70	26	40	11	4	12
80	30	50	13	4	13
90	34	60	16	4	14
100	38	70	19	4	15
110	41	80	22	4	16
120	45	90	24	4	17
130	49	100	27	4	18
140	53	110	30	4	19
150	56	120	32	4	20
160	60	130	35	4	21
170	64	140	38	4	22
180	68	150	40	4	23
190	72	160	43	4	24
200	75	170	46	4	25

As planning guidelines, the criteria and, therefore, the loads, may change as management plans are reviewed. Technical justification for an alternative target concentration may be provided based on flow augmentation resulting in dilution of upstream concentrations, refined values based on the Department's planning/monitoring requirements to refine NPS IAs by appropriate stream sections, or adjustments to the WLA based on instream assimilation or mixing zone studies.

Table 11 lists potential IAs based on existing instream concentrations above where known point sources exist, and existing tributary concentrations. Background and nonpoint source loads currently fulfill the proposed instream phosphorus criteria. For RCWTP to discharge, the effluent concentration would have to be equal to or below the ambient phosphorus criteria.

Table 11
LA by Tributary and Mainstem Reach

<u>Mainstem (ug/l)</u>	<u>Tributaries (ug/l)</u>
Upper River 20	Scoggins Cr. 60
Dilley 40	Gales Cr. 75
Golf Course Rd. 45	Dairy Cr. 120
Rood Rd. 70	McKay Cr. 180
Farmington 70	Rock Cr. 320
Elsner 70	Fanno Cr. 200
Stafford 70	

Knowing the tributary flow, the effect of alternative criteria can be presented. See Table 12.

Table 12
Tributary Load Reduction

<u>Tributary (cfs)</u>	<u>Difference in Load Between Alternatives Reviewed</u>
Dairy (20 cfs) (Includes McKay)	8.5 lbs/d
Rock Cr (10 cfs) (Includes Beaverton)	13.5 lbs/d
Fanno Cr. (3 cfs)	3.0 lbs/d

The allocations presented in Table 9 provide a equitable distribution of the efforts to achieve the phosphorus criteria in the Tualatin Basin. The allocations are the Department's estimate of the reductions required to achieve the TMDL. The LAs are based on an assessment of existing conditions. However, the Department has not assessed the potential of achieving these goals.

The allocations presented in Table 11 assume no nonpoint source control efforts. This assumption has obvious effects on the WLA provided to USA. The Department acknowledges the need to include nonpoint source controls as a component of the management plan for the Tualatin River. The proposed LAs are those listed in Table 9.

A TMDL based on 70 ug/l provides an appropriate margin of safety. All analysis indicate that this concentration will: result in a trophic level change in algal growth conditions, achieve the algal growth in the range of 15 ug/l chlorophyll a at existing flow

conditions, and result in a decrease in algal growth that is noticeable to the general public.

Load allocations are planning guidelines. Permit conditions for USA require that sewage bypassing be prevented. Therefore, the WLA for sewage bypass has already been defined as zero. The Department is currently conducting studies to determine pollution loads originating from container nurseries. Results of these investigations will be included as WLA in the Tualatin following the study and assessment of management options by the Department and the technical advisory committee to the project. Stormwater quality goals and guidelines are to be developed as part of the compliance schedule for nonpoint source agencies. As appropriate these guidelines will be included in the TMDL planning guidelines for the Tualatin Basin.

4. Ammonia Criteria:

a. Toxicity

Three commenters felt that prior to establishing ammonia limits, problems with ammonia toxicity need to be reviewed. Limits should be based on the strictest possible limit to provide adequate oxygen concentration or prevent ammonia toxicity to cold water fish.

Department's Response:

The Department agrees that the limit should be the strictest limits for ammonia which provide adequate oxygen concentration and prevent ammonia toxicity.

Ammonia exists in two basic forms, the ammonium ion and un-ionized ammonia. The principle toxic form is the un-ionized ammonia. The degree of toxicity depends primarily on the concentration of ammonia, the pH, and stream temperature.

Current levels of ammonia in the Tualatin River at Farmington routinely exceed the EPA 4-day average toxicity criteria level during summer low flow conditions. The 4-day average ammonia toxicity criteria is occasionally exceeded in the lower Tualatin River at Elsner and Tualatin during summer low flow conditions. One hour maximum ammonia toxicity values are not exceeded in the Tualatin River.

The primary source of ammonia in the Tualatin Basin is RCWTP. Below RCWTP ammonia is rapidly converted to nitrate. The highest

concentrations, and the greatest exceedance of the EPA criteria, occur below the RCWTP as measured at Farmington. The critical site for establishing an ammonia standard is below the RCWTP at Farmington.

Based on the maximum temperature observed at Farmington (22° C) and the maximum pH (7.5), the 1.0 mg/l (1000 ug/l) ammonia standard would maintain maximum ammonia concentrations below the EPA 4-day average criteria value in the Tualatin River. Ammonia levels required to achieve the dissolved oxygen standard are restrictive enough to prevent chronic toxicity levels of ammonia.

b. Ammonia Time Frame:

EPA suggested that a longer time period is required to prevent dissolved oxygen violations. The suggested time frame occurs earlier in the spring and later in the fall. Larry Everson, suggested year-round standards to address ammonia toxicity concerns.

Department's Response:

The Department agrees that a longer time frame is required to prevent dissolved oxygen violations and eliminate concerns with ammonia toxicity. Historical data shows that dissolved oxygen violations occur from early June through mid-November. Ammonia concentrations routinely exceed EPA 4-day average toxicity criteria at Farmington from June through October. Ammonia concentrations occasionally exceed EPA 4-day average toxicity criteria in November. The ammonia criteria is to be expanded to include May 1 through November 15.

The Department's objective is to establish guidelines, through OAR, which address existing problems in the Tualatin River Basin. Defined water quality problems associated with ammonia are low dissolved oxygen and chronic ammonia toxicity. Both problems occur during low flow conditions. The Department is not aware of ammonia toxicity concerns in the Tualatin River, or tributaries, during winter high flow conditions. Data indicates that ammonia concentrations are well below EPA recommended criteria during winter high flow conditions.

As stated, the Department sees TMDLs as tools to achieving water quality standards where existing rules and regulations fail to attain water quality objectives. Toxic levels of ammonia are prevented according to OAR 340-41-445 (2)(o)(B). Levels of toxic substances shall not exceed the most recent criteria values for

organic and inorganic pollutants established by EPA and published in Quality Criteria for Water (1986). The Department intends that these levels apply to all Tualatin tributaries.

c. **TMDL, LA and WLA by Tributary and River Reach:**

Concerns regarding the refinement of ammonia criteria by sub-basin were related to ammonia toxicity concerns. The Department feels that a refinement of the ammonia load allocations is appropriate and these allocations are presented for segments of the mainstem and specific tributaries to the Tualatin in Table 13.

Table 13
LA by Tributary and Mainstem Reach

<u>Mainstem (Ug/l)</u>		<u>Tributaries (Ug/l)</u>	
Upper River	30	Scoggins Cr.	30
Dilley	30	Gales Cr.	40
Golf Course Rd.	40	Dairy Cr.	40
Rood Rd.	50	McKay Cr.	40
Farmington	1000	Rock Cr.	100
Elsner	850	Fanno Cr.	100
Stafford	850		

All allocations are presented in ug/l. Limits are based on existing concentrations at standard DEQ sampling locations. LA criteria apply at the mouth of the tributary. The daily load can be converted to pounds per day by multiplying the target concentration by the flow in cubic feet per second and again by the conversion factor 0.00538.

The proposed criteria are lower at Elsner and Stafford than the criteria at Farmington to prevent chronic ammonia toxicity levels from being exceeded. Lower levels are necessary due to warmer water temperatures that occur in this section of the river. The rapid conversion of ammonia to nitrate in the river will prevent chronic levels of ammonia at Elsner if the load allocation at Farmington is reached.

The ammonia WLA for the major point source at Rock Creek can be calculated by subtracting the load above the point of discharge (Rood Road) plus the load allocation from the Rock Creek tributary basin from the load below the discharge (Farmington). Table 14 provides an example of the ammonia WLA when RCWTP is discharging at 20 cfs and the flow in Rock Creek is 10 cfs.

Table 14
Ammonia WLA Calculation

<u>Flow at Farmington cfs</u>	<u>Load at Farmington Lbs/Day</u>	<u>Flow at Rood Rd. cfs</u>	<u>Load at Rood Rd. Lbs/Day</u>	<u>Load at Rock Creek at 10 cfs Lbs/Day</u>	<u>WLA RCWTP 20 cfs Lbs/Day</u>
50	269	20	5	4	258
60	323	30	8	4	309
70	377	40	11	4	360
80	430	50	13	4	412
90	484	60	16	4	463
100	538	70	19	4	514
110	592	80	22	4	565
120	646	90	24	4	616
130	699	100	27	4	667
140	753	110	30	4	718
150	807	120	32	4	769
160	861	130	35	4	820
170	915	140	38	4	872
180	968	150	40	4	923
190	1022	160	43	4	974
200	1076	170	46	4	1025

As planning guidelines, the target criteria and, therefore, the loads, may change as management plans are reviewed. Reasons for change may include technical justification for an alternative value, flow augmentation resulting in dilution of upstream concentrations, refined values based on the Department's planning/monitoring requirements to refine NPS IAs by appropriate stream sections, or technical justification for an alternative target water quality condition.

A TMDL based on the proposed 1.00 mg/l (1000 ug/l) of ammonia provides an appropriate margin of safety. All analysis indicate that this concentration will prevent substandard oxygen concentration and prevent chronic levels of ammonia toxicity in the Tualatin River below Farmington.

5. **Nonpoint Source Control:**

a. **NPS Controls Needed**

Several commenters noted that nonpoint source controls are a necessary component of management strategies to protect the

description of the elements that they felt should be included in a nonpoint source management plan. One Thousand Friends of Oregon felt that a link needs to be established between land use planning and water quality planning in the Tualatin Basin. Several individuals felt that the Department needs to designate a lead agency for developing nonpoint source pollution control plans in the basin. Washington County was suggested as an appropriate agency.

Total Phosphorus and Total Suspended Solids were suggested as surrogates for numerous other chemical parameters entering the environment from nonpoint sources. NEDC suggested establishing a TMDL for Total Suspended Solids.

Department's Response:

The Department agrees that additional emphasis and guidance needs to be given the nonpoint source program. Therefore, specific requirements for urban stormwater runoff and agricultural discharges have been added to the rules. Washington and Clackamas Counties and the incorporated cities of these counties within the Tualatin Basin have been charged with the responsibility of developing plans within specific time frames for urban stormwater runoff. These plans are to address existing problems and will as contain provisions for preventing future problems.

The final proposed rule also contains requirements for Washington and Clackamas Counties to designate an agency responsible for agriculture nonpoint sources within their county in the Tualatin Basin. Specific time periods are established for completing these designations and conducting subsequent reviews and approvals by the EQC.

The Department agrees that IAs for the major tributary basins are appropriate and these have been established in sections (a) and (c) of the proposed rule.

b. Tributary Load Allocation:

Several commenters felt that load allocations for the major tributary basins need to be defined.

Department's Response:

The Department agrees that tributary load allocations provide an appropriate method for establishing guidelines for water quality

in tributary streams. The allocations are discussed under the phosphorus and ammonia concerns.

6. Compliance Schedule:

Several commenters noted the need to further define a compliance schedule in the proposed rules.

Department's Response:

After review of the public testimony, the Department agrees that further clarification of compliance schedules, for both point and nonpoint sources, is necessary. The Department's requirements need to be stated to assure that steady progress is made towards addressing water quality problems in the Tualatin Basin. The proposed rule is modified to reflect these requirements.

The Department believes that 90 days is an adequate time period for USA to develop and submit to the Department for approval, a plan and schedule of how USA will comply with the proposed rule.

Nonpoint source compliance schedules will be addressed by Washington County, Clackamas County, incorporated cities, and designated lead agencies. The Department believes that one year is adequate time for the counties and cities to develop plans and time schedules for controlling the quality of stormwater discharged to public water in the Tualatin Basin. This plan needs to provide an inventory of sewage bypass locations and describe a process for complying with the proposed rule.

The Counties, subject to Commission approval, will designate a lead agency to be responsible for the control of nonpoint source pollution outside of the urban growth boundaries. The Department believes that 90 days is sufficient time for the county to designate a lead agency. The Department also believes that 180 days is sufficient time to develop and submit a plan and time schedule for achieving the goals of the proposed rule.

Hearings will be held to obtain public input on all proposed plans. Following these hearing, the Environmental Quality Commission will either accept or reject the submitted plans. Plans will be rejected if the Commission determines that it will not meet the goals of the proposed rule within a reasonable time period. If the plan is rejected, the Commission will specify a compliance schedule for resubmittal of the plan for approval.

8. Cost of Achieving the TMDL

Several commenters felt that the Department has not fully evaluated the costs associated with the proposed TMDLs, or fully evaluated all options, has not proven that a phosphorus limit will result in improved water quality in the Tualatin River, or proven that proposed phosphorus levels are attainable.

Department's Response:

The establishment of the limits to protect the beneficial uses of the Tualatin River Basin is a technical issue. Criteria are set to achieve defined water quality objectives and are based on the best available technical information. Once these criteria have been determined, then options for achieving the TMDLs, WLAs, and LAs, can be evaluated by the appropriate agency. During this evaluation, the costs associated with achieving a defined criteria can be evaluated.

All the technical data collected by the Department or provided by cooperating agencies shows that reducing phosphorus will reduce algal growth in the Tualatin River. Phosphorus control is a commonly accepted method to restore waters suffering from nuisance algal growth. No technical information has been provide that indicates phosphorus control would not limit algal growth in the Tualatin River.

The proposed TMDLs provides a technical assessment of the phosphorus criteria required to limit algal growth at all currently existing flow conditions. A complete assessment of attainability will require that control options be defined and evaluated. This evaluation will occur as part of the compliance schedule developed by USA, the designated nonpoint source agency, and DEQ.

The proposed tributary LAs are based on the concentration of phosphorus expected in the reach of the Tualatin River where they discharge. LAs for the Tualatin River are based on a mass balance of phosphorus in the Tualatin River with existing point and undefined phosphorus loads removed. The Department believes that these LAs provide the best available planning guide for NPS controls. As stated earlier, LAs will refined as needed.

9. Technical Evaluation:

Four commenters described concerns, or provided suggestions for technical analysis.

Department's Response:

Concerns raised regarding technical issues are discussed in the technical evaluation section.

10. Other Concerns:

a. Definition of LC, TMDL, WLA, and LA:

NEDC and USEPA suggested that definitions for the components of the TMDL be those defined by USEPA.

Department's Response:

The Department agrees that the definitions of Loading Capacity (LC), Waste Load Allocation (WLA), Load Allocation (LA) and Total Maximum Daily Load (TMDL) should be consistent with the federal definition. These definitions appear in the background section.

b. Postpone establishing criteria for five years:

Three commenters suggested postponing establishing criteria for phosphorus and ammonia for five years to provide further study. This suggestion also stated that limits should not be imposed without 80% federal or state funds available for necessary improvements.

Department's Response:

The proposed criteria are planning guidelines. As guidelines they establish water quality goals for the basin. Options for achieving water quality criteria have not been fully defined or reviewed. The necessary compliance schedules have not yet been determined for point and nonpoint sources.

USA and the designated nonpoint source agency, under the proposed compliance schedule, must submit to the Department for review and approval planning schedules by December 31, 1988. These schedules will include appropriate time frame for any further study that is needed to assess management options.

c. Treatment Alternatives:

Many commenters suggested wetlands as a treatment alternative for point sources. Others commenters felt that less discharge to the Tualatin will be required.

Department's response:

The proposed criteria are planning guidelines. Treatment alternatives have not been determined, nor has any alternative been fully evaluated. Identification and evaluation of treatment alternatives is a key component of the planning process identified in the proposed compliance schedule. Only when this review has been completed, can the selection process for the appropriate management option be initiated.

d. Phosphorus Detergent Ban is Needed.

Department's Response:

Phosphorus detergent bans have been reviewed by the Department. This review is available upon request. In general, phosphorus detergent bans have not been found to be effective at reducing loads to a river where treatment plants currently treat phosphorus. However, as a management option to reduce influent load to treatment plants, or to reduce nonpoint source loads, a phosphorus detergent ban may be further reviewed. If this assessment indicates a verifiable benefit from a phosphorus detergent ban, the Department would support an appropriate restriction.

e. The Department is not legally required to establish standards under the federally required TMDL process:

The Department agrees that the proposed criteria are better defined as special rules and policies for the Tualatin Basin.

f. The Tualatin River Stinks:

Department's Response:

Although only mentioned by one individual during the hearings, this complaint has been voiced by several citizens during the course of the study. The Department believes that the proposed criteria to eliminate nuisance algal growth will prevent this aesthetic problem. Decay of organic material, such as algae, has been suggested as the primary reason for this problem.

g. Algae does not mean pollution:

Department's Response:

There are very few waters that do not support some algal growth. Since algae are primary producers in the food chain, this is a fortunate fact. The problems occur when algal productivity is increased due to human activities to nuisance levels. These nuisance levels currently occur in the Tualatin River. Beneficial uses of fish and aquatic life, contact recreation, and aesthetics are negatively affected by these nuisance algal growths.

The nuisance phytoplankton growth rules cites an average summer chlorophyll a concentration of 15 ug/l as an indication that nuisance algal growth conditions may exist. No technical information has been provided to indicate that higher levels are acceptable for the Tualatin River. Median chlorophyll a levels in the Tualatin River at Elsner during 1987 were over 35 ug/l. The Department feels that this exceedance is great enough to indicate nuisance algal growth conditions.

h. USA is not working in good faith.

Department's Response:

USA has worked cooperatively with the Department throughout the study design, data collection, data analysis, and public involvement components of the project. The Department believes that this cooperation will continue.

Attachments: (2)

Matrix of Respondents and Concerns
Summary of Written Testimony

Bob Baumgartner:hs/kjc
WH2720
292-5877
June 17, 1988

SUMMARY OF ORAL AND WRITTEN TESTIMONY

The proposed rule went out for public comment, following Commission approval, on March 11, 1985. Three hearings were held in the Tualatin Basin to obtain public input. A total of 94 respondents provided 76 documents of written testimony and 53 respondents provided oral testimony. The remainder of this report summarizes the oral and written testimony received by the Department.

Joseph Abraham, Written Testimony

Mr. Abraham provided his historical view of the Tualatin River, and noted that it is in the best interest of many people that the river be cleaned up.

Eileen Alrore, Written Testimony

Ms. Alrore described swimming and picnicking along the Tualatin River during the 1930's and 1940's. She hopes that the Tualatin, as well as the Molalla and Pudding Rivers, are kept clean.

Brett Arvidson, Oral Testimony, 4/25/88

Mr. Arvidson stated that DEQ has not proven that the proposed phosphorus standard would work and that there has not been a full evaluation of the potential costs. Other concerns that were stated by Mr. Arvidson include: the proposed rule grossly neglects factors other than phosphorus that affect algal growth; nonpoint source controls; and removal of flow in the Tualatin by out-of-basin transport may be more of a problem than nutrient control. Mr. Arvidson felt that just because algae was present did not mean the river was polluted. Mr. Arvidson does not believe the Department has shown that the Tualatin River is water quality limited due to algal growth.

Richard Baranzano, Written Testimony and Oral Testimony, 4/28/88

Citing OAR 340-41-150(2), Mr. Baranzano states that the Environmental Quality Commission must prove that the Tualatin River's true characteristic is devoid of algal growth prior to establishing a phosphorus limit. He feels that the Department must develop a control strategy for attaining compliance that is technologically and economically practicable.

Lloyd Baron, Oral Testimony, 4/25/88

Mr. Baron noted that there are 25 to 26 agencies with some control of water quality or quantity in the Tualatin Basin and suggested that a single agency, the Washington County Commissioners, should be responsible for water control in the basin. There are different costs associated with the level of nutrient control required. Phosphorus is not the only factor which influences algal growth. Because of these concerns, Mr. Baron felt that Washington County should go slow in developing a water quality management plan for the Tualatin Basin.

Beull and Associates, Written Testimony and Oral Testimony, 4/26/88

Dr. Beull encouraged the use of wetlands as a waste treatment alternative in the Tualatin Basin. Dr. Beull provided examples and information on existing wetland treatment systems in California.

Gregg Brown, Oral Testimony, 4/25/88

Mr. Brown questioned the costs estimates provided by the Unified Sewerage Agency and their consultants, CH2M-Hill. Mr. Brown felt the costs were purposefully inflated to suggest that costs associated with water quality control measures were unacceptable.

Carolyn Brown, Written Testimony and Oral Testimony, 4/25/88

Ms. Brown supports the proposed phosphorus controls for the Tualatin River. The lower Tualatin River is not a lake. In more mature streams, such as the Tualatin River, stream configurations tend to have meanders and sluggish flow. Ms. Brown felt that costs and economic impacts should be described. Structural nonpoint source controls should be defined and implemented.

Lolitta Carter, Written and Oral Testimony, 4/25/88

Dr. Carter provided seven reasons why the EQC should postpone establishing a water quality plan for the Tualatin Basin. These reasons are: the proposed phosphorus limit may not work; the algal assays may not be the best technology; the Tualatin Technical Advisory Committee (TAC) was not asked to endorse the proposal; out-of-basin transport may be an option and result in further water quality problems; natural sources of phosphorus may keep levels in the river above the lowest proposed levels; the solution needs to be permanent and include ecological, economic, and social factors as well as be cost effective to reduce the financial cost to the citizenry; and the Washington County Board of Commissioners should be the agency to solve the problem, not DEQ.

Consulting Engineers Council Oregon (CECO), Written Testimony

The CECO took exception to suggestions that CH2M-Hill provided invalid cost estimates. Cost estimates are a professional service provided by registered engineers. They carry the same professionalism as design drawings.

CH2M-Hill, Written Testimony and Oral Testimony, 4/25/88

CH2M-Hill provided results of their modelling efforts for the Unified Sewerage Agency and proposed an "Individual Control Strategy (ICS) for the Tualatin River". The strategy proposed by CH2M-Hill is based on their analysis of the Tualatin data. From this analysis, CH2M-Hill concludes that many factors interact to control algal growth in the Tualatin River. The major factors include weather, residence time, phosphorus, and nitrogen. The Tualatin River ICS incorporates the interactions between flow and nutrient concentration to limit algal growth.

CH2M-Hill bases the justification for the proposed ICS on Environmental Protection Agency guidance for phosphorus control which states that there are natural conditions that would dictate the consideration of either a more or less stringent phosphorus level. CH2M-Hill responds to all seven specific conditions cited by EPA justifying an alternative standard. In summary, their results indicate that natural phenomenon may currently be limiting algal growth in the lower Tualatin River. Cost effective measures, based on the ICS, may help control introduced pollutants. Phosphorus control may not be sufficiently effective under present technology to make phosphorus the limiting nutrient. Under the ICS, total nitrogen may be the limiting nutrient.

CH2M-Hill also provides a review of biological nutrient removal with wetland polishing. Their analysis suggests that under this strategy total inorganic nitrogen will be the limiting nutrient. They do not believe that a control strategy based on nitrogen limitation will result in a shift to blue-green algal forms which can fix atmospheric nitrogen. The reason stated is that there has been a nitrogen limitation since at least 1980 (interaction). There has been no indication of a switch to blue-green algae; they have not been the dominant form in the late summer in these years. Nitrogen limited waters are common in western Oregon and Washington. Blue-green algae are relatively uncommon. Blue-greens generally require molybdenum when nitrate or nitrogen gas is the nitrogen source. Molybdenum is often the limiting nutrient (micro-nutrient) for western Oregon waters.

CH2M-Hill believe that site specific limitations were better addressed by their empirical analysis and modelling than by the Department's algal assay and comparison of data with other streams. They also noted that EPA criteria should be used as guidance values and not limits, when site specific information is available.

John R. Churchill, Written Testimony and Oral Testimony, 4/25/88 and 4/27/88

Mr. Churchill refers to EPA guidelines and states that the burden of proof for deviating from these guidelines is on the regulator. Mr. Churchill believes that the Department's data and CH2M-Hill's model results show 0.05 mg/l of phosphorus to be the appropriate limit for establishing a water quality control plan in the Tualatin Basin. Mr. Churchill believes that 0.05 mg/l will be easier to attain than a 0.10 mg/l concentration since it will require restrictions from all point and nonpoint sources which would eliminate competition for load allocations.

A specific nonpoint source management program needs to be part of the water quality management plan. This program should include load allocations for each sub-basin, identification of all point sources and appropriate waste load allocations. A schedule of attainment must be part of the plan as well as a schedule for refining load allocations to nonpoint sources. He cited container nurseries as an industry in need of waste load allocations. The Department also needs to separate background sources from nonpoint sources in their load allocations and commit to a monitoring program.

Mr. Churchill questions why Lake Oswego is not discussed in the proposed water quality management plan. Mr. Churchill states that limits to protect water quality in Lake Oswego are required by the consent decree and by the Clean Water Act.

Clackamas County, Written Testimony

The Clackamas County Commission emphasizes that a clean Tualatin River is vital to the economic and environmental well being of Clackamas County. The degraded river limits the beneficial use of the river as well as threatens property values of communities in the lower Tualatin Valley. Clackamas County concurs with the establishment of phosphorus limits of 0.025 mg/l for Lake Oswego and 0.05 mg/l for the lower Tualatin River. Clackamas County strongly recommends extending the period for phosphorus limitation from the proposed June to September to March to September the time period of TMDLs. An intensive nonpoint source program is also suggested.

Joyce Cohen, State Senator District 13, Written Testimony

Ms. Cohen states that it is important to act without delay to restore water quality to the Tualatin River and Lake Oswego. Standards should be set as stringently as possible. Comprehensive water quality management plans should include nonpoint source control.

Cornelius, City of, Written Testimony

The City does not wish to take a position at this time but wishes to reserve the right to comment at a later stage in the process should the need arise.

Billie Cottingham, Written Testimony

"We need a strong program to clean up the Tualatin River and let's do it now."

Robert Couch, Written Testimony

Referring to the cleanup of Vancouver Lake, which greatly improved water quality and recreational opportunities, Mr. Couch urges adoption of a 0.05 mg/l target level for total phosphorus. He states that 5 years is a reasonable time frame for compliance.

Andre Cyminski, Oral Testimony, 4/25/88

The Tualatin River used to be a trophy bass fishery. The river is not used for swimming simply because it is too polluted. A phosphorus standard based on 0.05 mg/l is needed to result in a clean river.

Victor Duran, Written Testimony

Mr. Duran would like to see the Tualatin cleaned up; therefore, he is in favor of the strict (0.05 mg/l phosphorus) limit.

Walter A. Durham, Written and Oral Testimony, 4/27/88

Mr. Durham provided a personal account of the history of the Tualatin River. It is his belief that phosphorus can be reduced to 0.05 mg/l in the Tualatin River. Nonpoint source controls and protection of the water table should be included in a comprehensive water quality management plan for the Tualatin Basin. The Department needs to convince the citizens of the Tualatin Basin that they are capable of cleaning up the Tualatin Basin.

Mrs. Robert Eastman, Written Testimony

Mrs. Eastman provided her historical views and perspective of problems in the Tualatin River. She notes that the fish they sometimes catch look diseased and wonders if it is possible that interested citizens can exercise enough power to stop industrialists, developers, and polluters from abusing a once exceptional river.

Rodger Ellingson, Written Testimony

Mr. Ellingson believes a strong numerical limit for phosphorus is needed to protect the Tualatin River. A narrative standard would not be enforceable. A 0.05 mg/l phosphorus standard could be achieved through improved forest practices, wetland conservation, wetland treatment, and education. Mr. Ellingson states that it has not been proved that the 0.05 mg/l level in the lower river could not be met within five years by using passive ecological treatment.

Connie Emmons, Oral Testimony, 4/27/88

The Tualatin is not fishable or swimmable as required by the federal Clean Water Act. The citizens of the Tualatin River Basin deserve a long-term goal of clean water in the Tualatin Basin. The DEQ has shown an inability to deal with the problem.

Coustaue Emmons, Written Testimony

Regulations protecting the Tualatin River have been sloppy. The river is not fishable or swimmable. The Department needs to be involved in regulating growth to protect water quality. A long-term plan is needed to protect the Tualatin River for future generations.

David Erickson, Written Testimony

Mr. Erickson feels the Department should be very aggressive on controlling the pollution in the Tualatin River. A 0.05 mg/l phosphorus level is still too high, but it is a good first step.

Larry Everson, Written and Oral Testimony, 4/27/88

Mr. Everson focused his comments on points relating to the fishery resources of the Tualatin Basin. The phosphorus concentration has been shown to affect aquatic life through its effect on algal growth. The phosphorus concentration will reflect the level of other pollutants in the Tualatin River, including toxics. Therefore phosphorus may be used as an indicator of the ability of the river to support fish. Mr. Everson recommends a 0.05 mg/l phosphorus standard, or a standard based on instream concentrations above the City of Gaston. These standards should be in place for the entire year.

The proposed ammonia standard is inadequate to protect the fishery resource in the Tualatin River. Mr. Everson recommends changing the proposed standard to cover the full year for the Tualatin River and its tributaries. The standard must be based on the strictest limit to provide adequate oxygen concentration or prevent ammonia toxicity to cold water fish.

Zella Eyeler, Written and Oral Testimony, 4/27/88

In providing her historical view of the Tualatin River, Ms. Eyeler supports a 0.05 mg/l phosphorus level to restore the Tualatin River. She believes the river should be restored during our lifetime and protected for future generations.

Farm Bureau of Washington County, Written and Oral Testimony, 4/25/88

The Farm Bureau provided suggestions for alternatives to establishing total maximum daily loads for nutrient control in the Tualatin and other water quality limited streams in Oregon. The proposal includes postponing the establishment of limits for five years. During this time, further study would be conducted and a coordinated management group would be established in each basin. Implementation of programs for water quality control would be conducted only if there was at least 80% federal or state funding for the program.

Jerry Feela, Written Testimony

In providing his historical view of water quality problems in the Tualatin Basin, Mr. Feela points out that urban growth has caused degraded water quality in the Tualatin River. Actions should have been taken long ago to protect water quality.

Kenneth Fink, Written and Oral Testimony, 4/28/88

It took 60 years for the Tualatin River to reach its present deplorable condition. It will take much effort to restore the Tualatin. The state should not have been forced by EPA through a citizen lawsuit to initiate a program to restore the river. Mr. Fink supports a 0.05 mg/l phosphorus standard.

Forest Grove, City of, Written Testimony

The City Council expresses a strong desire for DEQ and USA to work together to find a mutually agreeable resolution to the phosphorus standard issue.

Gaston, City of, Written Testimony

The City of Gaston intends to exceed the water quality requirements set by the DEQ. The City currently treats stormwater runoff to reduce pollution loads to the river. They noted that their efforts may be old fashion, but they are effective. Their efforts do cost money which they pay for by a high tax rate. However, the City feels it is their responsibility not to pollute the river and pass problems on to their neighbors downstream.

Stan Geiger, Written and Oral Testimony, 4/27/88

Mr. Geiger suggests starting the proposed phosphorus limitation earlier in the spring to help protect Lake Oswego. Support is given for the 0.10 mg/l phosphorus standard. What the standard would produce is a new range of summertime algal growth effects in the river, not create a certain level of algal growth.

As chairman for the Tualatin Technical Advisory Committee (TAC), Mr. Geiger clarified the role of the TAC. This clarification was made in response to statements made in other testimony. The worth of a technical advisory committee is that it identifies important technical questions and issues that have a bearing on the rule-making process. Issues were well reviewed by the technical committee. A summary report of the issues reviewed by the TAC is provided as an attachment to Mr. Geiger's written testimony.

Jim Gilbert, Oral Testimony, 4/26/88

Mr. Gilbert discussed the results of 13 random surveys he conducted at Roamers Rest on the Tualatin River. All individuals surveyed were second or third generation citizens of the Tualatin Basin. Mr. Gilbert concluded from his survey that water quality is getting worse in the river, few people would swim in the river under present conditions, and that all survey respondents agree there are fewer fish than there used to be.

Robert Grimes, Written Testimony

Mr. Grimes states that he and his neighbors resent the Unified Sewerage Agency crying about how much it will cost to correct problems they (USA) have created. He supports the 0.05 mg/l phosphorus standard.

Guise and Associates, Written Testimony

Mr. Guise states that he will gladly pay an extra \$10.00 per month for clean recreational water in the Tualatin River.

Judie Hammerstad, State Representative District 27, Written and Oral Testimony, 4/27/88

A numerical standard for phosphorus should be set. This standard may be in the form of an equation including streamflow and sunlight. Load allocations should be established for all point and nonpoint sources. The ability to meet limits will depend on nonpoint source controls. Standards should be year-round. A timeline should be established that will result in substantial improvement in water quality. Cost-effectiveness is important. However, we should be careful not to end up with only a partially cleaned up stream.

Mary Harrison, Oral Testimony, 4/27/88

A master plan needs to be developed for the Tualatin Basin, not an expensive quick fix solution. Somebody will have to pay, through taxes or user fees, the cost of cleaning up the Tualatin River. The nationwide guidelines are not applicable to the Tualatin because they do not include flow which is paramount to the problem. The USA treatment plants provide a major portion of the flow in the basin. If limits are too strict, USA will transport the effluent out of the Basin. The resulting lower flow in the river will result in worse conditions than are there currently.

L. A. Helgesson, Written Testimony

Noting that their cattle will not drink the creek water, Mr. Helgesson states the need for further nonpoint source controls. Also, the sewerage district should monitor all users so that the financial burden of phosphorus control can be equitably distributed.

Hillsboro, City of, Written Testimony

The City of Hillsboro supports good, quality water and is prepared to work with the sewerage agency to do its share to improve water quality in the Tualatin River. The City recognizes the need to implement nonpoint source controls. The City hopes the Department and USA can agree on a proposal for a water quality management plan for the Tualatin River.

Izaak Walton League of America, Inc., Portland Chapter, Written Testimony

The Izaak Walton League recommends that 0.05 mg/l be established as the phosphorus standard for the Tualatin River. Additionally, the League recommends that an immediate program be launched to clean up the river for both point and nonpoint sources.

Karen James, Written Testimony

Ms. James is pleased to see an effort to clean up the Tualatin River, and appalled that it required a law suit to initiate the cleanup. Ms. James supports a 0.05 mg/l phosphorus standard.

Stanley G. Jewett, Jr., Written Testimony

Based on federally suggested guidelines, Mr. Jewett supports a year-round 0.05 mg/l phosphorus standard.

Irv Jones, Written Testimony

Mr. Jones contends that the proposed ammonia limit is too high due to the toxicity of un-ionized ammonia. Mr. Jones suggests a limit of 0.20 mg/l ammonia as the standard.

Pat Kleiwer, Oral Testimony, 4/25/88

Pat Kleiwer provided a lengthy discussion on water quantity problems in the Butternut Creek, a tributary of the Tualatin. Based on her experiences, she feels that an intensive nonpoint source program is a necessary component to the restoration of the Tualatin River.

Lake Oswego, City of, Written and Oral Testimony, 4/27/88

The City of Lake Oswego is committed to achieving the highest possible water quality in the Tualatin River. Numerical limits must be established and careful consideration given to the time limits for these standards. The City believes there should be no further delays in establishing limits.

Lake Oswego Corporation, Written and Oral Testimony, 4/27/88

Three individuals provided both oral and written testimony on behalf of the Lake Oswego Corporation. The Lake Oswego Corporation supports efforts to clean up the Tualatin River and disagrees with recommendations supporting narrative standards. Numerical standards should be established as close to 0.05 mg/l phosphorus as possible; allocations should be set for all point and nonpoint sources; there should be no further delays in establishing standards; there should be some limits on pollution loading at all times; however, the control period for phosphorus should be expanded to begin March 1st.

League of Women Voters of East Washington County, Written and Oral Testimony, 4/26/88

The League urges DEQ to develop a point and nonpoint source control program for the Tualatin Basin. The League supports the standards proposed by DEQ.

League of Women Voters West Clackamas County, Written Testimony

The League of Women Voters supports the process of public input relative to the efforts to clean up the Tualatin River. The League urges that standards be set to fully protect all uses of the river, pollution from nonpoint sources be reduced, necessary regulations be established to guarantee the standards will be achieved, guidelines for compliance for all parties be prescribed without delay.

Ellen and David Ludwig, Written Testimony

The Ludwigs state that the phosphorus standard is too high and suggest 0.05 mg/l as a standard. There should be an effective designation of load allocations for each section of the Tualatin River and its tributaries.

Victor Madison, Oral Testimony, 4/25/88

Mr. Madison supports the suggestion that the limits be postponed for several years to allow for further study. Phosphate must be coming from farm land. The Corps of Engineers suggested that reefs in the lower river could be removed to increase flow in the river. The increased flow would decrease algal growth. Mr. Madison asked why removing the reefs isn't considered as a management strategy. The people in the lower river should have to help pay for the cleanup.

Susan Martins and Becky Lukens, Written Comments

The commentators note that the Tualatin River is a disgrace; however, it could support many uses if it is cleaned up.

McMinnville, City of, Written Comments

The City of McMinnville states that the proposed phosphorus limitation is not consistent with Oregon regulations. It is unclear as to what improvements will be made to beneficial uses by setting the proposed standards. Additionally, the control strategy for attaining compliance needs to be technologically and economically feasible. It is not good policy to establish standards that are not economically feasible.

It is not practicable to set a numerical limit. Many factors affect algal growth. To select two factors as the criteria for a standard is erroneous. The standard should be tied more directly to the problem.

Kermit Miller, Written Testimony

Mr. Miller provided a personal history of his family's 42 years of residence along the Tualatin River. He strongly endorses the plan to clean up the Tualatin River to its former quality.

Gary Miniszewski, Written and Oral Testimony, 4/25/88

Mr. Miniszewski notes that it has been established that algal growth in a stream causes substandard water quality that affects the beneficial uses. If Washington County wants added growth in the basin, then the phosphorus issue needs to be resolved. Mr. Miniszewski states that 0.05 mg/l should be the phosphorus standard.

Jim Morrilan, Oral Testimony, 4/27/88

Mr. Morrilan states that the proposed 0.10 mg/l phosphorus standard is not adequate, a 0.05 mg/l standard is needed to prevent nuisance algal growth. Nonpoint source pollution control plans are needed. Something should be accomplished within five years.

Peter Morris, Anglers Club of Oregon, Oral Testimony, 4/27/88

Mr. Morris states that any deviation from the EPA suggested 0.05 mg/l phosphorus standard is self-serving behavior. Standards need to be set in a reasonable time frame. The Tualatin River once provided excellent fishing.

Rosalie Morrison, Written and Oral Testimony, 4/27/88

Rosalie provided pictures of pipes which discharge stormwater runoff into the Tualatin River and local erosion problems due to construction. She states that a 0.05 mg/l phosphorus standard should apply from March through September.

Northwest Environmental Defense Center (NEDC), Written and Oral Testimony, 4/25/88

NEDC reminded the Department that if the Department fails to submit, or if EPA fails to approve an inadequate submission of TMDLs and associated load and waste load allocations, then EPA shall determine and establish TMDLs, WLAs, and IAs, and other appropriate regulatory actions for the Tualatin River no later than 90 days thereafter.

NEDC states that the proposed standards for phosphorus are inadequate to comply with the terms and intent of the consent decree.

Conclusions based on the laboratory algal assay data and the available data from instream assessments of the Tualatin River and other rivers is subjective. Conclusions from the assays are dependent on an arbitrary line fitted through the data. NEDC offers suggestions for an alternative interpretation.

Comparison of various streams ignores critical parameters that affect algal growth. To seek meaning from this curve is to compare apples and oranges. NEDC suggests fitting an envelope around the data based on the generally accepted 1:1 ratio of chlorophyll a to phosphorus in algal biomass.

NEDC feels that the summary of advantages and disadvantages of target concentrations are unnecessarily subjective and noticeably biased toward the Department's proposed phosphorus standard. Summaries on control options include premature assumptions and impacts of point and nonpoint source control strategies that have not been designed. NEDC offers alternative advantages and disadvantages summaries. The staff report should contain some discussion of the benefits and value to local planners, developers, and

resource management agencies of clear objectives, standards, or planning objectives.

NEDC cited publications cautioning against reliance on dynamic modelling for estimating the relationship between nutrient loads and eutrophication response. These models have limited predictive capabilities because the dynamic relationships are poorly modeled. Rather than state the obvious, that algal growth is dependent on many factors, CH2M-Hill's modelling efforts should focus on estimating the algal growth response for various concentrations of phosphorus.

Standards for both phosphorus and ammonia should be year-round instead of seasonal. Historically, seasonal limitations were to compensate for different flow conditions. The Department's proposed method for relating streamflow to limits already accounts for this.

NEDC points out the inconsistency with definitions for TMDLs, WLAs, and LAs, proposed by the Department and as defined by federal regulation. The federal definitions are recommended. It was also noted that WLAs should be allocated to each existing or future point source of pollution and separate LAs for each existing or future nonpoint source of pollution. NEDC provides a description of the elements contained in a nonpoint source pollution management system for the Tualatin Basin.

Referring to the Clean Water Act, NEDC states that any implementation or compliance schedule allowing greater than 5 years for achieving full compliance with water quality standards in the Tualatin River will be unreasonable.

John Nelson, Oral Testimony, 4/27/88

Mr. Nelson has lived along the lower river for 42 years. It strikes him that most of the pollution comes from up-river in Washington County. Mr. Nelson suggests that if the polluters put their intakes below their outfalls, there would be fewer problems.

Birgetta Nixon, Written Testimony

Ms. Nixon points out that forest practices in the upper river are having a detrimental effect on water quantity in the lower river.

Oregon Environmental Council, Written Comments

The Tualatin River is a very important part of the recreational opportunities in the area. With a cleanup, it can be returned to its former prominence as a fishing stream. The Department must act now to stop both point and nonpoint sources of pollution. The phosphorus standard should be at least as strict as 0.05 mg/l.

One Thousand Friends of Oregon, Written Testimony

One Thousand Friends of Oregon describes the goals of Oregon's land use planning program and states that a link could be established between land use planning and water quality planning. They recommend that the Department use its permitting authority in conjunction with the land use regulations, to establish an effective nonpoint source control plan.

Jim Orell, Written and Oral Testimony, 4/27/88

Based on his many years living along the Tualatin River, Mr. Orell recommends that the Department review wetland treatment and irrigation of effluent as options to reduce pollution loads to the Tualatin River. He recommends accomplishing something within the next five years in the Tualatin River Cleanup.

Rosalyn Paul, Written and Oral Testimony, 4/27/88

Rosalyn Paul submitted a poem she wrote entitled "A River Is For Life" and recommended a 0.05 mg/l phosphorus standard.

Eleanor Phinney, Oral Testimony, 4/27/88

Eleanor described the efforts she has put towards learning about the Tualatin River as part of the Tualatin River-Watch. Included in her dissertation was a review of a map she put together which describes the Tualatin Basin. Her review of the map included a discussion of the need and potential for nonpoint source controls. Mrs. Phinney supports a 0.05 mg/l phosphorus standard.

John Platt, Written and Oral Testimony, 4/25/88

As a member of the Oregon Wildlife Federation, Mr. Platt recommended that the Department base its decision on a scientific and technical evaluation in compliance with federal law, not on the foundation of political opinions that take into the account the needs of a small minority whose gains come from the majority's loss.

David Ransier, Written Testimony

Being concerned about the quality of the Tualatin River, Mr. Ransier supports a phosphorus limit of 0.05 mg/l, effective designation of LAS on each segment of the Tualatin River and tributaries, and an immediate program to stop point and nonpoint source pollution.

City of Rivergrove, Written and Oral Testimony, 4/27/88

The City provided a list of beneficial uses of the Tualatin River and stated that the Department has not defined the beneficial uses of the Tualatin River. The City of Rivergrove wishes to restore the Tualatin River to a condition which supports the beneficial uses without delay. To achieve this restoration, the City Council recommends a 0.05 mg/l phosphorus TMDL.

Joe and Eugene Robick, Written and Oral Testimony, 4/27/88

The Robicks provided their historical views of the Tualatin River and said that they would like to see the river restored to its former condition.

Andy and Elizabeth Rocchia, Written and Oral Testimony, 4/27/88

The prime interest of Mr. and Mrs. Rocchia is a cleaner river to protect fish and bird life. They support a 1.0 mg/l ammonia standard and a 0.05 mg/l phosphorus standard for the Tualatin River. The use of wetlands and irrigation of effluent are encouraged.

Emile E. Rhode, Written Testimony

The Tualatin River stinks. Sewage effluent should be used to irrigate forest land; the cost would be low, and effluent would not be a problem.

Ethan Seltzer, Oral Testimony, 4/25/88

Dr. Seltzer noted that a weak standard was a sign that nothing much is going to happen. The problems are a failure of political will and community response. Dr. Seltzer asks for a phosphorus standard of 0.05 mg/l.

Arden Sheets, Written and Oral Testimony, 4/25/88

The Department has not proved that any phosphorus standard will improve water quality. Phosphorus is a natural element and does not constitute a health hazard. Many factors contribute to algal growth. It is apparent that several issues have been identified and a unified effort will be required to improve water quality in the Tualatin River. Algae is a nuisance affecting aesthetics. How much aesthetics can we afford?

Nothing has been done to learn of the economic effect on Washington County. An economic impact study needs to be completed before any public funds are spent on a cleanup.

Lee Shissler, Written and Oral Testimony, 4/27/88

As a graduate student at Portland State University, Mr. Shissler conducted a phone survey on pollution control management in the Tualatin Basin. Of 445 calls, there were 83 positive responses. Mr. Shissler concluded that if recreational capacity of the river is to be restored, a significant improvement in water quality is necessary. Therefore, he supports a 0.05 mg/l phosphorus standard.

Dennis Stanfill, Written and Oral Testimony, 4/26/88

Mr. Stanfill provided a thorough discussion of problems in Butternutt Creek, a tributary of the Tualatin River. Mr. Stanfill concluded that DEQ can assist the residents of Washington County by setting the strictest feasible water quality standards, establishing a tributary monitoring program, and establishing an enforcement program that requires costs to be borne by those who create the problem.

Leonard Stark, Written and Oral Testimony, 4/27/88

Mr. Stark provided his historical view of water quality in the Tualatin Basin. He recommends the Department consider all options for limiting or controlling pollution in the Tualatin Basin.

Soil and Water Conservation District (SWCD) of Washington County, Written and Oral Testimony, 4/26/88

The Washington County SWCD provided literature describing their nonpoint source control programs and alternatives to the Department's proposed limits. The proposed alternative suggests that phosphorus limits not be established for another five years to allow time for further study and the implementation of a coordinated group. Coordinated groups will be developed for each section of the river. These groups will plan to reduce or mitigate TMDLs in each river segment. The proposal states that if there is not 80% federal or state funding for programs and construction available to reduce or mitigate the TMDLs, the river or segment shall be considered in compliance. The proposed alternative would apply to all water quality limited segments in Oregon.

Tigard, City of, Written Testimony

The City of Tigard supports efforts to clean up the Tualatin River, but it is concerned over the high costs that may be involved. The City takes no formal position and reserves the right to comment at a later date. The City hopes that the Department and USA can reach agreement on a water quality management for the Tualatin Basin.

Tualatin, City of, Written Testimony

The City of Tualatin supports the position of USA that existing Tualatin River water quality standards should be retained or further narrative standards be adopted. The City supports the phosphorus loads proposed by USA as the more effective way to enhance or maintain water quality to protect the beneficial uses of the Tualatin River. The City supports a cooperative planning effort by all affected parties that focuses on all aspects of water quality, and is consistent with reasonable use of public and private resources.

Tualatin Valley Irrigation District (TVID), Written and Oral Testimony, 4/25/88

TVID supports the proposals presented by SWCD and the Farm Bureau of Washington County.

Unified Sewerage Agency (USA) of Washington County, Written and Oral Testimony, 4/25/88

USA states their position that the phosphate and ammonia TMDLs should be set at the levels contained in Dr. Kaczynski's (CH2M-Hill) comments. These levels are sufficient, when combined with the principal elements of USA's individual control strategy, to achieve substantial reductions in the levels of algae in the Tualatin River.

USA believes it is unnecessary and unwise to set new or additional water quality standards in order to adopt TMDLs and implement an effective water quality management plan for the basin. Their proposed ICS strategy addresses several parameters that affect algal growth, not just phosphorus. Modelling results indicate that the goal of algae reduction can be achieved with phosphorus concentrations higher than 0.10 mg/l.

The algae issue is one of aesthetics. There was no support from the technical committee for basing the standards on the nuisance phytoplankton growth rule. This rule is intended to indicate when a study is needed, not as a basis for establishing standards. More effort needs to be given to addressing the meaning of the standard in terms of algal growth and aesthetics.

Efforts to address solutions to the algal problem and other water quality issues on the Tualatin River will not be simple or inexpensive. Many agencies and jurisdictions will be involved. Any workable plan will need to include a comprehensive nonpoint source control plan.

U.S. Environmental Protection Agency, Region 10, Written Comments

The EPA focuses its comments on three general issues: criteria levels for water quality standards, the process for establishing total maximum daily loads, and implementation programs for both point and nonpoint sources.

EPA emphasizes that standards form a basis for water pollution control decisions which must be made to achieve a set of goals. These goals need to be clearly stated by the Department prior to initiating an implementation program.

Many groups with different perspectives have an interest in the Tualatin. The Department must feel it is supported by a sound technical basis in order to minimize conflicts which may arise. The information used to establish a criterion and develop an implementation plan should fit into a logical framework.

EPA describes concerns with using data from several streams to propose limits for phosphorus in the Tualatin. EPA suggests that site specific evaluations based on modelling conducted by CH2M-Hill be used to describe the relationship between total phosphorus and flow. This information should then be used to establish the concentration of total phosphorus that may be needed to achieve an average chlorophyll a concentration of 0.015 mg/l under current summer low flow conditions. Using the available information, the Department should be able to reasonably describe the effect of achieving various levels of phosphate in the lower river. EPA suggests that the proposed phosphorus standard may not be low enough.

EPA suggests that the Department provide a more adequate time frame for the application of the ammonia standard and review potential ammonia toxicity problems.

EPA states that water quality management plans developed to meet the proposed criteria and TMDLs should be comprehensive and balanced. The Department needs to identify appropriate criteria for tributary streams, and identify and establish loads for all point sources.

EPA states that the initial establishment of criteria is a technical decision; economics should not enter into the process until implementation strategies are developed and good, reliable cost estimates are available.

Washington County, Written and Oral Testimony, 4/26/88

Washington County supports adoption of TMDLs as proposed by USA and CH2M-Hill.

Washington County disagrees with DEQ's proposal to adopt TMDLs and standards simultaneously. Oregon has existing, valid, adequate standards that address dissolved oxygen (DO) and algae in terms of recreation and aesthetics. The DO standard is numerical. If additional standards are needed at this time to address algal growth, then Washington County supports a narrative standard. It is not necessary to set standards to establish

TMDLs. State law requires the EQC to consider the ability of local government to finance necessary improvements. DEQ should avoid conflicts between state law considerations for standards and federal law defining TMDLs as the assimilative capacity without regard to cost.

DEQ should set loads as high as possible, consistent with available data and analysis. Section 404 of the 1987 Water Quality Act provides that once waste loads are set and permits issued based on those loads, neither loads nor permit levels can be increased. There may be flexibility, through new information or studies, that may allow loads to change and still attain water quality standards.

Phosphorus limits should not apply year-round. They are more appropriate during the recreation season. The requirements of a compliance schedule are not supported by applicable provisions of state or federal law. TMDLs are part of the water quality planning process. Compliance schedules can be developed as part of the NPDES permit modifications. As a practical matter, the Durham and Rock Creek treatment plants are the only two point sources discharging into the river during the season in question. They are under common ownership. Thus, a single WLA to USA is logical to afford the agency the flexibility to meet the WLA number.

Washington County suggests that the Department address implementation of TMDLs in writing, and request public comment. No document exists now to explain the Department's approach to implementation of TMDLs.

Sandy Wasson, Written and Oral Testimony, 4/26/88

Sandy Wasson provided a detailed description of flooding problems she and her neighbors face along Butternut Creek, a tributary of the Tualatin River. Ms. Wasson felt that the Department could help by establishing nonpoint source pollution controls.

West Linn, City of, Written Testimony

As the community furthest downstream, West Linn inherits everything poured into the river. The City Council supports the proposed standards of 1.0 mg/l ammonia and 0.05 mg/l phosphorus.

Wetlands Conservancy, Written and Oral Testimony, 4/27/88

The Wetlands Conservancy believes that the proposed standard of 0.10 mg/l of phosphorus is too high and supports the 0.05 mg/l phosphorus recommendation of NEDC. The Conservancy urges the use of wetlands to help solve pollution problems in the Tualatin Basin. There is tremendous potential to use wetlands for stormwater control. The Conservancy urges the Department to establish nonpoint source load limits for each tributary sub-basin.

Michael T. White, Written and Oral Testimony, 4/26/88

Mr. White provided a description of water quality problems along Dawson Creek, a tributary of the Tualatin. The potential impact on numerous fish and wildlife species was included in his discussion. Mr. White suggested that the Department recognize the value of wetlands; impose fines on property owners who fail to control soil erosion; provide tax incentives for property owners who maintain adequate buffer zones; require permits for excavation in riparian areas; establish quantitative standards for silt, phosphorus, ammonia, heavy metals, and other chemical pollutants; hold a periodic review of water quality; and restrict the use of well surfactants.

Paul and Betty Wolf, Written and Oral Testimony, 4/26/88

In providing a narrative of their view of the Tualatin River, the Wolfs state that the river water quality is not adequate for swimming or fishing. They feel that there is an immediate need to clean up the river and not five or ten years from now.

Stephan Zimmerman, Oral Testimony, 4/25/88

Mr. Zimmerman believes that a 0.10 mg/l phosphorus standard would allow physical remedies such as wetlands to be used to clean up the Tualatin River. A more restrictive standard would not allow physical fixes. Therefore, Mr. Zimmerman supports the 0.10 mg/l phosphorus standard.

WJ530

Commenter	Testimony Written Oral	Date (Received)	Clean The River	Perminant Solution	Phosphorus Concerns					Ammonia Concerns			Nonpoint Source Management			
					Target Conc.	As Proposed	B Altern- Limits	C Extend Time(P)	D LA WLA TMDL	A Toxicity Concern	B Extend Time (N)	C LA WLA TMDL	-----A----- NPS Plans Needed	Lead Agency Needed	B Major Tributary Allocation	
					Lower	As	ative	Extend	LA	A	B	C	-----A-----	B	Major	
Abraham, Joseph W.	X	23-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	:	:
Alrore, Eilene Y.	X	27-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	:	:
Arvidson, Brett	1		:	:	X	:	:	:	:	:	:	:	X	:	:	:
Baranzano, Richard A	X	3 29-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Baron, Lloyd	1		:	:	:	:	:	:	:	:	:	:	:	X	:	:
Beull & Assc.	X	2 27-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Brown, Gregg	1		:	:	:	:	:	:	:	:	:	:	:	:	:	:
Browne, Carolyn	X	1 25-Apr-87	:	:	:	:	X	:	X	:	:	X	:	X	:	:
Carter, Lolita	X	1 29-Apr-87	:	:	X	:	:	:	:	:	:	:	:	:	X	:
CECO	X	29-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	:	:
CH2M-Hill	X	1	:	:	:	:	:	X	X	:	:	X	:	:	:	:
Churchill, John R.	X	2 26-Apr-87	:	:	:	X	:	:	X	:	:	X	:	:	X	:
Clackamass County	X	29-Apr-87	X	:	:	X	:	X	:	:	:	:	:	:	X	:
Cohen Joyce	X	29-Apr-87	:	:	X	:	:	:	:	:	:	:	:	X	:	:
Cornelius, City of	X	21-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Cottingham, Billie	X	27-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	:	:
Couch, Robert	X	29-Apr-87	:	:	:	X	:	:	:	:	:	:	:	:	:	:
Cyminski, Andre	1		:	:	:	X	:	:	:	:	:	:	:	:	:	:
Duran, Victor	X	29-Apr-87	:	:	X	X	:	:	:	:	:	:	:	:	:	:
Durham, Walter A.	X	3 27-Apr-87	:	:	:	X	:	:	:	:	:	:	X	:	:	:
Eastman, Mrs Robert	X	21-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	:	:
Ellingson, Rodger M.	X	02-May-87	:	:	:	X	:	:	X	:	:	X	:	X	:	:
Emmons, Connie	3		X	:	:	:	:	:	:	:	:	:	:	:	:	:
Emmons, Coustaue	X	27-Apr-87	:	:	X	:	:	:	:	:	:	:	:	:	:	:
Erickson, David	X	27-Apr-87	X	:	:	X	:	:	:	:	:	:	:	:	:	:
Everson, Larry	X	3 29-Apr-87	:	:	:	X	:	X	X	:	X	X	X	X	X	X
Eyler, Zella A.	X	3 25-Apr-87	X	:	:	X	:	:	:	:	:	:	:	:	:	:
Farm Bureau	X	1 25-Apr-87	:	:	:	:	:	:	:	:	:	:	:	X	:	:
Feela, Jerry	X	27-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	:	:
Fink, Kenneth E.	X	3 27-Apr-87	:	:	:	X	:	:	:	:	:	:	X	:	:	:
Forest Grove	X	29-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Gaston, City of	X	27-Apr-87	:	:	:	X	:	:	:	:	:	:	:	:	:	:
Geiger, Stan	X	3 27-Apr-87	:	:	:	X	:	X	:	:	:	:	:	:	:	:

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Gilbert, Jim		2	: X	:	:											
Grimes, Robert E	X		:	:	:	X										
Guise & Assc.	X	20-Apr-87	: X	:	:											
Hammerstad, Judie	X	1 27-Apr-87	:	:	:			X						X		
Harrison, Mary		3	:	:	:			X								
Helgesson, L.A.	X	27-Apr-87	: X	:	:									X		
Hillsboro, City of	X	29-Apr-87	:	:	:											
Izaak Walton League	X	22-Apr-87	:	:	:	X			X			X		X		X
James, Karen	X		:	:	:	X			X			X		X		X
Jewett, Stanley G.	X	29-Apr-87	:	:	:	X										
Jones, Irv.	X		:	:	:				X		X		X			
Kleiwer, Pat		2	:	:	:									X		
Lake Oswego, City of	X	3 22-Apr-87	:	:	:			X								
Lake Oswego Corp. 1	X	3 27-Apr-87	:	:	:	X		X	X			X				X
Lake Oswego Corp. 2	X	3 27-Apr-87	:	:	:	X		X	X			X				X
Lake Oswego Corp. 3	X	3 27-Apr-87	:	:	:	X		X	X			X				X
Gary LaHaie			:	:	:											
League, Women Voters	X	2 26-Apr-87	:	:	:		X		X			X				X
League, Women Voters	X	27-Apr-87	:	:	:									X		
Ludwig, Ellen & David	X	29-Apr-87	:	:	:	X								X		X
Madison, Victor		1	:	:	:											
Martin/Luckens	X	22-Apr-87	: X	:	:											
McMinnville, City of	X	29-Apr-87	:	:	:											
Miller, Kermit		27-Apr-87	: X	:	:											
Miniszewski, Gary	X	1 25-Apr-87	:	:	:	X								X		
Morrilan, Jim		3	:	:	:	X								X		
Morris, Peter		3	:	:	:	X										
Morrison, Rosalie	X	3 27-Apr-87	:	:	:	X								X		
NEDC	X	1 29-Apr-87	:	:	:	X		X	X		X	X	X	X		X
Nelson, John C.		3	: X	:	:											
Nixon, Birgetta	X	25-Apr-87	:	:	:									X		
OEC	X		:	:	:	X			X			X		X		X
One Thousands Friends	X	29-Apr-87	:	:	:				X			X		X		

Committer	Testimony Written Oral	Date (Received)	Clean The River	Perminant Solution	Phosphorus Concerns					Ammonia Concerns			Nonpoint Source Management			
					Target Conc.	A		C Extend Time(P)	D LA WLA TMDL	B		C LA WLA TMDL	A		B Major Tributary Allocation	
						As Proposed	Alternative Limits			Toxicity Concern	Extend Time (N)		NPS Plans Needed	Lead Agency Needed		
Orrell, Jim	X	3	27-Apr-87	:	:	X	:	:	:	:	:	:	X	:	:	
Paul, Rosalyn	X	3	27-Apr-87	X	:	X	:	:	:	:	:	:	:	:	:	
Phinney, Eleanor	X	3	29-Apr-87	X	:	X	:	:	:	:	:	:	:	:	:	
Platt, John C.	X	1	25-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	
Ransier, David M.	X		27-Apr-87	:	:	X	:	X	:	:	X	:	X	:	X	
Rivergrove, City of	X	3	27-Apr-87	:	:	X	:	X	:	:	X	:	X	:	:	
Robick, Joe	X		27-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	
Rocchia, Elizabeth	X	3	27-Apr-87	:	:	X	:	:	:	:	:	:	:	:	:	
Rode, Emile E.			27-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	
Seltzer, Ethan		1		:	:	X	:	:	:	:	:	:	X	:	:	
Sheets, Arden	X	1	25-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	
Shissler, Lee	X	3	27-Apr-87	:	:	X	:	:	:	:	:	:	:	:	:	
Stanfill, Dennis R.	X	2	29-Apr-87	:	:	:	:	:	:	:	:	:	X	:	:	
Stark, Leonard	X	3	27-Apr-87	X	:	:	:	:	:	:	:	:	:	:	:	
SWCD, Washington Ct.	X	2	26-Apr-87	:	:	:	:	X	:	:	X	:	X	:	X	
Tigard, City of	X		18-Apr-87	:	:	:	:	:	:	:	:	:	:	:	:	
Tualatin, City of	X		26-Apr-87	:	:	:	X	:	:	:	:	:	X	:	:	
TVID	X	1	25-Apr-87	:	:	:	:	:	:	:	:	:	:	X	:	
USA	X	2	22-Apr-87	:	:	:	X	:	X	:	X	:	X	X	:	
USEPA	X		29-Apr-87	:	:	:	:	X	:	X	X	:	:	:	X	
Washington County,	X	2	29-Apr-87	:	:	:	X	:	:	:	:	:	:	:	:	
Wasson, Sandy	X	2	27-Apr-87	:	:	:	:	:	:	:	:	:	X	:	:	
West Linn, City of	X		27-Apr-87	:	:	X	:	:	:	:	:	:	:	:	:	
Wetlands Conservany,	X	3	27-Apr-87	:	:	X	:	X	:	:	X	:	X	:	X	
White, Michal T	X	1	22-Apr-87	:	:	:	:	:	:	:	:	:	X	:	:	
Wolf, Betty		3		:	:	X	:	:	:	:	:	:	:	:	:	
Wolf, Paul and Betty	X		26-Apr-87	X	:	X	:	:	:	:	:	:	:	:	:	
Zimmerman, Stephan		1		:	:	:	X	:	:	:	:	:	:	:	:	
Total	94	76	53	21	5	38	4	5	11	21	4	3	21	33	6	16

Commenter	Compliance Schedules		Economics			Assurance		Technical Concerns			Other Concerns
	Need to be Defined	3-5 years Adequate	Costs Not Defined	All Options Not Fully Studied	Economic Practice Limits	Results Not Proven	P Limit Not Achiev- able	Algal Assays	Basin Compar- isson	Model Review	
Abraham, Joseph W.	:	:	:	:	:	:	:	:	:	:	:
Alrore, Eilene Y.	:	:	:	:	:	:	:	:	:	:	:
Arvidson, Brett	:	:	X	X	X	X	:	X	:	:	:Algae does not mean pollution
Baranzano, Richard A	:	:	:	:	X	:	:	:	:	:	:
Baron, Lloyd	:	:	:	:	:	X	:	:	:	:	:Go Slow in setting limits
Beull & Assc.	:	:	:	:	:	:	:	:	:	:	:Supports use of wetlands
Brown, Gregg	:	:	:	:	:	:	:	:	:	:	:CH2M-Hill invalid cost estimates
Browne, Carolyn	:	:	X	:	:	:	:	:	:	:	:
Carter, Lolita	:	:	:	:	X	X	X	X	X	:	:
CECO	:	:	:	:	:	:	:	:	:	:	:CH2M-Hill cost estimates are verifiable
CH2M-Hill	:	:	:	:	:	:	:	:	:	:	:
Churchill, John R.	X	:	:	:	:	:	:	:	:	X	:
Clackamass County	:	:	:	:	:	:	:	:	:	:	:
Cohen Joyce	X	:	:	:	:	:	:	:	:	:	:
Cornelius, City of	:	:	:	:	:	:	:	:	:	:	:Reserve Comment
Cottingham, Billie	:	:	:	:	:	:	:	:	:	:	:
Couch, Robert	:	X	:	:	:	:	:	:	:	:	:
Cyminski, Andre	:	:	:	:	:	:	:	:	:	:	:
Duran, Victor	:	:	:	:	:	:	:	:	:	:	:
Durham, Walter A.	:	:	:	:	:	:	:	:	:	:	:
Eastman, Mrs Robert	:	:	:	:	:	:	:	:	:	:	:
Ellingson, Rodger M.	X	:	:	X	:	:	:	:	:	:	:
Emmons, Connie	:	:	:	:	:	:	:	:	:	:	:
Emmons, Coustaue	:	:	:	:	:	:	:	:	:	:	:
Erickson, David	:	:	:	:	:	:	:	:	:	:	:
Everson, Larry	:	:	:	:	:	:	:	:	:	:	:
Eyler, Zella A.	:	:	:	:	:	:	:	:	:	:	:
Farm Bureau	X	:	:	:	:	:	:	:	:	:	:Wait 5 Years, only with federal/state funds
Feela, Jerry	:	:	:	:	:	:	:	:	:	:	:
Fink, Kenneth E.	:	:	:	X	:	:	:	:	:	:	:
Forest Grove	:	:	:	:	:	:	:	:	:	:	:No Position at this time
Gaston, City of	:	:	:	:	:	:	:	:	:	:	:
Geiger, Stan	X	:	:	:	:	:	:	:	:	:	:

Commenter	Compliance Schedules		Economics			Assurance		Technical Concerns			Other Concerns
	Need to be Defined	3-5 years Adequate	Costs Not Defined	All Options Not Fully Studied	Economic Practice Limits	Results Not Proven	P Limit Not Achievable	Algal Assays	Basin Comparison	Model Review	
Gilbert, Jim	:	:	:	:	:	:	:	:	:	:	:Phone Survey, uses not supported
Grimes, Robert E	:	:	:	:	:	:	:	:	:	:	:
Guise & Assc.	:	:	:	:	:	:	:	:	:	:	:
Hammerstad, Judie	X	:	:	:	:	:	:	:	:	:	:
Harrison, Mary	:	:	:	X	X	:	X	:	:	:	:
Helgesson, L.A.	:	:	:	:	:	:	:	:	:	:	:
Hillsboro, City of	:	:	:	:	:	:	:	:	:	:	:
Izaak Walton League	:	:	:	:	:	:	:	:	:	:	:
James, Karen	:	:	:	:	:	:	:	:	:	:	:Phosphorus Detergent ban
Jewett, Stanley G.	:	:	:	:	:	:	:	:	:	:	:
Jones, IRV.	:	:	:	:	:	:	:	:	:	:	:
Kleiwier, Pat	:	:	:	:	:	:	:	:	:	:	:
Lake Oswego, City of	:	:	:	:	:	:	:	:	:	:	:
Lake Oswego Corp. 1	:	:	:	:	:	:	:	:	:	:	:
Lake Oswego Corp. 2	:	:	:	:	:	:	:	:	:	:	:
Lake Oswego Corp. 3	:	:	:	:	:	:	:	:	:	:	:
Gary LaHaie	:	:	:	:	:	:	:	:	:	:	:
League, Women Voters	:	:	:	:	:	:	:	:	:	:	:
League, Women Voters	X	:	:	:	:	:	:	:	:	:	:Supports public involvement
Ludwig, Ellen & David	:	:	:	:	:	:	:	:	:	:	:
Madison, Victor	:	:	:	:	:	:	:	:	:	:	:More time needed for study
Martin/Luckens	:	:	:	:	:	:	:	:	:	:	:
McMinnville, City of	:	:	X	:	X	:	X	:	:	:	:DEQ not consistent with regulations
Miller, Kermit	:	:	:	:	:	:	:	:	:	:	:
Miniszewski, Gary	:	:	:	:	:	:	:	:	:	:	:
Morrilan, Jim	:	X	:	:	:	:	:	:	:	:	:
Morris, Peter	:	:	:	:	:	:	:	:	:	:	:
Morrison, Rosalie	:	:	:	:	:	:	:	:	:	:	:Sediment problems
NEDC	:	X	:	X	:	:	:	X	X	X	:
Nelson, John C.	:	:	:	:	:	:	:	:	:	:	:
Nixon, Birgetta	:	:	:	:	:	:	:	:	:	:	:Forest practices cause problems
OEC	:	:	:	:	:	:	:	:	:	:	:
One Thousands Friends	:	:	:	:	:	:	:	:	:	:	:

Commenter	Compliance Schedules		Economics			Assurance		Technical Concerns			Other Concerns	
	Need to be Defined	3-5 years Adequate	Costs Not Defined	All Options Not Fully Studied	Economic Practice Limits	Results Not Proven	P Limit Not Achiev- able	Algal Assays	Basin Compar- isson	Model Review		
Orrell, Jim		X		X								
Paul, Rosalyn												
Phinney, Eleanor												
Platt, John C.												
Ransier, David M.												
Rivergrove, City of											:Committee process unacceptable	
Robick, Joe												
Rocchia, Elizabeth												
Rode, Emile E.				X							:River Stinks	
Seltzer, Ethan												
Sheets, Arden			X		X	X						
Shissler, Lee												
Stanfill, Dennis R.												
Stark, Leonard												
SWCD, Washington Ct.		X									:Wait 5 years, only with federal-state funds	
Tigard, City of											:Reserve Comment	
Tualatin, City of					X	X						
TVID	X										:Wait 5 years, only with federal-state funds	
USA						X					:Not leagally required to set* standards	
USEPA	X								X			
Washington County,											:DEQ is not legally committeed to establishing standard	
Wasson, Sandy												
West Linn, City of												
Wetlands Conservany,				X								
White, Michal T												
Wolf, Betty												
Wolf, Paul and Betty												
Zimmerman, Stephan												
Total	94	9	5	4	8	7	7	2	3	3	2	22

achieving a significantly greater effluent reduction than that required by the applicable effluent limitation and moves toward the national goal of eliminating the discharge of all pollutants, or by achieving the required reduction with an innovative system that has the potential for significantly lower costs than the systems which have been determined by the Administrator to be economically achievable, the Administrator (or the State with an approved program under section 402, in consultation with the Administrator) may establish a date for compliance under subsection (b)(2)(A) of this section no later than July 1, 1987, if it is also determined that such innovative system has the potential for industrywide application.

(1) The Administrator may not modify any requirement of this section as it applies to any specific pollutant which is on the toxic pollutant list under section 307 (a) (1) of this Act.

WATER QUALITY RELATED EFFLUENT LIMITATIONS

SEC. 302. (a) Whenever, in the judgment of the Administrator, discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 301 (b)(2) of this Act, would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.

(b) (1) Prior to establishment of any effluent limitation pursuant to subsection (a) of this section, the Administrator shall issue notice of intent to establish such limitation and within ninety days of such notice hold a public hearing to determine the relationship of the economic and social costs of achieving any such limitation or limitations, including any economic or social dislocation in the affected community or communities, to the social and economic benefits to be obtained (including the attainment of the objective of this Act) and to determine whether or not such effluent limitations can be implemented with available technology or other alternative control strategies.

(2) If a person affected by such limitation demonstrates at such hearing that (whether or not such technology or other alternative control strategies are available) there is no reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this Act), such limitation shall not become effective and the Administrator shall adjust such limitation as it applies to such person.

(c) The establishment of effluent limitations under this section shall not operate to delay the application of any effluent limitation established under section 301 of this Act.

WATER QUALITY STANDARDS AND IMPLEMENTATION PLANS

SEC. 303. (a)(1) In order to carry out the purpose of this Act, any water quality standard applicable to interstate waters which was adopted by any State and submitted to, and approved by, or is

awaiting approval by, the Administrator pursuant to this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, shall remain in effect unless the Administrator determined that such standard is not consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. If the Administrator makes such a determination he shall, within three months after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after the date of such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(2) Any State which, before the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, has adopted, pursuant to its own law, water quality standards applicable to intrastate waters shall submit such standards to the Administrator within thirty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. Each such standard shall remain in effect, in the same manner and to the same extent as any other water quality standard established under this Act unless the Administrator determines that such standard is inconsistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972. If the Administrator makes such a determination he shall not later than the one hundred and twentieth day after the date of submission of such standards, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(3)(A) Any State which prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 has not adopted pursuant to its own laws water quality standards applicable to intrastate waters shall, not later than one hundred and eighty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, adopt and submit such standards to the Administrator.

(B) If the Administrator determines that any such standards are consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, he shall approve such standards.

(C) If the Administrator determines that any such standards are not consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, he shall, not later than the ninetieth day after the date of submission of such standards, notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standards pursuant to subsection (b) of this section.

(b)(1) The Administrator shall promptly prepare and publish proposed regulations setting forth water quality standards for a State

in accordance with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972, if—

(A) the State fails to submit water quality standards within the times prescribed in subsection (a) of this section,

(B) a water quality standard submitted by such State under subsection (a) of this section is determined by the Administrator not to be consistent with the applicable requirements of subsection (a) of this section.

(2) The Administrator shall promulgate any water quality standard published in a proposed regulation not later than one hundred and ninety days after the date he publishes any such proposed standard, unless prior to such promulgation, such State has adopted a water quality standard which the Administrator determines to be in accordance with subsection (a) of this section.

(c)(1) The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with the date of enactment of the Federal Water Pollution Control Act Amendments of 1972) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Results of such review shall be made available to the Administrator.

(2) Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator. Such revised or new water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this Act. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

(3) If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this Act, such standard shall thereafter be the water quality standard for the applicable waters of that State. If the Administrator determines that any such revised or new standard is not consistent with the applicable requirements of this Act, he shall not later than the ninetieth day after the date of submission of such standard notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standard pursuant to paragraph (4) of this subsection.

(4) The Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved—

(A) if a revised or new water quality standard submitted by such State under paragraph (3) of this subsection for such waters is determined by the Administrator not to be consistent with the applicable requirements of this Act, or

(B) in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of this Act.

The Administrator shall promulgate any revised or new standard

under this paragraph not later than ninety days after he publishes such proposed standards, unless prior to such promulgation, such State has adopted a revised or new water quality standard which the Administrator determines to be in accordance with this Act.

(d)(1)(A) Each State shall identify those waters within its boundaries for which the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(B) are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

(B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 301 are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

(C) Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 304(a)(2) as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(D) Each State shall estimate for the waters identified in paragraph (1)(D) of this subsection the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife. Such estimates shall take into account the normal water temperatures, flow rates, seasonal variations, existing sources of heat input, and the dissipative capacity of the identified waters or parts thereof. Such estimates shall include a calculation of the maximum heat input that can be made into each such part and shall include a margin of safety which takes into account any lack of knowledge concerning the development of thermal water quality criteria for such protection and propagation in the identified waters or parts thereof.

(2) Each State shall submit to the Administrator from time to time, with the first such submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 304(a)(2)(D), for his approval the waters identified and the loads established under paragraphs (1)(A), (1)(B), (1)(C), and (1)(D) of this subsection. The Administrator shall either approve or disapprove such identification and load not later than thirty days after the date of submission. If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section. If the Administrator disapproves such identification and load, he shall not later than thirty days after the date of such disapproval identify such waters in such State and establish such loads for such waters as he determines necessary to implement the water quality standards applicable to such waters and upon such identification and establishment the State shall incorporate them into its current plan under subsection (e) of this section.

(3) For the specific purpose of developing information, each State shall identify all waters within its boundaries which it has not identified under paragraph (1)(A) and (1)(B) of this subsection

and estimate for such waters the total maximum daily load with seasonal variations and margins of safety, for those pollutants which the Administrator identifies under section 304(a)(2) as suitable for such calculation and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish and wildlife.

(e)(1) Each State shall have a continuing planning process approved under paragraph (2) of this subsection which is consistent with this Act.

(2) Each State shall submit not later than 120 days after the date of the enactment of the Water Pollution Control Amendments of 1972 to the Administrator for his approval a proposed continuing planning process which is consistent with this Act. Not later than thirty days after the date of submission of such a process the Administrator shall either approve or disapprove such process. The Administrator shall from time to time review each State's approved planning process for the purpose of insuring that such planning process is at all times consistent with this Act. The Administrator shall not approve any State permit program under title IV of this Act for any State which does not have an approved continuing planning process under this section.

(3) The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for all navigable waters within such State, which include, but are not limited to, the following:

(A) effluent limitations and schedules of compliance at least as stringent as those required by section 301(b)(1), section 301(b)(2), section 306, and section 307, and at least as stringent as any requirements contained in any applicable water quality standard in effect under authority of this section;

(B) the incorporation of all elements of any applicable area-wide waste management plans under section 208, and applicable basin plans under section 209 of this Act;

(C) total maximum daily load for pollutants in accordance with subsection (d) of this section;

(D) procedures for revision;

(E) adequate authority for intergovernmental cooperation;

(F) adequate implementation, including schedules of compliance, for revised or new water quality standards, under subsection (c) of this section;

(G) controls over the disposition of all residual waste from any water treatment processing;

(H) an inventory and ranking, in order of priority, of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302.

(f) Nothing in this section shall be construed to affect any effluent limitation, or schedule of compliance required by any State to be implemented prior to the dates set forth in sections 301(b)(1) and 301(b)(2) nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

(g) Water quality standards relating to heat shall be consistent with the requirements of section 316 of this Act.

(h) For the purposes of this Act the term "water quality standards" includes thermal water quality standards.

INFORMATION AND GUIDELINES

SEC. 304. (a)(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersal of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the effects of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters.

(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after the date of enactment of this title (and from time to time thereafter revise) information (A) on the factors necessary to restore and maintain the chemical, physical, and biological integrity of all navigable waters, ground waters, waters of the contiguous zone, and the oceans; (B) on the factors necessary for the protection and propagation of shellfish, fish, and wildlife for classes and categories of receiving waters and to allow recreational activities in and on the water; and (C) on the measurement and classification of water quality; and (D) for the purpose of section 303, on and the identification of pollutants suitable for maximum daily load measurement correlated with the achievement of water quality objectives.

(3) Such criteria and information and revisions thereof shall be issued to the States and shall be published in the Federal Register and otherwise made available to the public.

(4) The Administrator shall, within 90 days after the date of enactment of the Clean Water Act of 1977 and from time to time thereafter, publish and revise as appropriate information identifying conventional pollutants, including but not limited to, pollutants classified as biological oxygen demanding, suspended solids, fecal coliform, and pH. The thermal component of any discharge shall not be identified as a conventional pollutant under this paragraph.

(5)(A) The Administrator, to the extent practicable before consideration of any request under section 301(g) of this Act and within six months after the date of enactment of the Clean Water Act of 1977, shall develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water.

(B) The Administrator, to the extent practicable before consideration of any application under section 301(h) of this Act and within six months after the date of enactment of the Clean Water Act of 1977, shall develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water.

(6) The Administrator shall, within three months after enactment of the Clean Water Act of 1977 and annually thereafter, for purposes of section 301(h) of this Act publish and revise as appropriate information identifying each water quality standard in effect under this Act of State law, the specific pollutants associated with such water quality standard, and the particular waters to which such water quality standard applies.

(b) For the purpose of adopting or revising effluent limitations under this Act the Administrator shall, after consultation with appropriate Federal and State agencies and other interested person, publish within one year of enactment of this title, regulations, providing guidelines for effluent limitations, and, at least annually thereafter, revise, if appropriate, such regulations. Such regulations shall—

(1)(A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best practicable control technology currently available for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the control measures and practices to be applicable to point sources (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best practicable control technology currently available to comply with subsection (b)(1) of section 301 of this Act shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, and shall also take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

(2)(A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the best measures and practices available to comply with subsection (b)(2) of section 301 of this Act to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate;

(3) identify control measures and practices available to eliminate the discharge of pollutants from categories and classes of

point sources, taking into account the cost of achieving such elimination of the discharge of pollutants; and

(+) (A) identify, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, the degree of effluent reduction attainable through the application of the best conventional pollutant control technology (including measures and practices) for classes and categories of point sources (other than publicly owned treatment works); and

(B) specify factors to be taken into account in determining the best conventional pollutant control technology measures and practices to comply with section 301(b)(2)(E) of this Act to be applicable to any point source (other than publicly owned treatment works) within such categories or classes. Factors relating to the assessment of best conventional pollutant control technology (including measures and practices) shall include consideration of the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived and the comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources, and shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.

(c) The Administrator, after consultation, with appropriate Federal and State agencies and other interested persons, shall issue to the States and appropriate water pollution control agencies within 270 days after enactment of this title (and from time to time thereafter) information on the processes, procedures, or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under section 306 of this Act. Such information shall include technical and other data, including costs, as are available on alternative methods of elimination or reduction of the discharge of pollutants. Such information, and revisions thereof, shall be published in the Federal Register and otherwise shall be made available to the public.

(d)(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within sixty days after enactment of this title (and from time to time thereafter) information, in terms of amounts of constituents and chemical, physical, and biological characteristics of pollutants, on the degree of effluent reduction attainable through the application of secondary treatment.

(2) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall publish within nine months after the date of enactment of this title (and from time to time thereafter) information on alternative waste treatment management techniques and systems available to implement section 201 of this Act.

(3) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall promulgate

within one hundred and eighty days after the date of enactment of this subsection guidelines for identifying and evaluating innovative and alternative wastewater treatment processes and techniques referred to in section 201(g)(5) of this Act.

(4) *For the purposes of this subsection, such biological treatment facilities as oxidation ponds, lagoons, and ditches and trickling filters shall be deemed the equivalent of secondary treatment. The Administrator shall provide guidance under paragraph (1) of this subsection on design criteria for such facilities, taking into account pollutant removal efficiencies and, consistent with the objective of the Act, assuring that water quality will not be adversely affected by deeming such facilities as the equivalent of secondary treatment.*

(e) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, may publish regulations, supplemental to any effluent limitations specified under subsections (b) and (c) of this section for a class or category of point sources, for any specific pollutant which the Administrator is charged with a duty to regulate as a toxic or hazardous pollutant under section 307 (a)(1) or 311 of this Act, to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage which the Administrator determines are associated with or ancillary to the industrial manufacturing or treatment process within such class or category of point sources and may contribute significant amounts of such pollutants to navigable waters. Any applicable controls established under this subsection shall be included as a requirement for the purposes of section 301, 302, 306, 307, or 403, as the case may be, in any permit issued to a point source pursuant to section 402 of this Act.

(f) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall issue to appropriate Federal agencies, the States, water pollution control agencies, and agencies designated under section 208 of this Act, within one year after the effective date of this subsection (and from time to time thereafter) information including (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from—

(A) agricultural and silvicultural activities, including runoff from fields and crop and forest lands;

(B) mining activities, including runoff and siltation from new, currently operating, and abandoned surface and underground mines;

(C) all construction activity, including runoff from the facilities resulting from such construction;

(D) the disposal of pollutants in wells or in subsurface excavations;

(E) salt water intrusion resulting from reductions of fresh water flow from any cause, including extraction of ground water, irrigation, obstruction, and diversion; and

(F) changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.

Such information and revisions thereof shall be published in the Federal Register and otherwise made available to the public.

(g) (1) For the purpose of assisting States in carrying out programs under section 402 of this Act, the Administrator shall publish, within one hundred and twenty days after the date of enactment of this title, and review at least annually thereafter and, if appropriate, revise guidelines for pretreatment of pollutants which he determines are not susceptible to treatment by publicly owned treatment works. Guidelines under this subsection shall be established to control and prevent the discharge into the navigable waters, the contiguous zone, or the ocean (either directly or through publicly owned treatment works) of any pollutant which interferes with, passes through or otherwise is incompatible with such works.

(2) When publishing guidelines under this subsection, the Administrator shall designate the category or categories of treatment works to which the guidelines shall apply.

(h) The Administrator shall, within one hundred and eighty days from the date of enactment of this title, promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to section 401 of the Act or permit application pursuant to section 402 of this Act.

(i) The Administrator shall (1) within sixty days after the enactment of this title promulgate guidelines for the purpose of establishing uniform application forms and other minimum requirements for the acquisition of information from owners and operators or point-sources of discharge subject to any State program under section 402 of this Act, and (2) within sixty days from the date of enactment of this title promulgate guidelines establishing the minimum procedural and other elements of any State program under section 402 of this Act which shall include:

(A) monitoring requirements;

(B) reporting requirements (including procedures to make information available to the public);

(C) enforcement provisions; and

(D) funding, personnel qualifications, and manpower requirements (including a requirement that no board or body which approves permit applications or portions thereof shall include, as a member, any person who receives, or has during the previous two years received, a significant portion of his income directly or indirectly from permit holders or applicants for a permit).

(j) The Administrator shall issue information biennially on methods, procedures, and processes as may be appropriate to restore and enhance the quality of the Nation's publicly owned freshwater lakes.

(k) (1) The Administrator shall enter into agreements with the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior, and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, to provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality through appropriate implementation of plans approved under section 208 of this Act.

(2) The Administrator is authorized to transfer to the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior and the heads of such other departments, agencies, and in-

strumentalities of the United States as the Administrator determines, any funds appropriated under paragraph (3) of this subsection to supplement funds otherwise appropriated to programs authorized pursuant to any agreement under paragraph (1).

(3) There is authorized to be appropriated to carry out the provisions of this subsection \$100,000,000 per fiscal year for the fiscal years 1979 through 1983.

WATER QUALITY INVENTORY

Sec. 305. (a) The Administrator, in cooperation with the States and with the assistance of appropriate Federal agencies, shall prepare a report to be submitted to the Congress on or before January 1, 1974, which shall—

(1) describe the specific quality, during 1973, with appropriate supplemental descriptions as shall be required to take into account seasonal, tidal, and other variations, of all navigable waters and the waters of the contiguous zone;

(2) include an inventory of all point sources of discharge (based on a qualitative and quantitative analysis of discharges) of pollutants, into all navigable waters and the waters of the contiguous zone; and

(3) identify specifically those navigable waters, the quality of which—

(A) is adequate to provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allow recreational activities in and on the water;

(B) can reasonably be expected to attain such level by 1977 or 1983; and

(C) can reasonably be expected to attain such level by any later date.

(b)(1) Each State shall prepare and submit to the Administrator by April 1, 1975, and shall bring up to date by April 1, 1976, and biennially thereafter, a report which shall include—

(A) a description of the water quality of all navigable waters in such State during the preceding year, with appropriate supplemental descriptions as shall be required to take into account seasonal, tidal, and other variations, correlated with the quality of water required by the objective of this Act (as identified by the Administrator pursuant to criteria published under section 304(a) of this Act) and the water quality described in subparagraph (B) of this paragraph;

(B) an analysis of the extent to which all navigable waters of such State provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water;

(C) an analysis of the extent to which the elimination of the discharge of pollutants and a level of water quality which provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreational activities in and on the water, have been or will be achieved by the requirements of this Act, together with recommendations as to additional action necessary to achieve such objectives and for what waters such additional action is necessary;

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2 Portland, OR 97201
(503) 245-7641
3 Attorney for Plaintiffs

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IN THE FEDERAL DISTRICT COURT

9

FOR THE DISTRICT OF OREGON

10

11 Northwest Environmental Defense)
Center (NEDC), and John R.)
12 Churchill,)
Plaintiffs)

CIVIL NO.

86-1578-PA

13

v.

14

Lee Thomas, in his official capacity)
15 as Administrator of the Environmental)
Protection Agency,)
16 Defendant)

COMPLAINT

ENVIRONMENTAL
LITIGATION

17

18

PRELIMINARY STATEMENT.

19

20 Plaintiffs bring this suit to require the defendant to
21 comply with and enforce the federal Clean Water Act, and the
22 federal Administrative Procedure Act, as it applies to waters of
23 the United States within the state of Oregon, specifically the
24 Tualatin River Basin and Lake Oswego in Oregon.

25

26 When the Clean Water Act was passed in 1972, Congress stated
27 in the first section of the Act that it was a goal of Congress to
"restore and maintain the chemical, physical, and biological

1 integrity of the Nation's waters." This was to be achieved by
2 the complete elimination of the discharge of pollutants by 1985.
3 Until the discharge of pollutants was completely eliminated, an
4 interim goal of achieving water quality sufficient for the
5 protection of beneficial uses by July 1, 1983. 33 U.S.C. § 1251.

6
7 Congress decided that the problem with water quality (or
8 lack thereof), and its effect on uses made of the water, was not
9 lack of knowledge, but lack of action to protect the uses
10 threatened by degradation in water quality. The time for action
11 to improve water quality had come.

12 The Act evinces clear Congressional intent that these goals
13 be implemented by prompt state action to solve water quality
14 problems. Congress provided for a fast track schedule under
15 which the states and the Environmental Protection Agency were to
16 act to protect uses and water quality. The deadlines for the
17 various steps in the Clean Water Act show that Congress intended
18 that Total Maximum Daily Loads of pollutants (TMDL's) be
19 established by June 1974 at the latest. Total Maximum Daily
20 Loads were to be established with "a margin of safety which takes
21 into account any lack of knowledge", as required by Clean Water
22 Act § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C).

23
24 Each step of the process was intended by Congress to be done
25 as expeditiously as possible. The Environmental Protection
26 Agency has responded to its mandate by delaying any action
27 required of it. It did not list pollutants for which TMDL's are
suitable, until forced to do so by a court order in 1978 (more

LAC

1 than five years after the statutorily mandated deadline).
2 Continuing in the same vein, it has allowed the states to delay
3 any action required of them by the Clean Water Act.
4

5 Plaintiffs and other environmental organizations have over a
6 period of several years unsuccessfully used the administrative
7 process in an attempt to persuade the EPA and Oregon to fulfill
8 their statutory duties under the Act. The Congressional mandate
9 to eliminate pollution has never been realized in the Tualatin
10 River and Lake Oswego. The water quality in both continues to
11 deteriorate, and algae growth continues unabated. Lake Oswego
12 residents are being forced to spend tens of thousands of dollars
13 for algacides in attempts to control this algal growth downstream
14 from the sewage treatment plants discharging into the Tualatin
15 River.

16 More than two dozen technical studies have been made of the
17 Tualatin River basin from 1940 through 1986. Virtually all of
18 these have described excessive algal growth as a continuing water
19 quality problem, and have pointed to nutrient discharges from the
20 area's sewage treatment plants as the primary cause of the
21 problem.
22

23 Without doubt, establishment, and enforcement, of maximum
24 allowable loadings for these nutrients has been needed for years.
25 Clearly the Tualatin River and Lake Oswego are "waters ... for
26 which the effluent limitations ... are not stringent enough to
27 implement any water quality standard applicable to such waters",

1 under 33 U.S.C. § 1313(d)(1)(A), and clearly these are waters for
 2 which TMDL's should be established and enforced to bring these
 3 nutrient discharges down to those levels necessary to implement
 4 water quality standards.

5
 6 The evidence of the need for action is overwhelming. The
 7 1972 Clean Water Act requires that these remedial actions be
 8 promptly undertaken. Instead of meeting its statutory
 9 obligations and responding to manifest biological reality, the
 10 state of Oregon has begun yet another two year study to determine
 11 the whether action is even necessary. When faced with such
 12 frustration of act's goals and purposes EPA is under a
 13 nondiscretionary duty to implement the provisions of the Clean
 14 Water Act relating to identifications of water quality limited
 15 segments and total maximum daily loads itself, under 33 U.S.C. §
 16 1313(d)(2). EPA has not only agreed to DEQ's continuing delays,
 17 but is providing federal funding for the study's conduct.

18 Plaintiffs and other citizens suffer the continuing
 19 deprivation of opportunities for recreation in and on the waters
 20 of Tualatin River and Lake Oswego. Instead of waters suitable
 21 for recreation according to the goals and objectives of the act,
 22 they live with floating mats of putrefying algal scum.

23 Plaintiffs seek declaratory and injunctive relief:
 24

25 A. To require the Administrator to fulfill his
 26 statutory duties under the Clean Water Act to ensure that waters
 27 of the United States within the state of Oregon that are water

1 Quality Limited Segments are identified as such; and

2 B. To require the administrator to fulfill his
3 statutory duties under the Clean Water Act to ensure that Total
4 Maximum Daily Loads are established and implemented for waters
5 within the state of Oregon identified as being Water Quality
6 Limited Segments and that they are adequate under the Clean Water
7 Act to protect water quality.
8

9 JURISDICTION

10 1. The jurisdiction of this court is invoked pursuant to
11 the provisions of:
12

13 A. The Clean Water Act, 33 U.S.C. § 1365, this being
14 an action arising because of defendant's failure to perform non-
15 discretionary duties under the Clean Water Act.

16 B. 28 U.S.C. § 1331 for claims arising under the
17 federal Administrative Procedures Act, 5 U.S.C. § 706. This is
18 the claim for the defendant's arbitrary and capricious decision
19 which was not based on any evidence in the record.
20

21 VENUE

22 2. Venue is proper in the district of Oregon under 28
23 U.S.C. § 1391(e).
24

25 RELIEF

26 3. Plaintiffs' action for declaratory and injunctive
27 relief is authorized by:

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A. 33 U.S.C. § 1365 which relates to judicial review of defendant performance of nondiscretionary duties under the Clean Water Act; and,

B. 5 U.S.C. § 706 which relates to judicial review of federal administrative actions.

PLAINTIFFS

4. Plaintiff Northwest Environmental Defense Center (NEDC) is a non-profit, tax-exempt, public interest environmental membership organization, incorporated under the law of the state of Oregon. Plaintiff NEDC is dedicated to the protection of the environment and natural resources including the waters of the Pacific Northwest. Plaintiff NEDC seeks to achieve these objectives by, inter alia, taking action on behalf of itself and its members to ensure that defendant performs his statutory mandate to protect the environment. Some of plaintiff NEDC's members live, work, and enjoy recreational activities (including canoeing, bird watching, swimming) in areas that will be directly affected by defendant's failure to comply with his statutory duties. NEDC's offices are located at 10015 SW Terwilliger Blvd., Portland, Oregon, 97219. Plaintiff NEDC and its members are adversely affected by pollution in the Tualatin River and Lake Oswego, and other waters of the United States within the state of Oregon. Plaintiff NEDC brings this suit on its own behalf and on behalf of its members.

1 agency charged with controlling water pollution for the state of
2 Oregon.

3
4 8. The Tualatin River and its tributaries lie primarily
5 within Washington County, Oregon. The Tualatin River is itself
6 tributary to the Willamette River. Lake Oswego lies within
7 Clackamas County, Oregon. Some portion of the flow of the
8 Tualatin River is diverted into Lake Oswego before the Tualatin
9 River reaches the Willamette River. The Tualatin River and its
10 tributaries, and Lake Oswego are part of the navigable waters of
11 the United States as defined in the Clean Water Act, 33 U.S.C. §
12 1362.

13 9. The Clean Water Act and the implementing regulations
14 define Water Quality Standards (WQS's) as consisting of the
15 designated uses of the waters and the water quality criteria
16 based on those uses, under 33 U.S.C. § 1313(c)(2); 40 C.F.R. §
17 130.2(c).

18
19 10. The Clean Water Act required each state to identify
20 those waters within the state where effluent limits are not
21 stringent enough to meet applicable Water Quality Standards,
22 under 33 U.S.C. § 1313(d)(1)(A), 40 C.F.R. § 130.7(b)(1). These
23 waters are called Water Quality Limited Segments, pursuant to 40
24 C.F.R. § 130.2(i).

25 11. The state of Oregon, through its Department of
26 Environmental Quality (DEQ) has within its biennial report to the
27 defendant EPA required by 33 U.S.C. § 1315(D), repeatedly

1 identified the middle and lower Tualatin River and Lake Oswego,
2 as well as other bodies of water within Oregon, as being bodies
3 of water where designated uses are not being fully supported.
4 This biennial report is known as the 305(b) Report.

5
6 12. In its 1984 305(b) Report DEQ identified river miles 0-
7 9 of the Tualatin as being degraded during the ten years from
8 1972 to 1982. DEQ listed the designated beneficial uses not
9 fully supported for the Tualatin River as being swimming, and for
10 Lake Oswego as being aesthetics. In its 1986 305(b) Report DEQ
11 added aquatic life to swimming (now called "contact recreation")
12 as a use not fully supported for the Tualatin River, and changed
13 the use not fully supported for Lake Oswego from aesthetics to
14 contact recreation.

15 13. In both its 1984 and its 1986 305(b) Reports DEQ
16 identified the pollutants causing problems in the Tualatin as
17 dissolved oxygen, fecal coliform bacteria, and nutrients. In
18 both its 1984 and its 1986 305(b) Reports DEQ identified the
19 pollutants causing problems in Lake Oswego as nutrients. DEQ has
20 identified the sources of the pollution for the lower Tualatin
21 (river miles 0-9), as being municipal wastes (33 1/3%), urban
22 runoff (33 1/3%), and natural (33 1/3%). DEQ identified the
23 sources of the pollution for the middle Tualatin (river miles 9-
24 39), as being municipal waste (40%), agriculture and other
25 nonpoint sources (20%), urban runoff (20%), and natural (20%).
26 DEQ has identified the source of pollutants in Lake Oswego as
27 municipal waste (50%) and urban runoff (50%) from the Tualatin

1 River.

2
3 14. In its 1986 305(b) Report DEQ admitted that it has only
4 assessed approximately 9,665 stream miles, of an estimated 90,000
5 stream miles in Oregon, as fully supporting designated beneficial
6 uses. Of the water bodies assessed as not fully supporting
7 designated beneficial uses (approximately 2190 stream miles,
8 79,300 acres of lakes and reservoirs, 160.5 square miles of
9 ground water supply, 40,156 acres of bays and estuaries); the
10 failure to support is caused by nutrients and algae growth in
11 approximately 191 miles of stream segments, 62,182 acres of lakes
12 and reservoirs, and 159 square miles of ground water. DEQ
13 provided information similar to that provided for the Tualatin
14 River and Lake Oswego, including uses not fully supported,
15 pollutants causing the failures to support, and sources of those
16 pollutants, for these other waters within Oregon that do not
17 fully support designated uses.

18 15. The information contained in Oregon's 305(b) Reports
19 shows that the Tualatin River, and Lake Oswego as well as other
20 waters within Oregon are "waters ... for which the effluent
21 limitations ... are not stringent enough to implement any Water
22 Quality Standard applicable to such waters" within the meaning of
23 Clean Water Act § 1313(d), and that the pollution is getting
24 worse in the Tualatin River and Lake Oswego.

25
26 16. Despite the information contained in the 305(b)
27 Reports, Oregon has failed to "identify" under the Clean Water
Act the Tualatin River and Lake Oswego, or any other body of

1 water, as waters where effluent limitations are not stringent
2 enough to prevent violation of applicable Water Quality
3 Standards, contrary to the purposes and requirements of the Clean
4 Water Act, as required by CWA section 1313(d)(1)(A), and 40
5 C.F.R. § 130.7(b)(1).
6

7 17. Each state, including Oregon, was required by Clean
8 Water Act section 1313(d)(1)(C) to establish Total Maximum Daily
9 Loads (TMDL's) for those pollutants identified by defendant EPA
10 under CWA section 1314(a)(2)(D), for those Water Quality Limited
11 Segments identified by the state under CWA section 1313(d)(1)(A).
12

13 18. Oregon has failed to establish TMDL's for the Tualatin
14 River, Lake Oswego, or any other body of water in violation of a
15 Water Quality Standards as required by CWA § 1313(d)(1)(A).
16

17 19. Each state, including Oregon, was required by the Clean
18 Water Act § 1313(d)(2) to submit a list of waters identified as
19 being Water Quality Limited Segments to defendant EPA as
20 Administrator of the Environmental Protection Agency, and TMDL's
21 established for those waters no later than 180 days after the
22 date of publication by defendant EPA of pollutants identified as
23 being suitable for determination of TMDL's.

24 20. Defendant EPA made the necessary identifications on
25 December 28, 1978 by publication in the Federal Register at 43
26 Fed. Reg. 60662-66 (Dec. 28, 1978). Defendant EPA identified all
27 pollutants as being suitable for the calculations of TMDL's. 43
Fed. Reg. at 60665. Therefore states, including Oregon, were

1 required to submit TMDL's by June 26, 1979 for all pollutants for
2 those waters identified as not meeting Water Quality Standards.
3

4 21. Oregon has failed for over seven years now to submit
5 proposed TMDL's and to identify Water Quality Limited Segments.
6 This failure is a constructive submission of no TMDL's and a
7 constructive submission of no identifications. Oregon's failure
8 to identify these waters as required by section 1313(d)(1)(A) and
9 to establish TMDL's for these waters as required by section
10 1313(d)(1)(C), within 180 days of Dec. 28, 1978, is contrary to
11 the purposes and requirements of the Clean Water Act.

12 22. Defendant EPA is aware that Oregon has not identified
13 to the EPA, the Tualatin River, Lake Oswego or any other waters
14 within Oregon, as waters not meeting applicable Water Quality
15 Standards; that Oregon is required to do so; and that Oregon's
16 failure to do so is contrary to the purposes and requirements of
17 the Clean Water Act.

18 23. EPA is aware that Oregon has not submitted to the
19 defendant, TMDL's for the Tualatin River, Lake Oswego, or any
20 other body of water; that Oregon is required to do so; and that
21 Oregon's failure to do so is contrary to the purposes and
22 requirements of the Clean Water Act.

23 24. The facts set forth herein are known, have been known
24 or reasonably should have been known by the EPA.
25

26
27 / / / / / /

FIRST CLAIM FOR RELIEF

25. Plaintiffs reallege paragraphs 1 - 24.

26. Defendant EPA is under a nondiscretionary duty to review the identifications and TMDL's submitted by the states to determine whether they are adequate under the act. Defendant EPA is also under a nondiscretionary duty to approve or disapprove submissions by a state of its identification of waters not meeting WQS's and the state's establishment of TMDL's, under U.S.C. § 1313(d)(2) within 30 days of the date of submission.

27. Defendant EPA has failed to perform these nondiscretionary duties:

A. To review the constructive submissions by Oregon of no identifications and no TMDL's; and

B. To approve or disapprove these constructive submissions.

SECOND CLAIM FOR RELIEF

28. Plaintiffs reallege paragraphs 1 - 24, and 26 - 27.

29. Defendant EPA is under a duty to disapprove any submission of either an identification of waters not meeting WQS's, or of TMDL's established, if EPA finds that such submissions are contrary to the purposes and requirements of Clean Water Act section 1313(d)(2).

30. Defendant EPA's failure to disapprove Oregon's

1 constructive submission of no identifications of Water Quality
2 Limited Segments, and Oregon's constructive submission of no
3 Total Maximum Daily Loads, when there is no evidence in the
4 supporting this failure to disapprove, is arbitrary and
5 capricious. Effluent limitations for the Tualatin River, Lake
6 Oswego, and other waters are not stringent enough to prevent
7 violation of Water Quality Standards or even to prevent
8 degradation of the water quality, therefore any approval by the
9 defendant of Oregon's constructive submission of no
10 identifications of waters not meeting WQS's or of no TMDL's is an
11 arbitrary and capricious decision not supported by any evidence
12 in the record, in violation of the Administrative Procedures Act.
13

14 THIRD CLAIM FOR RELIEF

15 31. Plaintiffs reallege paragraphs 1 - 24, paragraphs 26 -
16 27, and paragraphs 29 - 30.
17

18 32. Defendant EPA has failed to perform a nondiscretionary
19 duty to make identifications of Water Quality Limited Segments
20 and to establish Total Maximum Daily Loads. Since Oregon's
21 identifications or loads should have been disapproved by EPA, EPA
22 is under a nondiscretionary duty to, within 30 days of the
23 disapproval, make the identifications and establish such loads as
24 determined necessary to implement the applicable Water Quality
25 Standards. 33 U.S.C. § 1313(d)(2). Defendant has failed to make
26 the identifications and establish the TMDL's.
27 / / / / /

REQUESTED RELIEF

WHEREFORE, plaintiffs request an order of this court:

A. declaring that Oregon's failure to identify Water Quality Limited Segments and/or to establish Total Maximum Daily Loads for those Water Quality Limited Segments substantially unlawful and procedurally invalid;

B. ordering the Administrator of the Environmental Protection Agency to disapprove Oregon's constructive submission of no identifications of Water Quality Limited Segments and Oregon's constructive submission of no Total Maximum Daily Loads;

C. declaring that the Administrator's failure to disapprove Oregon's constructive submission of no identifications of Water Quality Limited Segments, and Oregon's constructive submission of no TMDL's is arbitrary and capricious, and not supported by any evidence in the record;

D. ordering the Administrator of the Environmental Protection Agency to identify Water Quality Limited Segments in Oregon, and to establish and implement Total Maximum Daily Loads for those segments within the time frame specified in the Clean Water Act;

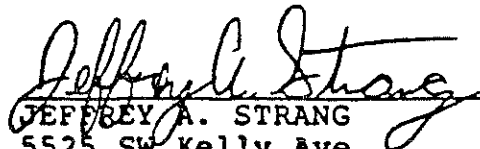
E. awarding plaintiffs their attorney fees incurred in pursuit of this suit pursuant to the Equal Access to Justice Act, 28 U.S.C. § 2412, and the Clean Water Act 33 U.S.C. § 1365;

F. awarding plaintiffs their cost incurred herein; and,

1 G: ordering, declaring or awarding such other relief
2 as the court deems necessary.

3
4 DATED: DECEMBER 12, 1986

Respectfully submitted,

5
6 

7 JEFFREY A. STRANG
8 5525 SW Kelly Ave.
9 Portland, OR 97201
10 (503) 245-7641
11 Attorney for Plaintiffs

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CLERK, U.S. DISTRICT COURT
DISTRICT OF OREGON

BY _____

ATTACHMENT
PAGE 17

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON

PLAINTIFF,

VS.

DEFENDANT.

CIVIL No. 86-1578 PA
ORDER

THE FOLLOWING SHALL OCCUR WITHIN 120 DAYS OF THE FILING OF THE COMPLAINT:

- AMENDMENT OF PLEADINGS AND JOINDER OF OTHER PARTIES
- FILING OF MOTIONS
- COMPLETION OF DISCOVERY

THE PRETRIAL ORDER OR AN ORDER WAIVING THE PRETRIAL ORDER MUST BE LODGED WITHIN 150 DAYS OF THE FILING OF THE COMPLAINT.

MOTIONS FOR EXTENSION OF ANY TIME LIMIT MUST BE SUPPORTED BY AN AFFIDAVIT WITH SUFFICIENT REASONS DEMONSTRATING BOTH GOOD CAUSE AND APPROPRIATE USE OF PRIOR TIME.

DATED: DEC 12 1986 _____

ROBERT M. CHRIST, CLERK

BY M. Sheehan
DEPUTY CLERK



Northwest Environmental Defense Center
10015 S.W. Terwilliger Blvd., Portland, Oregon 97219
(503) 244-1181 ext.707

January 6, 1987

Lee Thomas
Administrator,
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Robi Russell
Administrator, Region X
Environmental Protection Agency
1200 6th Avenue
Seattle, WA 98101

Edwin Meese, III
U.S. Attorney General
Room 5111, Main Justice Bldg.
10th & Constitution Avenues, N.W.
Washington, D.C. 20530

Fred Hansen
Director,
Oregon Department of Environmental Quality
811 S.W. 6th Avenue
Portland, OR 97204

Dear People:

This letter is to give you notice as required by 33 U.S.C. § 1365(b)(2) (Clean Water Act § 505(b)(2)) that the Northwest Environmental Defense Center (NEDC) and other Oregon citizens intend to file suit under § 1365(a)(2), after expiration of sixty days, against the Environmental Protection Agency (EPA) for a failure to perform nondiscretionary duties under the Clean Water Act.

Specifically:

**Oregon's Actions are Contrary to the Purposes and
Requirements of the Clean Water Act**

Among other things:

1) Each state was required to identify those waters where effluent limitations are not stringent enough to implement any water quality standard. 33 U.S.C. § 1313(d)(1)(A); 40 C.F.R. § 130.7(b)(1). These waters are called water quality limited segments. 40 C.F.R. § 130.2(i). Water quality standards consist of the designated uses of the waters and the water quality criteria based on those uses. 33 U.S.C. § 1313(c)(2); 40 C.F.R. § 130.2(c).

The State of Oregon, through its Department of Environmental Quality (DEQ), has identified the following and other waters of the state as being bodies of water where designated uses are not being fully supported. See Oregon 1986 Water Quality Program Assessment and Program Plan for Fiscal Year 1987, at Appendix A, pp. 147-181. (This is DEQ's 1986 305(b) Report to EPA as required by section 305(b) of the Clean Water Act. 33 U.S.C. § 1315(b)).

- Neacoxie Creek
- Necanicum River
- Nestucca River and Nestucca Bay *
- Schooner Creek and Siletz Bay *
- Yaquina River and Yaquina Bay *
- North Florence Groundwater Aquifer
- South Umpqua River *
- Calapooya Creek
- Coquille River and Coquille Estuary *
- Bear Creek *
- Willamette River *
- Coast Fork Willamette River *
- Mary's River *
- Calapooyia River *
- South Yamhill River
- Yamhill River
- Pudding River *
- Columbia Slough
- Deschutes River
- Crooked River *
- John Day River *
- Umatilla River *
- Grande Ronde River
- Powder River *
- Malheur River *
- Owyhee River *
- Klamath River *

Those waters on the above list that are followed by an asterisk (*) are waters that were identified by DEQ as being bodies of water where designated uses were not being fully supported as long ago as 1972 (the

original year of enactment of the Clean Water Act, PL 92-500). See DEQ's 1984 305(b) Report, at Table 2 (rivers & streams), Table 4 (lakes), and Table 6 (estuaries). Those waters on the above list not followed by an asterisk are bodies of water whose use supporting status in 1972 was unknown by DEQ or whose status was identified by DEQ as being degraded since 1972, the year EPA began administration of the Clean Water Act.

In its 1984 305(b) report to EPA, DEQ listed swimming, shellfish harvesting, fisheries, and cold water fisheries as uses not fully supported among the above listed waters. In its 1986 305(b) report, the uses listed by DEQ as not fully supported among the above listed waters had become contact recreation, shellfish harvesting, aquatic life, and domestic water supply.

DEQ has listed fecal coliform bacteria, dissolved oxygen, suspended solids, algal growth and nutrients, ammonia, pH, toxic organics and heavy metals as water quality concerns causing uses to be not fully supported among the above listed waters. DEQ has identified the causes of pollution of the above waters to be agricultural nonpoint sources, on-site septic tank and drainfield systems, urban and residential runoff, municipal point sources, industrial point sources, forest harvesting, low flow, and natural background levels. See 1986 305(b) Report, at Appendix A.

The information contained in Oregon's 1984 and 1986 305(b) reports shows that the waters listed above are clearly "waters ... for which the effluent limitations ... are not stringent enough to implement any water quality standard applicable to such waters" within the meaning of § 1313(d) and that the pollution of these waters is progressively becoming worse.

Oregon has failed to identify any of the waters listed above, or any other bodies of water, as waters where effluent limitations are not stringent enough to prevent violation of applicable water quality standards contrary to the purposes and requirements of the Clean Water Act as required by 33 U.S.C. § 1313(d)(1)(A) and 40 C.F.R. § 130.7(b)(1).

2) Each state was required to establish the total maximum daily load (TMDL), for those pollutants identified by EPA under § 1314(a)(2)(D), for those water quality limited segments identified by the state under § 1313(d)(1)(A). 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.7(c).

Oregon has failed to establish TMDL's for any of the above listed waters, or any other body of water in violation of any water quality standard, as required by § 1313(d)(1)(A).

3) Each state was required to submit this list of waters identified as being water quality limited segments, and the TMDL's established for those waters, to the EPA no later than 180 days after publication by EPA of the pollutants identified as being suitable for calculation of TMDL's under § 1314(a)(2)(D). 33 U.S.C. § 1313(d)(2); 40 C.F.R. § 130.7(d).

EPA made the necessary identification of pollutants on December 28, 1978 by publication in the Federal Register. 43 F.R. 60662-66 (Dec. 28, 1978). The EPA identified all pollutants as being suitable for the calculations of TMDL's. 43 F.R. at 60665. Therefore states were required to submit TMDL's by June 26, 1979 for all pollutants for those waters identified as not meeting water quality standards.

"If a state fails over a long period of time to submit proposed TMDL's, this prolonged failure may amount to the 'constructive submission' by that state of no TMDL's." Scott v. City of Hammond, Ind., 741 F.2d 992, 996 (7th Cir. 1984).

Oregon has failed over a long period of time to submit proposed TMDL's and to identify water quality limited segments. This failure is a constructive submission of no TMDL's and a constructive submission of no identifications. Oregon's failure to identify these waters as required by § 1313(d)(1)(A) and to establish TMDL's for these waters as required by § 1313(d)(1)(C), within 180 days of December 28, 1978, is contrary to the purposes and requirements of the Clean Water Act. 33 U.S.C. § 1313(d)(1)(A), (C).

EPA's Failures Under the Clean Water Act

Among other things:

1) EPA is under a nondiscretionary duty to review reports submitted by the states under the Clean Water Act. 40 C.F.R. § 130.8. EPA is aware, or because the information is contained in Oregon's 305(b) reports should be aware, that the above listed waters and other waters of the state of Oregon do not fully support their designated uses.

Water quality standards include designated uses. EPA is aware, or should be aware, that Oregon has not identified to the EPA any of those waters listed above or any other bodies of water as waters not meeting applicable water quality standards, that Oregon is required to do so, and that Oregon's failure to do so is contrary to the purposes and requirements of the Clean Water Act.

EPA is aware, or should be aware, that Oregon has not submitted to EPA the TMDL's for any pollutant for any of the waters listed above or for any other body of water, that Oregon is required to do so, and that Oregon's failure to do so is contrary to the purposes and requirements of the Clean Water Act.

2) EPA is under a nondiscretionary duty to review the identifications and TMDL's submitted by the states to determine whether they are adequate and sufficient under the Act. EPA is under a nondiscretionary duty to approve or disapprove submissions by a state of its identification of

waters not meeting water quality standards and its establishment of TMDL's under § 1313(d) within 30 days of the date of the state's submission. 33 U.S.C. § 1313(d)(2). If the failure by the state is a constructive submission of no identifications and no TMDL's, "then EPA is under a duty to either approve or disapprove the 'submission.'" Scott v. City of Hammond, at 997.

EPA has failed to perform nondiscretionary duties: (1) to review the constructive submissions by Oregon of no identifications and no TMDL's for the above listed waters or any other waters; and (2) to approve or disapprove Oregon's constructive submissions.

3) EPA is under a duty to disapprove any submission of either an identification of waters not meeting water quality standards or of TMDL's, if EPA finds that such identification of waters not meeting water quality standards or submissions of TMDL's is contrary to the purposes and requirements of the Clean Water Act. 33 U.S.C. § 1313(d)(2). Because effluent limitations for the above listed and other waters are not stringent enough to prevent violation of water quality standards or even to prevent degradation of water quality, any approval by the EPA of Oregon's constructive submission of no identifications of waters not meeting water quality standards or of no TMDL's is an arbitrary and capricious decision not supported by the evidence in the record in violation of the Administrative Procedures Act.

4) If EPA disapproves Oregon's constructive submissions of no identifications and no TMDL's, then EPA is under a nondiscretionary duty to, within 30 days of the disapproval, make the identifications and establish such TMDL's as determined necessary to implement the applicable water quality standards. 33 U.S.C. § 1313(d)(2). EPA has failed to perform a nondiscretionary duty to make the identifications and establish TMDL's, if Oregon's submissions are not approved.

Sincerely yours,



J. Douglas Smith
President,
Northwest Environmental Defense Center

cc: Governor-elect Neil Goldschmidt

JDS:pc

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
the State of Oregon to modify, N.P.D.E.S. permits on the basis of
9 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 2. That the following terms shall have the meanings
16 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

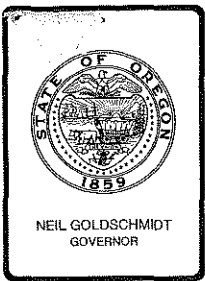
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Seattle, WA 98101
(206) 442-1505



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director *Jul*
Subject: Agenda Item G, 7/8/88, EQC Meeting

Executive Summary of Staff Report Proposing Adoption of New Administrative Rules for the Waste Tire Program, OAR 340-62: Permit Procedures and Standards for Waste Tire Storage Sites and Waste Tire Carriers

Background

The 1987 Legislature passed HB 2022 (ORS 459.705 - 459.790) establishing a comprehensive program governing the storage, transportation and disposal of waste tires. Waste tires cause environmental problems. They provide compaction problems if landfilled whole. Tire fires are very difficult to control, and emit toxic substances. The waste tire program was established to deal with these problems.

Implementation

The Department is going through a two-stage rulemaking procedure to implement the program. The first stage of this proposed rule deals with permitting requirements for waste tire storage sites, waste tire carriers, and chipping standards for tires to be landfilled. The second stage deals with use of reimbursement and cleanup funds, and is the subject of a second agenda item (Agenda Item E).

The Department developed the rule with the help of the Waste Tire Task Force. The Commission authorized public hearings on the proposed rule at its April 29, 1988, meeting. Five public hearings were held on the proposed rule in Pendleton, Bend, Springfield, Medford and Oregon City, from May 31 through June 6, 1988.

Summary of Staff Report Key Issues

To comply with the statutory deadline to have sites storing waste tires under permit from DEQ by July 1, 1988, the Department is proposing a two-step permit procedure for storage sites. Stage I permits are valid for no longer than six months, or until December 31, 1989, whichever comes first. The Department is proceeding with processing Stage I permits to meet the July 1 deadline. However, Stage I permits are effectively a compliance

Executive Summary
Agenda Item G
7/8/88, EQC Meeting
Page 2

schedule for providing complete applications for Stage II permits, the requirements for which the Commission will determine in this rule.

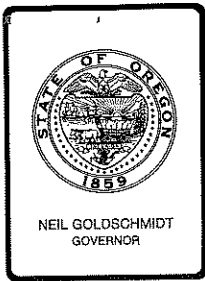
Storage site permit fees are uniform, not based upon site size (\$250). Permit fees and conditions are set to encourage the cleanup of tire piles, rather than applying for storage permits. Storage standards set a maximum size, determined by fire standards.

Tire carriers with more than one truck are required to have one permit, with a fee and a separate I.D. number for each truck.

Chipping standards for tire disposal at landfills are set so as to prohibit the simple splitting of tires. This added expense will discourage landfilling of tires in favor of recycling. The Department has heard from a number of landfill operators who feel splitting will accomplish the same end of avoiding landfill problems with tires, while avoiding the extra cost of chipping.

It is recommended that the rule establishing permit requirements and chipping standards be adopted with the changes indicated in the staff report.

SB7625ES



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item G, July 8, 1988, EQC Meeting

Proposed Adoption of New Administrative Rules for the Waste Tire Program, OAR 340-62: Permit Procedures and Standards for Waste Tire Storage Sites and Waste Tire Carriers

BACKGROUND

Some 2 million waste tires are generated each year in Oregon. About ten percent are used for retreading. An additional 55 percent are currently being reused as fuel for use in industrial boilers, or raw materials for manufacturing. Most of them go into landfills, tire "piles", or are illegally dumped.

Waste tires pose environmental problems, as they resist compaction in solid waste disposal sites, and once they catch on fire, they are nearly uncontrollable. Tire fires emit many toxic compounds. Tires also offer a breeding ground for mosquitoes and other vectors.

Proper disposal of waste tires can be expensive, making illegal dumping a serious problem. The reuse and recycling of waste tires has been restricted by a lack of developed markets.

Policy

In developing rules for the Waste Tire Program, the Department has had to consider the interrelationships between waste tire cleanup, disposal, storage and reuse. The Department's priority is the reuse and recycling of waste tires. The Department anticipates that over time, storage will be confined to temporary rather than permanent storage. The purpose of the reimbursement to users of waste tires is to encourage reuse and recycling. This is intended to increase the demand for waste tires so that the Department's involvement in cleanup of tire piles can be minimized. The highest priority for use of cleanup funds would be for sites posing the greatest hazard to health and the environment.

Waste Tire Program (HB 2022)

The 1987 Oregon Legislature passed HB 2022 (Attachment VI) to address the waste tire disposal problem, and to enhance the market for waste tires. It sets up the following comprehensive program for waste tires:

1. Effective July 1, 1988, storage sites accepting waste tires must have a permit issued by DEQ. Solid waste disposal sites which store over 100 tires must have their DEQ permit modified to authorize tire storage.

The following are exempt from the permitting requirement: a) sites with fewer than 100 tires; b) tire retailers with fewer than 1,500 waste tires; and c) tire recappers with fewer than 3,000 waste tires.

2. Certain carriers hauling waste tires must have a permit issued by DEQ.
3. Waste tires may not be disposed of in land disposal sites after July 1, 1989 unless they are chipped, or recycling is not economical.
4. A \$1.00 fee is assessed on the sale of all new replacement tires sold in Oregon, beginning January 1, 1988. It is collected by retail tire dealers and paid to the Oregon Department of Revenue (DOR). The tire dealers keep \$.15 per tire. DOR deducts their administrative expenses from the fund. The rest goes into the Waste Tire Recycling Account, administered by DEQ.
5. The Waste Tire Recycling Account will be used for partial reimbursements to users of recycled tires or tire chips; to help finance the cleanup of some waste tire piles; and to pay for DEQ's administrative costs.

Department responsibilities under the statute fall into two broad areas: permitting (tire storage sites and tire carriers); and overseeing use of the Waste Tire Recycling Account. The first statutory deadline requiring Department action is July 1, 1988, by when sites storing waste tires must have DEQ permits. Therefore the Department first developed the present rule covering permits to meet that deadline. A second stage of rulemaking (Agenda Item E) treats use of the Waste Tire Recycling Account for reimbursements and tire cleanup.

The Department initiated a two-stage waste tire storage site permitting process before the adoption of this rule, and is proceeding with processing Stage I permits to meet the July 1 legislative deadline. However, Stage I permits are essentially a compliance schedule to complete Stage II permits, the requirements of which will be determined by the Commission in the rule now under consideration. This process was presented to the Commission at

its April 29, 1988, meeting. At that time the Department requested and received permission to hold public hearings on this proposed rule governing waste tire storage sites and carriers. Notice of the hearings was published in the May 15, 1988 Secretary of State's Bulletin. The following hearings were held:

Pendleton	May 31
Bend	June 1
Springfield	June 2
Medford	June 3
Oregon City	June 6

Statement of Need for Rulemaking is attached (Attachment I), as well as a copy of the notice of public hearing (Attachment II). The Commission is authorized to adopt rules pertaining to the waste tire program by ORS 459.710, 459.725, 459.730, 459.750 and 459.785.

ALTERNATIVES AND EVALUATION

Public Comment Process

At the five public hearings concerning the proposed rule, 18 people submitted oral testimony. In addition, ten people submitted written testimony. Several presenters were auto wreckers, and felt the rule did not take their concerns into account. They also complained that they had not been involved in the development of the proposed rule. Many auto wreckers have substantial amounts of waste tires. The auto wreckers felt that they should be allowed to store more than 100 waste tires before being required to get a waste tire storage site permit. They also wanted clarification on the definition of "waste tire", one suggestion being that if a tire was on a rim it should not be considered a waste tire.

Another frequent comment was that there need to be alternatives for disposal of waste tires which are not prohibitively expensive. A related comment was that the proposed chipping standard for tire disposal in landfills will be too expensive; purchase of a shredding machine to meet the standard could cost over \$100,000. The concern was that solid waste disposal sites are unlikely to make that investment, and will simply stop accepting tires after July 1, 1989. Several people recommended allowing splitting rather than chipping.

The law allows an exception to the chipping requirement if "The Commission finds that the reuse or recycling of waste tires is not economically feasible." (ORS 459.710 (1)(c)) Several presenters felt that in rural areas reuse of tires is not economically feasible, and wanted landfills in their area to be able to keep accepting whole tires. They asked what standard would be used for that finding, and who could apply for it. The proposed rule does not address this issue. The Department feels this should receive public scrutiny, and intends to draft a rule setting an economic

feasibility standard later this year. The draft rule would receive public hearings, and be adopted in early 1989. The Department's preference would be to set a procedure to determine an average statewide cost of landfill disposal of tires, and add a ten percent premium for reuse. The resulting cost would be deemed the amount it was "economically feasible" to pay for tire reuse. If tire reuse cost more than that in a region, then landfilling of whole tires would be allowed there.

The attached hearing officer's reports (Attachment III) and response to public comment (Attachment IV) provide a complete listing of all comments received and the Department's responses.

Major Elements in the Proposed Rule

The present proposed rule was developed with substantial input from the Waste Tire Task Force. The rule covers permitting and storage standards for waste tire storage sites, permitting of tire carriers, and standards for tire chipping for landfills.

The rule as drafted is broken down into the following main elements: conditions when a waste tire storage permit is required; permittee obligations; storage site standards; closure procedures; modification of solid waste disposal site permits for solid waste site storing over 100 tires; chipping standards; and requirements for waste tire carrier permits.

1. Waste Tire Storage Site Permit Procedure. In order to meet the statutory deadline of getting sites under permit by July 1, 1988, the Department proposed to issue waste tire storage site permits in a two-stage procedure. The Stage I permit is of limited duration (maximum six months, or December 31, 1988, whichever comes first) and is based on statutory requirements. Permittees must either remove all waste tires from their site by December 31, 1988, or apply for a Stage II waste tire storage site permit. The Stage II or "regular" permit will be required of any site still having over 100 tires after the expiration of their Stage I permit.

The Stage II permit will include additional requirements, such as an application and annual compliance fee, financial assurance, a comprehensive tire management plan, and a compliance plan to remove or process the waste tires. Permittees will have to comply with DEQ standards for storing waste tires.

An alternative considered was issuing a permit by rule to all identified sites storing waste tires on July 1, 1988, and establishing by rule a later date for a "regular" waste tire storage site application. The Department felt it was important to more actively involve permittees, and use the Stage I permit as a first step towards a Stage II "regular" permit.

2. Fee Structure. The Task Force recommended uniform permit fees for all waste tire storage site permit applicants, rather than the other alternative, fees based on the size of the facility. Their thinking was that DEQ's administrative costs per site may well not depend on the size of the site. Some relatively small sites whose owners have few resources may be more difficult to bring under compliance than large sites.

The tire carrier fee would however take into account the size of the applicant's operation. The recommended fee structure includes an annual compliance fee partially based on how many trucks the business has.

The Task Force recommended a combined storage site/carrier permit application and fee for persons who must have both permits.

DEQ received some public comments that the proposed fees were too high, but no specific recommendations for changes. The Department is not changing its recommended fee structure from the draft rule.

Recommended fee structure:

- Waste tire storage sites:

"Stage II" application fee	\$250
Annual compliance fee	\$250

- Waste tire carriers:

Application fee	\$25
Annual compliance fee	
Base (per company or corporation)	\$175
Plus annual fee per vehicle	\$25

- Combined fee (storage site/carrier)

Application fee	\$250
Annual compliance fee	
Base (per company or corporation)	\$250
Plus annual fee per vehicle	\$25

3. Site Storage Standards. Major concerns in setting standards for waste tire storage sites are fire prevention and suppression, vector control, and keeping tires out of waterways.

The following "maximum bulk" standard for tire piles is recommended to allow fires to be broken up:

Width: 50 feet
Area: 15,000 square feet
Height: 6 feet
Minimum fire lane width: 50 feet

Staff added to the draft rule a standard for indoor storage of tires after several questions arose about indoor storage: The Standard for Storage of Rubber Tires, NFPA 231D-1986 edition, adopted by the National Fire Protection Association.

4. Definition of Waste Tire. The statute defines "waste tire" as a tire that is no longer suitable for its original intended purpose because of wear, damage or defect. With input from the Task Force, the Department clarified that definition to cover tire casings intended for recapping. Only a person involved in the tire trade can tell whether a used tire is recappable, or only fit to be discarded.

During the public comment process, auto wreckers recommended that a tire on a rim not be considered a waste tire. However, whether a tire is on a rim or not does not determine whether it meets the statutory definition of "waste tire". The Department does not recommend adding that change. In response to other questions from auto wreckers, the Department clarified that a used tire which can be resold for use on a vehicle is not a waste tire, and thus not subject to regulation under this program.

5. "Beneficial Use" of Whole Waste Tires. The Task Force felt that there may be various legitimate uses of whole waste tires such as farm use of tire fences that should be exempt from the storage site permit requirement. Rather than trying to define all such uses in the rule, the Task Force recommended allowing the Department to grant exemptions on a case-by-case basis. This is provided for in OAR 340-62-015 (7). The use would have to meet state and local requirements for vector and fire control. At the Oregon City public meeting, several people noted that mosquito breeding can be a serious concern with tire "fences."
6. Financial Assurance. Financial assurance is required of waste tire storage site permittees and waste tire carriers. For storage sites, this is to cover waste tire removal and processing and fire suppression. The statute allows a waiver for existing sites. The proposed rule would allow DEQ to grant a waiver for sites that were not accepting additional waste tires, and which were complying with a schedule to clean up their site. One comment was received that a waste tire processor, which was also a waste tire storage site permittee, should not be required to have over \$5,000

in financial assurance. The Department feels this must be determined on a case-by-case basis, depending on the number of tires stored. Several members of the public commented that the \$5,000 bond required by statute of tire carriers was unnecessary and/or burdensome. The statute does not allow a waiver of financial assurance for tire carriers.

7. Chipping Standards. The Commission is required to set standards to which tires must be "chipped" in order to be disposed of in solid waste disposal sites after July 1, 1989. As noted above, this standard will have an economic impact on landfill operators and indirectly on the public; machines will have to be purchased or services contracted for to chip the tires. Splitting (cutting the tires in two) would be cheaper than chipping to smaller pieces, and several landfills now are using splitters. Many on the Task Force felt that "splitting" is not "chipping". They feel that if the Legislature had intended to allow land disposal of split tires, it would have so specified. However it is difficult to identify any environmental advantage to landfilling chipped tires over landfilling split tires. The Department is not recommending changes to the chipping standard as proposed in the draft rule.

The statute provides for an exception to the chipping standard if the EQC "finds that the reuse or recycling of waste tires is not economically feasible". Several presenters felt that may be the case in the more rural parts of the state. The Department feels it would be premature to recommend that finding now, before the reimbursement for use of waste tires is in place. But DEQ intends to examine more closely the economic feasibility of tire recycling early in 1989 to see if it may be warranted in some areas.

The issue of applying the chipping standard to oversize tires arose in one public meeting. Such tires cannot be chipped, and in addition there is little demand for their reuse (aside from one manufacturer of discs for fishing nets). The Department is adding a recommendation to the draft rule that reuse or recycling of tires larger than 18 inches is not economically feasible. This would allow them to be landfilled whole.

8. Tire Carrier Standards. The main issues concerning tire carriers were how to treat tire dealers and retreaders who haul recappable casings in-house; retail tire dealers servicing commercial accounts and hauling replaced casings back to their store; and waste tire processors who need to lease or otherwise hire additional vehicles from large commercial fleets that are not, and have no interest in becoming, waste tire carriers. Several members of the public commented that persons (such as tire dealers) who now haul their own scrap tires to proper disposal sites should not have to become permitted tire carriers. Written

testimony was also received from public agencies who are required to pick up abandoned casings from public rights-of-way. They requested exemption from the carrier permit requirement.

The draft rule offered relief from the permit requirement for in-house haulers of casings, and retail tire dealers serving accounts. DEQ received public comment that the in-house hauling exemption should be extended to company-franchised outlets. The Department agrees, and is incorporating that recommendation into this proposed rule.

The Task Force recommended adding a provision to the draft rule that would allow a temporary extension of a tire carrier permit to additional leased or contracted for vehicles. Thus a processor who had a carrier permit could obtain a temporary permit for a temporarily leased vehicle (less than 30 days). The Department is proposing adding a provision to allow this, under a blanket \$25 per year additional fee. The permittee would keep a log of all vehicles used. The permittee's bond would have to cover vehicles leased or under contract.

To ease the burden of obtaining a carrier permit for persons who haul their own tires for disposal in small trucks, the Department is proposing a lower annual compliance fee for them (\$25 instead of \$175).

DEQ agrees that public agencies who are required to pick up scrap tires should be exempt from the permitting requirement. The Department has added language to this proposed rule exempting agencies under the PUC "E" plate definition from the carrier requirement.

As a housekeeping change, the Department also added a provision to the rule to allow a waste tire carrier to add a permanent vehicle to its tire carrier fleet after its original carrier permit was issued.

9. Other Proposed Changes from the Draft Rule. DEQ has made various housekeeping changes, such as making references to bonding requirements consistent for storage site permits and carrier permits.

OAR 340-62-070 noting civil penalties was deleted on the advice of the Attorney General. Civil penalties are covered in OAR 340-12. A portion of the financial assurance section (OAR 340-62-022) was also deleted on advice of the Attorney General.

A subsection is added to OAR 340-62-055 to clarify that persons subject to the waste tire carrier permit requirement who fail to apply for the permit are subject to civil penalty.

At their May 17 meeting, the Task Force recommended that waste tire storage sites be required to inform DEQ of any non-permitted tire carriers delivering waste tires to their site. The Task Force felt that the sites should accept the tires, but forward the name of the unpermitted carrier to DEQ for enforcement. This change has been incorporated into the proposed rule.

Following DEQ staff comment, a proposed requirement has been added for solid waste disposal sites that want to landfill chipped tires after July 1, 1989. This would require the site operator to verify to the Department that alternatives to such tire disposal have been investigated and found not to be economically feasible.

A \$10 fee to replace a lost or destroyed tire carrier ID decal is proposed.

SUMMATION

1. The Waste Tire Program passed by the 1987 Legislature gives DEQ responsibilities to implement a program regulating storage, transportation and reuse of waste tires. This includes establishing rules to set standards for storage sites, permit fees.
2. The statute directs the Commission to adopt rules to implement the Waste Tire Program (ORS 459.710, 459.725, 459.730, 459.750, and 459.785).
3. The draft rule was developed with the help of the Waste Tire Task Force.
4. The Commission on April 29, 1988 authorized the Department to hold public hearings on a proposed rule to implement the Waste Tire Program.
5. Notice of proposed rulemaking was published in the May 15, 1988 Secretary of State's Bulletin.
6. Five public hearings were held between May 31 and June 6, 1988.
7. This proposed rule covers:
 - Permitting and storage standards for waste tire storage sites;
 - Solid waste permit modifications to allow waste tire storage;
 - Permit procedures and requirements for waste tire carriers; and
 - Chipping standards for waste tires to be landfilled.

8. In order to store more than 100 waste tires, a site must receive a permit from the Department by July 1, 1988. The Department is proposing a two-stage permit process to comply with this statutory deadline.

DIRECTOR'S RECOMMENDATION

Based upon the summation, it is recommended that the Commission adopt the proposed new rule governing permitting of waste tire storage sites, waste tire carriers, and chipping standards for landfill disposal of waste tires in OAR Chapter 340, Division 62.



Fred Hansen

- Attachments
- I. Rulemaking Statements
 - II. Notice of Public Hearing
 - III. Hearing Officer's Reports (6)
 - IV. Department Response to Public Comment
 - V. Draft Rule OAR Chapter 340, Division 62
 - VI. HB 2022

Deanna Mueller-Crispin:dmc
229-5808
June 7, 1988

SB7625

RULEMAKING STATEMENTS
for
Proposed New Rules Pertaining to the Storage of Waste Tires
OAR Chapter 340, Division 62

Pursuant to ORS 183.335, these statements provide information on the intended action to adopt a rule.

STATEMENT OF NEED:

LEGAL AUTHORITY:

The 1987 Oregon Legislature passed the Waste Tire Act regulating the storage and transportation of waste tires. ORS 459.785 requires the Commission to adopt rules and regulations necessary to carry out the provisions of ORS 459.705 to 459.790. The Commission is adopting new rules which are necessary to carry out the provisions of the Waste Tire Act.

NEED FOR THE RULE:

Improper storage and disposal of waste tires represents a significant problem throughout the State. The Waste Tire Act establishes a comprehensive program to regulate the storage, transportation and disposal of waste tires. It also establishes a Waste Tire Recycling Fund to help pay for the cleanup of some tire dumps, and to create financial incentives for people to reuse waste tires. Rules from the Commission are needed to set program procedures, requirements, standards and permit fees. The rule now proposed deals with requirements for permits for: waste tire storage sites; waste tire carriers; modification of solid waste site permits to allow waste tire storage. A rule covering use of the Waste Tire Recycling Fund will be proposed at a later date.

PRINCIPAL DOCUMENTS RELIED UPON:

- a. Oregon Revised Statutes, Chapter 459.
- b. Oregon Administrative Rules, Chapter 340, Division 60.
- c. Report to Minnesota Pollution Control Agency on Scrap Tires in Minnesota, October 1987, prepared by Waste Recovery, Inc.
- d. Used Tire Recovery and Disposal in Ohio, March 1987
- e. Proceedings of a Workshop on Disposal Techniques with Energy Recovery for Scrapped Vehicle Tires, sponsored by US Dept of Energy et al, November 1987
- f. Waste Tire Permitting Rules as Proposed by the Minnesota Waste Management Board, Minn. Rules Parts 9220.0200 to 9220.0835

FISCAL AND ECONOMIC IMPACT STATEMENT:

This action will require the Department to add two full-time equivalent employees to implement the permitting portions of the rule, and monitor, inspect and provide surveillance over permitted and non-permitted waste tire storage sites. It may also cause additional work for the Department's enforcement personnel, and Regional staff. The additional employees are included in the Department's approved budget.

This action will have an economic impact on local government, private businesses and the public.

Permit fees and financial assurance will be required of persons obtaining waste tire storage site permits, and those becoming waste tire carriers. Operators of waste tire storage sites and permitted solid waste sites may incur additional costs in complying with the standards this action establishes for waste tire storage and tire chipping, and/or in removing and properly disposing of waste tires from their site. Waste tire carriers and members of the public may incur additional costs in disposing of waste tires, as they will be required to use only permitted waste tire storage sites (or solid waste disposal sites) where fees may be higher than in the past. Ultimately the public will pay additional costs of proper waste tire disposal. The public should also benefit from not having to pay for the disposal of tires improperly and illegally dumped.

Many of the persons now storing or hauling waste tires are small businesses. Therefore the small business impact could be appreciable. The two-phase permit procedure proposed by the Department will give businesses additional time to phase out their waste tires, allowing them to avoid costs of becoming a permanent waste tire storage site.

LAND USE CONSISTENCY STATEMENT:

The proposed rules appear to affect land use and appear to be consistent with Statewide Planning Goals and Guidelines.

With regard to Goal 6 (Air, Water and Land Resources Quality), the rules provide for the proper storage and disposal of waste tires. They should help eliminate or reduce potential tire fires, a source of air pollution. Storage standards will keep waste tires out of waterways. Waste tires are often stored in conflict with local land use rules. As tire sites are identified and either permitted or cleaned up, land use compliance should improve.

With regard to Goal 11 (Public Facilities and Services), the rules provide that solid waste disposal sites store and dispose of waste tires in conformance with new standards. The standards are intended to improve the public health, safety and welfare.

The rules do not appear to conflict with other Goals.

Attachment I
Agenda Item G
7/8/88, EQC Meeting

Public comment on any land use issue involved is welcome and may be submitted in the manner described in the accompanying NOTICE OF PUBLIC HEARING.

It is requested that local, state and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts brought to our attention by local, state or federal authorities.

SB7433I

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Proposed Rules Related to Regulating How Waste Tires
May Be Stored and Transported

Hearing Dates: 5/31/88
6/1/88
6/2/88
6/3/88
6/6/88
Comments Due: 6/7/88

**WHO IS
AFFECTED:**

Owners and operators of sites where more than 100 waste tires are stored, and their customers. The public who dispose of waste tires. Persons hauling waste tires. Permitted solid waste disposal sites which store over 100 tires. Owners and operators of retail tire stores which have more than 1,500 waste tires in storage. Tire retreaders with more than 3,000 waste tires stored outside. Local governments. Fire marshals. Vector control districts.

**WHAT IS
PROPOSED:**

The Department proposes to adopt new Administrative Rules, Division 340, Section 62, to establish a procedure to issue permits to store or transport waste tires; to set standards for storing waste tires; and to establish standards for chipping waste tires to be disposed of at solid waste sites. Implementation would begin July 1, 1988.

**WHAT ARE THE
HIGHLIGHTS:**

These rules would establish a two-stage application process for people required to obtain a permit to store waste tires. Those include all persons who are storing more than 100 waste tires, except tire retailers and retreaders. They may store up to 1,500 and 3,000 tires respectively without getting a permit. The rules would set standards for how waste tires must be stored (maximum size of tire piles, etc.), and other permit requirements, such as reporting. The rules would set procedures and timelines for carriers required to obtain a waste tire carrier permit from the Department. They would set application fees for the permits. The rules contain an enforcement procedure and civil penalty for persons who fail to properly store and dispose of waste tires.

(over)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

HOW TO
COMMENT:

Public hearings will be held before a hearings officer at:

7:15 p.m.
Tuesday, May 31, 1988
Blue Mountain CC/Morrow Hall 130
2411 N.W. Carden
Pendleton, OR 97801

7:15 p.m.
Wednesday, June 1, 1988
School Administration Bldg. #314
520 N.W. Wall Street
Bend, OR 97701

7:15 p.m.
Thursday, June 2, 1988
City Council Chambers
225 5th Street
Springfield, OR 97477

7:15 p.m.
Friday, June 3, 1988
Jackson County Courthouse Auditorium
Main and Oakdale
Medford, OR 97501

7:15 p.m.
Monday, June 6, 1988
Clackamas Co. Dept. of Transportation & Development
Conference Room A
Oregon City, OR 97045

Informational meetings will be held prior to the hearings, from 3 p.m. to 6 p.m., on the same day and place.

Written or oral comments may be presented at the hearings. Written comments may also be sent to the Department of Environmental Quality, Hazardous and Solid Waste Division, 811 S.W. 6th Avenue, Portland, OR 97204, and must be received no later than 5:00 p.m., Tuesday, June 7, 1988.

Copies of the complete proposed rule package may be obtained from the DEQ Hazardous and Solid Waste Division. For further information, contact Deanna Mueller-Crispin at 229-5808.

WHAT IS THE
NEXT STEP:

The Environmental Quality Commission may adopt new rules identical to the ones proposed, adopt modified rules as a result of testimony received, or may decline to adopt rules. The Commission will consider the proposed new rules at its meeting on July 8, 1988.

SB7433.P
4/1/88

Attachment III
Agenda Item G
7/8/88, EQC Meeting

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

TO: Environmental Quality Commission DATE: June 7, 1988

FROM: Deanna Mueller-Crispin,
Hearing Officer

SUBJECT: Public Hearing, Waste Tire Program Permit Rule
Pendleton, 7:15 p.m., 5/31/88

On May 31, 1988 a Public Hearing regarding a new rule (OAR 340-62) to establish standards and procedures for waste tire storage sites and waste tire carriers was held in Pendleton, Oregon. Eleven people attended. Eight persons testified.

A summary of the testimony follows:

Auto Wreckers (6):

Generally testified that they have not been included in the development of rules. Some had found out about this only recently. There was a general desire to have more input into the on-going rulemaking procedure. They feel that wreckers are being penalized for doing what the state wants to happen: i.e., recycle. They feel that the legislation will fail unless provisions are made to include wreckers' concerns. Most felt that lack of tire disposal opportunities in Eastern Oregon is a major problem. A few people wondered what the maximum number of tires allowed under a waste tire storage site would be. Several, such as K.A. Heer of Pendleton, mentioned DEQ should ensure that waste tire storage or disposal facilities are available in all geographic locations.

Luella Hoskins of Milton-Freewater, a wrecking yard operator, also suggested DEQ clarify the definition of waste tire. Is a tire on a vehicle a waste tire? She recommended that a tire still on a wheel should not be considered a waste tire. She noted that it ruins the tires to just let them sit in a wrecking yard. She leaves the tires on the vehicles she stores.

Michael H. Onstat of Milton-Freewater, a scrap processor, noted he keeps a lot of tires on wheels. He uses them to put on abandoned vehicles which he tows back to his business. He has to have different kinds for the different cars he picks up. He wanted to know whether they are "waste tires" subject to regulation. He suggested DEQ clarify

Memo to: Environmental Quality Commission
June 7, 1988
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the definition of waste tires if we do not intend to regulate those. DEQ could add something like "A tire is not a waste tire as long as it is holding air", and/or perhaps add a time limit on how long the tires can set.

Walter Day of Baker, an auto wrecker, was distressed that auto wreckers - who store a major proportion of the waste tires in Oregon - were not represented on the task force that helped DEQ develop the rule. He recommended that DEQ go back and study the problem in wrecking yards before we finalize our storage site rules. He commented that if wrecking yards have to dispose of their waste tires, it will virtually break them. He recommended that they receive financial help from the \$1.00 tire fee to help dispose of their tires. He suggested that paying perhaps fifty percent of the costs of tire disposal would be appropriate. He also felt that people who haul their own waste tires to a landfill for disposal should not have to pay an additional fee or have a bond to be a waste tire carrier. He felt that DEQ should be able to determine whether a hauler (tire dealer or wrecker) was taking tires to a landfill by whether they were hauling waste tires in the direction of the local landfill or not.

Joe Lindell of Pendleton, an auto dismantler, was categorically opposed to the fees. He felt they were exorbitant, and should be covered by the \$1.00 fee on new tires. No further fees should be tacked onto people who are disposing of tires. He felt DEQ should have involved the state auto dismantlers and their association with developing the rules. He also felt that the processor or recycler of waste tires should receive some compensation (from the tire fee). DEQ has been negligent in not requesting input from them.

David Lindell of Lindell's Auto Parts, Pendleton, also was concerned that there be some solutions for getting a reimbursement for processors of waste tires in Eastern Oregon, and that some of the compensation (reimbursement) come to Eastern Oregon. He does not think anyone will come out here and haul waste tires away "for free". So Eastern Oregon needs some direct compensation for use of waste tires. There should at least be a reasonable landfill solution. He was concerned that landfilling waste tires may be the only solution left in Eastern Oregon.

Other witnesses had similar concerns regarding possibilities for waste tire disposal. Several felt solutions in Eastern Oregon need to be different from in the valley. Terry Morris of Milton-Freewater, a tire retailer, was concerned that the local landfill may use the new tire law as an excuse not to accept waste tires any more. He noted that DEQ staff had led him to believe that exemptions to the chipping requirement for landfills (July 1, 1989) may be available for isolated locations without other disposal options. He wondered how such exemptions should be applied for.

Memo to: Environmental Quality Commission
June 7, 1988
Page 3

Bob Wooters of Baker (Wooters Tire Service) wanted to know if anyone in Eastern Oregon was or would be burning tire chips. He felt the cost factor might prevent putting a plant to burn tires in Eastern Oregon.

In general discussion, the issue of land use compatibility arose. There was general comment that local land use regulations in Eastern Oregon will not allow any tire storage sites, as there are few industrially zoned sites. Many felt this would be a problem in getting Stage II storage site permits.

SF3158

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

TO: Environmental Quality Commission

DATE: June 7, 1988

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Waste Tire Program Permit Rule
Bend, 7:15 p.m., 6/1/88

On June 1, 1988 a Public Hearing regarding a new rule (OAR 340-62) to establish standards and procedures for waste tire storage sites and waste tire carriers was held in Bend, Oregon. Nine people attended. Three persons testified.

A summary of the testimony follows:

Two auto wreckers and one other person (interested in storing/recycling tires) gave formal testimony in Bend.

Wanda Borden of B and B Auto Wrecking noted that she has a lot of waste tires, but they have not been a problem. Her main concern was that there be some cost-effective solutions for waste tire disposal. She does not see any.

John Hancock, also an auto wrecker, was concerned that the bill made no provision for auto wreckers. Wreckers take care of cars abandoned on the street. They come with tires. These waste tires should not be the wrecker's problem - he is doing a public service by recycling the car. He felt there should be a moratorium on implementing the bill; give people some time to dispose of their past accumulation of tires, at a free or low-cost disposal place, and then they would be able to handle the future flow of waste tires. He also felt the fee on new tires should be \$2.00 instead of \$1.00, which would yield enough money to really take care of the disposal problem.

Bob Comstock of Mid-Oregon Oil Company mainly wanted to know what DEQ expects from him as a potential waste tire storage site, and waste tire transporter.

General discussion and questions centered mainly on concerns about where wrecking yards and the general public would be able to dispose of waste tires. People felt costs would go up so as to be prohibitive, and illegal dumping would result.

There was discussion in the afternoon informational session about the tire carrier permit requirement for retail tire dealers who haul their own waste tires to the dump. Harold Wells of Northgate Union Truckstop felt they

Memo to: Environmental Quality Commission
June 7, 1988
Page 2

should be exempt from the carrier permit requirement, as it would make it too expensive for them to properly dispose of their waste tires, as they are now doing. Jerry Taylor of Les Schwab felt the rules needed to address truck tires as well as passenger car tires, especially concerning the chipping requirement for landfill. He felt anything larger than a 24.5 wheel cannot be chipped (e.g., for energy recovery use), and therefore EQC should declare that reuse of those tires is not economically feasible. That would allow them to continue to be landfilled whole after July 1, 1989 when the chipping requirement goes into effect.

SF3156

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: June 7, 1988

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Waste Tire Program Permit Rule
Springfield, 7:15 p.m., 6/2/88

On June 2, 1988 a Public Hearing regarding a new rule (OAR 340-62) to establish standards and procedures for waste tire storage sites and waste tire carriers was held in Springfield, Oregon. Eight people attended. Three persons testified. One of the witnesses also presented written testimony.

A summary of the testimony follows:

Two of the three people testifying were potential processors of waste tires, and were most interested in the structure of the reimbursement to users of waste tires. Both Bill Briggs, of Fuel Processors, Inc. and J.A. Briggs of Springfield, stressed that for an incentive program to work, money from the subsidy needs to go to the final product. Bill Briggs had some technical comments on using waste tires for tire-derived fuel and pyrolysis, and costs of tire disposal.

Schley Lynch of A & A Auto Wreckers commented that some of the funds should go to people such as wrecking yards with whom the waste tires end up; they have to get rid of them.

During the afternoon public information meeting, Tim Zwettler of Delta Sand and Gravel requested that Delta be exempted from the chipping standard requirement for landfills. He noted that Delta had a unique situation in that they create more landfill space than they have fill to fill it. They bury up to 500 tons of tires a month whole now, and would like to continue doing so. If they can't bury whole, it will remove the best cheap disposal option in the area. Buying a chipper to meet the new requirement probably doesn't make economic sense.

Bill Briggs was concerned about accountability for illegally dumped tires. He recommended DEQ require dealers to stamp an ID number in their tires so they could be traced if illegally dumped.

Kevin Hill of Kevin Hill's Marine in Newport was concerned that the carrier permit requirement would eliminate a relatively inexpensive option he now has to have waste tire delivered to him, which he needs in his business. He calls up a dispatcher and requests a trucking firm which needs a backhaul

Memo to: Environmental Quality Commission
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Page 2

in the area from which he needs a delivery. The dispatcher finds a truck from any of several firms within a couple of days. Hill was worried that these firms will not want to get carrier permits, because they have 20-30 trucks, any one of which might end up carrying waste tires.

GB7595SP

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: June 7, 1988

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Waste Tire Program Permit Rule
Medford, 7:15 p.m., 6/3/88

On June 3, 1988 a Public Hearing regarding a new rule (OAR 340-62) to establish standards and procedures for waste tire storage sites and waste tire carriers was held in Medford, Oregon. Eight people attended. Two persons testified.

A summary of the testimony follows:

A tire retailer and one wrecking yard operator testified.

George Collins of Medford Tire Service, Inc. suggested that Section 340-62-055(3)(d) be changed to incorporate hauling waste tires between a company-franchised retail outlet and a company-franchised retread facility. He was also concerned with how a tire dealer would know that the person picking up tires to haul was legitimate. He suggested they have to show their permit on request.

William Adams of Pelican City Auto Wreckers was concerned about how wreckers were going to be able to dispose of their waste tires without it breaking them, and that there appeared to be no provision to help tire dealers deal with waste tire disposal.

In the general question session, Henry W. Turk of G.P Sanitation Inc. expressed concern that DEQ was not using the same "rules" for all people concerning waste tires. He said he had been forced to dig a trench and bury his, stacked, while others were allowed to have them all over their hills.

In the afternoon informational session, Richard Busk of Takilma was concerned that he be allowed to continue to use the tires he has collected to grow crops. He has some 9,000 loose tires as well as tires being used as planters.

Val Dutson of Central Point and Lindy Levison of Ashland commented on the proposed chipping standard. They felt splitting should be sufficient, as the local landfill had never had any problems with split tires, and people had invested in splitters a year ago after checking with local DEQ people. Mr. Dutson also commented that the bulk reduction test for the chipping standard would depend greatly on how big the box was that the chipped tires were being put in.

SB7595M

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: June 7, 1988

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Hearing Officer

SUBJECT: Public Hearing, Waste Tire Program Permit Rule
Oregon City, 7:15 p.m., 6/6/88

On June 6, 1988 a Public Hearing regarding a new rule (OAR 340-62) to establish standards and procedures for waste tire storage sites and waste tire carriers was held in Oregon City, Oregon. Thirteen people attended. Two persons testified, one of them reading written testimony.

A summary of the testimony follows:

Dick Berkey of the Oregon State Highway Division presented testimony from the Division, including two concerns. The Division wondered whether they would be required to obtain waste tire storage permits for temporary storage of waste tires removed from highway rights-of-way. This could hamper their tire cleanup efforts. Secondly, they requested exemption from the tire carrier permit requirement for public agency vehicles, especially from agencies required to move casings from public highways.

Pierre Renaud of Northwest Tire Disposal Services, Inc. wondered whether having a contract for removal of all waste tires would exempt the owner of over 100 waste tires from having to get a waste tire storage site permit.

Several attendees had questions on the interrelationship between local land use and other ordinances, and DEQ regulations. For example, Keith Lucas of G. & L. Distributing asked which governed if DEQ and county requirements disagree. He said his operation would meet DEQ rules for storing tires at a retread shop, but the county won't allow it. There was also discussion on which jurisdiction is responsible for making sure vector control in stored tires (such as tire fences) occurs.

SB75950R

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

TO: Environmental Quality Commission DATE: June 22, 1988

FROM: Deanna Mueller-Crispin,
Hearing Officer

SUBJECT: Written Comments, Waste Tire Program Permit Rule

In May, DEQ gave public notice soliciting comments on a new rule (OAR 340-62) to establish standards and procedures for waste tire storage sites and waste tire carriers. In response, the Department received eight written comments, in addition to two pieces of written testimony submitted at the public hearings.

A summary of the written testimony follows:

W.E. Puntney of Clayton-Ward Company in Salem felt that existing recyclers should be grandfathered in and not have to obtain permits to recycle, store or transport waste tires.

James V. Sears, Director of the Marion County Department of Solid Waste Management commented:

1. Motorcycle and ATV tires are excluded from regulation, yet they are as unsightly as auto tires.
2. The rules do not address sale lots for used or recapped tires.
3. The topographic map required for a waste tire storage site permit needs to specify an interval for contours.
4. The rules do not address standards for the final disposal of tires to ensure proper destruction.

Willard Jones, Director of Columbia Drainage Vector Control District had concerns about additional costs for his district in picking up and storing abandoned waste tires. He suggested excluding public bodies from requirements to obtain permits and pay fees, so they could continue tire removal programs.

W.L. Briggs of Portland (who also gave oral testimony in Springfield) wrote he felt the rules were lacking in not addressing the financial incentive to solve the waste tire problem. He also asked if existing capacity can handle the waste tire flow in Oregon, and what consideration had been given to illegal dumping in Oregon. He feared the proposed rule will make legal disposal too expensive, and encourage illegal dumping. He suggested existing sites should be given time to phase in the new requirements, to allow compliance at minimum expense.

He also recommended that a processor (who may have to be a tire storage site) not be required to have a bond over \$5,000.

Val Dutson of the Southern Oregon Auto Wreckers Association commented on the proposed chipping standard for tire burial at landfills. He felt that the proposed standard would create a "financial crisis" for those affected by it. He does not think that "volume" reduction (one way the proposed rule would test whether the chipping standard was met) is the correct term. The "volume" (water displacement capacity) of a tire does not change whether it is whole or chipped. He feels the important criteria for tire burial are "compactability", and whether the tire pieces will surface. He does not believe the rule's proposed volume reduction test is applicable. He suggests rather a "real world" test in a typical landfill with dirt overlay to test whether tire movement will occur. He further comments that chipping is not available in Southern Oregon, and recommends that tire splitting for landfill be allowed to continue, at least in rural Oregon.

Tim Zwettler of Delta Sand and Gravel in Eugene wrote his comments on why he believes Delta should be allowed to continue disposal of whole tires, even after the chipping standard goes into effect. Requiring chipping for their site would cause them to close it to waste tires, as a shredder to meet the proposed standards is not affordable for them. He noted that until there is an alternative way to use tires (as a source of energy, for instance), Delta should be allowed to provide the public service of disposing of large amounts of tires for a nominal fee. He also understands that the statutory exemption to the chipping requirement, i.e., that reuse of tires is not economically feasible, may not be applicable to his site.

John Levine, of Environmental Security of California in Los Angeles, a manufacturer of liquids to suppress tire fires, sent comments concerning control of tire fires. He notes that an effective agent to control such fires is now available, and should be required for waste tire storage site permittees, together with an appropriate delivery system. He proposed specific language to be added to the rule requiring "an effective, non-toxic, biodegradable product to extinguish tire fires", approved by a national testing lab, and in quantities determined by the local fire official.

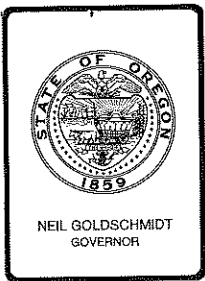
Eugene Papineau, of the Jackson County Vector Control District, wrote in support of the regulation of waste tires. He asked to be notified of the location of tire storage sites in Jackson County, so his agency can treat them with larvicides if necessary.

William E. Adams of Pelican City Auto Wreckers in Klamath Falls commented on several aspects of the law. His main concern was that auto dismantlers are not considered "tire retailers" under the law, and thus must get a waste tire storage site permit if they have over 100 waste tires. He also felt it was contradictory to allow a tire retailer to store up to 1,500 tires, but yet not allow them to haul any of these tires to a disposal site without a waste tire carrier permit.

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The Highway Division's written testimony is summarized in the Oregon City hearing notes.

SF3155



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission Date: July 8, 1988

From: Deanna Mueller-Crispin, Hazardous and Solid Waste Division

Subject: Response to Public Comment
Public Hearings
Rule to Establish Standards for Waste Tire Storage Sites, Waste
Tire Carriers, and Chipping Standards for Landfill Disposal of
Waste Tires

Comment: Auto wreckers commented that they were not taken into consideration in the legislation, and have not been involved in the rulemaking process. Auto wreckers often store many tires, and felt the 100 tire limit (beyond which they must get a waste tire storage site permit) is unfair.

Response: The legislation makes no special provision for auto wreckers. The legislation clearly spells out higher thresholds of waste tires before a permit is required for tire retailers (1,500 tires) and tire retreaders (3,000). In general, wreckers do not sell "new replacement tires", so they do not fit the category of tire retailers. Most auto wreckers, then, fall into the general other "persons" category, with a 100-tire threshold. DEQ cannot change the legislation. The used tires that wreckers sell for reuse on vehicles are however exempt from regulation under the waste tire program. Such tires are not "waste tires" under the statutory definition. In addition, if the wrecker can demonstrate that waste tires are serving a "useful purpose" pursuant to proposed OAR 340-62-015 (7), such tires could also be granted an exemption from regulation. The Department does not believe it is necessary to establish any special standards to govern storage of waste tires in wrecking yards.

No representative of the auto wreckers was involved with developing the legislation. DEQ did not initially identify wreckers as a group likely to be particularly affected by the waste tire program. However, DEQ recycling staff made a presentation at an auto wreckers' meeting on March 8, and mentioned the new waste tire law. After that, information was sent to the Willamette Valley Auto Wreckers Assn., and some individual auto wreckers attended Waste Tire Task Force meetings

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on March 30 and May 4. The "Chance to Comment" on the draft rule was mailed to all auto wreckers on the Department of Motor Vehicles' list in early May. The Willamette Valley Auto Wreckers Assn. has been asked to name a representative to the Waste Tire Task Force.

Comment: DEQ should clarify the definition of waste tire for tires kept by wrecking yards. The following clarifications were suggested: "A tire is not a waste tire as long as it is holding air." "A tire on a rim is not considered a waste tire."

Response: The first clarification would work only for tires that are still on a rim. Most waste tires are not. The second clarification would not meet the statutory definition of waste tire. Just because a tire is still on a rim does not guarantee that it is still "suitable for its original intended purpose". However, under the proposed rule if a person can demonstrate that a tire (on or off a rim) serves a useful purpose (see first Response above), it would not be regulated under the program. The Department does not recommend changing the proposed definition of waste tire.

Comment: DEQ should ensure that waste tire storage or disposal facilities are available in all geographic locations of the state.

Response: The Department has no authority to require the establishment of waste tire storage sites. The Department agrees that such sites should be available in all areas, and will work with applicants who wish to establish legitimate sites.

Comment: DEQ should give some of the available funds from the Waste Tire Recycling Account to wrecking yards as financial help for tire disposal.

Response: The proposed rule does not deal with use of funds from the Waste Tire Recycling Account. The law makes provision for help with cleanup for some permitted waste tire storage sites if complying with the law would cause them financial hardship. Use of the cleanup funds will be covered in DEQ's next round of rulemaking on this program.

Comment: Persons hauling their own waste tires to a landfill or other proper disposal site should not have to get a waste tire carrier permit; it is a disincentive for proper disposal of waste tires by tire dealers who are trying to take care of their own waste tires now.

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Response: The statute provides for only two exemptions to the definition of "tire carrier": solid waste collectors hauling fewer than 10 tires, and persons hauling fewer than five tires with their own solid waste for disposal. Statutory intent seems clear that anyone hauling more than four of their own tires is to have a waste tire carrier permit. DEQ is however recommending a lower annual compliance fee for persons hauling their own tires in small trucks (under 8,000 lbs.): \$25, and no per vehicle fee.

Comment: The fees are too high.

Response: The fee schedule was recommended by the Waste Tire Task Force which represents persons affected by the law. No specific testimony was received suggesting a different fee schedule. DEQ is recommending one fee schedule change to ease the burden of waste tire carriers hauling their own tires in small trucks (see previous Response).

Comment: Local landfills should continue to accept waste tires. The proposed chipping standard will make it too expensive for them to take tires. There should be an exemption to the chipping requirement for isolated areas with few other tire disposal options based on the statutory provision that the chipping requirement would not go into effect if the EQC found that "the reuse or recycling of waste tires is not economically feasible".

Response: The chipping standard does not go into effect until July 1, 1989. Until then landfills may continue to accept waste tires just as they do now. The Department will develop a rule governing how "economic feasibility" of tire reuse and recycling will be determined. The rule will receive public comment, and should be adopted in early 1989. Meanwhile, the reimbursement for reuse of waste tires will be implemented. It is expected to help create a better market for waste tires.

Comment: Delta Sand and Gravel should be allowed to continue to bury whole tires at their solid waste disposal site after July 1, 1989. Delta does not cause environmental problems, they create more space by their gravel operations than they fill with tires, and they provide a public service disposing of tires for moderate fees. It would not be economically feasible for them to purchase a chipper.

Response: The law provides for exceptions to the chipping requirement for burial only if the EQC finds that "reuse or recycling of waste tires is not economically feasible." (See preceding response.) The economic feasibility test does not apply to the landfill operator's cost of purchasing a chipper, but rather to the cost of

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landfilling a tire vs. reuse. The Department could not grant an exception on the grounds cited by Delta.

Comment: There should be a moratorium on implementing the bill so that people would have time to dispose of their backlog of waste tires before they have to become a waste tire storage site. (This witness felt the moratorium should include "the state" accepting the waste tires at low or no cost.)

Response: The Stage I/Stage II waste tire site permitting process being used by the Department acts a bit like a moratorium. It gives operators who are not accepting additional waste tires six months to properly dispose of their waste tires before they have to provide fees to operate a tire storage site, provide financial assurance, and comply with all the storage site standards. DEQ has no authority to declare a moratorium on the permitting requirement.

Comment: The fee on new tires should be \$2.00 instead of \$1.00 to provide enough money to really take care of the problem.

Response: Raising the fee would require a change in the legislation. DEQ's rules cannot address that issue.

Comment: The waste tire carrier permit requirement will make it very difficult to use trucking firms cheaply for backhauls of waste tires to processors who need them as raw material. Large trucking firms will not want to become waste tire carriers since it is such a small part of their business. They also have too many trucks to get permits for all of them. Backhauls use whatever truck is available out of the entire fleet. Even if a trucking firm permitted a few of their trucks, there is no assurance the permitted truck would be the one available when needed to haul tires.

Response: DEQ recognizes this as a potential problem. The Department is proposing an amendment to the proposed draft rule which would allow a permitted waste tire carrier (e.g. the processor) to lease or hire an unpermitted trucker. The permittee (processor) would specify on their permit application to DEQ that they intend to temporarily use leased or contract vehicles. They would pay an additional \$25 flat fee to do this. A vehicle could not be used for more than 30 days under this provision. The permittee would have to keep a log of all vehicles used. The permittee's bond would have to cover the leased or hired vehicle.

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Comment: Section 340-62-055(3)(d) should be amended to allow an exemption from the waste tire carrier permit requirement for people hauling recappable tire casings between company-franchised retail tire outlets and company-franchised retread shops, as well as company-owned retailers and retreaders.

Response: The Department feels that this is compatible with the intent of this provision, which is to exempt "in-house" haulers of recappable casings from the waste tire carrier requirement. DEQ is changing the proposed rule to incorporate this concept.

Comment: Public agencies which are required to remove tire casings from highway rights-of-way should not have to comply with the tire carrier or storage site permit requirements (at least for temporary storage of tires they have picked up until they can take them away for proper disposal).

Response: DEQ and the Waste Tire Task Force agree that public agencies required to remove abandoned waste tires from roadways should not have to be permitted tire carriers. The purpose behind the permit requirement is to prevent illegal dumping, while these agencies are in fact cleaning up illegally dumped tires. The Department has changed the proposed rule to exempt vehicles fitting the PUC definition of a publicly owned vehicle from the tire carrier permit requirement.

On the other hand, some large waste tire storage sites are operated by public agencies. The agencies are not required to have such sites. Tires stored at such sites should comply with the same standards as privately operated sites. The Department does not recommend changing the storage site permit requirement for public agencies. It is not clear that the statute would allow it in any case.

Comment: Existing recyclers should be grandfathered in and not have to obtain permits to recycle, store or transport waste tires.

Response: The statute makes no provision for grandfathering in existing uses.

Comment: Motorcycle tires are excluded from regulation, yet piles of motorcycle tires are as unsightly as piles of car tires.

Response: Motorcycle tires are excluded by statute from regulation. DEQ's rules cannot change that.

Comment: The rules don't address sale lots for used or recapped tires.

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Response: A tire that can be sold as a used tire is excluded from regulation as a waste tire. However, at any location which has 100 or more waste tires, those waste tires would be subject to regulation. Tire retailers and retreaders may store up to 1,500 and 3,000 waste tires respectively before being subject to regulation. These numbers are established by the legislation.

Comment: The topographic map required for a Stage II waste tire storage site permit needs to specify an interval for contours.

Response: DEQ is changing the proposed rule to specify that a 40 foot interval on a 7.5 minute series topographic map is required.

Comment: The rules don't address standards for the final disposal of tires to ensure they are properly destroyed.

Response: The chipping standard for landfill disposal of tires after July 1, 1989, addresses final disposal in landfills.

Comment: A person processing waste tires (and who is a waste tire storage site) should not be required to have a bond over \$5,000.

Response: The statute requires financial assurance to cover "waste tire removal processing, fire suppression..." In determining the amount of financial assurance required, the Department will take into account the least expensive alternative for disposal. This will be done on a site-by-site basis. But a processor storing large numbers of tires may be required to have more than a \$5,000 bond. In the past, some processors have accumulated considerable numbers of waste tires without being able to properly dispose of them over time.

Comment: The chipping standard as proposed is not necessary for proper burial in landfill sites, and would cause a financial burden. Splitting tires is likely sufficient processing to reduce their bulk, and assure they stay buried. The chipping standard should be to split the tire, at least in rural areas.

Response: The statute specifically states that tires shall be "chipped in accordance with standards established by the EQC" (emphasis added). Splitting is not chipping. The legislation was not intended to encourage burying of tires in landfills, but rather to remove them from the waste stream. The legislation establishes a reimbursement for the use of waste tires, intended to enhance the market for waste tires as an alternative to landfilling. Establishing a chipping standard makes reuse more economically

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competitive with burial. The Department does not believe a standard which would allow splitting tires would meet the statutory intent.

Comment: The proposed "volume" reduction test for meeting the chipping standard is confusing (OAR 340-62-052). Piling chipped tires in a rectangular box to establish 65 percent bulk reduction is not an appropriate test. A real life test should be done on a typical landfill to see whether split tires do in fact surface.

Response: Since the Department believes splitting tires is not an appropriate standard for landfill burial, such a test would be irrelevant. However, the Department has changed the language in the reduction test to specify that the test applies to "bulk" and not "volume" reduction.

Comment: All waste tire storage sites should be required to provide fire control using an effective, non-toxic product, and an appropriate delivery system.

Response: Such a product may provide excellent fire suppression qualities, but the Department is not familiar enough with such products to require them for all sites. If an individual site wishes to provide such a product in amounts approved by the local fire officials, the Department would consider it favorably.

Deanna Mueller-Crispin

SB7626

P R O P O S E D R U L E

WASTE TIRE PROGRAM
6/24/88

Purpose

340-62-005 The purpose of these rules is to prescribe requirements, limitations and procedures for storage, collection, transportation, and disposal of waste tires. [To come later: The rules also prescribe criteria for financial help to clean up waste tire sites. They also prescribe how to apply for a partial reimbursement for using waste tires. The purpose of the reimbursement is to promote the use of waste tires by enhancing markets for waste tires or similar materials.]

Definitions

340-62-010 As used in these rules unless otherwise specified:

- (1) "Commission" -- the Environmental Quality Commission.
- (2) "Department" -- the Department of Environmental Quality.
- (3) "Director" -- the Director of the Department of Environmental Quality.
- (4) "Dispose" -- to deposit, dump, spill or place any waste tire on any land or into any water as defined by ORS 468.700.
- (5) "Financial assurance" -- a performance bond, letter of credit, cash deposit, insurance policy or other instrument acceptable to the Department.
- (6) "Land disposal site" -- a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.
- (7) "Oversize waste tire" -- a waste tire exceeding an 18-inch rim diameter, or a 35-inch outside diameter.
- (8) "Person" -- the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(9) "Private carrier" -- any person who operates a motor vehicle over the public highways of this state for the purpose of transporting persons or property when the transportation is incidental to a primary business enterprise, other than transportation, in which such person is engaged.

(10) "PUC" -- the Public Utility Commission of Oregon.

(11) "Retreader" -- a person engaged in the business of recapping tire casings to produce recapped tires for sale to the public.

(12) "Rick" -- to horizontally stack tires securely by overlapping so that the center of a tire fits over the edge of the tire below it.

(13) "Store" or "storage" -- the placing of waste tires in a manner that does not constitute disposal of the waste tires.

(14) "Tire" -- a continuous solid or pneumatic rubber covering encircling the wheel of a vehicle in which a person or property is transported or by which they may be drawn on a highway. This does not include tires on the following:

(a) A device moved only by human power.

(b) A device used only upon fixed rails or tracks.

(c) A motorcycle.

(d) An all-terrain vehicle.

(e) A device used only for farming, except a farm truck.

(15) "Tire carrier" -- a person who picks up or transports waste tires for the purpose of storage or disposal. This does not include the following:

(a) Solid waste collectors operating under a license or franchise from a local government unit and who transport fewer than 10 tires at a time.

(b) Persons who transport fewer than five tires with their own solid waste for disposal.

(16) "Tire processor" -- a person engaged in the processing of waste tires.

(17) "Tire retailer" -- a person in the business of selling new replacement tires.

(18) "Tire derived products" -- tire chips or other usable materials produced from the physical processing of a waste tire.

(19) "Waste tire" -- a tire that is no longer suitable for its original intended purpose because of wear, damage or defect, and is fit only for:

- (a) Remanufacture into something else, including a recapped tire; or
- (b) Some other use which differs substantially from its original use.

Waste Tire Storage Permit Required

340-62-015 (1) After July 1, 1988, a person who stores more than 100 waste tires at a site is required to have a waste tire storage permit for that site from the Department. The following are exempt from the permit requirement:

- (a) A tire retailer with not more than 1,500 waste tires in storage.
- (b) A tire retreader with not more than 3,000 waste tires stored outside.

(2) Piles of tire derived products are not subject to regulation as waste tire storage sites if they have an economic value.

(3) If tire derived products have been stored for over six months, the Department shall assume they have no economic value, and the site operator must either:

- (a) Apply for a waste tire storage site permit; or
- (b) Demonstrate to the Department's satisfaction that the tire derived products do have an economic value by presenting receipts, orders, etc. for the tire derived products.

(4) After July 1, 1988, a permitted solid waste disposal site which stores more than 100 waste tires, is required to have a permit modification addressing the storage of tires from the Department.

(5) The Department may issue a waste tire storage permit in two stages to persons required to have such a permit by July 1, 1988. The two stages are a "first-stage" or limited duration permit, and a "second-stage" or regular permit.

(6) Owners or operators of existing sites not exempt from the waste tire storage site permit requirement shall apply to the Department by June

1, 1988 for a "first-stage" permit to store waste tires. A person who wants to establish a new waste tire storage site shall apply to the Department at least 90 days before the planned date of facility construction. A person applying for a waste tire storage site permit on or after September 1, 1988 shall apply for a "second-stage" or regular permit.

(7) The Department may grant an exemption to the requirement to obtain a waste tire storage site permit for whole waste tires if the applicant can demonstrate to the Department's satisfaction that:

(a) The applicant is using the tires for a permanent useful purpose with a documented economic value; and

(b) The waste tires used in this way will meet state and local government requirements for vector control, health, fire control, safety and other environmental concerns; and

(c) The use otherwise is not in conflict with local ordinances and state and Federal laws and administrative rules.

(8) Failure to conduct storage of waste tires according to the conditions, limitations, or terms of a permit or these rules, or failure to obtain a permit, is a violation of these rules and shall be subject to civil penalties as provided in OAR Chapter 340, Division 12 or to any other enforcement action provided by law. Each day that a violation occurs is a separate violation and may be the subject of separate penalties.

"First-Stage" or Limited Duration Permit

340-62-018 (1) An application for a "first-stage" permit shall include such information as required by the Department, including but not limited to:

(a) A management plan for the operation of the site, including:

(A) The person to be responsible for the operation of the site;

(B) The proposed method of tire disposal; and

(C) The proposed emergency measures to be provided at the site, together with the name and phone number of the appropriate fire district.

(b) A description of the facilities on the site and how many tires are to be stored;

(c) The location of the site, including legal description; and

(d) The name and address of all tire carriers that the applicant has on record who have deposited waste tires at the site during the past 12 months.

(2) A "first-stage" permit shall be valid for a period not to exceed six months, or until December 31, 1988, whichever comes first.

(3) No later than September 1, 1988, a holder of a "first-stage" permit shall either:

(a) Inform the Department in writing that the "first-stage" permit holder will remove all waste tires from the site and properly dispose of them before the expiration of the "first-stage" permit; or

(b) Apply for a "second-stage" or regular waste tire storage permit pursuant to OAR 340-62-020.

"Second-Stage" or Regular Permit

340-62-020 (1) An application for a "second-stage" or regular waste tire storage site permit shall:

(a) Include such information as shall be required by the Department, including but not limited to:

(A) A description of the need for the waste tire storage site;

(B) The zoning designation of the site, and a written statement of compatibility of the proposed waste tire storage site with the acknowledged local comprehensive plan and zoning requirements from the local government unit(s) having jurisdiction.

(C) A description of the land uses within a one-quarter mile radius of the facility, identifying any buildings and surface waters.

(D) A management program for operation of the site, which includes but is not limited to:

(i) Anticipated maximum number of tires to be stored at the site for any given one year period.

(ii) Present and proposed method of disposal, and timetable.

(iii) How the facility will meet the technical tire storage standards in OAR 340-62-035 for both tires currently stored on the site, and tires to be accepted.

(iv) How the applicant proposes to control mosquitoes and rodents, considering the likelihood of the site becoming a public nuisance or health hazard, proximity to residential areas, etc.

(E) A proposed contingency plan to minimize damage from fire or other accidental or intentional emergencies at the site. It shall include but not be limited to procedures to be followed by facility personnel, including measures to be taken to minimize the occurrence or spread of fires and explosions.

(F) The following maps:

(i) A site location map showing section, township, range and site boundaries.

(ii) A site layout drawing, showing size and location of all pertinent man-made and natural features of the site (including roads, fire lanes, ditches, berms, waste tire storage areas, structures, wetlands, floodways and surface waters).

(iii) A topographic map using a scale of no less than one inch equals 200 feet, with 40 foot intervals on 7.5 minute series.

(b) Submit proof that the applicant holds financial assurance acceptable to the Department in an amount determined by the Department to be necessary for waste tire removal processing, fire suppression or other measures to protect the environment and the health, safety and welfare, pursuant to OAR 340-62-025 and 340-62-035.

(c) Submit an application fee of \$250. Fifty dollars (\$50) of the application fee shall be non-refundable. The rest of the application fee may be refunded in whole or in part when submitted with an application if either of the following conditions exists:

(A) The Department determines that no permit will be required;

(B) The applicant withdraws the application before the Department has granted or denied the application.

(2) A "second-stage" permit may be issued for up to five years.

(3) The Department may waive any of the requirements in paragraph (1)(a)(E) (contingency plan), (1)(a)(F) (maps) or (1)(b) (financial assurance) of this section for a waste tire storage site in existence on or before January 1, 1988, if it is determined by the Department that the site is not likely to create a public nuisance, health hazard, air or water pollution or other environmental problem. This waiver shall be considered for storage sites which are no longer receiving additional tires, and are under a closure schedule approved by the Department. The site must still meet operational standards in OAR 340-62-035.

Financial Assurance

340-62-022 (1) The Department shall determine for each applicant the amount of financial assurance required under ORS 459.720(c) and OAR 340-62-020 (1)(b). The Department shall base the amount on the estimated cost of cleanup for the maximum number of waste tires allowed by the permit to be stored at the storage site.

(2) The Department will accept as financial assurance only those instruments listed in and complying with requirements in OAR 340-61-034(3)(c)(A) through (G) or OAR 340-71-600(5)(a) through (c).

(3) The financial assurance shall be filed with the Department.

Permittee Obligations

340-62-025 (1) Each person who is required by ORS 459.715 and 459.725, and OAR 340-62-015 and 340-62-055, to obtain a permit shall:

(a) Comply with these rules and any other pertinent Department requirements.

(b) Inform the Department in writing within 30 days of company changes that affect the permit, such as business name change, change from individual to partnership and change in ownership.

(c) Allow to the Department, after reasonable notice, necessary access to the site and to its records, including those required by other public agencies, in order for the monitoring, inspection and surveillance program developed by the Department to operate.

(2) Each person who is required by ORS 459.715 and OAR 340-62-015 to obtain a permit shall submit to the Department by February 1 of each year an annual compliance fee for the coming calendar year in the amount of \$250, effective February 1, 1989.

(3) Each waste tire storage site permittee whose site accepts waste tires after the effective date of these rules shall also do the following as a condition to holding the permit:

(a) Maintain records on approximate numbers of waste tires received and shipped, and tire carriers transporting the tires so as to be able to fulfill the reporting requirements in subsection (3)(b) of this rule. The permittee shall issue written receipts upon receiving loads of waste tires.

Quantities may be measured by aggregate loads or cubic yards, if the permittee documents the approximate number of tires included in each. These records shall be maintained for a period of three years, and shall be available for inspection by the Department after reasonable notice.

(b) Submit a report containing the following information annually by February 1 of 1990 and each year thereafter:

(A) Number of waste tires received at the site during the year covered by the report;

(B) Number of waste tires shipped from the site during the year covered by the report;

(C) The name (and tire carrier permit number, if applicable) of the tire carriers delivering waste tires to the site and shipping waste tires from the site, together with the quantity of waste tires shipped with those carriers.

(D) The number of waste tires located at the site at the time of the report.

(c) Notify the Department within 24 hours of the name of any unpermitted tire carrier (who is not exempt under OAR 340-62-055(3)) who delivers waste tires to the site after January 1, 1989.

(d) If required by the Department, prepare for approval by the Department and then implement:

(A) A plan to remove some or all of the waste tires stored at the site. The plan shall follow standards for site closure pursuant to OAR 340-62-045. The plan may be phased in, with Department approval.

(B) A plan to process some or all of the waste tires stored at the site. The plan shall comply with ORS 459.705 through 459.790 and OAR 340-62-035.

(e) Maintain the financial assurance required under OAR 340-62-020(1)(b) and 340-62-022.

(f) Maintain any other plans and exhibits pertaining to the site and its operation as determined by the Department to be reasonably necessary to protect the public health, welfare or safety or the environment.

(4) The Department may waive any of the requirements of subsections (3)(a) through (3)(b)(D) of this section for a waste tire storage site in existence on or before January 1, 1988. This waiver shall be considered for storage sites which are no longer receiving additional tires and are under a closure schedule approved by the Department.

Department Review of Applications for Waste Tire Storage Sites

340-62-030 (1) Applications for waste tire storage permits shall be processed in accordance with the Procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR Chapter 340, Division 14, except as otherwise provided in OAR Chapter 340, Division 62.

(2) Applications for permits shall be complete only if they:

(a) Are submitted on forms provided by the Department, accompanied by all required exhibits, and the forms are completed in full and are signed by the applicant and the property owner or person in control of the premises;

(b) Include plans and specifications as required by OAR 340-62-018 and 340-62-020;

(c) Include the appropriate application fee pursuant to OAR 340-62-020(1)(c).

(3) Following the submittal of a complete waste tire storage site permit application, the Director shall cause notice to be given in the county where the proposed site is located in a manner reasonably calculated to notify interested and affected persons of the permit application.

(4) The notice shall contain information regarding the location of the site and the type and amount of waste tires intended for storage at the site. In addition, the notice shall give any person substantially affected by the proposed site an opportunity to comment on the permit application.

(5) The Department may conduct a public hearing in the county where a proposed waste tire storage site is located.

(6) Upon receipt of a completed application, the Department may deny the permit if:

(a) The application contains false information.

(b) The application was wrongfully accepted by the Department.

(c) The proposed waste tire storage site would not comply with these rules or other applicable rules of the Department.

(d) The proposed site does not have a written statement of compatibility with acknowledged local comprehensive land and zoning requirements from the local government unit(s) having jurisdiction; or

(e) There is no clearly demonstrated need for the proposed new, modified or expanded waste tire storage site.

(7) Based on the Department's review of the waste tire storage site application, and any public comments received by the Department, the director shall issue or deny the permit. The director's decision shall be subject to appeal to the Commission and judicial review under ORS 183.310 to 183.550.

Standards for Waste Tire Storage Sites

340-62-035 (1) All permitted waste tire storage sites must comply with the technical and operational standards in this part.

(2) The holder of a "first-stage" waste tire storage permit shall comply with the technical and operational standards in this part if the site receives any waste tires after the effective date of these rules.

(3) A waste tire storage site shall not be constructed or operated in a wetland, waterway, floodway, 25-year floodplain, or any area where it may be subjected to submersion in water.

(4) Operation. A waste tire storage site shall be operated in compliance with the following standards:

(a) An outdoor waste tire pile shall have no greater than the following maximum dimensions:

(A) Width: 50 feet.

(B) Area: 15,000 square feet.

(C) Height: 6 feet.

(b) A 50-foot fire lane shall be placed around the perimeter of each waste tire pile. Access to the fire lane for emergency vehicles must be unobstructed at all times.

(c) Waste tires to be stored for one month or longer shall be ricked.

(d) The permittee shall operate and maintain the site in a manner which controls mosquitoes and rodents if the site is likely to become a public nuisance or health hazard and is close to residential areas.

(e) A sign shall be posted at the entrance of the storage site stating operating hours, cost of disposal and site rules if the site receives tires from persons other than the operator of the site.

(f) No operations involving the use of open flames or blow torches shall be conducted within 25 feet of a waste tire pile.

(g) An approach and access road to the waste tire storage site shall be maintained passable for any vehicle at all times. Access to the site shall be controlled through the use of fences, gates, or other means of controlling access.

(h) If required by the Department, the site shall be screened from public view.

(i) An attendant shall be present at all times the waste tire storage site is open for business, if the site receives tires from persons other than the operator of the site.

(j) The site shall be bermed or given other adequate protection if necessary to keep any liquid runoff from potential tire fires from entering waterways.

(k) If pyrolytic oil is released at the waste tire storage site, the permittee shall remove contaminated soil in accordance with applicable rules governing the removal, transportation and disposal of the material.

(5) Waste tires stored indoors shall be stored under conditions that meet those in The Standard for Storage of Rubber Tires, NFPA 231D-1986 edition, adopted by the National Fire Protection Association, San Diego, California.

(6) The Department may approve exceptions to the preceding technical and operational standards for a company processing waste tires if:

(a) The average time of storage for a waste tire on that site is one month or less; and

(b) The Department and the local fire authority are satisfied that the permittee has sufficient fire suppression equipment and/or materials on site to extinguish any potential tire fire within an acceptable length of time.

Closure

340-62-040 (1) The owner or operator of a waste tire storage site shall cease to accept waste tires and shall immediately close the site in compliance with any special closure conditions established in the permit and these rules, if:

(a) The owner or operator declares the site closed;

(b) The storage permit expires or is revoked and renewal of the permit is not applied for, or is denied;

(c) A Commission order to cease operations is issued; or

(d) A permit compliance schedule specifies closure is to begin.

(2) The owner or operator of a waste tire storage site may be required by the Department to submit to the Department a closure plan with the permit application.

(3) The closure plan shall include:

(a) When or under what circumstances the site will close, including any phase-in of the closure;

(b) How all waste tires and tire-derived products will be removed from the site or otherwise properly disposed of upon closure;

(c) A schedule for the applicable closure procedures, including the time period for completing the closure procedures.

(d) A plan for site rehabilitation, if deemed necessary by the Department.

Closure Procedures

340-62-045 (1) In closing the storage site, the permittee shall:

(a) Close public access to the waste tire storage site for tire storage;

(b) Post a notice indicating to the public that the site is closed and, if the site had accepted waste tires from the public, indicating the nearest site where waste tires can be deposited;

(c) Notify the Department and local government of the closing of the site;

(d) Remove all waste tires and tire-derived products to a waste tire storage site, solid waste disposal site authorized to accept waste tires, or other facility approved by the Department;

(e) Remove any solid waste to a permitted solid waste disposal site; and

(f) Notify the Department when the closure activities are completed.

(2) After receiving notification that site closure is complete, the Department may inspect the storage site. If all procedures have been correctly completed, the Department shall approve the closure in writing. Any financial assurance not needed for the closure shall be released to the permittee.

Modification of Solid Waste Disposal Site Permit Required

340-62-050 (1) After July 1, 1988, a solid waste disposal site permitted by the Department shall not store over 100 waste tires unless the permit has been modified by the Department to authorize the storage of waste tires.

(2) A solid waste disposal site permittee who accumulates fewer than 1,500 waste tires at any given time and has a contract with a tire carrier to transport for proper disposal all such tires whenever sufficient tires have been accumulated to make up a truckload of not more than 1,500 tires from that site, is not subject to the permit modification required by section (1). However, such permittee's solid waste operating plan shall be modified to include such activity. Nevertheless, if such permittee stores over 100 tires on-site for more than six months, permit modification pursuant to section (3) shall be required to allow such storage.

(3) A solid waste disposal site permittee currently storing over 100 waste tires at its site shall apply to the Department by June 1, 1988, for a permit modification to store over 100 waste tires. A solid waste disposal site permittee who wants to begin storing over 100 waste tires at its site shall apply to the Department for a permit modification at least 90 days before the planned date of such storage.

(4) The permittee shall apply to store a maximum number of waste tires which shall not be exceeded in one year.

(5) In storing waste tires, the permittee shall comply with all rules for waste tire storage sites in OAR 340-62-015 through 340-62-025, and 340-62-035 through 340-62-045, including a management plan for the waste tires, record keeping for waste tires received and sent, contingency plan for emergencies, and financial assurance requirements.

(6) Modification of an existing solid waste permit to allow waste tire storage does not require submission of a solid waste permit filing fee or application processing fee under OAR 340-61-115.

(7) The solid waste permittee should consider storing the waste tires or tire-derived products in a manner that will not preclude their future recovery and use, should that become economically feasible.

Chipping Standards for Solid Waste Disposal Sites

340-62-052 (1) After July 1, 1989, a person may not dispose of waste tires in a land disposal site permitted by the Department unless:

(a) The waste tires are processed in accordance with the standards in subsection (2) of this rule, and written notification has been submitted to the Department verifying that alternatives to disposal have been investigated and are not economically feasible; or

(b) The waste tires were located for disposal at that site before July 1, 1989; or

(c) The Commission finds that the reuse or recycling of waste tires is not economically feasible; or

(d) The waste tires are received from a person exempt from the requirement to obtain a waste tire carrier permit under OAR 340-62-055 (3)(a) and (b).

(2) To be landfilled under subsection (1)(a) of this rule, waste tires must be processed to meet the following criteria:

(a) The bulk of 100 unprepared randomly selected tires in one continuous test period must be reduced by at least 65 percent of the original bulk. No single void space greater than 125 cubic inches may remain in the randomly placed processed tires; or

(b) The tires shall be reduced to an average chip size of no greater than 64 square inches in any randomly selected sample of 10 tires or more. No more than 40 percent of the chips may exceed 64 square inches.

(3) The test to comply with (2)(a) shall be as follows:

(a) Unprocessed tire bulk shall be calculated by multiplying the circular area, with a diameter equal to the outside diameter of the tire, by the maximum perpendicular width of the tire. The total test bulk shall be the sum of the individual, unprocessed tire bulks;

(b) Processed tire bulk shall be determined by randomly placing the processed tire test quantity in a rectangular container and leveling the surface. It shall be calculated by multiplying the depth of processed tires by the bottom area of the container.

(4) Reuse or recycling of oversize waste tires is not now economically feasible, and they are thus exempt from the chipping requirement under subsection (2) of this rule until such time as their reuse becomes economically feasible.

Waste Tire Carrier Permit Required

340-62-055 (1) After January 1, 1989, any person engaged in picking up or transporting waste tires for the purpose of storage or disposal is required to obtain a waste tire carrier permit from the Department.

(2) After January 1, 1989, any person who contracts or arranges with another person to transport waste tires for storage or disposal shall only deal with a person holding a waste tire carrier permit from the Department, unless the person is exempted by (3)(a) or (b).

(3) The following persons are exempt from the requirement to obtain a waste tire carrier permit:

(a) Solid waste collectors operating under a license or franchise from any local government unit and who transport fewer than 10 tires at any one time.

(b) Persons transporting fewer than five tires.

(c) Persons transporting tire-derived products to a market.

(d) Persons who use company-owned vehicles to transport tire casings for the purposes of retreading between company-owned or company-franchised retail tire outlets and company-owned or company-franchised retread facilities.

(e) Tire retailers who transport used tires back to their retail tire outlet after taking them from customers in exchange for other tires, or for repair.

(f) The United States, the State of Oregon, any county, city, town or municipality in this state, or any department of any of them except when vehicles they own or operate are used as a waste tire carrier for hire.

(4) Persons exempt from the waste tire carrier permit requirement under subsection (3)(d) of this section shall nevertheless notify the Department of this practice on a form provided by the Department.

(5) A combined tire carrier/storage site permit may be applied for by tire carriers:

(a) Who are subject to the carrier permit requirement; and

(b) Whose business includes a site which is subject to the waste tire storage permit requirement.

(6) The Department shall supply a combined tire carrier/storage site application to such persons. Persons applying for the combined tire carrier/storage site permit shall comply with all other regulations concerning storage sites and tire carriers established in these rules.

(7) Persons who transport waste tires for the purpose of storage or disposal must apply to the Department for a waste tire carrier permit within 90 days of the effective date of this rule. Persons who want to begin transporting waste tires for the purpose of storage or disposal must apply to the Department for a waste tire carrier permit at least 90 days before beginning to transport the tires.

(8) Applications shall be made on a form provided by the Department. The application shall include such information as required by the Department. It shall include but not be limited to:

(a) A description, license number and registered vehicle owner for each truck used for transporting waste tires.

(b) The PUC authority number under which each truck is registered.

(c) Where the waste tires will be stored or disposed of.

(d) Any additional information required by the Department.

(9) A corporation which has more than one separate business locations may submit one waste tire carrier permit application which includes all the locations. All the information required in subsection (8) of this section shall be supplied by location for each individual location. The corporation shall be responsible for amending the corporate application whenever any of the required information changes at any of the covered locations.

(10) An application for a tire carrier permit shall include a \$25 non-refundable application fee.

(11) An application for a combined tire carrier/storage site permit shall include a \$250 application fee, \$50 of which shall be non-refundable. The rest of the application fee may be refunded in whole or in part when submitted with an application if either of the following conditions exists:

(a) The Department determines that no permit will be required;

(b) The applicant withdraws the application before the Department has granted or denied the application.

(12) The application for a waste tire carrier permit shall also include a bond in the sum of \$5,000 in favor of the State of Oregon. In lieu of the bond, the applicant may submit financial assurance acceptable to the Department. The Department will accept as financial assurance only those instruments listed in and complying with requirements in OAR 340-61-034(3)(c)(A) through (G) and OAR 340-71-600(5)(a) through (c).

(13) The bond or other financial assurance shall be filed with the Department and shall provide that:

(a) In performing services as a waste tire carrier, the applicant shall comply with the provisions of ORS 459.705 through 459.790 and of this rule; and

(b) Any person injured by the failure of the applicant to comply with the provisions of ORS 459.705 through 459.790 or this rule shall have a right of action on the bond in the name of the person. Such right of action shall be made to the principal or the surety company within two years after the injury.

(14) A waste tire carrier permit or combined tire carrier/storage site permit shall be valid for up to three years. Permits shall expire on March 1. Permittees who want to renew their permit must apply to the Department for permit renewal by February 1 of the year the permit expires.

(15) A waste tire carrier permittee may add another vehicle to its permitted waste tire carrier fleet if it does the following before using the vehicle to transport waste tires:

(a) Submits to the Department:

(A) The information required in OAR 340-62-055 (8); and

(B) A fee of \$25 for each vehicle added.

(b) Displays on each additional vehicle a decal from the Department pursuant to OAR 340-62-063 (1)(b).

(16) A waste tire carrier permittee may lease or contract for additional vehicles to use on a short-term basis under its waste tire carrier permit without adding that vehicle to its fleet pursuant to subsection (15) of this section, under the following conditions:

(a) The vehicle is not a B-commodity carrier meeting requirements of ORS 767.005(17) and 767.425(7).

(b) The vehicle may not be leased or contracted for a period of time exceeding 30 days. If the lease or contract is for a longer period of time, the vehicle must be added to the permittee's permanent fleet pursuant to subsection (15) of this section.

(c) The permittee must give previous written notice to the Department that it will use leased or contracted vehicles.

(d) The permittee must pay a \$25 annual compliance fee in advance to allow use of leased or contracted vehicles, in addition to any other fees required by OAR 340-62-055 (10), (11) and (15), and 340-62-063 (7) and (9).

(e) The permittee must keep a written log of all vehicles used with beginning and ending dates used, license numbers, PUC authority, PUC temporary pass or PUC plate/marker, and person from whom the vehicles were

leased or contracted. The written log must be kept up to date at all times, subject to verification by the Department. The written log shall be submitted to the Department each year as part of the permittee's annual report required by OAR 340-62-063(5).

(f) The permittee's bond or other financial assurance required under OAR 340-62-055 (12) must have specific language ensuring that the bond will cover all actions committed by any vehicle leased or contracted for by the permittee while operating under the permittee's waste tire carrier permit.

(g) The permittee is responsible for ensuring that a vehicle leased or contracted for complies with OAR 340-62-055 through 340-62-063, except that the leased or contracted vehicle does not have to obtain a separate waste tire carrier permit pursuant to OAR 340-62-055 (1) while operating under lease or contract to the permittee.

(17) For the purposes of ORS 459.995(1), the transportation of waste tires under OAR 340-62-055 through 340-62-063 is deemed to be collection of solid waste, and violations of these rules are subject to a civil penalty under the Solid Waste Management Schedule of Civil Penalties, OAR 340-12-065.

Waste Tire Carrier Permittee Obligations

340-62-063 (1) Each person required to obtain a waste tire carrier permit shall:

(a) Comply with OAR 340-62-025(1).

(b) Display a current decal with their waste tire carrier identification number issued by the Department when transporting waste tires. The decal shall be displayed on the side of the front doors of each truck used to transport tires.

(c) Maintain the financial assurance required under ORS 459.730(2)(d).

(2) When a waste tire carrier permit expires or is revoked, the applicant shall immediately remove all waste tire permit decals from its vehicles.

(3) Leasing, loaning or renting of permits is prohibited. No permit holder shall engage in any conduct which falsely tends to create the appearance that services are being furnished by the holder when in fact they are not.

(4) A waste tire carrier shall leave waste tires for storage or dispose of them only in a permitted waste tire storage site, at a solid waste disposal site permitted by the Department, or at another site approved by the Department.

(5) Waste tire carrier permittees shall record and maintain for three years the following information regarding their activities for each month of operation:

(a) The approximate quantity of waste tires collected. Quantities may be measured by aggregate loads or cubic yards, if the carrier documents the approximate number included in each load;

(b) Where or from whom the waste tires were collected;

(c) Where the waste tires were deposited. The waste tire carrier shall keep receipts or other written materials documenting where all tires were stored or disposed of.

(6) Waste tire carrier permittees shall submit to the Department an annual report that summarizes the information collected under subsection (5) of this section. The information shall be broken down by quarters. This report shall be submitted to the Department annually as a condition of holding a permit together with the annual compliance fee or permit renewal application.

(7) A holder of a waste tire carrier permit shall pay to the Department an annual fee in the following amount:

Annual compliance fee (per company or corporation)	\$175
Plus annual fee per vehicle used for hauling waste tires	25

(8) (a) A holder of a waste tire carrier permit who is a private carrier meeting requirements of subsection (8)(b) of this section shall, instead of the fees under subsection (7) of this section, pay to the Department an annual fee in the following amount:

Annual compliance fee	\$25
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(b) To qualify for the fee structure under subsection (8)(a) of this section, a private carrier must:

(A) Use a vehicle with a combined weight not exceeding 8,000 lbs;

(B) Transport only such waste tires as are generated incidentally to his business; and

(C) Use the vehicle to transport the waste tires to a proper disposal site.

(c) If a vehicle owned or operated by a private carrier is used for hire in hauling waste tires, the annual fee structure under subsection (7) of this section shall apply.

(9) A holder of a combined tire carrier/storage site permit shall pay to the Department an annual fee in the following amount:

Annual compliance fee (per company or corporation)	\$250
Plus annual fee per vehicle used for hauling waste tires	\$ 25

(10) The annual compliance fee for the coming year (March 1 through February 28) as required by subsections (7) through (9) of this rule shall be paid by February 15 of each year.

(11) The fee is \$10 for a decal to replace one that was lost or destroyed.

Department Review of Waste Tire Carrier Permit Applications

340-62-070 Applications for waste tire carrier permits shall be processed in accordance with the Procedures for Issuance, Denial, Modification and Revocation of Permits as set forth in OAR Chapter 340, Division 14, except as otherwise provided in OAR Chapter 340, Division 62.

64th OREGON LEGISLATIVE ASSEMBLY--1987 Regular Session

Enrolled
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Ordered printed by the Speaker pursuant to House Rule 12.00A (5). Pre-session filed (at the request of Joint Interim Committee on Hazardous Materials).

CHAPTER 706

AN ACT

Relating to tire recycling; creating new provisions; amending ORS 459.995; appropriating money; and limiting expenditures.

Be It Enacted by the People of the State of Oregon:

SECTION 1. As used in sections 1 to 18 of this Act:

- (1) "Commission" means the Environmental Quality Commission.
- (2) "Consumer" means a person who purchases a new tire to satisfy a direct need, rather than for resale.
- (3) "Department" means the Department of Environmental Quality.
- (4) "Director" means the Director of the Department of Environmental Quality.
- (5) "Dispose" means to deposit, dump, spill or place any waste tire on any land or into any waters of the state as defined by ORS 468.700.
- (6) "Person" means the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.
- (7) "Store" or "storage" means the placing of waste tires in a manner that does not constitute disposal of the waste tires.
- (8) "Tire" means a continuous solid or pneumatic rubber covering encircling the wheel of a vehicle in which a person or property is or may be transported in or drawn by upon a highway.
- (9) "Tire carrier" means any person engaged in picking up or transporting waste tires for the purpose of storage or disposal. This does not include solid waste collectors operating under a license or franchise from any local government unit and who transport fewer than 10 tires at any one time or persons transporting fewer than five tires with their own solid waste for disposal.
- (10) "Tire retailer" means any person engaged in the business of selling new replacement tires.
- (11) "Waste tire" means a tire that is no longer suitable for its original intended purpose because of wear, damage or defect.

SECTION 2. (1) Except as provided in subsection (2) of this section, after July 1, 1989, no person shall dispose of waste tires in a land disposal site, as defined in ORS 459.005.

(2) After July 1, 1989, a person may dispose of waste tires in a land disposal site permitted by the department if:

- (a) The waste tires are chipped in accordance with standards established by the Environmental Quality Commission;
- (b) The waste tires were located for disposal before July 1, 1989, at a land disposal site permitted by the department;
- (c) The commission finds that the reuse or recycling of waste tires is not economically feasible;

(d) The waste tires are received from a solid waste collector, operating under a license or franchise from any local government unit, who transports fewer than 10 tires at any one time; or

(e) The waste tires are received from a person transporting fewer than five tires in combination with the person's own solid waste for disposal.

SECTION 3. (1) After July 1, 1988, no person shall store more than 100 waste tires anywhere in this state except at a waste tire storage site operated under a permit issued under sections 3 to 12 of this Act.

(2) Subsection (1) of this section shall not apply to:

(a) A solid waste disposal site permitted by the department if the permit has been modified by the department to authorize the storage of tires;

(b) A tire retailer with not more than 1,500 waste tires in storage; or

(c) A tire retreader with not more than 3,000 waste tires stored outside.

SECTION 4. (1) Each waste tire storage site permittee shall be required to do the following as a condition to holding the permit:

(a) Report periodically to the department on numbers of waste tires received and the manner of disposition.

(b) Maintain current contingency plans to minimize damage from fire or other accidental or intentional event.

(c) Maintain financial assurance acceptable to the department and in such amounts as determined by the department to be reasonably necessary for waste tire removal processing, fire suppression or other measures to protect the environment and the health, safety and welfare of the people of this state.

(d) Maintain other plans and exhibits pertaining to the site and its operation as determined by the department to be reasonably necessary to protect the public health, welfare or safety or the environment.

(2) The department may waive any of the requirements of subsection (1) of this section for a waste tire storage site in existence on or before January 1, 1988.

SECTION 5. (1) The department shall furnish an application form to anyone who wishes to operate a waste tire storage site or to be a waste tire carrier.

(2) In addition to information requested on the application form, the department also shall require the submission of such information relating to the construction, development or establishment of a proposed waste tire storage site and facilities to be operated in conjunction therewith and such additional information, data and reports as it considers necessary to make a decision granting or denying a permit.

SECTION 6. (1) Permit applications submitted to the department for operating a waste tire storage site shall contain the following:

(a) The management program for the operation of the site, including the person to be responsible for the operation of the site, the proposed method of disposal and the proposed emergency measures to be provided at the site.

(b) A description of the size and type of facilities to be constructed upon the site, including the height and type of fencing to be used, the size and construction of structures or buildings, warning signs, notices and alarms to be used.

(c) The exact location and place where the applicant proposes to operate and maintain the site, including the legal description of the lands included within the site.

(d) An application fee, as determined by the commission to be adequate to pay for the department's costs in investigating and processing the application.

(e) Any additional information requested by the department.

(2) A permit application submitted to the department for operating as a waste tire carrier shall include the following:

(a) The name and place of business of the applicant.

(b) A description and license number of each truck used for transporting waste tires.

(c) The locations of the sites at which waste tires will be stored or disposed.

(d) A bond in the sum of \$5,000 in favor of the State of Oregon. In lieu of the bond, the applicant may submit financial assurance acceptable to the department.

(e) An application fee, as determined by the commission to be adequate to pay for the department's costs in investigating and processing the application.

(f) Any additional information requested by the department.

(3) The bond required under subsection (2) of this section shall be executed by the applicant as principal and by a surety company authorized to transact a surety business within the State of Oregon. The bond shall be filed with the department and shall provide that:

(a) In performing services as a waste tire carrier, the applicant shall comply with the provisions of sections 1 to 18 of this Act and rules adopted by the commission regarding tire carriers; and

(b) Any person injured by the failure of the applicant to comply with the provisions of sections 1 to 18 of this Act or the rules adopted by the commission regarding waste tire carriers shall have a right of action on the bond in the name of the person, provided that written claim of such right of action shall be made to the principal or the surety company within two years after the injury.

SECTION 7. (1) Following the submittal of a waste tire storage site permit application, the director shall cause notice to be given in the county where the proposed site is located in a manner reasonably calculated to notify interested and affected persons of the permit application.

(2) The notice shall contain information regarding the location of the site and the type and amount of waste tires intended for storage at the site, and may fix a time and place for a public hearing. In addition, the notice shall give any person substantially affected by the proposed site an opportunity to comment on the permit application.

SECTION 8. The department may conduct a public hearing in the county where a proposed waste tire storage site is located and may conduct hearings at other places as the department considers suitable. At the hearing the applicant may present the application and the public may appear or be represented in support of or in opposition to the application.

SECTION 9. Based upon the department's review of the waste tire storage site or waste tire carrier permit application, and any public comments received by the department, the director shall issue or deny the permit. The director's decision shall be subject to appeal to the commission and judicial review under ORS 183.310 to 183.550.

SECTION 10. A fee may be required of every permittee under sections 3 to 12 of this Act. The fee shall be in an amount determined by the commission to be adequate, less any federal funds budgeted therefor by legislative action, to carry on the monitoring, inspection and surveillance program established under section 12 of this Act and to cover related administrative costs.

SECTION 11. The director may revoke any permit issued under sections 3 to 12 of this Act upon a finding that the permittee has violated any provision of sections 3 to 12 of this Act or rules adopted pursuant thereto or any material condition of the permit, subject to appeal to the commission and judicial review under ORS 183.310 to 183.550.

SECTION 12. The department shall establish and operate a monitoring, inspection and surveillance program over all waste tire storage sites and all waste tire carriers or may contract with any qualified public or private agency to do so. After reasonable notice, owners and operators of these facilities must allow necessary access to the site of waste tire storage and to its records, including those required by other public agencies, for the monitoring, inspection and surveillance program to operate.

SECTION 12a. Fees received by the department pursuant to sections 6 and 10 of this Act shall be deposited in the State Treasury and credited to the department and are continuously appropriated to carry out the provisions of sections 4 to 12 of this Act.

SECTION 13. (1) Any person who purchases waste tires generated in Oregon or tire chips or similar materials from waste tires generated in Oregon and who uses the tires or chips or similar material for energy recovery or other appropriate uses may apply for partial reimbursement of the cost of purchasing the tires or chips or similar materials.

(2) Any person who uses, but does not purchase, waste tires or chips or similar materials, for energy recovery or another appropriate use, may apply for a reimbursement of part of the cost of such use.

(3) Any costs reimbursed under this section shall not exceed the amount in the Waste Tire Recycling Account. If applications for reimbursement during a period specified by the commission exceed the amount in the account, the commission shall prorate the amount of all reimbursements.

(4) The intent of the partial reimbursement of costs under this section is to promote the use of waste tires by enhancing markets for waste tires or chips or similar materials. The commission shall limit or eliminate reimbursements if the commission finds they are not necessary to promote the use of waste tires.

(5) The commission shall adopt rules to carry out the provisions of this section. The rules shall:

(a) Govern the types of energy recovery or other appropriate uses eligible for reimbursement, including but not limited to recycling other than retreading, or use for artificial fishing reefs;

(b) Establish the procedure for applying for a reimbursement; and

(c) Establish the amount of reimbursement.

SECTION 14. The Waste Tire Recycling Account is established in the State Treasury, separate and distinct from the General Fund. All moneys received by the Department of Revenue under sections 20 to 43 of this Act shall be deposited to the credit of the account. Moneys in the account are appropriated continuously to the Department of Environmental Quality to be used:

(1) For expenses in cleaning up waste tire piles as provided in section 15 of this Act;

(2) To reimburse persons for the costs of using waste tires or chips or similar materials; and

(3) For expenses incurred by the Department of Environmental Quality in carrying out the provisions of sections 2, 3 and 13 to 18 of this Act.

SECTION 15. (1) The department, as a condition of a waste-tire-storage-site permit issued under sections 3 to 12 of this Act, may require the permittee to remove or process the waste tires according to a plan approved by the department.

(2) The department may use moneys from the Waste Tire Recycling Account to assist a permittee in removing or processing the waste tires. Moneys may be used only after the commission finds that:

(a) Special circumstances make such assistance appropriate; or

(b) Strict compliance with the provisions of sections 1 to 18 of this Act would result in substantial curtailment or closing of the permittee's business or operation or the bankruptcy of the permittee.

(3) The department may use subsections (4) to (7) of this section if:

(a) A person fails to apply for or obtain a waste tire storage site permit under sections 3 to 12 of this Act; or

(b) A permittee fails to meet the conditions of such permit.

(4) The department may abate any danger or nuisance created by waste tires by removing or processing the tires. Before taking any action to abate the danger or nuisance, the department shall give any persons having the care, custody or control of the waste tires, or owning the property upon which the tires are located, notice of the department's intentions and order the person to abate the danger or nuisance in a manner approved by the department. Any order issued by the department under this subsection shall be subject to appeal to the commission and judicial review of a final order under the applicable provisions of ORS 183.310 to 183.550.

(5) If a person fails to take action as required under subsection (4) of this section within the time specified the director may abate the danger or nuisance. The order issued under subsection (4) of this section may include entering the property where the danger or nuisance is located, taking the tires into public custody and providing for their processing or removal.

(6) The department may request the Attorney General to bring an action to recover any reasonable and necessary expenses incurred by the department for abatement costs, including administrative and legal expenses. The department's certification of expenses shall be prima facie evidence that the expenses are reasonable and necessary.

(7) Nothing in sections 1 to 18 of this Act shall affect the right of any person or local government unit to abate a danger or nuisance or to recover for damages to real property or personal injury related to the transportation, storage or disposal of waste tires. ~~The department may reimburse a person or local government unit for the cost of abatement.~~

SECTION 16. In accordance with the applicable provisions of ORS 183.310 to 183.550, the commission shall adopt rules necessary to carry out the provisions of sections 1 to 18 of this Act.

NOTE: Section 17 was deleted by amendment. Subsequent sections were not renumbered.

SECTION 18. The provisions of sections 1 to 17 of this Act do not apply to tires from:

- (1) Any device moved exclusively by human power.
- (2) Any device used exclusively upon stationary rails or tracks.
- (3) A motorcycle.
- (4) An all-terrain vehicle.
- (5) Any device used exclusively for farming purposes, except a farm truck.

SECTION 19. ORS 459.995 is amended to read:

459.995. (1) In addition to any other penalty provided by law, any person who violates ORS 459.205, 459.270 or the provisions of ORS 459.180, 459.188, 459.190, [or] 459.195 or section 2 or 3 of this 1987 Act or any rule or order of the Environmental Quality Commission pertaining to the disposal, collection, storage or reuse or recycling of solid wastes, as defined by ORS 459.005, shall incur a civil penalty not to exceed \$500 a day for each day of the violation.

(2) The civil penalty authorized by subsection (1) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed and collected under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and ORS chapter 468.

SECTION 20. As used in sections 20 to 43 of this Act, unless the context otherwise requires:

(1) "Business" means any trade, occupation, activity or enterprise engaged in for the purpose of selling new tires in this state.

(2) "Department" means the Department of Revenue.

(3) "Place of business" means any place where new tires are sold.

(4) "Retail dealer" means every person who is engaged in the business of selling to ultimate consumers new tires.

(5) "Sale" means any transfer, exchange or barter, in any manner or by any means whatsoever, for a consideration, and includes and means all sales made by any person. It includes a gift by a person engaged in the business of selling new tires, for advertising, as a means of evading the provisions of sections 20 to 43 of this Act, or for any other purposes whatsoever.

(6) "Tire" has the meaning given that term in section 1 of this Act.

(7) "Wholesale sales price" means the established price for which a manufacturer sells a tire to a distributor, after any discount or other reduction for quantity or cash.

SECTION 21. (1) Beginning January 1, 1988, and ending June 30, 1991, a fee is hereby imposed upon the retail sale of all new replacement tires in this state of \$1 per tire sold. The fee shall be imposed on retail dealers at the time the retail dealer sells a new replacement tire to the ultimate consumer.

(2) The amount remitted to the Department of Revenue by the retail dealer for each quarter shall be equal to 85 percent of the total fees due and payable by the retail dealer for the quarter.

SECTION 22. The fee imposed under sections 20 to 43 of this Act shall not apply to new tires for:

- (1) Any device moved exclusively by human power.
- (2) Any device used exclusively upon stationary rails or tracks.
- (3) A motorcycle.
- (4) An all-terrain vehicle.
- (5) Any device used exclusively for farming purposes, except a farm truck.

SECTION 23. (1) Except as otherwise provided in sections 20 to 43 of this Act, the fee imposed by section 21 of this Act shall be paid by each retail dealer to the department on or before the last day of January, April, July and October of each year for the preceding calendar quarter.

(2) With each quarterly payment, the retail dealer shall submit a return to the department, in such form and containing such information as the department shall prescribe.

(3) The fee, penalties and interest imposed by sections 20 to 43 of this Act shall be a personal debt, from the time liability is incurred, owed by the retail dealer to the State of Oregon until paid.

(4) The returns required of retail dealers under this section shall be filed by all such retail dealers regardless of whether any fee is owed by them.

(5) The department for good cause may extend for not to exceed one month the time for making any return and paying any fee due with a return under sections 20 to 43 of this Act. The extension may be granted at any time if a written request therefor is filed with the department within or prior to the period for which the extension may be granted. When the time for filing a return and payment of fee is extended at the request of a retail dealer, interest at the rate established under ORS 305.220, for each month, or fraction of a month, from the time the return was originally required to be filed to the time of payment, shall be added and paid.

SECTION 24. The fee imposed by section 21 of this Act does not apply with respect to any new tires which under the Constitution and laws of the United States may not be made the subject of taxation by the state.

SECTION 25. Every person desiring to engage in the sale of new tires as a retail dealer, except a person who desires merely to sell or accept orders for new tires which are to be transported from a point outside this state to a consumer within this state, shall file with the department an application, in such form as the department may prescribe, for a certificate. A retail dealer shall apply for and obtain a certificate for each place of business at which the retail dealer engages in the business of selling new tires. No fee shall be charged for such certificate.

SECTION 26. (1) If the department considers such action necessary to insure compliance with sections 20 to 43 of this Act, it may require any person subject to sections 20 to 43 of this Act to place with the department such security as the department may determine.

(2) The amount of the security shall be fixed by the department but, except as provided in subsection (3) of this section, may not be greater than twice the estimated liability for fees of a person for the reporting period under sections 20 to 43 of this Act determined in such manner as the department considers proper.

(3) In the case of a person who, pursuant to section 28 of this Act, has been given notice of proposed revocation or suspension of certificate, the amount of the security may not be greater than twice the liability of the person for the reporting period under sections 20 to 43 of this Act determined in such manner as the department considers proper, up to \$10,000.

(4) The limitations provided in this section apply regardless of the type of security placed with the department. The required amount of the security may be increased or decreased by the department subject to the limitations provided in this section.

SECTION 27. Upon receipt of a completed application and such security as may be required by the department under sections 20 to 43 of this Act, the department shall issue to the applicant a certificate as a retail dealer. A separate certificate shall be issued for each place of business of the retail dealer within the state. A certificate is valid only for engaging in business as a retail dealer at the place designated thereon, and it shall at all times be conspicuously displayed at the place for which issued. The certificate is not transferable and is valid until canceled, suspended or revoked.

SECTION 28. (1) If any person fails to comply with any provision of sections 20 to 43 of this Act relating to the fee or any rule of the department relating to the fee adopted under sections 20 to 43 of this Act, the department may suspend or revoke the certificate held by the person. The department shall not issue a new certificate after the revocation of a certificate unless it is satisfied that the former holder of the certificate will comply with the provisions of sections 20 to 43 of this Act relating to the fee and the rules of the department.

(2) If the department proposes to refuse to issue or renew a certificate, or proposes to suspend or revoke a certificate, the department shall give notice of the proposed refusal, suspension or revocation at least 30 days before the refusal, suspension or revocation will be final. Appeal following the notice of the determination may be taken to the director in the manner provided in ORS 305.275 within the time provided in ORS 305.280 (1).

(3) An appeal from the director's order sustaining a proposed refusal to issue or renew, or suspension or revocation, may be taken by the person by filing an appeal to the Oregon Tax Court following the procedure provided in ORS chapter 305 within the time prescribed under ORS 305.560.

SECTION 29. (1) Every retail dealer shall keep at each registered place of business complete and accurate records for that place of business, including itemized invoices, of new tire products held, purchased, manufactured, brought in or caused to be brought in from without the state or shipped or transported to retail dealers in this state, and of all new tire sales made to the ultimate consumer.

(2) The records required by subsection (1) of this section shall show the names and addresses of purchasers, the inventory of all new tires on hand on January 1, 1988, and other pertinent papers and documents relating to the sale of new tires.

(3) When a certified retail dealer sells new tires exclusively to the ultimate consumer at the address given in the certificate, itemized invoices shall be made of all new tires sold by that certified retail dealer.

(4)(a) All books, records and other papers and documents required by this section to be kept shall be preserved for a period of at least three years after the initial date of the books, records and other papers or documents, or the date of entries appearing therein, unless the Department of Revenue, in writing, authorizes their destruction or disposal at an earlier date.

(b) The department or its authorized representative, upon oral or written reasonable notice, may make such examinations of the books, papers, records and equipment required to be kept under this section as it may deem necessary in carrying out the provisions of sections 20 to 43 of this Act.

(c) If the department, or any of its agents or employes, are denied free access or are hindered or interfered with in making such examination, the certificate of the retail dealer at such premises shall be subject to revocation by the department.

SECTION 30. Every person who sells new tires to the ultimate consumer shall render with each sale itemized invoices showing the seller's name and address, the date of sale, the fee collected and all prices and discounts. The person shall preserve legible copies of all such invoices for three years from the date of sale.

SECTION 31. Every retail dealer shall procure itemized invoices of all tires purchased. The invoices shall show the name and address of the seller and the date of purchase. The retail dealer shall preserve a legible copy of each such invoice for three years from the date of purchase. Invoices shall be available for inspection by the Department of Revenue or its authorized agents or employes at the retail dealer's place of business.

SECTION 32. The department shall administer and enforce sections 20 to 43 of this Act. The department is authorized to establish those rules and procedures for the implementation and enforcement of sections 20 to 43 of this Act that are consistent with its provisions and as are considered necessary and appropriate.

SECTION 33. (1) No person shall:

(a) Fail to furnish any return required to be made pursuant to sections 20 to 43 of this Act;

(b) Fail to furnish a supplemental return or other data required by the department; or

(c) Render a false or fraudulent return, report or claim for refund.

(2) No person who is required to make, render, sign or verify any report or return under sections 20 to 43 of this Act shall make a false or fraudulent report or return with intent to defeat or evade the determination of an amount due required by law.

SECTION 34. (1) If there is a failure to file a return required under sections 20 to 43 of this Act or a failure to pay a fee at the time the fee becomes due, and no extension is granted under section 23 of this Act, or if the time granted as an extension has expired and there is a failure to

file a return or pay a fee, there shall be added to the amount of fee required to be shown on the return a delinquency penalty of five percent of the amount of the fee.

(2) If the failure to file a return continues for a period in excess of three months after the due date:

(a) There shall be added to the fee required to be shown on the return a failure to file penalty of 20 percent of the amount of such fee; and

(b) Thereafter, the department may send a notice and demand to the person to file a return within 30 days of the mailing of the notice. If after such notice and demand no return is filed within the 30 days, the department may determine the fee according to the best of its information and belief, assess the fee with appropriate penalty and interest, plus an additional penalty of 25 percent of the fee deficiency determined by the department, and give written notice of the determination and assessment to the person required to make the filing.

(3) A penalty equal to 100 percent of any deficiency determined by the department shall be assessed and collected if:

(a) There is a failure to file a return with intent to evade the fee; or

(b) A return was falsely prepared and filed with intent to evade the fee.

(4) Interest shall be collected on the unpaid fee at the rate established under ORS 305.220, for each month or fraction of a month, computed from the time the fee became due, during which the fee remains unpaid.

(5) Each penalty imposed under this section is in addition to any other penalty imposed under this section. However, the total amount of penalty imposed under this section with respect to any deficiency shall not exceed 100 percent of the deficiency.

SECTION 35. (1) If a person fails to file a report or return within 60 days of the time prescribed under sections 20 to 43 of this Act, the department may petition the Oregon Tax Court for an order requiring the person to show cause why the person is not required to file the report or return.

(2) Within 10 days after the filing of the petition, the tax court shall enter an order directing the person to appear and show cause why no report or return is required to be filed. The petition and order shall be served upon the person in the manner provided by law. Not later than 20 days after service, the person shall:

(a) File the requested report or return with the department;

(b) Request from the court an order granting reasonable time within which to file the requested report or return with the department; or

(c) File with the court an answer to the petition showing cause why such report or return is not required to be filed.

(3) If an answer is filed, the court shall set the matter for hearing within 20 days from the filing of the answer, and shall determine the matter in an expeditious manner, consistent with the rights of the parties.

(4) An appeal may be taken to the Supreme Court as provided in ORS 305.445, from an order of the tax court made and entered after a hearing and determination under subsection (3) of this section.

(5) Costs shall be awarded to the prevailing party.

SECTION 36. The provisions of ORS chapters 305 and 314 as to the audit and examination of returns, periods of limitations, determination of and notices of deficiencies, assessments, liens, delinquencies, claims for refund and refunds, conferences, appeals to the director of the department, appeals to the Oregon Tax Court, stay of collection pending appeal, confidentiality of returns and the penalties relative thereto, and the procedures relating thereto, shall apply to the determinations of fees, penalties and interest under sections 20 to 43 of this Act, except where the context requires otherwise.

SECTION 37. If, under sections 20 to 43 of this Act, the department is not satisfied with the return of the fee or as to the amount of fee required to be paid to this state by any person, it may compute and determine the amount required to be paid upon the basis of the facts contained in the return or upon the basis of any information within its possession or that may come into its pos-

session. One or more deficiency determinations may be made of the amount due for one or for more than one period. Notices of deficiency shall be given and interest on deficiencies shall be computed as provided in ORS 305.265. Subject to ORS 314.421 and 314.423, liens for fees or deficiencies shall arise at the time of assessment, shall continue until the fees, interest and penalties are fully satisfied and may be recorded and collected in the manner provided for the collection of delinquent income taxes.

SECTION 38. If the department believes that the collection of any fee imposed under sections 20 to 43 of this Act or any amount of the fee required to be collected and paid to the state or of any determination will be jeopardized by delay, it shall make a determination of the fee or amount of fee required to be collected, noting that fact upon the determination. The amount determined is immediately due and payable and the department shall assess the fees, notify the person and proceed to collect the fee in the same manner and using the same procedures as for the collection of income taxes under ORS 314.440.

SECTION 39. (1) If any fee imposed under sections 20 to 43 of this Act or any portion of the fee is not paid within the time provided by law and no provision is made to secure the payment of the fee by bond, deposit or otherwise, pursuant to rules adopted by the department, the department may issue a warrant under its official seal directed to the sheriff of any county of the state commanding the sheriff to levy upon and sell the real and personal property of the retail dealer found within the county, for the payment of the amount of the fee, with the added penalties, interest and the sheriff's cost of executing the warrant, and to return the warrant to the department and pay to it the money collected from the sale, within 60 days after the date of receipt of the warrant.

(2) The sheriff shall, within five days after the receipt of the warrant, record with the clerk of the county a copy of the warrant, and the clerk shall immediately enter in the County Clerk Lien Record the name of the retail dealer mentioned in the warrant, the amount of the fee or portion of the fee and penalties for which the warrant is issued and the date the copy is recorded. The amount of the warrant so recorded shall become a lien upon the title to and interest in real property of the retail dealer against whom it is issued in the same manner as a judgment duly docketed. The sheriff immediately shall proceed upon the warrant in all respects, with like effect and in the same manner prescribed by law in respect to executions issued against property upon judgment of a court of record, and shall be entitled to the same fees for services in executing the warrant, to be added to and collected as a part of the warrant liability.

(3) In the discretion of the department a warrant of like terms, force and effect may be issued and directed to any agent authorized to collect the fees imposed by sections 20 to 43 of this Act. In the execution of the warrant, the agent shall have all the powers conferred by law upon sheriffs, but is entitled to no fee or compensation in excess of actual expenses paid in the performance of such duty.

(4) If a warrant is returned not satisfied in full, the department shall have the same remedies to enforce the claim for fees against the retail dealer as if the people of the state had recovered judgment against the retail dealer for the amount of the fee.

SECTION 40. (1) The director is authorized to enter into a tire fee refund agreement with the governing body of any Indian reservation in Oregon. The agreement may provide for a mutually agreed upon amount as a refund to the governing body of any tire fee collected under sections 20 to 43 of this Act in connection with the sale of new tires on the Indian reservation. This provision is in addition to other laws allowing refunds of fees or taxes.

(2) There is annually appropriated to the director from the suspense account established under ORS 293.445 and section 42 of this Act, the amounts necessary to make the refunds provided by subsection (1) of this section.

SECTION 41. The remedies of the state provided for in sections 20 to 43 of this Act are cumulative, and no action taken by the department or Attorney General constitutes an election by the state to pursue any remedy to the exclusion of any other remedy for which provision is made in sections 20 to 43 of this Act.

SECTION 42. All moneys received by the Department of Revenue under sections 20 to 43 of this Act shall be deposited in the State Treasury and credited to a suspense account established under ORS 293.445. After payment of administration expenses incurred by the department in the administration of sections 20 to 43 of this Act and of refunds or credits arising from erroneous overpayments, the balance of the money shall be credited to the Waste Tire Recycling Account established under section 14 of this Act.

SECTION 43. (1) The fees imposed by section 21 of this Act are in addition to all other state, county or municipal fees on the sale of new tires.

(2) Any new tire with respect to which a fee has once been imposed under section 21 of this Act shall not be subject upon a subsequent sale to the fees imposed by section 21 of this Act.

SECTION 44. (1) If a person or an officer or employe of a corporation or a member or employe of a partnership violates paragraph (a) or (b) of subsection (1) of section 33 of this Act, the Department of Revenue shall assess against the person a civil penalty of not more than \$1,000. The penalty shall be recovered as provided in subsection (4) of this section.

(2) A person or an officer or employe of a corporation or a member or employe of a partnership who violates paragraph (c) of subsection (1) or (2) of section 33 of this Act, is liable to a penalty of not more than \$1,000, to be recovered in the manner provided in subsection (4) of this section.

(3) If any person violates any provision of sections 20 to 43 of this Act other than section 33 of this Act, the department shall assess against the person a civil penalty of not more than \$1,000, to be recovered as provided in subsection (4) of this section.

(4) Any person against whom a penalty is assessed under this section may appeal to the director as provided in ORS 305.275. If the penalty is not paid within 10 days after the order of the department becomes final, the department may record the order and collect the amount assessed in the same manner as income tax deficiencies are recorded and collected under ORS 314.430.

SECTION 45. In addition to and not in lieu of any other expenditure limitation imposed by law, the amount of \$258,473 is established for the biennium beginning July 1, 1987, as the maximum limit for payment of expenses from fees collected or received by the Department of Environmental Quality for the administration of this Act.

SECTION 46. In addition to and not in lieu of any other expenditure limitation imposed by law, the amount of \$189,913 is established for the biennium beginning July 1, 1987, as the maximum limit for payment of expenses from fees collected by the Department of Revenue for administration of this Act.

Passed by House May 28, 1987

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Chief Clerk of House

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Speaker of House

Passed by Senate June 12, 1987

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President of Senate

Received by Governor:

.....M....., 1987

Approved:

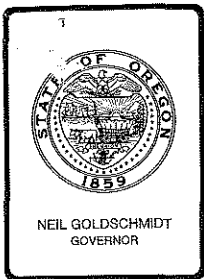
.....M....., 1987

.....
Governor

Filed by Office of Secretary of State:

.....M....., 1987

.....
Secretary of State



Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission
From: Director
Subject: Agenda Item H, July 8, 1988, EQC Meeting

Executive Summary of Staff Report Proposing Additions to OAR Chapter 340, Division 61, Financial Assurance at Regional Disposal Sites

Background

The 1987 Legislature passed HB 2619 which requires any regional disposal site (receives over 75,000 tons/year of waste from outside the county) to provide financial assurance. The law also requires the Commission to set the types and amount of financial assurance.

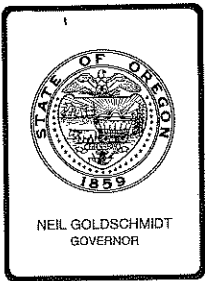
The Department's Solid Waste Advisory Committee considered several alternatives for financial assurance. These recommendations were drafted into rules which require, in addition to closure and post-closure funding, an additional amount of financial assurance to cover unexpected remedial action.

Summary of Staff Report Key Issues

1. Testimony requested the following changes:
 - (a) 61-029(4). Submit new financial assurance amounts only if there is a substantial change in the closure plan affecting dollar amounts.
 - (b) 61-029(5). The Department should only be able to use trust fund money after the permittee has been notified and fails to perform.
 - (c) 61-029(7). Specify which forms of financial assurance would go to local government after final closure.
 - (d) 61-029(8). Should limit audit procedures to those items directly related to financial assurance documents.
2. The Department agrees with the clarification wording and the changes requested.


Fred Hansen

RLB:b
SB7598ES
June 13, 1988



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item H, July 8, 1988, EQC Meeting

Proposed Adoption of Additions to Solid Waste Rules OAR 340-61-010 and 61-0-029, Financial Assurance at Regional Disposal Sites.

Background

HB 2619 (passed by the 1987 Legislature) was developed to regulate regional disposal sites. A regional disposal site is defined as a site that is:

- a) A disposal site selected pursuant to Chapter 679, Oregon Laws 1985 (landfill siting bill, SB 662), or
- b) A disposal site that receives, or a proposed disposal site that is designed to receive more than 75,000 tons of solid waste a year from commercial haulers from outside the immediate service area in which the disposal site is located. As used above, immediate service area means the county boundary of all counties except a county that is within the boundary of the Metropolitan Service District. For a county within the Metropolitan Service District's immediate service area means the Metropolitan Service District boundary.

One section of HB 2619 added a subsection to Oregon Revised Statute (ORS) 459.235 as follows:

"ORS 459.235 Applications for permits; fees; bond.

- (1) ...
- (2) ...
- (3) If the application is for a regional disposal facility, the applicant shall file with the Department a surety bond in the form and amount established by rule by the Commission. ..."

The Department has issued one permit for a regional disposal site to Oregon Waste Systems near Arlington and is processing another for Tidewater Barge near Boardman. In addition, one existing disposal site qualifies as a regional disposal site, Coffin Butte Landfill near Corvallis.

Statement of Need for Rulemaking is attached (Attachment I).

Alternatives and Evaluation

The Department's Solid Waste Advisory Committee examined a wide range of options for financial assurance before making the following recommendations:

- o Financial assurance for regional sites should be determined by the amount needed for closure/post-closure or \$1 million whichever is higher.
- o That this fund be used for environmental liability at the direction of the Department to include study, repair and remedial action.
- o All the instruments currently allowed for financial assurance be allowed, including building up of the fund over a number of years (per ton fee).

DEQ staff took the committee's recommendation and prepared a draft rule. The draft rule was presented to the committee and received their approval.

Existing closure and post-closure financial assurance requirements (OAR 340-61-034) cover only the last five years of operation and post-closure activities. The amount is based on engineering estimates for anticipated activities only. These rules go beyond closure and post-closure activities by requiring an "up front" closure fund and also include a base amount for study, repair and remedial action. Operators will be allowed to create an accumulating fund over a number of years rather than have all of the money at the beginning.

When financial assurance requirements for closure/post-closure of land disposal sites were imposed by the legislature in 1983 (ORS 459.270 and 459.273), there was concern over accumulation of excess money by landfill operators. ORS 459.273 requires that excess money to the extent practical be used for the following:

1. A reduction in the rates a person within the area served by the land disposal site is charged for solid waste collection service;
or

2. Enhancing present or future solid waste disposal facilities within the area from which the excess money was received.

At the public hearing concerning the proposed rules, two people attended and one testified. Written testimony was also submitted by the presenter which covered the same points. Both attendees represented Oregon Waste Systems, Inc. holder of the Solid Waste Disposal Permit for the Gilliam County Landfill (a regional disposal site).

The testimony asked for clarification of several subsections of the rules and asked for changes in one subsection. The following is a summary of the testimony and Department action:

1. 61-029(4). A new financial assurance plan and financing increases should only be required if there are substantial changes in the closure plan.

The draft rule required evaluation of the financial assurance plan and new amounts submitted as operational plans were amended or at least once each five years. Testimony was that new amounts should be required only if there was a major change in the closure plan affecting closure costs. By using the suggested wording, the financial assurance on a regional landfill will be sufficient for closure and the permittees will not be required to submit a new form of financial assurance each time a minor operating change is made. This concept has been added to the rules.

2. 61-029(5). Clarification should be made on when and for what reason the Department could take funds from the account for remedial action and that the funds should only be taken after notification to the permittee and their failure to respond.

The concept of using financial assurance for remedial action was not challenged. However, testimony asked that a procedure be included in the rule that requested response and gave the permittee a time schedule for compliance before the Department would take action to use the money.

This step had been envisioned by the Department but not included in the rule. The Department has added wording to the proposed rule that would:

- (1) Provide for notification to the permittee of the discharge and request remedial action with a time schedule.
- (2) The permittee does not have funds necessary to perform and fails to meet the compliance schedule.

3. 61-029(7). Clarify under what conditions and which options remaining funds would go to local government.

Testimony indicated that only under certain forms of financial assurance, where money was accumulated in some type of an account, there might be excess money after proper closure of the site. Financial assurance documents such as an insurance policy, bond or corporate guarantee are not money bearing accounts and this provision would not be applicable.

The Department agrees with testimony and has changed the rule to apply to only (A) a closure trust fund, (B) a surety bond guaranteeing payment into a closure trust fund, and (C) alternative forms of financial assurance that are equal in security to the other forms.

4. 61-029(8). Limit the audit procedures to those relating only to closure plans and the financial assurance document.

Testimony was that the Department only had reason to audit certain portions of the permittees financial records. This would be limited to information in the closure plan relating to costs for closure and only if financial assurance consisted of a cash holding such as a closure trust fund or a surety bond guaranteeing payment into a closure trust fund.

The Department agrees that routine day-to-day operations should not be subject to audit by the Department and that only those items relating to closure and closure costs should be subject to audit. The proposed rule has been clarified to reflect the change.

The proposed rule with the above clarifications and changes is attached (Attachment III).

Summation

1. ORS 459.235 requires the Commission to adopt rules requiring financial assurance at regional disposal sites.
2. Proposed rules were reviewed by and received approval of the Department's Solid Waste Advisory Committee.
3. Public testimony requested clarification of OAR 340-61-029(4), (5) and (7) and a change in audit requirements, OAR 340-61-029(8).

4. The Department agrees with the public testimony and recommends that the rules be changed accordingly.

Director's Recommendation

Based upon the summation, it is recommended that the Commission adopt the proposed additions to Solid Waste Rules OAR 340-61-010 and 029.



Fred Hansen

Attachment(s) I: Statement of Need for Rulemaking
II: Hearing Officer's Report and Response to Public Comment
III: Proposed Amendments to OAR 340-61

R.L. Brown:b
229-6237
June 13, 1988
SB7598

Before the Environmental Quality Commission
of the State of Oregon

In the Matter of Amending) Statement of Need for Rule
OAR 340-61-010 and Adopting) Amendment and Fiscal and
OAR 340-61-029) Economic Impact

1. Statutory Authority

ORS 459.235(3) provides that an applicant for a regional disposal site shall file with the Department a surety bond in the form and amount established by rule by the Commission.

2. Statement of Need

The Department presently has applications for two regional disposal sites. Before they can begin operation, the Commission must adopt rules setting the amount and form of financial assurance.

3. Principal Documents Relied Upon

- a. Oregon Revised Statutes, Chapter 459.
- b. Oregon Administrative Rules, Chapter 340, Division 61.

4. Fiscal and Economic Impact

The proposal would require that a minimum of \$1 million be accumulated by the permittee over a maximum period of 5 years. This would equate to approximately 30 cents per ton for users of the proposed eastern Oregon sites, based on anticipated annual disposal. If the applicant uses a corporate guarantee, there would be no cost to this rule.

Valley Landfills, Inc., Corvallis, a small business, would be impacted by the rule beginning in July 1989. It is anticipated, however, that user fees at the disposal site would be increased to cover the additional cost. Other than small increases in fees to small businesses there would be no other fiscal impact on small businesses.

MEMORANDUM

To: Environmental Quality Commission
From: Steve Greenwood, Hearing Officer
Subject: Public Hearing, Financial Assurance at Regional Disposal Sites, OAR 340-61-029

On June 2, 1988, a public hearing was held at DEQ offices, 811 S.W. 6th, Portland, to take testimony regarding proposed rules to require financial assurance at regional disposal sites.

Two persons attended, one testified. Written testimony was also presented by the person testifying. Testimony both oral and written was as follows:

1. 61-029(4) should read: The financial assurance plan must be evaluated by the applicant at least once each five years or sooner if there is a significant change in the operational plan for the regional landfill. The applicant must provide financial assurance in an amount sufficient for the revised financial assurance plan.
2. 61-029(5) additions should be made to:

- A. notify the applicant of the problem,
 - B. Define pollution that may trigger a draw,
 - C. Opportunity for the permittee to respond,
 - D. Draw can only be made if permittee fails to respond to Department's request,
 - E. Demonstration that the permittee has exhausted all other resources.
3. 61-029(7) add the following at the beginning:
- If a financial assurance is provided under OAR 340-61-034(3)(c)(A) or (B)
4. 61-029(8) audit of records should be limited to only:
- A. Audit for review and compliance with closure plan

-and-

Attachment II
EQC Agenda Item H
7/8/88 EQC Meeting
Page 3

- B. Audit of the records of a permittee that has established a trust fund under OAR 340-61-034(3)(c)(A) or (B).

Written testimony and an attendance list is attached.

SB7598II

SCHWABE, WILLIAMSON & WYATT
ATTORNEYS AT LAW

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June 3, 1988

VIA HAND DELIVERY

Bob Brown
DEPARTMENT OF ENVIRONMENTAL QUALITY
811 SW Sixth Avenue
Portland, Oregon 97204

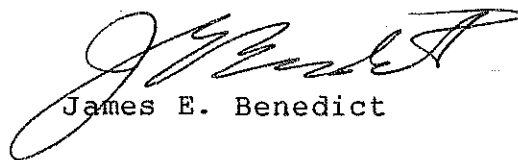
Hazardous & Solid Waste Division
Dept. of Environmental Quality
RECEIVED
JUN 06 1988

Re: Oregon Waste Systems, Inc.'s Comments on Proposed Rules
Respecting Financial Assurance for Regional Solid Waste
Disposal Facilities

Dear Bob:

Enclosed please find the comments of Oregon Waste Systems on the proposed amendments to OAR 340-61 respecting financial assurance for regional solid waste disposal facilities. OWS appreciates your careful consideration of our comments. If there are any issues that we can clarify or amplify, please feel free to call me or Dave Luneke at Oregon Waste Systems.

Very truly yours,


James E. Benedict

JEB:dlf
Enclosure
cc: Richard A. Daniels (w/encl)
David K. Luneke (w/encl)
Tom Alexander (w/encl)

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY

In the Matter of Proposed)
Amendments to OAR 340-61) OREGON WASTE SYSTEM'S
Respecting Financial Assurance) COMMENTS TO PROPOSED
for Regional Solid Waste) AMENDMENTS
Disposal Facilities)

Comment No. 1. Proposed OAR 340-61-029(4).

Present wording: The financial assurance plan must be evaluated by the applicant and new amounts submitted to the Department as operational plans are amended or at least once each five (5) years.

Suggested wording: The financial assurance plan must be evaluated by the applicant at least once each five (5) years or sooner if there is a significant change in the operational plan for the regional landfill. The applicant must provide financial assurance in an amount sufficient for the revised financial assurance plan.

Rationale: The suggested wording incorporates two concepts not in the present wording:

1. A new financial assurance plan need be submitted only if there is a significant change in operational plans. As drafted, any change in operational plans would require submittal of a new financial assurance plan; and,

2. The present wording presupposes that "new amounts [be] submitted to the Department" each time there is a change in the financial assurance plan. Many of the forms of financial assurance authorized under OAR 340-61-034(3)(a) do not require the submittal of any "amounts". They require the provision of varying

1 forms of financial assurance including a financial test, etc.
2 There is no "amount submitted" per se. The rule should reflect
3 that the financial assurance be revised, not the amount submitted.
4

5 Comment No. 2. Proposed OAR 340-61-029(5).

6 The provision as drafted allows the Department to draw on the
7 financial assurance for remedial action to "address pollution from
8 the landfill". As drafted, this provision is unworkable and could
9 only spawn disputes. Although OWS does not object to the concept,
10 there must be some procedures specified to make this provision
11 work. The rule needs to be amplified and specific procedures
12 established. For example, there should be at a minimum:

13 1. A procedure for notifying the applicant of the problem
14 requiring remedial action;

15 2. A definition of the types of "pollution" that may
16 require remedial action that will trigger a draw on financial
17 assurance;

18 3. An opportunity for the permittee to respond to the
19 Department's notice. This opportunity would likely involve two
20 time periods for different events requiring remedial action: one
21 time period for emergency conditions and a second for conditions
22 that are not an emergency or an imminent threat to the
23 environment; and,

24 4. The Department can draw upon financial assurance only
25 upon the failure of the permittee to properly respond to a request
26 to correct the problem.

1 The procedure also should require a demonstration that the
2 permittee has exhausted all other resources prior to the
3 Department's drawing upon the financial assurance. The financial
4 assurance is primarily intended to insure an orderly closure. The
5 financial assurance should not be drawn upon for remediation
6 during the term of operation if other resources are available. If
7 financial assurance is drawn upon for remediation there may not be
8 sufficient funds for closure.

9
10 Comment No. 3. Proposed OAR 340-61-029(7).

11 Add to the beginning of the rule, the following wording: "If
12 a financial assurance is provided under OAR 340-61-034(3)(c)(A) or
13 (B)" The rule generally attempts to provide for a refund
14 to solid waste ratepayers of excess money or interest accumulated
15 for a dedicated trust fund or sinking fund where such a fund is
16 used to provide for a financial assurance. This makes sense if
17 money is accumulated for this purpose and not used. However, for
18 other types of financial assurance, there is no "excess money" in
19 the financial assurance account that must be refunded. The rule
20 should be limited to the OAR 340-61-034(3)(c)(A) and (B) types of
21 financial assurance that actually accumulates money. If it is not
22 so limited, it only confuses the obligation of the permittees or
23 applicants providing other means of financial assurance.

24 This provision is not required by ORS 459.273 or for the
25 financial assurance to be provided for regional disposal site
26 under HB 2619 (ORS 459.235(3)). ORS 459.273 applies only to

1 financial assurance for closure plans that are required five (5)
2 years prior to closure of a land disposal site. It is not
3 required for the financial assurance that must be maintained
4 during the operating life of a regional disposal facility.

5
6 Comment No. 4. Proposed OAR 340-61-029(8).

7 This rule must also be changed. The Department's only
8 interest in an audit of records applies in two circumstances.
9 One, audit for review and compliance with the closure plan and
10 two, audit of the records of a permittee that has established a
11 trust fund under OAR 340-61-034(3)(c)(A) or (B). The Department
12 has a logical basis for auditing records under these
13 circumstances. However, there is no basis for the Department to
14 embark upon a broad records audit when, for example, an applicant
15 provides financial assurance by other means such as a surety bond,
16 insurance or the financial test. All of the other forms of
17 financial assurance are independent demonstrations of financial
18 capability that an audit of the records at the site would not
19 assist.

20 A surety bond guaranteeing closure stands alone. An audit of
21 the permittee's records would not in any way improve the assurance
22 provided by a surety bond. The same is also true for an
23 irrevocable letter of credit and for a closure insurance policy.
24 An audit of records is irrelevant to the effectiveness of these
25 means of financial assurance. Nor would an audit provide any
26 additional benefit for the financial test means of financial

1 assurance either. There exists presently in the regulations ample
2 means to confirm the adequacy of the financial test. A company
3 using the financial test must presently provide:

4 1. A letter signed by the permittee's chief financial
5 officer guaranteeing the existence of the funds;

6 2. A copy of an independent certified public accountant's
7 report on examination of permittee's financial statement; and

8 3. A special report from the permittee's independent
9 certified public accountant confirming the accuracy of the data in
10 the letter from the chief financial officer.

11 Even under the financial test the Department has existing
12 means for confirming the financial test data. Under
13 OAR 61-034(3)(c)(F)(iv) the Department may require at any time
14 additional reports on the financial condition of a permittee if
15 the DEQ believes the permittee no longer meets the criteria of the
16 financial test. If the information required in the report does
17 not satisfy the Department, it may require the permittee to fully
18 fund a standby closure trust. This mechanism is a reasonable one.
19 There is no need or basis for the Department to require in
20 addition an audit of the regional disposal sites' records.

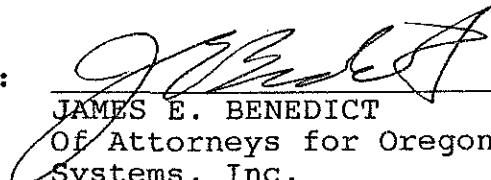
21 OWS strenuously object to this provision unless modified as
22 suggested. The Department cannot reasonably suggest that it must
23 audit in order to insure it is properly protecting the public
24 trust, because it does not require audit for other environmental
25 permittees that it regulates, e.g., air and water discharge
26 permittees. It seems even more unreasonable to impose this

1 additional requirement for solid waste disposal permittees that
2 are required to provide financial assurance to correct potential
3 problems. The audit is simply unreasonable in this context
4 because the financial assurance is self-executing and because
5 there are other existing procedures available to accomplish the
6 same objective. In addition, there is no statutory basis or
7 authority for the Department to include such a rule for financial
8 assurance from regional disposal sites.

9 DATED this 3rd day of June, 1988.

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SCHWABE, WILLIAMSON & WYATT

By: 
JAMES E. BENEDICT
Of Attorneys for Oregon Waste
Systems, Inc.

9/2/00

ATTENDANCE

PUBLIC HEARING ON PROPOSED RULE

FINANCIAL ASSURANCE AT REGIONAL DISPOSAL SITES

DAVID LUNEKE, OREGON WASTE SYSTEMS

JTM BENEDICT, REPRESENTING OREGON WASTE SYSTEMS

20

MEMORANDUM

To: Environmental Quality Commission
From: Robert L. Brown, Hazardous and Solid Waste Division
Subject: Response to Public Comment

Proposed Rule Adoption Financial Assurance at Regional
Disposal Sites OAR 340-61-010 and 029

Comment: 61-029(4) should read: The financial assurance plan must be evaluated by the applicant at least once each five years or sooner if there is a significant change in the operational plan for the regional landfill. The applicant must provide financial assurance in an amount sufficient for the revised financial assurance plan.

Comment: 61-029(5) should be clarified to notify the applicant and give them a chance to respond before the Department can take the funds for remedial action.

Comment: 61-029(7) should clarify which types of financial assurance are applicable to this subsection (OAR 340-61-034(3)(c)(A) or (B)).

Comment: Audit procedures should be applicable only to items relating to closure plan and only to certain types of financial assurance (OAR 340-61-034(3)(c)(A) or (B)).

Response: The Department concurs with all of the above comments. The proposed rules have been modified to include these additions, clarifications and changes.

SF3186

Proposed Amendments to OAR 340-61

DEFINITIONS

340-61-010 As used in these rules unless otherwise specified:

(1) "Access road" means any road owned or controlled by the disposal site owner which terminates at the disposal site and which provides access for users between the disposal site entrance and a public road.

(2) "Airport" means any area recognized by the Oregon Department of Transportation, Aeronautics Division, for the landing and taking-off of aircraft which is normally open to the public for such use without prior permission.

(3) "Aquifer" means a geologic formation, group of formations or portion of a formation capable of yielding usable quantities of ground water to wells or springs.

(4) "Assets" means all existing and probable future economic benefits obtained or controlled by a particular entity.

(5) "Baling" means a volume reduction technique whereby solid waste is compressed into bales for final disposal.

(6) "Base flood" means a flood that has a one percent or greater chance of recurring in any year or a flood of a magnitude equaled or exceeded once in 100 years on the average of a significantly long period.

(7) "Closure permit" means a document issued by the Department bearing the signature of the Director or his authorized representative which by its conditions authorizes the permittee to complete active operations and requires the permittee to properly close a land disposal

site and maintain the site after closure for a period of time specified by the Department.

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

(9) "Cover material" means soil or other suitable material approved by the Department that is placed over the top and side slopes of solid wastes in a landfill.

(10) "Composting" means the process of controlled biological decomposition of organic solid waste.

(11) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

(12) "Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

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

(14) "Digested sewage sludge" means the concentrated sewage sludge that has decomposed under controlled conditions of pH, temperature and mixing in a digester tank.

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

(16) "Disposal site" means land and facilities used for the disposal, handling or transfer of or resource recovery from solid wastes, including but not limited to dumps, landfills, sludge lagoons, sludge treatment facilities, disposal sites for septic tank pumping or cesspool cleaning

service, transfer stations, resource recovery facilities, incinerators for solid waste delivered by the public or by a solid waste collection service, composting plants and land and facilities previously used for solid waste disposal at a land disposal site; but the term does not include a facility subject to the permit requirements of ORS 468.740; a landfill site which is used by the owner or person in control of the premises to dispose of soil, rock, concrete or other similar nondecomposable material, unless the site is used by the public either directly or through a solid waste collection service; or a site licensed pursuant to ORS 481.345.

(17) "Endangered or threatened species" means any species listed as such pursuant to Section 4 of the Federal Endangered Species Act and any other species so listed by the Oregon Department of Fish and Wildlife.

(18) "Financial assurance" means a plan for setting aside financial resources or otherwise assuring that adequate funds are available to properly close and to maintain and monitor a land disposal site after the site is closed according to the requirements of a permit issued by the Department.

(19) "Floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters which are inundated by the base flood.

(20) "Groundwater" means water that occurs beneath the land surface in the zone(s) of saturation.

(21) "Hazardous waste" means discarded, useless or unwanted materials or residues in solid, liquid or gaseous state and their empty containers which are classified as hazardous pursuant to ORS 459.410.

(22) "Heat-treated" means a process of drying or treating sewage sludge where there is an exposure of all portions of the sludge to high temperatures for a sufficient time to kill all pathogenic organisms.

(23) "Incinerator" means any device used for the reduction of combustible solid wastes by burning under conditions of controlled air flow and temperature.

(24) "Land disposal site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(25) "Landfill" means a facility for the disposal of solid waste involving the placement of solid waste on or beneath the land surface.

(26) "Leachate" means liquid that has come into direct contact with solid waste and contains dissolved and/or suspended contaminants as a result of such contact.

(27) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(28) "Local government unit" means a city, county, metropolitan service district formed under ORS Chapter 268, sanitary district or sanitary authority formed under ORS Chapter 450, county service district formed under ORS Chapter 451, regional air quality control authority formed under ORS 468.500 to 468.530 and 468.540 to 468.575 or any other local government unit responsible for solid waste management.

(29) "Net working capital" means current assets minus current liabilities.

(30) "Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

(31) "Open dump" means a facility for the disposal of solid waste which does not comply with these rules.

(32) "Permit" means a document issued by the Department, bearing the signature of the Director or his authorized representative which by its conditions may authorize the permittee to construct, install, modify or operate a disposal site in accordance with specified limitations.

(33) "Person" means the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(34) "Public waters" or "Waters of the State" include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, 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.

(35) "Processing of wastes" means any technology designed to change the physical form or chemical content of solid waste including, but not limited to, baling, composting, classifying, hydropulping, incinerating and shredding.

(36) "Putrescible waste " means solid waste containing organic material that can be rapidly decomposed by microorganisms, which may give rise to foul smelling, offensive products during such decomposition or which is capable of attracting or providing food for birds and potential disease vectors such as rodents and flies.

(37) "Regional disposal site" means:

(a) A disposal site selected pursuant to chapter 679, Oregon Laws 1985;

or

(b) A disposal site that receives, or a proposed disposal site that is designed to receive more than 75,000 tons of solid waste a year from commercial haulers from outside the immediate service area in which the disposal site is located. As used in this paragraph, "immediate service area" means the county boundary of all counties except a county that is within the boundary of the metropolitan service district. For a county within the metropolitan service district, "immediate service area" means the metropolitan service district boundary.

(38) [(37)] "Resource recovery" means the process of obtaining useful material or energy from solid waste and includes:

(a) "Energy recovery," which means recovery in which all or a part of the solid waste materials are processed to utilize the heat content, or other forms of energy, of or from the material.

(b) "Material recovery," which means any process of obtaining from solid waste, by presegregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose.

(c) "Recycling," which means any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity.

(d) "Reuse," which means the return of a commodity into the economic stream for use in the same kind of application as before without change in its identity.

(39) [(38)] "Salvage" means the controlled removal of reusable, recyclable or otherwise recoverable materials from solid wastes at a solid waste disposal site.

(40) [(39)] "Sanitary landfill" means a facility for the disposal of solid waste which complies with these rules.

(41) [(40)] "Sludge" means any solid or semisolid waste and associated supernatant generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility or any other such waste having similar characteristics and effects.

(42) [(41)] "Solid waste" means all putrescible and non-putrescible wastes, including but not limited to garbage, rubbish, refuse, ashes, waste paper and cardboard; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction wastes; discarded or abandoned vehicles or parts thereof; discarded home and industrial appliances; manure; vegetable or animal solid and semi-solid wastes, dead animals and other wastes; but the term does not include:

(a) Hazardous wastes as defined in ORS 459.410.

(b) Materials used for fertilizer or for other productive purposes or

which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.

(43) [(42)] "Solid waste boundary" means the outermost perimeter (on the horizontal plane) of the solid waste at a landfill as it would exist at completion of the disposal activity.

(44) [(43)] "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(45) [(44)] "Transfer station" means a fixed or mobile facility, normally used as an adjunct of a solid waste collection and disposal system or resource recovery system, between a collection route and a disposal site, including but not limited to a large hopper, railroad gondola or barge.

(46) [(45)] "Underground drinking water source" means an aquifer supplying or likely to supply drinking water for human consumption.

(47) [(46)] "Vector" means any insect, rodent or other animal capable of transmitting, directly or indirectly, infectious diseases from one person or animal to another.

(48) [(47)] "Waste" means useless or discarded materials.

(49) [(48)] "Zone of saturation" means a three (3) dimensional section of the soil or rock in which all open spaces are filled with groundwater. The thickness and extent of a saturated zone may vary seasonally or periodically in response to changes in the rate or amount of groundwater recharge, discharge or withdrawal.

REGIONAL LANDFILLS

OAR 340-61-029

(1)(a) At least three (3) months prior to first receiving waste, the applicant for a new regional disposal facility shall submit to and have approved by the Department, a financial assurance plan. For purposes of this rule "new regional disposal facility" is a regional disposal facility which has received no waste prior to January 1, 1988.

(b) Regional disposal facilities existing on January 1, 1988 must submit to the Department a financial assurance plan with their application for renewal of the existing solid waste disposal permit at least three (3) months prior to permit expiration.

(c) The financial assurance plan must be in accordance with OAR 340-61-034(1)(a), (b) and (c).

(2) The total amount of financial assurance to be provided shall be the greater of:

(a) The sum of closure and post-closure estimated costs as approved by the Department, or

(b) \$1,000,000.

(3)(a) The Department will approve only forms of financial assurance which are listed in OAR 340-61-034(3)(c) (A through G).

(b) If the financial assurance plan provides for accumulation of the total amount over a period of time, the time shall not exceed five (5) years from startup or renewal of the permit.

(4) The financial assurance plan must be evaluated by the applicant at least once each five (5) years or sooner if there is a significant change in the operational plan for the regional landfill. The applicant must provide to the Department financial assurance in an amount sufficient for the revised financial assurance plan.

(5) Financial assurance shall provide that the Department may use a portion or all of the financial assurance to cover study/repair and remedial action to address pollution of air or water off of the landfill site provided that:

(a) The permittee has been properly notified of the problem requiring remedial action and given a time period based on the severity of the discharge for correction.

(b) The permittee fails to respond to the notice.

(c) It can be demonstrated that the permittee has exhausted other sources of revenue.

(6) If the Department requires use of the financial assurance for remedial action, the permittee shall submit a plan within three (3) months to reestablish the fund.

(7) If a financial assurance is provided under OAR 340-61-034(3)(c)(A), (B) or (G) upon successful closure and release from permit requirements by the Department, any excess money in the financial assurance account must be used in a manner consistent with OAR 340-61-034(3)(a)(C).

(8) The permittee is subject to audit by the Department and shall allow the Department access to all records relating to closure plan and other

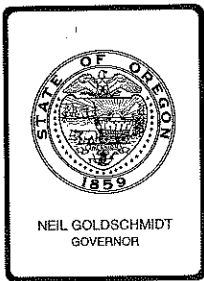
Attachment III
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July 8, 1988, EQC Meeting
Page 11

financial records if financial assurance consists of the requirements of OAR

340-61-034(3)(c)(A), (B) or (G).

SM1429

4/1



Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission
From: Director *Seal*
Subject: Agenda Item I, July 8, 1988 EQC Meeting

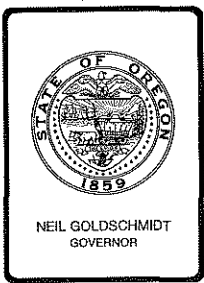
Public Hearing and Proposed Adoption of Temporary Rule OAR 340-60-100 for Certification of In-State Recycling Programs under ORS 459.305.

ORS 459.305, passed as part of HB 2619 by the 1987 Oregon Legislature, requires that regional solid waste disposal sites not accept any wastes after July 1, 1988 from any local or regional government units located within or outside of Oregon unless the government units have been certified by the Department as having implemented an opportunity to recycle that satisfies the requirements of the Oregon Recycling Opportunity Act. One purpose of HB 2619 is to insure that before a jurisdiction imposes its wastes on a different region, that jurisdiction must first minimize its waste by implementing at least the minimum recycling requirements of the Oregon Recycling Opportunity Act. A regional disposal site is a site selected under Chapter 679, Oregon Laws 1985 (SB 662, the landfill supersiting bill of 1985), or one that receives, or a proposed site designed to receive, more than 75,000 tons of waste per year from outside of the immediate service area (county) where the disposal site is located. The only existing site affected is the Coffin Butte landfill in Benton County. The proposed disposal sites in Gilliam and Morrow Counties will also be affected by the law.

The Department is awaiting guidance from the Oregon Attorney General as to how to adopt rules to implement ORS 459.305 without conflicting with federal law regarding interstate commerce. For in-state wastes, however, there is no conflict with interstate commerce law. Also, for in-state but not out-of-state government units, there exists a system for recycling report approvals that can be used for the required certification.

The Department is proposing that the Commission adopt as soon as possible a temporary rule, effective for 180 days, regarding certification of in-state programs, so as to minimize the possible disruption of waste handling in Benton, Linn, and Polk Counties. All these jurisdictions send waste to the Coffin Butte Landfill, and have all received conditional approval of their recycling reports. During these 180 days, and with the guidance of the Attorney General, the Department will propose permanent rules to implement ORS 459.305 for both in-state and out-of-state programs.

The proposed temporary rule would have a local or regional government unit be considered certified if a recycling report has been approved for the portions of the watershed that includes the entire government unit. A conditional recycling report approval would also suffice for certification, providing that the conditions of the approval are fulfilled within the time limit set in the conditional approval. Procedures for decertification and recertification are also specified.



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item I, July 8, 1988 EQC Meeting

Public Hearing and Proposed Adoption of Temporary Rule OAR 340-60-100 for Certification of In-State Recycling Programs under ORS 459.305.

BACKGROUND

The 1987 Oregon Legislature passed a bill, HB 2619, which prohibits a regional disposal site from accepting solid waste from any local or regional government unit located within or outside the State of Oregon after July 1, 1988 unless the Department certifies that the government unit has implemented the opportunity to recycle. A regional disposal site is defined as a disposal site selected pursuant to Chapter 679, Oregon Laws 1985 (SB 662, the landfill supersiting bill of 1985) or a disposal site that receives, or a proposed disposal site that is designed to receive, more than 75,000 tons of solid waste a year from commercial haulers from outside the immediate service area in which the disposal site is located. The only existing disposal site immediately affected by the law is the Coffin Butte landfill in Benton County. Proposed Eastern Oregon landfills in Gilliam and Morrow Counties will also be affected by the law.

One purpose of HB 2619 is to insure that before a jurisdiction imposes its wastes on a different region, that jurisdiction must minimize its waste by implementing at least the minimum recycling requirements of the Oregon Recycling Opportunity Act (ORS 459.165-459.200 and 459.250). The Legislature anticipated that, when the major regional disposal sites are developed in Gilliam and Morrow Counties, local or regional governments located outside the State of Oregon (for example, Clark County, Washington) would consider sending their wastes to the regional sites. The law requires these areas to have recycling opportunities which are equivalent to the requirements placed upon Oregon communities. The law also directs the Commission to develop a certification program which ensures that these government units will provide the opportunity to recycle as required by ORS 459.165 to ORS 459.200 and ORS 459.250. The opportunity to recycle includes recycling depots at all disposal sites, on-route collection of recyclable materials within the urban growth boundaries of all cities of more than 4,000 people and within the urban growth boundary of a metropolitan service district, and an education and promotion program which encourages people to recycle. An alternative method that is at least as effective as the

standard method can be used to provide the opportunity to recycle, if approved by the Department.

The Department foresees no problem in adopting rules for certifying the recycling programs of in-state jurisdictions. The existing requirements for recycling reports and approvals provide all the elements necessary for certification for in-state jurisdictions.

For out-of-state jurisdictions, however, care must be taken to adopt rules pursuant to ORS 459.305 that do not unduly restrain interstate commerce, and thus conflict with Federal law. For this reason, the Department has requested guidance for the Oregon Attorney General as to how rules can be adopted to implement ORS 459.305 without conflict with Federal law. We are not aware of any out-of-state jurisdiction that sends its waste to an Oregon regional disposal site, nor of any proposal for an out-of-state jurisdiction to do so within the next six months. For this reason, it is proposed that the Commission adopt a temporary rule that would be effective for six months that would cover certification of in-state jurisdictions, and postpone adoption of a final rule until sufficient time has been allowed to examine the Attorney General's guidance and determine the best way to proceed.

Authority to Act: ORS 459.305, Certification that government unit has implemented the opportunity to recycle; and ORS 459.165 to 459.200 and 459.250, Recycling Opportunity Act.

NEED FOR A TEMPORARY RULE

The Department finds that failure to act promptly and adopt a temporary rule setting a procedure for certification of recycling programs for local and regional governments will result in serious prejudice to the public interest. The Coffin Butte Landfill in Benton County currently accepts more than 75,000 tons of waste per year from Linn and Polk Counties, and thus qualifies as being a regional disposal site. If the Coffin Butte Landfill were to stop accepting these wastes because no rule was adopted proscribing a procedure to certify recycling programs, it could disrupt the safe handling of these wastes and create a health hazard.

ALTERNATIVES AND EVALUATION

The Department originally planned to request authorization for a public hearing on proposed certification rules for both in-state and out-of-state programs at the April 29, 1988 Commission meeting, with final adoption scheduled for this July 8th meeting. During staff report review for the April 29th meeting, however, the Attorney General's office pointed out the potential conflict with federal law. Due to the length of time required to research this issue plus the time required by statute for public notice, it became evident that there was insufficient time to propose permanent rules for adoption at the July Commission meeting. For this reason, the

Department chose to propose a temporary rule for in-state programs that can be adopted with abbreviated notice, and to postpone adoption of a permanent rule for in-state and out-of-state programs while awaiting the Attorney General's opinion. The Department currently plans to request authorization for a public hearing on permanent rules for both in-state and out-of-state programs at the August Commission meeting. No waste is currently being disposed of at a regional landfill from out-of-state, and the Department does not anticipate any need or request from out-of-state for waste disposal for at least a year, when the proposed Arlington and/or Finley Butte disposal sites come on line.

An alternative would be to not adopt rules pursuant to ORS 459.305, but instead to use the statutory authority and the existing recycling report rules directly to certify local governments. The Department believes that to do so would leave open the possibility that someone could bring suit to block waste disposal at the Coffin Butte Landfill, since the Department had not formally established a certification procedure as required by ORS 459.305.

One issue to be considered is whether to establish a certification fee for the recycling certification program. The law gave the Department the authority to establish a fee in accordance with ORS 468.065. The Department felt that it would not be appropriate to charge a fee for certifying programs within Oregon because these programs already must comply with the Recycling Opportunity Act and already pay recycling implementation fees, and the certification process does not require significant additional resources or staff time.

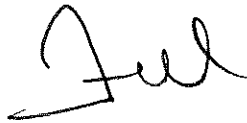
SUMMATION

1. The 1987 Legislature passed a law, HB 2619, which includes a provision (ORS 459.305) that prohibits a regional disposal site from accepting waste from any local or regional government unit located within or outside of the State of Oregon, unless DEQ certifies that the local government unit has implemented the opportunity to recycle.
2. For local governments located within Oregon, recycling report approval would be sufficient to receive certification. No additional fees would be required beyond those required under the Recycling Opportunity Act.
3. A temporary rule that sets the criteria for certification is necessary to allow wastes from Linn and Polk Counties to continue to be landfilled without interruption at the Coffin Butte Landfill in Benton County. Failure to adopt a rule could result in disruption of safe waste handling practices and creation of a health hazard.

EQC Agenda Item E
July 8, 1988
Page 4

DIRECTOR'S RECOMMENDATION

Based on the Summation, it is recommended that the Commission adopt the proposed temporary rule OAR 340-60-100.



Fred Hansen

- Attachments
1. Draft Statement of Need for Rulemaking
 2. Draft Notice of Public Hearing
 3. Draft Rule OAR 340-60-100
 4. ORS 459.305, Certification That Government Unit Has Implemented the Opportunity to Recycle.

YF3193

Peter H. Spindelow
Phone: 229-5253
June 23, 1988

Before the Environmental Quality Commission
of the State of Oregon

In the Matter of Public Hearing)
and Adoption of Temporary Rule)
OAR 340-60-100, Recycling)
Certification Program)

Statement of Need for Rule
for a Recycling Certification
Program

1. Statutory Authority

The proposed recycling certification program rule is proposed under authority of HB 2619, 1987 Oregon Legislature, codified under ORS 459.305, certification that government unit has implemented the opportunity to recycle; and ORS 459.165 to 459.200 and 250, Recycling Opportunity Act.

2. Statement of Need

The proposed rule is needed to carry out the program mandated by the 1987 Legislature in HB 2619. That law prohibits a regional disposal site from accepting waste from a local government unit located within or outside of Oregon unless the DEQ certifies that the local government unit has implemented the opportunity to recycle. The proposed rule prescribes procedures for certification and decertification of recycling programs for in-state local or regional governments.

3. Principal Documents Relied Upon

- a. OAR 340-60-005 to 185, Rules for Recycling and Waste Reduction
- b. ORS 459.305

4. Fiscal and Economic Impact

No significant fiscal or economic impact is expected as a result of adoption of the proposed temporary rule, since the local governments affected must already comply with the recycling rules.

5. Land Use Consistency Statement

The proposed rule appears to affect land use and appears to be consistent with the Statewide Planning Goals.

With regard to Goal 6 (air, water, and land resources quality) the rule is designed to enhance and preserve land resources in the affected area and are considered consistent with the goal.

With regard to Goal 11 (public facilities and services), the rule is designed to extend the life of solid waste disposal facilities through requiring that the opportunity to recycle be provided in all areas from which the waste is sent. The rule does not appear to conflict with other goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashions as are 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 programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflict brought to our attention by local, state, or federal authorities.

6. Statement of Findings of Need for Temporary Rule

The Department finds that failure to act promptly and adopt a temporary rule setting a procedure for certification of recycling programs for local and regional governments will result in serious prejudice to the public interest. The Coffin Butte Landfill in Benton County currently accepts more than 75,000 tons of waste per year from Linn and Polk Counties, and thus qualifies as being a regional disposal site. If the Coffin Butte Landfill were to stop accepting these wastes because no rule was adopted prescribing a procedure, as required by ORS 459.305, for the Department to certify local governments, it could disrupt the safe handling and disposal of these wastes and create a health hazard.

A CHANCE TO COMMENT ON...
Proposed Temporary Recycling Certification Program Rules
OAR 340-60-100

Hearing Date: July 8, 1988

Comments Due: July 8, 1988

WHO IS AFFECTED: Local and regional government units located within Oregon who are considering sending their solid waste to a regional landfill located in Oregon, regional disposal site owners and operators, owners and operators of local solid waste and recycling collection services within the local government units considering sending their waste to a regional disposal site, and citizens in these affected areas.

WHAT IS PROPOSED: DEQ proposes to adopt rules for a recycling certification program. Regional landfills such as the Coffin Butte Landfill in Benton County Oregon may not accept waste from local government units located within or outside of Oregon unless the DEQ certifies that the government units have implemented the opportunity to recycle as defined in ORS 459.165 to 200 and 250. The opportunity to recycle includes recycling depots at all disposal sites, on route collection of recyclable materials in all cities with more than 4,000 people, and an education and promotion program which encourages people to recycle.

WHAT ARE THE HIGHLIGHTS: The proposed rules set certification of in-state local governments approved as having a DEQ recycling report and set procedures for decertification and recertification.

HOW TO COMMENT: Copies of the proposed rule package may be obtained from the Hazardous and Solid Waste Division, 811 S.W. Sixth, Portland, Oregon 97204. Oral and written comments will be accepted at the public hearing:

2:00 p.m.
Friday, July 8, 1988
DEQ Conference Room 4A
811 S.W. Sixth
Portland, Oregon

Written comments should be sent to Peter Spendelow of the DEQ Waste Reduction Program, Hazardous and Solid Waste Division, 811 S.W. Sixth, Portland, OR 97204, and must be received by the time and date of the hearing on July 8. For further information contact Peter Spendelow at (503) 229-5253, or toll-free within Oregon at 1-800-452-4011.

(OVER)



811 S.W. 6th Avenue
Portland, OR 97204

11/1/86

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

Attachment II
Agenda Item I
7/8/88, EQC Meeting

**WHAT IS THE
NEXT STEP:**

After the public hearing, the Environmental Quality Commission may adopt rules identical to the proposed rules, adopt modified rules on the same subject matter, or decline to act. The Commission's deliberation should come immediately after the public hearing on July 8, 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.

YF3193.2

Recycling Certification

OAR 340-60-100

(1) After July 1, 1988, a regional disposal site as defined in ORS 459.005 may not accept solid waste generated from any local or regional government unit within the State of Oregon unless the Department certifies that the government unit has implemented an opportunity to recycle that meets the requirements of ORS 459.165 to 459.200 and 459.250.

(2) A local or regional government unit within the State of Oregon shall be considered certified as having implemented the opportunity to recycle if:

(A) A recycling report has been approved by the Department for the wastesheds, or portions thereof, that includes the entire government unit, or

(B) A recycling report has been conditionally approved by the Department for the wastesheds, or portions thereof, that include the entire government unit, and any time limit set in the conditional approval for meeting the conditions of the approval has not expired.

(3) Certified local or regional government units shall be decertified if the Department finds, through its review of the annual recycling report or through other information made known to the Department, that the opportunity to recycle is no longer being provided.

(A) Procedures for decertification shall be the same as procedures for disapproving a recycling report outlined in ORS 459.185. For local or regional government units that have previously been certified under OAR 340-60-100 (2), the Department shall grant an extension of time of at least 60 days to permit the affected persons to correct any deficiencies in providing the opportunity to recycle.

(B) If, after a reasonable extension of time and after the Commission has held a public hearing within the affected area of the wasteshed, and based on the Department's findings on review of the recycling report, hearings record, and other information made known to the Department, the Commission determines that all or part of the opportunity to recycle is not

being provided, the Commission shall act to decertify the local or regional government unit, and shall set an effective date for the decertification.

(4) If a local or regional government has been decertified under OAR 340-60-100 (3), any person may apply to the Department for recertification by supplying information to the Department to demonstrate that all deficiencies have been corrected and that the opportunity to recycle is being provided. If the Department determines that the opportunity to recycle is being provided, the Department shall so certify, and shall provide notice of the certification to the local or regional government unit.

YF3193.3

459.305 Certification that government unit has implemented opportunity to recycle; rules; fee; special provisions for metropolitan service district. (1) Except as otherwise provided by rules adopted by the Environmental Quality Commission under subsection (3) of this section, after July 1, 1988, a regional disposal site may not accept solid waste generated from any local or regional government unit within or outside the State of Oregon unless the Department of Environmental Quality certifies that the government unit has implemented an opportunity to recycle that meets the requirements of ORS 459.165 to 459.200 and 459.250.

(2) The Environmental Quality Commission shall adopt rules to establish a program for certification of recycling programs established by local or regional governments in order to comply with the requirement of subsection (1) of this section.

(3) Not later than July 1, 1988, the commission shall establish by rule the amount of solid waste that may be accepted from an out-of-state local or regional government before the local or regional government must comply with the requirement set forth in subsection (1) of this section. Such rule shall not become effective until July 1, 1990.

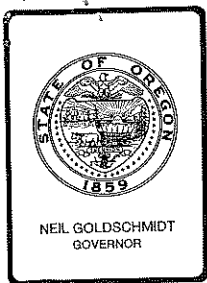
(4) Subject to review of the Executive Department and the prior approval of the appropriate legislative review agency, the department may establish a certification fee in accordance with ORS 468.065.

(5) After July 1, 1988, if the metropolitan service district sends solid waste generated within the boundary of the metropolitan service district to a regional disposal site, the metropolitan service district shall:

(a) At least semiannually operate or cause to be operated a collection system or site for receiving household hazardous waste;

(b) Provide residential recycling containers, as a pilot project implemented not later than July 1, 1989; and

(c) Provide an educational program to increase participation in recycling and household hazardous materials collection programs. [1987 c.876 §6]



Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission
From: Director *Jul*
Subject: Agenda Item J, July 8, 1988, EQC Meeting

Executive Summary of Staff Report Proposing Adoption of
Amendments to the Hazardous Waste Management Rules, OAR
Chapter 340, Division 100, 102 and 104.

The Department proposes to adopt new federal regulations, repeal certain existing state regulations, and amend current generator and treatment, storage and disposal facility reporting requirements.

In order to maintain final authorization and equivalency to the federal program, the Department must adopt federal rules within certain time frames. The cluster of federal regulations the Department currently intends to adopt pertains to the exportation of hazardous waste from Oregon; waste minimization certification requirements for small quantity generators; the addition of four listed wastes to the Department's current hazardous waste category; and federal closure standards for nonpermitted surface impoundments. In addition, the Department is also proposing to adopt revisions and additions to its hazardous waste reporting requirements.

Hazardous wastes may be exported. However, under the proposed rule, the receiving country's government must provide written approval to both the federal government and the Department prior to the waste being exported from Oregon.

Until recently, the EPA excluded small quantity generators from certifying on the manifest that they are minimizing their wastes. The Department proposes to adopt the new EPA regulation requiring the small quantity generators to certify waste minimization efforts on the manifest.

The Department is further proposing to adopt federal requirements regulating four new waste streams. The waste streams are generated during the production of a pesticide and contain a hazardous constituent that is a known carcinogen.

The Department proposes to adopt new federal closure and post-closure standards for nonpermitted hazardous waste surface impoundments. The new closure by removal standard is more stringent than previous federal closure requirements and the current state standards. Those standards allow

nonpermitted surface impoundments the option of clean closing while leaving environmentally significant quantities of hazardous constituents in place. The new closure standards require the owner/operator of the surface impoundment to demonstrate that remaining hazardous constituents will not pose a substantial present or future threat to human health or the environment before clean closure is complete.

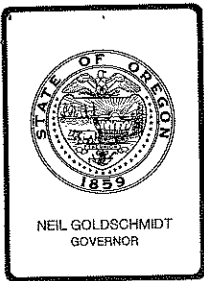
In addition, new federal rules requiring corrective action plans, i.e., plans designed to address releases of hazardous wastes or constituents to be developed prior to a hazardous waste permit being issued have changed. To speed up the permitting process, the permit application requirements now allow a plan to be developed after a permit has been issued. The Department agrees with this approach and proposes to adopt this revised federal standard.

The Department's current quarterly reporting requirements do not provide adequate information to accurately project the quantity of waste generated for budget needs; to track wastes, assess fees, determine trends in waste generation and management, and prepare DEQ biennial reports required by EPA. The proposed rule will allow the Department to obtain required federal information beginning with the 1990 biennial report. In addition, in April, 1988, the EQC adopted a new fee schedule for the hazardous waste program. Adoption of the fee schedule was recommended by the hazardous waste funding Task Force, and contingent on the Department's commitment to identify the universe of regulated hazardous waste generators in Oregon. The Department is preparing a survey to identify the universe of hazardous waste generators. The survey will be mailed to industries most likely to generate hazardous waste.

The Department is proposing to adopt a survey requirement requiring all hazardous waste generators to provide information to the Department concerning the type of waste generated, the quantity, and methods of waste management. In this way, the Department will be able to identify the universe of hazardous waste generators and better regulate the small quantity and fully regulated generators.

Fred Hansen

GC:b
ZB7606ES
June 16, 1988



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item J, July 8, 1988, EQC Meeting

Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Division 100, 102, and 104.

Background

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.

HSWA changed how Oregon must implement the federal hazardous waste program. Prior to HSWA, new federal RCRA regulations only took effect in nonauthorized states. In Oregon, such regulations became effective only after the state would adopt them. However, since HSWA, all federal regulations promulgated pursuant to HSWA become effective in Oregon regardless of whether or not the state adopts them. Such regulations are implemented and enforced by the EPA until a state becomes authorized to implement them.

It is anticipated that between November 8, 1984 and May 1990 as many as sixty HSWA requirements or prohibitions will take effect. Since these provisions will take effect automatically in Oregon, it is likely that responsibility for implementing the RCRA program will bounce back and forth between Oregon and EPA for some time to come. To facilitate a stable relationship between the RCRA regulated community, the Department, and the EPA, it behooves the state to adopt the HSWA regulations as rapidly as possible.

Note that the Department does not have the ability to pick and choose to adopt certain of the HSWA program areas and not others. The federal requirement is for Oregon to operate "all or none" of the RCRA program. If a HSWA program area is not adopted by Oregon by the required deadline, not only will all other HSWA program areas revert back to the EPA, but so will the base RCRA program for which we are already authorized. This would not occur automatically, however. EPA would need to follow specific federal criteria and procedures for withdrawing approval of Oregon's program. The procedures are described in the federal regulations found in 40 Code of Federal Regulations 271.22 and 271.23.

There is a twofold test for Oregon to pass to be authorized to assume responsibility for implementing the federal HSWA program. This test includes whether our state program can demonstrate "equivalency and capability." By equivalency, EPA means adequate statutory authority and state rules that are essentially identical to or more stringent than federal rules to carry out the responsibilities of the program. When EPA evaluates our program's equivalency for the purposes of authorization, they review the statutory authority, administrative rules, memoranda of understanding between state agencies, and agency policy and procedures. EPA also evaluates a state's capability to implement the program over the long term. They look at expertise and resources, such as the number of state staff assigned to the various elements of the program as well as program funding. The state must demonstrate ability to issue technically sound and complete permits as well as conduct a strong and comprehensive compliance enforcement program for all hazardous waste management requirements.

With the passage of SB 116 by the 1987 Legislature, the Department now has clear statutory authority to implement the base program and the HSWA provisions. The major HSWA provisions include the following:

- o Regulation of small quantity generators - those industries that generate between 220 lbs. and 2,200 lbs. of hazardous waste per month;
- o Banning certain wastes from land disposal, such as the solvents and dioxins ban that was promulgated in November, 1986, as well as the upcoming ban of the "California List" of wastes and the banning of all federal listed wastes by 1990;
- o Authority to require corrective clean-up action for release of hazardous wastes or constituents of hazardous waste;
- o Establish the requirement for hazardous waste minimization and reduction;
- o Regulate persons who produce, market, distribute or burn fuels containing, or derived from, hazardous waste;
- o Set minimum technology standards for liners in landfills and surface impoundments;

- o Bans liquids in landfills. This includes bulk hazardous and nonhazardous liquid wastes as well as containerized waste under certain circumstances;
- o Bans underground injection of hazardous waste into wells;
- o Prevents burning of hazardous waste in cement kilns which are located in an area with greater than 500,000 population unless permitted as an incinerator; and
- o Establishes new permit requirements related to incinerator technology, permit term, exposure information, and research and development permits.

EPA requires states to adopt specific rules in clusters and apply for and receive authorization in clusters.

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.

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 or non-HSWA program rules.

The Department intends to propose the adoption of new HSWA and non-HSWA RCRA 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 the deadlines, the Department now proposes the adoption of a group of these new federal rules. Additionally, the Department proposes to repeal an existing state rule which is more stringent than federal rules. The Department is also taking this opportunity to propose amendments to the existing state reporting requirements for hazardous waste generators and management facilities. Some of these amendments are more stringent than federal requirements.

The Department had proposed to repeal an existing state rule found in OAR 340-104-228. This rule requires permitted surface impoundments to make all reasonable efforts to remove all hazardous wastes upon closure. The corresponding federal rule (40 CFR, Part 264) allows alternative closure options, one of which (closure as a landfill) does not require the operator to attempt to remove waste materials. The state regulation is, therefore, potentially more stringent.

Upon reconsideration of this proposal, the Department has determined that repeal of the state rule at this time is premature. By repealing this rule and, therefore, allowing landfill type closures to occur, the Department is concerned about the potential for inconsistency between the RCRA closure program and the state's proposed remedial action regulations.

The currently proposed Remedial Action Regulations (pursuant to ORS 466.553) would establish a state preference for permanent remedies, achieving background concentration wherever possible, and alternative treatment technologies under circumstances similar to those found at closing RCRA facilities.

The Department at this point in time prefers to be consistent with the proposed remedial action regulations for removing or treating hazardous constituents to the extent practicable, and not for leaving significant quantities of hazardous wastes or constituents in place, as the current federal landfill closure option would allow.

Therefore, the Department is withdrawing its proposal to delete OAR 340-104-228 and will retain its potentially more stringent landfill closure requirements.


On April 19, 1988, a public hearing was held on these proposed amendments. Twelve people attended, in addition to Department staff, but no one wished to testify. Two people submitted written testimony. Both were concerned about the proposed amendments to the Department's reporting rules. In response to these comments, the proposed amendments have been revised. A Hearing Officer's Report and the Department's Response to Comment Summary are attached.

The Department now requests the adoption of these proposed federal amendments and state reporting amendments. A Statement of Need for Rulemaking is 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 the exportation and importation of hazardous wastes, waste minimization certification by small quantity generators, the listing of additional materials as hazardous waste, the definition of solid waste, the closure and post-closure care of nonpermitted 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 as discussed below.

In order to maintain authorization for the RCRA program, the state must adopt all of these federal rules or equivalent rules, within specified time frames ranging from July 1, 1988 to July 1, 1990. Some of these rules are HSWA requirements and 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 proposed new rule and proposed changes to existing rules are discussed below. The title of each rule and the date EPA published it in the Federal Register and whether the rule is a HSWA or RCRA rule (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 and Imports of Hazardous Waste and Disposal of Waste Pesticide (August 8, 1986 Federal Register, HSWA).

This federal HSWA rule became effective in Oregon on November 8, 1986.

The proposed federal hazardous waste export and import regulations amend the existing state and federal requirements pertaining to both the exportation and importation of hazardous waste and to the disposal of waste pesticide.

The new federal requirements affecting the exportation of hazardous waste now require that the receiving country give prior written consent to both Oregon and EPA that it will accept the wastes before they may be exported. The Department proposes to adopt this requirement.

The previous federal rules, which the state adopted earlier, only required prior notification of intent to export hazardous waste. This requirement remains in effect in the new rule. However, there was no requirement that prior approval from the receiving country be obtained before the wastes were shipped. 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's current exportation and importation rule, OAR 340-102-050, requires the exporters to notify the Department at least four weeks before the wastes are scheduled to leave Oregon. This is a less stringent requirement than the current federal standard which is sixty days. Thus, in addition to proposing to adopt the requirement that the receiving country provide written consent to receive the waste, the Department proposes to repeal its four-week notification requirement and adopt the federal sixty-day standard.

For the importation of hazardous waste, the state's current rule is the same as the previous federal requirements. However, in addition, the state's rule requires that both the foreign generator and the U.S. importer or its agent sign the certification statement on the manifest. The new, current federal rules only require the signature of the U.S. importer or its agent. Thus, the state rule is more stringent than the federal rule. However, there is a question about the constitutionality of the state requiring a foreign national, in this case the generator of the hazardous waste, to sign the manifest. Thus, the state proposes to adopt the federal importation

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rule, 40 CFR 262.60, Subpart F, and repeal OAR 340-102-050(3)(a) and OAR 340-102-050(3)(b).

Concerning the disposal of waste pesticide by any pesticide user (excluding a homeowner), the state has an existing rule, OAR 340-102-051, which stands alone from the federal rule being proposed for adoption. The state's rule requires users who dispose of waste pesticides to comply with both the federal rule and with Division 109 of the Department's rules. Division 109 includes additional requirements for the management of waste pesticides and empty pesticide containers. Specifically, the state's pesticide program requires users to manage waste pesticides and containers according to certain procedures outlined in the state's regulations. The federal regulations require users to follow the instructions found on the pesticide container labels, or to follow the state's standards. The waste pesticide and empty container disposal instructions found on the pesticide container labels lack specificity and refer the user to the state regulatory agencies for information about hazardous waste compliance and management procedures. Thus, the state's regulations help the user to determine exactly what management practices are required to be in compliance with the state's hazardous waste program.

Therefore, the state intends to retain its more specific pesticide waste and empty container management procedures and simply renumber the state's rules to conform with the new federal citation.

Waste Minimization Certification by Small Quantity Generators (October 1, 1986 Federal Register, HSWA).

This federal HSWA rule became effective in Oregon on September 22, 1986.

EPA has amended the federal small quantity generator rules which the Commission adopted by reference on May 29, 1987. Previously, the federal rules that were adopted May 29, 1987, exempted small quantity generators from having to certify, on the manifest, that they had taken steps to minimize their waste generation. The Department proposes to adopt the new federal waste minimization certification requirement by reference.

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 on the manifest 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's emerging Waste Reduction Program 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 and propose the adoption of specific waste minimization standards or requirements.

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As a practical matter, Oregon requires generators to use the federal manifest form. The new, federal certification statement has been included on that form since October 1986. Accordingly, small quantity generators in Oregon have already been complying with this rule for more than a year.

Additional Listed Wastes (October 24, 1986 Federal Register, HSWA).

This federal HSWA rule became effective in Oregon on April 24, 1987.

This HSWA rule adds four wastes to the "K" list of hazardous wastes in the federal rules. The "K" list describes hazardous wastes from specific sources. In this case, 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.

The Department's list of "K" wastes do not include these wastes; thus, the Department proposes to adopt them. However, in addition to being obligated to adopt the four waste streams by HSWA, 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 8704, RCRA).

These federal rules are not in effect in Oregon.

These rules amend the base, or non-HSWA RCRA program and concern the closure and post-closure care of existing, nonpermitted hazardous waste surface impoundments.

Under the federal rules, existing hazardous waste management facilities, or treatment, storage or disposal facilities (TSDF), that do not have permits are granted "interim status" by EPA and are allowed to continue operating as if they have permits, until a permit is issued. The State of Oregon does not recognize interim status. The reason the state does not recognize interim status is because under interim status a facility can come into existence independently of the state's hazardous waste regulations or facility siting standards. For example, under the federal program, if EPA lists a new hazardous waste that is not currently covered by a state rule, any facility in Oregon receiving that waste could receive interim status from EPA and operate as if it has a permit, without having to first go through state facility siting standards. The Department does not believe that a new facility should begin operating without state review. However, existing, nonpermitted facilities may continue to operate, if they comply with both the federal interim status rules and with the Department's rules.

The federal interim status rules provide parallel, but separate closure requirements for nonpermitted and permitted facilities. The purpose of these amendments is to make the State's standards for closure and post-closure care of nonpermitted surface impoundments conform to the new federal standards for closure of interim status surface impoundments.

Previously, the federal interim status rules required owner/operators of nonpermitted surface impoundments, who elected to remove wastes to achieve closure, 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, "remove all wastes" meant removal of all hazardous wastes and hazardous constituents to background levels. However, for characteristic wastes, "remove all wastes" meant removal of wastes only to a level at which the remaining wastes no longer exhibited the hazardous characteristic (i.e., to that level where the wastes were by definition no longer hazardous waste). Once that level was achieved, closure was considered completed. This standard allowed environmentally significant amounts of potentially hazardous constituents to remain in place at the site after closure.

The new federal interim status rules, which are proposed for adoption, require that a facility be considered a landfill and comply with the more comprehensive landfill closure/post-closure requirements, if any hazardous constituents are left in place that pose a substantial present or potential threat to human health or the environment. This determination of whether a facility is closed as a landfill or achieves "clean closure" while leaving some contaminants in place is to be made on a site-specific basis.

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Technical Corrections to the Definition of Solid Waste (June 5, 1987 Federal Register 21306, RCRA).

These federal rules are not in effect in Oregon.

This rule amends the non-HSWA RCRA program. The rule makes two minor corrections to the current federal and state rules concerning recycling and the definition of solid waste.

First, EPA is restoring a provision that it inadvertently deleted from the current regulations by a previous amendment. EPA is now clarifying that recycled materials are considered to be "wastes" only when they are recycled by being burned, used in fuel production, or placed 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 hazardous waste-derived fuel, prior to burning, is subject to regulation.

Corrective Action Programs for Hazardous Waste Land Disposal Facilities (June 22, 1987 Federal Register, 23447, RCRA; and September 9, 1987 Federal Register, 23447, RCRA).

These federal rules are not in effect in Oregon.

These rules amend the non-HSWA 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. Corrective action plans address how a facility will manage a release of hazardous waste or constituents. 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

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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; therefore, is proposing to adopt the amendment.

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 Survey (OAR 340-104-075).

These are existing state rules that specify the information that hazardous waste generators and owner/operators of permitted TSD facilities must periodically submit to the Department. The Department uses the reports for a number of purposes, including budgeting, assessment of 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 the states's rules:

1. The state's list of required reporting elements is incomplete with respect to the federal waste minimization reporting 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 when shipping waste off-site and to owner/operators of permitted TSD facilities. Accordingly, generators who manage wastes on-site and nonpermitted TSD facilities operating under 40 CFR 265 requirements are not required to report. Thus, the Department cannot accurately project program needs, track wastes or assess the hazardous waste program.

In regard to the first problem, the Commission adopted by reference, a federal rule which requires generators to report on waste minimization activities. However, during previous rulemaking, the Department inadvertently amended OAR 340-102-041 and deleted the federal rule requiring reporting of waste minimization activities.

With the passage of SB 116 by the 1987 Legislature, the Commission now has clear authority to adopt rules pertaining to waste minimization. To maintain consistency with the federal program, this federal reporting requirement must now be restored in the state's rule. The state's program may not be less stringent than the federal program.

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

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Department currently does not receive adequate data from the regulated community to determine the state's waste management capacity needs.

To illustrate the problem, many generators are currently not required to submit reports (e.g., generators who are exempt from the manifest requirement, and generators who manage their wastes on-site). Without comprehensive reporting requirements, the Department will be unable to identify the total universe of generators and therefore determine required capacity, for example, unless all registered generators and all TSD facilities are required to submit reports.

In addition, annual fees are collected from both generators and TSD facilities. Lack of adequate data from generators and TSD facilities contribute to inaccurate fee revenue projections during development of the program budget. This creates instability in program revenue projections.

Accordingly, the Department is proposing to amend the generator reporting regulations, OAR 340-102-041, to require the submission of quarterly reports by all registered generators, and to annually 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.

Regarding the reporting requirements for 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 are nonpermitted and, therefore, are not subject to the reporting rule for permitted facilities.

Federal rules adopted by reference require owner/operators of nonpermitted TSD facilities to submit periodic reports once every two years. This reporting frequency is too long and 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, to include reporting requirements for nonpermitted facilities which would require nonpermitted as well as permitted TSD facilities to report quarterly (the state currently requires quarterly reports from generators and believes transfer and storage reporting frequencies should be equivalent). The Department also proposes some changes for purposes of clarity and to make the rule more consistent with the federal rule.

In response to comments received, and after further consideration of its information needs, the Department has made a number of changes in the proposed amendments (see Attachment III, Department's Response to Comment Summary). First, the Department has clarified that quarterly reports from generators are to be submitted on the same schedule required of transfer and storage facilities. Second, the Department has changed the proposed amendments to specify that generators need not continue reporting, if no hazardous wastes are generated for one year and the generator requests, in writing, that its registration be withdrawn. Third, the term "waste" in OAR 340-102-065(2)(a)(A)(ii) has been changed to "hazardous waste." Fourth, the Department has changed the proposed amendments to specify that the periodic survey (rather than an annual survey) will be required only of generators

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who receive the survey. Fifth, the Department has changed the proposed amendments to specify that generators may submit either copies of the manifests or a listing of manifest information. Sixth, the Department has changed the proposed new reporting requirements on waste minimization activities from quarterly to annually. Lastly, the "reserved" section in OAR 340-104-075 (f) is proposed to be deleted.

In conclusion, the following matrix lists proposed Department actions and describes the degree of stringency of the new proposed rules as compared to the federal rules.

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SUMMARY OF AMENDMENTS TO THE STATE'S RULES

<u>SUBJECT</u>	<u>DEQ ACTION</u>	<u>RULE</u>	<u>AUTHORITY</u>	<u>NEW RULE EQUAL OR MORE/LESS STRINGENT AS/THAN FEDERAL RULE</u>
Exporting hazardous waste OAR 340-102-050	Adopt federal rule; amend OAR 340-102-040	Requires exporting country to consent to receive wastes before they may be exported; repeal four week notification requirement.	HSWA	Equal
Importing hazardous wastes OAR 340-102-050	Delete OAR 340-102- 050(3)(a) and (3)(b); adopt federal rule.	Required generator in exporting country to sign manifest; federal rule requires U.S. importer to sign.	HSWA	Equal
Pesticide users, OAR 340-102- 051	Renumber state citations; no change in state rule.	Requires users to rinse pesticide containers and manage pesticide wastes according to state standards.	HSWA	More
Waste minimization certification	Adopt federal rule	Requires small quantity generators to sign waste minimization certification on manifest.	HSWA	Equal
Additional listed wastes	Adopt federal rule	Adds four wastes to the "K" list.	RCRA	Equal

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SUMMARY OF AMENDMENTS TO THE STATE'S RULES

<u>SUBJECT</u>	<u>DEQ ACTION</u>	<u>RULE</u>	<u>AUTHORITY</u>	<u>NEW RULE EQUAL OR MORE/LESS STRINGENT AS/THAN FEDERAL RULE</u>
Interim status standards for closure and post-closure care of nonpermitted surface impoundments	Adopt federal rule	Requires interim status facilities who choose closure by removal and who leave constituents in-place to operate as landfills if constituents pose threat to human health or the environment.	RCRA	Equal
Definition of waste as it pertains to recycling hazardous waste	Amend state rule to comply with new federal definition of "waste".	New rule limits definition of "waste" to hazardous waste burning & land application, both recycling activities; the term now no longer encompasses all recycling activities.	RCRA	Equal
Disposal facility permit application requirements	Amend state rule	Allows corrective action plan to be submitted after permit is issued.	RCRA	Equal

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SUMMARY OF AMENDMENTS TO THE STATE'S RULES

<u>SUBJECT</u>	<u>DEQ ACTION</u>	<u>RULE</u>	<u>AUTHORITY</u>	NEW RULE EQUAL OR MORE/LESS STRINGENT AS/THAN <u>FEDERAL RULE</u>
Generator and TSD facility reporting and generator periodic survey	Amend state rule	Correct state rule to allow waste minimization reporting; require all registered generators to submit quarterly reports; require nonpermitted TSDF to submit reports, including data on closure cost insurance and groundwater monitoring; change term "waste" to "hazardous waste" and require periodic survey.	RCRA	More

ZF3207

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 certain existing state rules that are more stringent than current 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 adoption of a new state rule, and the amendment of two existing state rules, concerning reporting requirements for hazardous waste generators and hazardous waste management facilities.

The Department had proposed to repeal an existing state rule concerning closure of permitted surface impoundments. Upon reconsideration of the proposal, the Department has determined that repeal of this rule at this time is premature. Thus, the Department is withdrawing its proposal.

4. A public hearing has been held concerning the adoption of new rules, and the repeal of specific, existing state rules. No comments were received on the Department's original proposal to delete the closure requirements for permitted surface impoundments. The Department has made revisions to the proposed amendments, in response to the comments received.
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.

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Director's Recommendation

Based upon the summation and findings, and to maintain authorization equivalency with the federal program, it is recommended that the Commission adopt the proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102, and 104.



Fred Hansen

- Attachments
- I. Statement of Need for Rulemaking
 - II. Hearing Officer's Report
 - III. Department's Response to Comment Summary
 - IV. Draft Rules, OAR 340, Divisions 100, 102, and 104
 - V. Federal Registers (Chronological Order)

Gary Calaba:f
ZB7606
229-6534
June 22, 1988

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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:

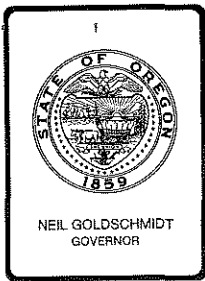
The new federal regulations may increase the costs of hazardous waste management for some people in this state. However, any increased costs associated with these new standards will occur irrespective of the Department's proposed rule amendments. The new standards for hazardous waste generators, and 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.

Expanding the reporting requirements for hazardous waste generators and handlers will increase the costs of hazardous waste management somewhat for those people. The addition of a periodic survey will cause an economic impact of \$26,250 assuming 30 minutes to complete the survey by 3,500 generators at \$15.00/hour.

The small business impact is identical to that described above.

ZF2906.1

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Environmental Quality Commission

Attachment II
Agenda Item J
7/8/88, EQC Meeting
PHONE (503) 229-3696

TO: Environmental Quality Commission
FROM: William H. Dana, Hearing Officer
SUBJECT: Agenda Item I, July 8, 1988, EQC Meeting

Hearing Officer's Report on Proposed Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100, 102, and 104.

Summary of Procedure:

Pursuant to public notice, a public hearing was convened at 9:00 a.m. on April 19, 1988, in the Department's offices at 811 S.W. Sixth Avenue in Portland. The purpose of the hearing was to receive testimony concerning proposed amendments to the hazardous waste management rules. Twelve people attended, in addition to Department staff. A hearing attendance list is attached. The hearing record closed at 5:00 p.m. on April 22, 1988.

Summary of Oral Testimony:

No one wished to testify at the hearing. As a result, the Department used the opportunity to answer questions and informally discuss the proposed rule amendments.

Summary of Written Testimony:

Written testimony was received from two people. Copies of the letters are attached. A summary of the written testimony is as follows:

Douglas M. Richardson, of Great Western Chemical Company, states that he supports the proposed adoption, by reference, of recent federal rules and the proposed repeal of an existing state rule that is more stringent than one of the new federal rules. However, Mr. Richardson expresses concern about several aspects of the proposed amendment's to the Department's reporting rules. First, he objects to the concept that persons be required to submit reports indefinitely once hazardous waste has been generated. He requests that only those people reasonably expected to continue generating be required to continue reporting. Second, he states that the term "waste" in the draft rules is too broad. He requests that the term "hazardous waste" be used instead. Third, he states that the proposed annual survey is excessive and unjustified, since generators are also required to submit quarterly reports. He requests that generators be required to report either quarterly or annually, but not both. He also believes that the proposed annual survey rule should be underlined, to highlight that it is a new

Attachment II
Agenda Item J
7/8/88, EQC Meeting

requirement. Fourth, he is very concerned about the proposed amendments to the reporting rules for treatment and storage facilities. He objects to the concept that the owner/operator of such facility becomes a "generator" if he/she ships another person's waste off-site. He states that this proposal violates the spirit and intent of the federal program. He requests that the rule be changed to state that the owner/operator becomes subject to the "generator requirements" in such situations, but does not become the "generator" of the waste.

Thomas C. Donaca, representing Associated Oregon Industries, also expresses concern about the proposed amendments to the reporting rules. First, he requests that the generator reporting rules specify when the reports are due. Second, he states that the Department should clarify at what point reporting may be discontinued by a person no longer generating hazardous waste. Third, he requests that generators be given the option of submitting either copies of the manifests or a listing of the manifest information. He notes that treatment, storage and disposal facilities have this option. Fourth, he notes that, if the proposed reporting forms vary significantly from the federal forms, this will be an increased burden and cost to businesses. Fifth, he states that the proposed waste minimization reporting requirements are excessive and premature. He recommends that these requirements not be adopted until the Department's Waste Reduction Program is ready to adopt more comprehensive waste minimization rules. Sixth, he feels that the "reserved" section in the reporting rules is confusing and improper and should be deleted. Lastly, Mr. Donaca agrees with Mr. Richardson that the owner/operator of a management facility should not be designated a "generator", if he/she ships another person's waste off-site. Also, he agrees that the term "waste" in the draft rules should be replaced by the term "hazardous waste."

Attachments: Hearing Attendance List
Letter from Douglas Richardson, dated 4/22/88
Letter from Thomas Donaca, dated 4/22/88

ZF2906.2

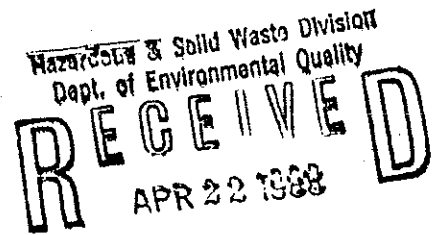


GREAT WESTERN CHEMICAL Co.

CORPORATE HEADQUARTERS

808 SOUTHWEST FIFTEENTH AVENUE PORTLAND, OREGON 97205 (503) 228-2600

April 22, 1988



Mr. Bill Dana
Hazardous Waste Section
Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

RE: Proposed Amendments to Oregon Hazardous Waste Regulations

Dear Mr. Dana:

Great Western Chemical Company is an Oregon based chemical distribution company which has its primary chemical manufacturing and storage facilities in the state, although it has branch facilities in 10 Western states. Great Western Chemical shares the DEQ's concern regarding the implementation of hazardous waste regulations which promote the responsible management of hazardous materials and/or hazardous waste while maintaining an economic climate which supports the governor's "Oregon Comeback Program." Great Western appreciates this opportunity to comment on these most recent proposed changes to Oregon's Hazardous Waste Regulations.

OAR 340-100-002 & 340-104-228

Great Western supports the proposed changes to OAR 340-100-002 which codify, without change, recent EPA amendments to Title 40 of the Code of Federal Regulations.

In addition, Great Western supports the proposed repeal of OAR 340-104-228, Oregon's existing regulation for the closure and post-closure care of surface impoundments. This proposed action allows the Oregon regulations to maintain consistency with the corresponding Federal Regulations. Great Western strongly supports maintaining consistency between the Oregon regulations and the EPA Hazardous Waste Regulations, whenever possible. Great Western only supports deviating from the Federal regulations where there is clear and convincing evidence of a need for greater protection to human health or the environment, through more stringent Oregon regulations.

OAR 340-102-041(2)

Great Western is concerned with some of the proposed new wording, as well as, the existing wording of OAR 340-102-041(2). More specifically, Great Western is concerned that the proposed

Mr. Bill Dana
April 22, 1988
Page 3

DEQ already requires quarterly reporting of hazardous waste generation at OAR 340-102-041, a requirement which is significantly more stringent than the Federal provisions of 40 CFR 262.41, which only requires a biennial report. Under the OAR 340-102-045 proposal, the DEQ is additionally proposing to require generators to submit an annual survey of the waste generated. Great Western is unable to justify this rule and believes the DEQ should not impose additional record keeping burdens on the regulated community, when they already have this information submitted to the agency under the quarterly reports required by OAR 340-102-041.

Great Western respectfully requests that the DEQ either go forward with the quarterly reports, as required by OAR 340-102-041, or delete those requirements, and go forward with the proposed new annual report. However, both reports are not necessary and impose an additional and unjustified paperwork burden on the regulated community.

OAR 340-104-075(3)

Great Western is very concerned with the implication of some of the provisions within OAR 340-104-075(3). As written, this rule fundamentally shifts the legal responsibility for hazardous waste generation from the original generator to the owner or operator of the treatment or storage facility which ships the hazardous waste from its treatment or storage facility to another TSD facility, by requiring the intermediate treatment or storage facility to become the "generator" of the waste.

However, in the public hearing on April 19th, industry representatives were informed that it is the DEQ's intent for this rule to require owners or operators of treatment or storage facilities, which subsequently ship hazardous waste to another TSD facility, to comply with the manifesting and record keeping provisions of 40 CFR 262 Subpart B and Subpart D, per 40 CFR 262.10(f) and 40 CFR 265.71(c). Compliance with the provisions of 40 CFR 262 can easily be obtained without requiring the intermediary treatment or storage facility to become the "generator" of the hazardous waste.

Great Western believes that the proposed rule incorrectly reflects the intent of both 40 CFR 262.10(f) and 40 CFR 265.71(c). 40 CFR 262.10(f) requires that owners or operators of treatment, storage or disposal facilities who initiate a shipment of hazardous waste from the intermediary facility to

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operators of these facilities transport hazardous waste off-site that they have generated, they must undertake certain activities, including initiating the manifest, and properly labeling and packaging the waste.

'Owners and operators of hazardous waste management facilities may also ship off-site hazardous wastes which they do not generate. The most obvious example is the removal of hazardous waste from a storage facility. The owner or operator of a storage facility does not "generate" a waste simply by removing it from storage. Removing hazardous waste from storage for shipment offsite, however, means the waste will be transported and subsequently handled elsewhere...'

'This amendment requires owners and operators of hazardous waste management facilities to comply with Part 262 generator standards when they initiate a shipment of hazardous waste which they have not "generated" from their facilities... If the owner or operator is removing from storage hazardous waste which was originally manifested by the generator, he may rely on the information on the manifest to make the determination pursuant to §262.11(c)(2). He is required to prepare a manifest to accompany the shipment, pursuant to Subpart B of Part 262. He must package, label, mark and placard the waste in accordance with the applicable EPA and Department of Transportation regulation, as provided in Subpart C or Part 262. He must also comply with the Subpart D recordkeeping and reporting requirements...'

'The rationale for applying these requirements to owners and operators of hazardous waste management facilities parallels that underlying the entire Subtitle System. Congress established this system to protect public health and the environment during management of hazardous waste from the time of generation through ultimate disposition. The key to the system is the manifest which enables EPA (or the states...) to track individual shipments of hazardous waste. RCRA places the initial burden of preparing the manifest, recordkeeping, and reporting on the generator... Therefore, the owner or operator of a facility who ships hazardous waste elsewhere is in a position analogous to the generator. It is his act which ought to trigger

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Mr. Bill Dana
April 22, 1988
Page 7

If you have further questions regarding these matters, please
don't hesitate to call.

Sincerely,

GREAT WESTERN CHEMICAL COMPANY

Douglas M. Richardson

Douglas M. Richardson
Environmental Compliance
Manager

SP

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Salem 503/588-0050
Portland 503/227-5636

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Comments of Associated Oregon Industries

on

Proposed Amendments to OAR 340-102-041 and 340-104-075

Submitted by Thomas C. Donaca, ~~Hazardous~~ & Solid Waste Division
Dept. of Environmental Quality
General Counsel

April 22, 1988

RECEIVED
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We appreciate the opportunity to make the following comments and recommendations:

- (1) OAR 340-102-041
(a) Subsection (2) is unclear in two regards.

First, when are the quarterly reports due? There should be more specific language as is found in OAR 340-104-075. Second, does this rule assume that if you were once a generator subject to this rule, but then drop below either the acutely hazardous or hazardous waste generation level, that you would be required to continue to report? The language in Subsection (2) "from that point forward" seems to so indicate. There should be some clarifying language to indicate at what time reports may be discontinued by the generator.

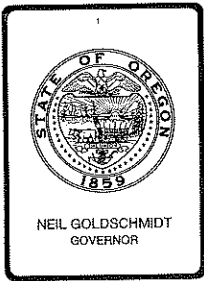
- (b) Subparagraph (2) (a) (A) (i).

We suggest that the language should parallel the language in OAR 340-104-075 (2) (i) except that it should indicate waste "shipped" rather than "received". The subparagraph covers both large and small generators and the generator should be able to use the method that will best fit his record keeping method. Manifests will probably be sent by most smaller generators while larger generators may prefer to "list the information from each manifest or shipping document". We urge you to make this change.

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(b) Subsection (3) appears to be a misreading of the federal rules 40 CFR 262.10(f) and 40 CFR 265.71(c). Those sections of federal rule do not make the owner or operator of a storage or treatment facility automatically a generator as does the proposed rule. Those rules only require that such facilities "must comply with the generator standards established in this part". The proposed rule not only changes the potential liability of storer and treater, it also obviates the provision in those regulations that the provisions of 40 CFR 262.34 only apply to owners who are shipping hazardous waste which they generated at that facility.

AOI recommends that subsection (3) be rewritten to parallel the provisions of 40 CFR 262.10(f) and 265.71(c) to insure continuity with federal regulation, to avoid automatically shifting a legal liability to a storer or treater and to avoid applying the rule in a manner not intended by federal regulation.



Environmental Quality Commission

Attachment III
Agenda Item U
7/8/88, EQC Meeting

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

TO: Environmental Quality Commission

FROM: Jan Whitworth, Manager
Hazardous Waste Section

SUBJECT: Response to Comments Summary

Comment:

A person should not be required to report indefinitely, once they have ceased to be a generator of hazardous waste.

Department's Response:

The Department agrees. However, many generators only produce wastes once a year (e.g., when a tank is cleaned, a pond is dredged, etc). These people need to be kept in the system, as long as wastes continue to be routinely generated. Also, unless a person notifies the Department that he/she is no longer a generator, the Department has no way of knowing. Accordingly, the Department has revised the proposed rules to specify that reporting is required, unless hazardous wastes have not been generated for a period of one year, and the person has requested in writing that his/her generator registration be withdrawn.

Comments:

The term "waste" in OAR 340-102-065(2)(A)(a)(ii) is too broad and should be changed to "hazardous waste."

Department's Response:

The Department agrees and has made this change.

Comment:

Generators should not be required to submit both an annual survey and quarterly reports.

Department's Response:

The Department understands the concerns raised and has amended its proposal to allow generators who submit quarterly reports only certify their

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notification status on the survey and return it to the Department. The survey will be required of all regulated generators including small quantity generators who are not required to submit quarterly reports. In addition, the Department has determined that surveys may not be needed each year. Accordingly, the proposal has been changed to require periodic rather than annual surveys.

Comment:

The owner/operator of a storage or treatment facility, who ships another person's waste off-site, must comply with the generator requirements, in accordance with the federal rules, but should not be designated as the generator of the waste.

Department's Response:

The Department disagrees. The Department is consistent with EPA interpretation stating that TSD facilities who have been designated on a manifest and who subsequently ship off-site another business' waste are considered the generators of the waste for purposes of complying with the manifesting requirements in 40 CFR Part 262; including initiating a new manifest as generator. However, the original proposed rule clarifying this interpretation has been deleted.

Comment:

The reporting rules for generators should specify when the reports are due, as do the reporting rules for treatment, storage and disposal (TSD) facilities.

Department's Response:

The Department agrees and has inserted the same language used in the TSD facility reporting rules.

Comment:

Generators should be given the option, as are TSD facilities, of submitting either copies of the manifests or a listing of the manifest information.

Department's Response:

The Department agrees and has made this change.

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Comment:

The proposed reporting forms should closely parallel the federal forms, for consistency and to avoid being burdensome to the regulated community.

Department's Response:

The Department is sensitive to this concern, but state and federal information needs may be somewhat different. The proposed reporting forms will be developed with the assistance of the Department's Hazardous Waste Program Advisory Committee. The Committee includes representatives from industry, environmental groups and the public. Every effort will be made to develop forms that are clear, easy to use, pertinent to the Department's needs, and consistent with the federal format.

Comment:

Quarterly reporting on waste minimization activities is burdensome. It is also premature, in that the Department's Waste Reduction Program is just emerging and does not yet need this information.

Department's Response:

The Department agrees that waste minimization reporting need not be done on a quarterly basis, at this time. Information needed by the Department is currently aggregated by industry annually. Changes to production processes may take at least one year to establish and once established quantification of minimization efforts will show little change. However, the Department does need some periodic information to help its Waste Reduction Program determine needs and measure progress. The information requested will be primarily qualitative with a minimal amount of quantitative information to determine who is implementing a program and what is the implementation plan. Accordingly, the Department has amended its proposal to require annual reporting on this subject.

Comment:

The "reserved" section in the TSD facility reporting rules is confusing and inappropriate.

Department's Response:

The reserved section was placed in the state's rules, because there is a reserved section in the equivalent federal rule. However, the state rule differs from the federal rule in a number of ways and this attempt at equivalency is not necessary. The Department agrees, therefore, to delete this section and to renumber the rule accordingly.

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Comment:

The proposed new rule concerning an annual survey, OAR 340-102-045 has not been properly noticed, in that the text is not underlined.

Department's Response:

The Department disagrees that the annual survey has not been properly noticed. The preamble to the proposed rule amendments state that "unless otherwise indicated, material that is underlined is to be added." Section 3 of the proposed amendments meets this criteria by clearly stating "a new rule 340-102-045 is proposed to be added as follows:" Accordingly, underlining is not required. Typically, underlining is used when the new text is limited to a few words or lines, and not when an entire new rule is being added. A check with the Administrative Rules Section of the Secretary of State's Office confirms that this procedure is proper.

ZF2906.3

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(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,] A person producing at any time more than one (1) kilogram of acutely hazardous waste, a total of 100 kilograms or more of hazardous waste in a calendar month, or who accumulates on-site at any time more than 1,000 kilograms of hazardous waste, shall submit Quarterly Reports to the Department from that point forward, unless no additional hazardous waste is generated for a period of one year and the person requests in writing that the Department withdraw his/her generator registration. Reports are due within 45 days after the end of each calendar quarter:

(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 or a listing of the information from each manifest for each shipment made during the calendar quarter; [and]

(ii) A listing of all additional hazardous 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[.]; and

(iii) 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] is required to have a permit for the treatment, storage or disposal 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.

(4) In addition to the requirements of sections (2) and (3) of this rule, on an annual basis, a person subject to the requirements of section (2) of this rule shall also submit, with the fourth quarter report, the following information:

(a) A description of the efforts undertaken during the calendar year to reduce the volume and toxicity of wastes generated and to recycle wastes, on a form provided by the Department;

(b) A description of the changes in volume and toxicity of wastes actually achieved during the calendar year, in comparison to previous years, to the extent such information is available, on a form provided by the Department.

3. A new rule 340-102-045 is proposed to be added as follows:

Periodic Survey

340-102-045 Beginning July 1, 1988, hazardous waste generators who receive a survey form from the Department, concerning the waste generated and waste handling practices, shall either confirm their current notification status on the form or complete the form. The form shall be returned to the Department, within 30 days of receipt.

4. 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 in accordance with 40 CFR 262.53 [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;]

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[(c)](a) 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.]

5. 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.

6. 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 of a hazardous waste management facility or recycling facility 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 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 by EPA handling code 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)]

(f) [(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]

(g) [(h)] A certification signed by the owner or operator of the facility or his authorized representative as required by 40 CFR 270.11(b)[.];

(h) 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

(i) Monitoring data under 40 CFR 265.94(a)(2)(ii) and (iii), and (b)(2), where required.

ZF2906.4

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Attachment V
Agenda Item J
7/8/88, EQC Meeting

Friday
August 8, 1986

40 CFR Parts 260, 261, 262, 263, and 271

Part III

**Environmental
Protection Agency**

**40 CFR Parts 260, 261, 262, 263, and 271
Hazardous Waste Management System;
Exports of Hazardous Waste; Final Rule**

JK

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 382-4675 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 308. Transporters transporting hazardous waste for export are also a type of "exporter."

The responsibilities of the primary exporter are contained in Part 262, 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.¹ Exporters of such

¹ 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 exempted 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. H8169 (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).²

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

² The final rule as it applies to small quantity generators is also discussed at Section H 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.³

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

³ 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

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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 reject 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.⁴

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

⁴ 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(i) 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-105), 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 TSDF, 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.⁵ 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),⁶ provided

⁵ 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.

⁶ 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 no 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 or 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(b) 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, 1986,⁷ 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

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

⁷ Section 3017(a) requires compliance with export requirements 24 months after enactment of HSWA (November 8, 1986).

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 266 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:

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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.

(e) * * *

(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

(f) * * *

(1) 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:

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§ 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

40 CFR Part 262

Part VII

**Environmental
Protection Agency**

**40 CFR Part 262
Hazardous Waste Management System;
Standards for Generators of Hazardous
Waste; Final Rule**

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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 to ward 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 6560-50-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 (Continuation Sheet)		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		
28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			29. Containers	30. Total	31. Unit	R. Waste No.
			No.	Quantity	Wt/Vol	
a.						
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; 9:45 am]

BILLING CODE 6560-50-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 K062) 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-M

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 ethylenedisithiocarbamic 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-Biawas, 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 ethylenedisithiocarbamic acid (EBDC) and its salts.¹ 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

¹ 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.² 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.

² 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.³ 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

³ 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) 426-2875 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 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 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 3006(g) of RCRA, 42 U.S.C. 6926(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 3006(g)(2) or 3006(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 3006(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
Prsticides		
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(f) 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

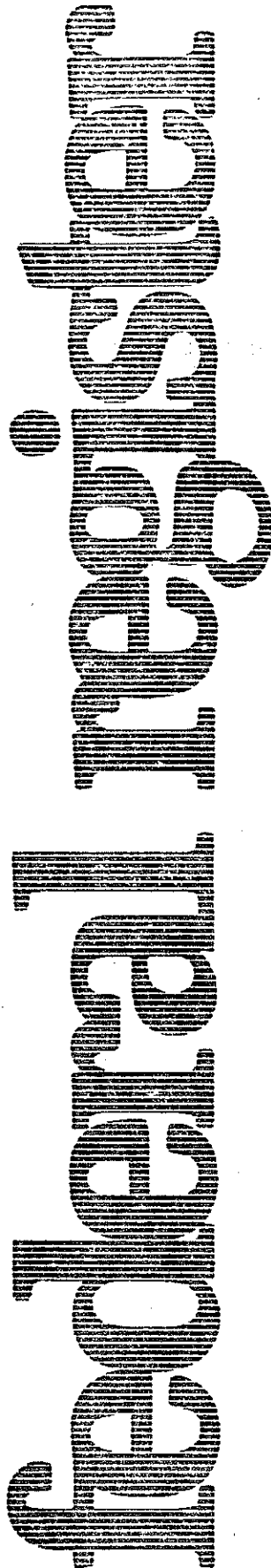
States with final authorization under section 3006(b) of the Resource Conservation and Recovery Act ("RCRA), 42 U.S.C. 6929(b), have a continuing obligation to maintain a hazardous waste program that is equivalent to, consistent with, and no less stringent than the Federal hazardous waste program. Revisions 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 26, 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 26, 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 20, 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 265.100). 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 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 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 2050-0008.

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)(?) 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]

BILLING CODE 6560-50-M

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]

BILLING CODE 4160-01-M

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 665. 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 28744, 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. McGraw,

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]

BILLING CODE 6560-50-M

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 of 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 *Lowe 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 G—Colorado

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7642.

2. Section 52.920 is amended by adding paragraph (c)(33) to read as follows:

§ 52.920 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., E, F., G. and Section VI.B. and C.) adopted June 27, 1985.

[FR Doc. 87-14133 Filed 6-19-87; 8:45 am]

BILLING CODE 6560-50-M

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 S-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-FFFFF. 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 (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 264.90(a), a "regulated unit" is a surface impoundment, waste pile, land treatment unit, or landfill that received waste after July 26, 1982.¹ The permit

application requirements for these standards are found in § 270.14(c)(1) through § 270.14(c)(8). 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 3005(c)(2) of RCRA, final disposition must be made on permit applications for all land disposal facilities by November 8, 1988. 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

¹ This date was originally identified in the 1982 regulations as January 26, 1983, but was amended to

July 26, 1982 (50 FR 28715) in accordance with section 3006(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)(7)), 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 commentor 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 commentor 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 commentor 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 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 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. 6926(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 retain 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, 6927, 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)(8) (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 6-18-87; 8:45 am]

BILLING CODE 6990-50-M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 640

[Docket No. 8345-7101]

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 22056).

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 B. 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 260,000 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. 87-20653 Filed 9-8-87; 8:45 am]
BILLING CODE 6560-50-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. 87-20652 Filed 9-8-87; 8:45 am]
BILLING CODE 6560-50-M

FEDERAL MARITIME COMMISSION

46 CFR Part 581

[Docket No. 86-29]

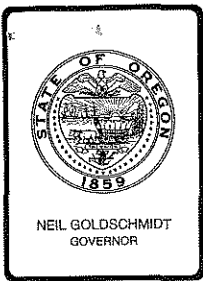
Filing of Service Contracts and Availability of Essential Terms

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



Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission

From: Fred Hansen, Director *Fred Hansen*

Subject: Agenda Item K, July 8, 1988, EOC Meeting. Appeal of On-Site Sewage Disposal System Variance Denial by Lester W. and Norma J. Fread

Lester and Norma Fread own two adjoining lots (Lots 46 and 50, Deschutes River Tracts) near Tumalo, Oregon. They currently live in a residence on one lot (Lot 50) and wish to locate a mobile home on the other lot (Lot 46) so they can attend to the needs of elderly relatives who require periodic care. The Fread lots are in an unsewered area where residents discharge their sewage to individual septic tank-soil absorption systems. Although a public water supply is available to the lots in the residential subdivision where the Freads live, many property owners, including the Freads and their nearest neighbors, obtain their drinking water from individual domestic wells.

Wells withdraw groundwater from a shallow aquifer (20 feet to the static water level). The aquifer is overlain by coarse textured soils (loamy sand) of volcanic origin which are rapidly to very rapidly draining. Soils are underlain by a mixture of unconsolidated stream deposited materials (e.g., pumice, boulders and ash) which extend to the aquifer. Like the soils above, geological materials are considered to be rapidly to very rapidly draining.

To locate a mobile home on Lot 46, the Freads need to either construct an individual septic tank-soil absorption system on that lot, or, under an on-site rule permitted hardship Authorization Notice, pipe septic tank effluent from the proposed mobile home to the on-site system currently serving their residence on Lot 50.

The Freads prefer to develop a standard septic tank-soil absorption system on Lot 46. However, inadequate area exists on the lot to develop the desired system due to the presence of wells on both Fread lots and on neighboring lots immediately north, south, east, and west of Lot 46. Oregon on-site rules require a minimum 100 feet separation distance between a septic tank-soil absorption system and the nearest well. The individual sewage disposal system proposed by the Freads would be about 60 feet from two wells. Minimum well setbacks required under Oregon on-site rules were established to reduce the likelihood of well contamination from inadequately

treated septic tank effluent that might move into well bores under conditions of saturated flow.

The Freads were unable to acquire the septic tank-soil absorption system permit they desired because of the inability to meet minimum separation distances between wells and on-site systems. They applied for a variance from rules which specify minimum on-site system to well setbacks in accordance with procedures established by statute. The Freads request for variance was denied. The Department's variance officer was not able to find that strict adherence to on-site rules and standards was inappropriate for cause; nor was he able to determine that special physical conditions exist which rendered strict rule compliance unreasonable, burdensome, or impractical.

The Freads are appealing the variance officer's decision to the Commission.

At issue is whether the public health and groundwater would be adequately protected if the Commission were to grant the Freads the right to construct a septic tank-soil absorption system on Lot 46 when the area required for the system's development would be located about 60 feet from two wells. In considering this question, it is important to note that the closer wells are to on-site systems, the more likely they are to becoming contaminated by inadequately treated septic tank effluent. The possible presence of water laid strata which might cause inadequately treated septic tank effluent to quickly move laterally to well bore locations increase the chance for well contamination. Thus, there would be a potential for greater risk to public health and groundwater quality if an on-site system would be located closer (60 feet) from wells rather than 100 feet or more from wells. If the EQC does elect to grant the Freads the right to place an on-site system on the lot in question without abandoning wells on that lot and Lot 50 under Water Resource Commission Rules, the Commission could specify the type of on-site system to be permitted or it can leave system selection to the discretion of Deschutes County.

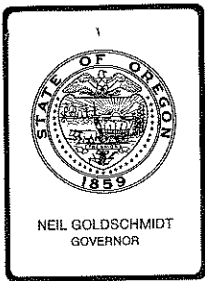
Of the various types of on-site systems available, a sand filter system would afford the greatest level of treatment, result in the lowest potential risk to the public health, and have the least significant impact on groundwater. Oregon experimental intermittent sand filter studies have demonstrated BOD₅, suspended solids, total nitrogen, fecal coliform, and total coliform were reduced 98%, 93%, 49%, 3 logs and 2 logs, respectively. In contrast, a standard gravity feed soil absorption system would provide the least amount of protection to the public's health and groundwater due to its tendency to allow inadequately treated effluent to move from trenches under conditions of saturated flow. Another variety of system which might be considered for placement on Lot 46 would be a pressure distribution system. Oregon experimental studies indicate pressurized distribution of septic tank effluent under controlled application rates will prevent swift movement of septic tank effluent through rapidly draining soil and geological materials. A third option would be to allow the installation of

an individual septic tank-gravity fed soil absorption system. This system would occupy approximately the same area as a pressurized distribution system. However, localized areas of disposal field could be prone to rapid, saturated movement of insufficiently treated effluent to groundwater or stratum draining to existing wells. This variety of system would be the least desirable due to the more extensive area it requires to accommodate system placement and the relative risk it would pose to wells and groundwater.

It is important to note that two viable options appear to be available to the Freads which would facilitate their placement of a mobile home on Lot 46. If they abandon wells on Lots 46 and 50 according to Water Resource Commission rules, sufficient area would exist to accommodate the construction of an on-site sewage treatment and disposal facility which met EQC on-site rules. Under this option, the Freads could secure water for drinking and irrigation purposes from the Laidlaw Water District.

The Freads also have the option to locate a mobile home on Lot 46 via a hardship Authorization Notice issued by Deschutes County. Under this option, a septic tank would be located on Lot 46 to receive sewage from the mobile home. Drainage from the septic tank would be piped to the on-site system serving the Freads existing residence. No abandonment of wells would be required.

Since at least two viable means appear to exist which would accommodate mobile home placement on Lot 46, it does not appear reasonable for the Commission to grant the Freads the right to locate an individual on-site system closer than 100 feet from existing wells.



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item K , July 8, 1988, EQC Meeting

Appeal of On-Site Sewage Treatment and Disposal System
Variance Denial by Lester W. Fread and Norma J. Fread

Problem Statement

Lester and Norma Fread own a 0.37 acre parcel (Lot 46, Deschutes River Tracts). They desire to locate a mobile home and standard septic tank-soil absorption system on that lot. Wells where the Freads proposed locating their soil absorption system were too close to the on-site system placement area to allow Deschutes County to issue a system construction permit. The Freads applied to the Department of Environmental Quality for variances from on-site rules which specify minimum well and property line setbacks.

The variance officer, Sherman Olson, denied granting the Fread's variance request. He did not find that strict compliance with on-site rules and standards were inappropriate for cause, nor was he able to determine that special physical conditions rendered strict rule compliance unreasonable, burdensome or impractical. In making his determination, the variance officer evaluated information related to the nature of soil and geological materials of the site; the depth to groundwater used for drinking purposes; the relationships between wells and the proposed on-site system; the potential for contamination of wells by the placement of the desired septic tank-soil absorption system; and the fact that an acceptable public water supply was readily available to Lot 46. The variance officer was unable to conclude that a reduction of separation distance between the prospective on-site sewage disposal system and nearby wells would be adequate to protect the public health and welfare and state waters as required under law.

In the Department's denial letter, the Freads were advised that if they abandoned wells on their existing homesite and the property in question by a method acceptable under State Water Resource Commission Rules, they could approach Deschutes County for a construction-installation permit which would facilitate the placement of an on-site system on Lot 46 and would meet EQC rules. As an additional option, the Freads were advised that they could approach Deschutes County for a personal hardship Authorization Notice. An Authorization Notice would allow the Freads to place the mobile home they desired on Lot 46 without the abandonment of any wells. Wastewater generated by the mobile home would drain to a septic tank located on the

lot. Septic tank effluent would be piped to the existing on-site system currently serving the Freads' residence on Lot 50.

The Freads have appealed the denial to the EQC. It appears they view the nature of soil and geological materials, depth to the watertable, and distance to wells adequate to protect public health and prevent groundwater degradation if a standard system were to be placed on that property.

Background

The pertinent legal authorities are summarized in Attachment A.

Lester and Norma Fread own a 0.37 acre tract near Tumalo, Oregon in Deschutes County (Lot 46, Deschutes River Tracts). The lot was evaluated and determined unsuitable for on-site sewage disposal system placement by Deschutes County on September 23, 1987 (Attachment B).

The Freads initially filed a variance application with DEQ's Bend office (Attachment C) after Deschutes County and DEQ Central Region staff advised Mr. Fread that a variance might be possible. Mr. Fread had indicated that an on-site system could be installed on Lot 46 which would be at least 90 feet from the nearest wells on neighboring lots.

The Department's Bend office directed the variance application to the Department's Portland office for processing. The application was received by the Water Quality Division on December 28, 1987. On December 30, 1987, Department staff called Mr. Fread and requested that he furnish a land use clearance statement from Deschutes County and a \$225 processing fee. On December 31, the Department received a land use clearance letter from Deschutes County. The Department's fiscal office received the necessary variance processing fee from the Freads on January 7, 1988.

Through their variance application, the Freads sought approval of a standard septic tank-soil absorption system. They indicated a soil absorption system (initial system and reserve area for a replacement system) could be developed that would be a minimum of 90 feet from adjacent wells to the north and south. The Freads applied for variances from the following Oregon Administrative Rules:

1. OAR 340-71-150(4)(a)(A)&(B)---which require all criteria for approval identified in standard system rule OAR 340-71-220 and/or alternative systems rules 340-71-260 through 340-71-360 to be met, and mandate each parcel contain sufficient usable area to accommodate an initial and replacement on-site system;
2. OAR 340-71-220(2)(i); Table 1, Item 1---which requires a soil absorption facility be at least 100 feet from groundwater supplies, including wells; and

3. OAR 340-71-220(2)(i); Table 1, Item 10---which requires a soil absorption facility be at least 10 feet from property boundaries.

On January 5, 1988, Sherman Olson, DEQ variance officer, conducted a variance hearing held at the Fread residence, (located on Lot 50, adjacent to the subject property). During the hearing, Mr. Fread stressed he needed a quick decision on the variance because he had to make a decision to purchase a mobile home by noon, January 7, 1988. Prior to the hearing, Mr. Olson evaluated the proposed on-site development area, and with the aid of Don Bramhall, DEQ Central Region, made measurements from four (4) wells on abutting properties to the north, south, east, and west (Attachment D). At that time, Mr. Olson noted the application did not indicate all relevant wells. He also observed that the 90 foot separation distance represented in discussions prior to the hearing and in the application were inaccurate. Mr. Olson determined the maximum distance that could be maintained between the proposed soil absorption system development area on Lot 46 and wells on adjacent lots to the north and south was about 60 feet. This was substantially different than the 90 foot separation distance noted in the variance application.

Oregon Administrative Rules governing on-site system siting require a 100 foot minimum separation distance between groundwater supplies, including wells and on-site system placement areas. In the past, variances to minimum well to system setback requirements have been granted, on a case-by-case basis, when a variance officer determined the type of on-site system proposed, well construction, soil, and geological characteristics were adequate to prevent groundwater degradation. During the hearing, Mr. Fread was advised that the record would be kept open to (1) receive additional information from the Watermaster about nearby wells and area geological conditions; and (2) allow the Department to contact the Laidlaw Water District to determine if community water would be available to Lot 46 since an existing service main is located along Elm Lane (immediately south of the subject property). The Watermaster's opinion was considered important since his knowledge of well construction and the hydrogeology of the area and his familiarity with Water Resource Commission Rules governing well construction and abandonment were necessary to help define potential groundwater contamination risks and appropriate well abandonment procedures.

On January 7, 1988, Mr. Olson contacted Bob Main, District 11 Watermaster. Mr. Main advised he had not observed the formal abandonment of a well on the subject property. Based on the description of the abandonment method followed by Mr. Fread, Mr. Main concluded it did not appear the well had been properly abandoned. The variance officer desired this information to help determine if the procedure Mr. Fread described for abandoning his well on Lot 46 was adequate to prevent the contamination of groundwater by the entry of insufficiently treated septic tank effluent at that point. After discussing the proposed variance and evaluating well logs from wells adjacent to the subject property, Mr. Main recommended that at least 100

feet separation be maintained between any well and on-site system. He noted he would not authorize development of a well less than 100 feet from the proposed soil absorption system area because of the geological properties in the area (mixed volcanic pumice and ash) and the shallow proximity to the static groundwater table.

On January 7, 1988, following his discussion with the Watermaster, Mr. Olson called Mr. Fread, and advised him that his variance would probably be denied. However, Mr. Olson noted a final decision would not be made until further information was received from the Watermaster, the Laidlaw Water District, and Deschutes County.

Before making the final decision on the variance proposal, Mr. Olson contacted the State Health Division to verify information on the potability of the Laidlaw Water District's water supply. The Health Division advised the Laidlaw Water District provided potable water suited for domestic use. In addition, Mr. Olson received well log information from the Watermaster (Attachment E). Other well log data had accompanied the original variance application (Attachment F). Mr. Olson also received information from the Water District (Attachment G), and Deschutes County (Attachment H). The Laidlaw Water District reported they had ample water to meet Mr. Fread's domestic and irrigation needs at Lot 46 and noted they would assess a \$450 connection fee if they were requested to supply water to the lot. The site was also revisited by Don Bramhall, DEQ Central Region, and Jay Langley, Deschutes County Community Development Department, to recheck measurements to affected wells since original measurements were made when the site was covered by about one foot of snow.

The District 11 Watermaster advised the Department that he would require at least 100 feet separation between a new well and an existing on-site system based on his knowledge of the area's geology. Well log information submitted to the Department was inadequate to demonstrate the actual nature of geological materials between ground surface and the shallow aquifer. Unfortunately, no standardized system of nomenclature is used by well drillers in Oregon to describe well log information in a precise, uniform manner. As a consequence, terms like "clay" and "conglomerate" are subject to broad interpretation. For this reason, the Department relied more heavily on the training and experience of the District 11 Watermaster and his knowledge of the proposed on-site development area's hydrogeology than it did on actual well log information reported by well drillers.

Shallow aquifers located beneath rapidly and very rapidly draining soil and geological materials like those which are common in the area of Lot 46 are also particularly susceptible to contamination by nitrate nitrogen since little organic matter (necessary for nitrate assimilation) is present in these materials. Nitrate nitrogen is a natural septic tank effluent breakdown product. Studies have shown that excess nitrate nitrogen in groundwater has been responsible for causing a condition know as

methemoglobinemia in young infants. Severe instances of this disorder have resulted in infant deaths.

The 100 feet minimum separation distance between wells and soil absorption systems required under on-site rules was established to help protect well bores against the entry of inadequately treated septic tank effluent. If setbacks between wells and the Freads' desired on-site system were decreased from 100 feet to about 60 feet, there would be greater potential for the channelized flow of untreated septic tank effluent to contaminate nearby wells.

In addition, a community water supply is available to the property. This would allow the applicant to properly abandon wells on Lots 46 and 50 so an on-site system could be developed on the subject property that fully complied with on-site rules.

Under Oregon on-site statutes and rules, the Department must find that compliance with rules for on-site system installation are inappropriate for cause, or that special physical conditions render strict compliance unreasonable, burdensome, or impractical. However, the public health and welfare and the waters of the state must be adequately protected in order to grant a variance. The variance officer was unable to conclude that reduction of separation distance between the prospective on-site sewage disposal system and nearby wells would provide adequate protection to the public health and welfare and state waters as required under law. Also, the variance officer was unable to conclude that compliance with on-site sewage disposal rules would be unreasonable, burdensome, or impractical. As a result, the variance was denied.

By certified letter dated April 27, 1988, Mr. and Mrs. Fread were notified that their variance request was denied (Attachment I). The variance officer noted an on-site system could be installed on the Lot in question (Lot 46) in full compliance with existing rules of the EQC if existing wells on Lots 46 and 50 were abandoned in accordance with requirements of the Department of Water Resources (Attachment J).

Well abandonment would facilitate the construction of an on-site sewage disposal system (with room for a full replacement system) on Lot 46 which would comply with Commission rules. Both the initial system and reserve area for a replacement system could be located at least 100 feet from all remaining wells.

Department of Water Resource Rules (OAR 690-220-005 through OAR 690-220-140) provide minimum standards for well abandonment. Where a cased well is to be abandoned and the casing will not be removed, the casing must be thoroughly ripped or perforated and the annular space between the casing and the drill hole wall must be completely filled with cement grout that has been applied under pressure. The remainder of the well is required to be filled with

cement grout or concrete in a manner that will effectively check vertical movement of water within the well bore throughout the depth of the water bearing horizon.

Mr. Fread advised the Department that he abandoned his well on Lot 46 by batch mixing and hand applying approximately 1/2 cubic yard of concrete. Under this process, Mr. Fread did not thoroughly rip or perforate the casing, no cement grout was used, and the concrete was not introduced into the well under pressure. Thus, the procedure followed did not meet minimum Water Resources Rules. Mr. Fread indicated he elected to abandon his well himself rather than have it abandoned by a commercial well driller because he was concerned about the cost of abandonment. One well driller (Orvail Buckner Well Drilling) contacted by the Department estimated it would normally cost around \$910 to abandon a 6" cased well like the Freads in compliance with Water Resource Commission Rules.

Since Lots 46 and 50 are adjacent lots co-owned by the Freads, the variance denial letter also advised the Freads that it might be possible for them to place a mobile home on Lot 46 to house elderly family members requiring their periodic attention under on-site hardship Authorization Notice rules (Attachment K).

On May 13, 1988, the Director received a May 9, 1988, letter from Lester Fread appealing the Department's decision to deny on-site variances sought by the Freads (Attachment L). In that letter, Mr. Fread opined it would be unreasonable for the Department to require formal sealing and abandonment of wells on Lots 46 and 50. Further, Mr. Fread contested the interpretation by state Watermaster concerning the adequacy of well seals in the area of the subject property. In addition, he cited he had understood Dr. Paeth viewed vertical separation distance between soil absorption facilities and watertable levels more important than lateral separation distances and Mr. Fread emphasized distance to static water level below Lot 46 was considerably greater than the four foot minimum separation required under on-site rules.

In his letter, Mr. Fread placed significant emphasis on comments made by Dr. Bob Paeth, DEQ's chief soil scientist, that septic tank effluent treatment quality is based on vertical separation distance from the watertable rather than lateral distance from wells. Before Mr. Fread's variance hearing, Dr. Paeth responded by telephone to a general information request from Jay Langley, Deschutes County Environmental Health Division. Dr. Paeth noted his response had been misinterpreted and inappropriately applied. He had been asked whether he thought vertical separation from the watertable was more or less important than horizontal separation from a well. No specific situation was described as the basis for the question. Dr. Paeth indicated he viewed vertical separation to be more critical. This was a general statement since Dr. Paeth was not asked to visit the site and offer an opinion. After considering the actual facts surrounding the Freads'

variance proposal, Dr. Paeth viewed a variance permitting the desired well setbacks to be inappropriate.

Alternatives and Evaluation

Pursuant to ORS 454.660, decisions of a variance officer to grant variances may be appealed to the Environmental Quality Commission. Alternatives available to the EQC include either upholding the decision of the variance officer or granting variances which would allow the installation of some kind of on-site system on Lot 46. The Commission must find that strict compliance with rules or standards regulating the installation of an on-site sewage disposal system are inappropriate for cause, or that specific physical conditions render strict compliance unreasonable, burdensome, or impractical if it elects to grant variance requests.

The alternatives are as follows:

1. Uphold the variance officer's decision. Under this alternative, it appears the Freads could:
 - a. Abandon the wells on Lots 46 and 50 in accordance with the rules of the Water Resources Commission. According to an estimate Orvail Buckner Well Drilling provided the Department, it would cost approximately \$660 for that company to abandon the existing well on Lot 50 in accordance with Water Resource Commission Rules. And it would cost around \$910 to abandon the well on Lot 46 since special equipment would be required to remove existing concrete from the well bore in order to facilitate proper well abandonment. If wells were abandoned in an acceptable manner, Deschutes County could issue an on-site construction-installation permit in full compliance with EQC rules. Water from the Laidlaw Water District is available to both Lots 46 and 50 at a service connection cost of \$450 per lot; or
 - b. The Freads could apply to Deschutes County for a hardship Authorization Notice. If granted, the Notice would allow the Freads to apply for temporary housing for a relative suffering hardship for the duration of the hardship. No well abandonment would be required under this option. This alternative would likely be the least expensive for the Freads and would not require Commission action.
2. In cases of extreme or unusual hardship, the EQC could grant the Freads variances to enable them to develop Lot 46 as desired provided they sufficiently demonstrated:
 - a. Need to care for an aged, incapacitated or disabled relative; and

- b. Insignificant environmental impact would occur if an on-site system were installed.

Under this option, the Commission may impose special conditions affecting the type of system installed (e.g., a sand filter or pressurized distribution system which would more adequately protect state waters and be more likely to prevent saturated flow of septic tank effluent from occurring, rather than the standard system desired by the Freads) and use of the system (such as limiting the number of residents using the system and requiring the abandonment of the system upon cessation of the hardship) if the hardship variance were to be granted.

3. Grant the Freads the right to install either a sand filter system or a pressurized distribution system rather than the standard gravity feed drainfield system they desire.

Under this option, the Commission could direct Deschutes County to issue a sand filter system permit. Oregon sand filter system studies have demonstrated BOD₅, suspended solids, total nitrogen were reduced 98%, 93%, 49%, respectively and substantially reduced total and fecal coliform bacteria levels. A sand filter system would provide the greatest level of treatment on Lot 46 and would help assure a higher level of groundwater protection than any other type of on-site system allowed under EQC rules. A primary disadvantage of this system is cost. Sand filter systems placed on sites like those owned by the variance applicant typically cost around \$3,500 to construct.

Alternatively, the Commission could direct Deschutes County to issue a permit for a pressurized distribution system. Pressurized distribution systems are designed to prevent saturated flow from occurring beneath or to the sides of beds or trenches to check the rapid lateral or downward migration of inadequately treated septic tank effluent. Although this system is less expensive to construct than a sand filter (approximately \$2,500) its installation requires more area than a sand filter and pressure systems lack the special treatment sand necessary to assure maximum effluent treatment.

4. Grant the Freads' request to develop the system as proposed.

Under Oregon statute and Commission rules, the variance officer did not find that compliance with rules for on-site system installation were appropriate for cause nor did he determine that special physical conditions rendered strict compliance unreasonable, burdensome, or impractical and other alternatives exist which would allow the Freads to establish a mobile home on Lot 46. In addition, the variance officer was unable to conclude that a separation distance of less than

100 feet would adequately protect the public health and welfare and waters of the state required under law.

Summation


1. Lester and Norma Fread filed a variance application dated December 19, 1987, and a transmittal letter which was received by the Department's Portland office on December 28, 1987.
2. On January 5, 1988, following the evaluation of relationships between existing wells and the area proposed for on-site system development at Lot 46, Sherman Olson, DEQ variance officer, conducted a variance hearing at the Fread home, which is on a lot immediately adjoining the subject property. At that time, Mr. Fread was advised that the variance record would remain open pending receipt of additional information from the District 11 Watermaster concerning the disposition of the construction of nearby wells, additional related information on the geological and groundwater characteristics in the proximity of wells and proposed on-site development area; and information from the Laidlaw Water District concerning the availability of water from that source. During the course of the hearing, Mr. Fread indicated he needed a quick decision on the variance because he had to make a decision to purchase a mobile home for the lot in question by noon January 7, 1988.
3. After discussion with the Watermaster, a representative from Laidlaw Water District, and a representative with the state Health Division, and reviewing information submitted from the Watermaster as well as that which was previously part of the variance application file, Mr. Olson could not find that it was reasonable to grant variances from on-site sewage disposal rules which would be necessary to allow the development of a subsurface sewage system on Lot 46.
4. April 27, 1988, Mr. Olson advised the Freads, by letter, that on-site variances sought would not be granted due to the presence of a number of wells near the proposed on-site system development site; the uncertain quality of their construction; the rapidly draining nature of geological materials lying between ground surface and the aquifer; and the relatively shallow depth to the aquifer. The variance officer concluded the potential existed for partially treated septic tank effluent to drain to the shallow groundwater table where contaminants could be picked up by wells used for drinking water. In addition, it appeared other alternatives were available which would facilitate placement of a mobile home on Lot 46.
5. Lester Fread filed an appeal to the Commission on May 9, 1988, because he viewed soil and geological materials underlying Lot 46 would be

EQC Agenda Item No. K
July 8, 1988
Page 10

adequate to prevent groundwater degradation if an on-site system were placed on that property.

Director's Recommendation

Based on findings in the summation, it is recommended that the Commission adopt the findings of the variance officer and uphold the decision to deny Lester and Norma Fread's proposal to vary from siting standards OAR 340-71-150(4)(a)(A)&(B) and well and property boundary setbacks required under OAR 340-71-220(2)(i); Table 1, Items 1 and 10.



Fred Hansen

Attachments (12)

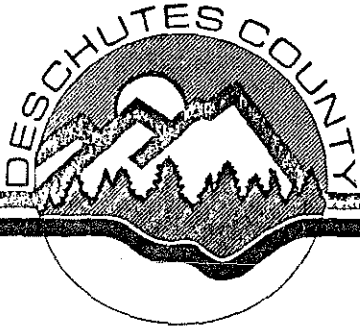
- Attachment A-Pertinent Legal Authorities
- Attachment B-Deschutes County Site Evaluation Report Letter
- Attachment C-Variance Application Form/Fread Cover Letter
- Attachment D-Well to Proposed On-site System Relationships
- Attachment E-Well Logs from Adjoining Property Mr. Fread Supplied to Mr. Olson by District 11 Watermaster
- Attachment F-Well Logs Provided Mr. Olson by Mr. Fread
- Attachment G-Letter from Laidlaw Water District to Mr. Olson
- Attachment H-Letter from Deschutes Board of County Commissioners to Mr. Olson
- Attachment I-Sherman Olson Variance Denial Letter
- Attachment J-Water Resources Commission Well Abandonment Rules
- Attachment K-Personal Hardship Authorization Notice Rules
- Attachment L-Appeal Letter from Mr. Fread to Fred Hansen

Mark P. Ronayne:kjc
WJ739
229-6442
June 13, 1988

Agenda Item No. K, July 8, 1988, EQC Meeting.

1. Administrative rules governing subsurface sewage disposal are provided for by Statute: ORS 454.625.
2. The Environmental Quality Commission has been given statutory authority to grant variances from the particular requirements of any rule or standard pertaining to subsurface sewage disposal systems if, after hearing, it finds that strict compliance with the rule or standard is inappropriate for cause or special physical conditions render strict compliance unreasonable, burdensome or impractical: ORS 454.657.
3. The Commission has been given statutory authority to delegate the power to grant variances to special variance officers appointed by the Director of the Department of Environmental Quality: ORS 454.660.
4. Mr. Olson was appointed as a variance officer pursuant to the Oregon Administrative Rules: OAR 340-71-030.
5. Decisions of the variance officers to grant variances may be appealed to the Commission: ORS 454.660.

Mark P. Ronayne:kjc
WJ673
229-6442
June 10, 1988



Community Development Department

Administration Bldg./1130 N.W. Harriman/Bend, Oregon 97701
(503) 388-6575

Planning Division
Building Safety Division
Environmental Health Division

September 24, 1987

Mike Boyle
8408 Owensmouth
Canoga Park, CA 91311

RE: FEASIBILITY #87-171 T16-R12-S31D TAX LOT 5200

Dear Mr. Boyle:

This letter is in response to your on-site sewage disposal site evaluation conducted on September 23, 1987. The test pits showed that this site was unsuitable for any on-site sewage disposal system.

Well setbacks cannot be maintained in accordance with OAR 340-71, Table 1.

You may have additional test pits examined by this division within 90 days of the initial site evaluation with no additional charge, or you may apply for a denial review. This review is conducted by the Department of Environmental Quality, Central Region Office. A written request must be submitted within 30 days of this denial notification. A \$60 denial review fee is charged by that agency. You may also apply for a variance through the Department of Environmental Quality, located at 2150 N.E. Studio Road, Bend, Oregon 97701. A \$225 fee will be charged.

Sincerely,

ENVIRONMENTAL HEALTH DIVISION

Jay E. Langley
Jay E. Langley, Director
JEL:tlf
Enclosure

Applicant Mike Boyle

Subdivision _____ L _____ B _____ T16 R12 S310 TL 5200

EVALUATOR: J. Langley

Soil Matrix Color & Mottling (notation), *Coarse fragments, roots, structure, layer limiting effective soil depth, etc.

Depth	Texture	
<u>0-48</u>	<u>l.s.</u>	

<u>0-48</u>	<u>l.s.</u>	

Denial

Landscape notes _____

Slope _____ Aspect _____ Groundwater _____

Other site notes _____

Residential Commercial _____ Filter Fabric _____

Type system: Initial _____ System Sizing _____ /150 g. Max depth adsorption facility (in) _____

Replacement _____ System Sizing _____ /150 g. Max dept. adsorption facility (in) _____

Special conditions: no area less than 100ft. from neighbors wells

12

Application for Variance from Administrative Rules
Regulating On-Site Sewage Disposal Systems

Please complete this application form and submit the application fee* (\$225) and required attachments to:
Department of Environmental Quality, On-Site Sewage Systems Section, P.O. Box 1760, Portland, Oregon 97207

REFERENCE INFORMATION--Please Print

<u>Lester W. Freed</u>	<u>Norma J. Freed</u>	<u>16</u>	<u>12</u>	<u>31</u>
Name of Owner		Township	Range	Section
<u>19929 Fir Ln</u>		<u>5200</u>	<u>1613</u>	<u>31D</u>
Address		Tax Lot or Account No.	Parcel Size <u>150' x 110' x 102' x 150'</u> 6-37-82	
<u>Bend</u>	<u>Ore</u>	<u>97701</u>	Subdivision Name <u>Deschutes River Tract</u>	
City	State	Zip Code		
	<u>382-5629</u>		Lot <u>216</u>	Block _____
Business Phone	Home Phone			

ATTACHMENTS

Provide The Following Items:

- X 1. Complete and accurate directions to the property. A locator map would be helpful.
- X 2. Two (2) copies of the parcel's legal description (metes and bounds, warranty deed, sales contract, or approved subdivision plat). Include the protective covenants, deed restrictions and easements, if applicable.
- 3. Two (2) copies of an assessor or title company plat map or a surveyor plat map.
- X 4. Two (2) copies of a land use compatibility statement from the appropriate land use authority that your proposed land use is compatible with the LCDC acknowledged comprehensive plan or statewide planning goals.
- X 5. Copies of all correspondence and field notes relating to past evaluations for septic tank-drainfield development on the subject property. A copy of the site evaluation report must be included.
- 6. Two (2) copies of narrative description of your variance proposal including the system construction specifications. Please list the step-by-step procedures that you propose to be followed for the installation of this system.
- 7. On a plot plan draw to a defined scale not smaller than one inch equals thirty feet, show the location and dimensions of the proposed drainfield and its replacement area. Indicate separation distances between disposal trenches, wells, springs, water courses, agricultural drainage tile, ditches, drainage ways, waterlines, buildings, roads, embankments, and other identifying features which help demonstrate parcel to drainfield relationships. Please provide two (2) copies.
- 8. Two (2) copies of a profile view of the proposal which illustrates the projected drainfield layout, trench dimensions, backfill depth, boundaries, (in cases where a crown over the drainfield is proposed), slope direction and percent of slope.

Hardship variances may be considered in cases of extreme and unusual hardship. The following factors may be considered: Advanced age or bad health of applicant; need of applicant to care for aged, incapacitated or disabled relative; and relative insignificance of the environmental impact of granting a variance. Documentation of hardship must be provided. FOR HARDSHIP CONSIDERATION MARK THIS BOX.

A minimum of two test pits must be provided within the specific area where the actual variance system is being proposed. The pits should be approximately two feet wide, four feet long, and excavated to either bedrock or to a depth of five (5) feet. Similar pits must be provided in the area of the repair system. The Variance Officer may require the proposed drainfield and the future replacement drainfield be staked out.

Please note that it is your responsibility to present all of the facts and the reasoning which you feel justifies the granting of the variance.

By my (our) signature(s), I (we) request the Department of Environmental Quality act on this application and hereby grant permission to enter onto the above described property.

<u>Lester W. Freed</u>	<u>12-19-87</u>	<u>Norma J. Freed</u>	<u>12/19/87</u>
Signature of Owner	Date	Signature of Owner	Date

NOTE: All owners must sign this application form. If there are more than two (2) owners, attach additional duplicate applications.

* Pursuant to ORS 454,662, the applicant is not required to submit the application fee if, at the time of filing the application, the applicant is 65 years of age or older, is a resident of the State of Oregon, and has an annual household income, as defined in ORS 310.630, of \$15,000 or less. Appropriate documentation must be submitted with the application.

December 20, 1987

Sir;

We hope the enclosed maps are adequate for your needs. They are drawn to show a well clearance of 90', for which we are asking in our variance request.

This request is being made do to the need to re-locate two elderly ladies nearer to us, for closer supervision and care.

They are at this time residing in a retirement home in Bend. They have recently been notified of a rent increase of ^{130.00} per month. This increase puts the cost well beyond their means.

One of these ladies is our mother, who is 77yrs. old. The other is a family friend who is over 80 yrs. old. We also have our other mother to care for who is 84 years old , but still able to care for herself at this time in her home.

We take these ladies to town and to the doctor appointments and grocery shopping each week. We must now move the two ladies, and feel we could better care for them if they were living next door to us. We must help them with their house work and laundry once a week, and check on them once a day, yet they remain independant which is most important to them.

We sincerely hope you will consider this request as soon as possible, as we must do something soon for these ladies.

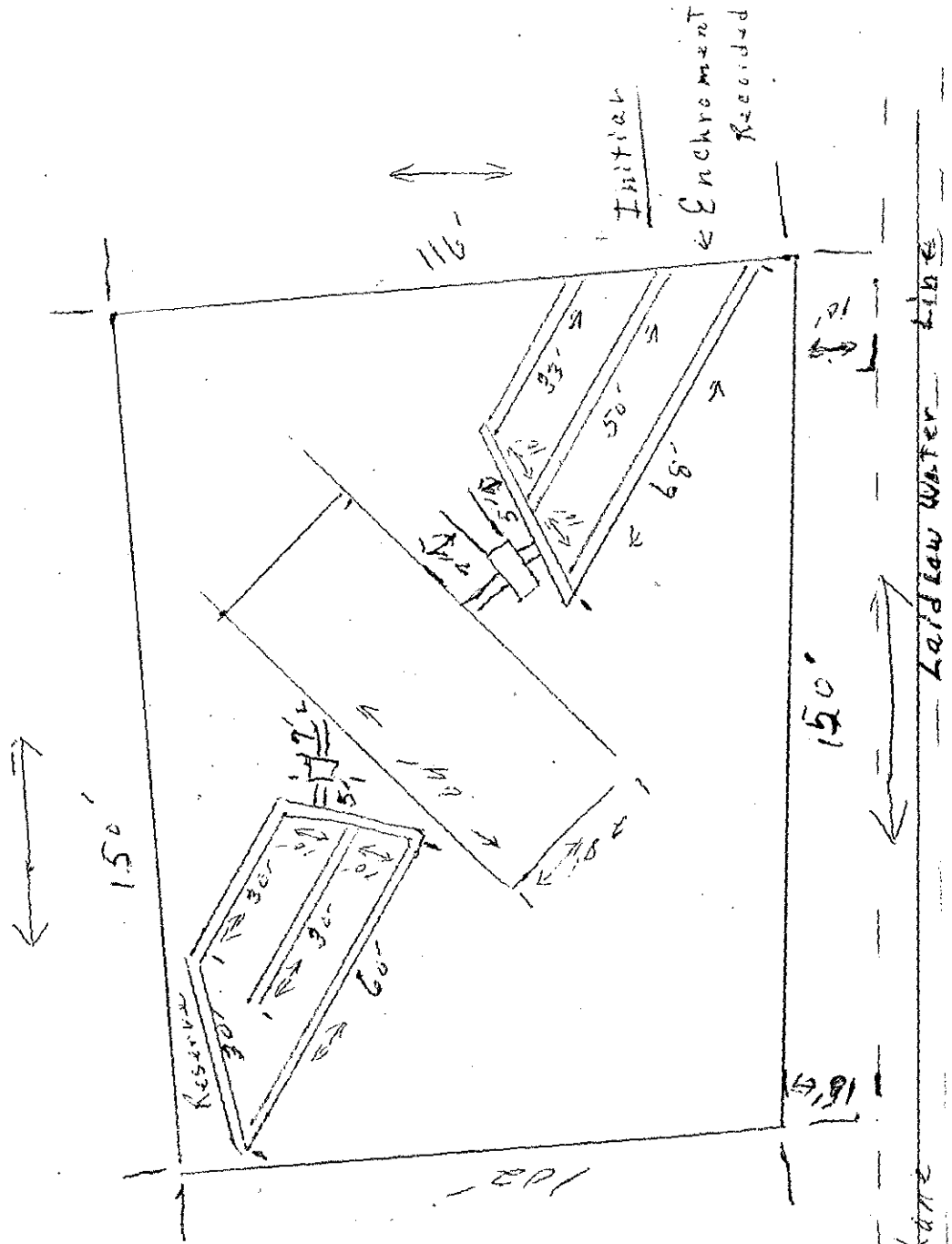
thank You,

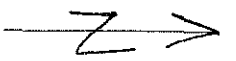
Sincerely,

Mrs Lister W. Fread

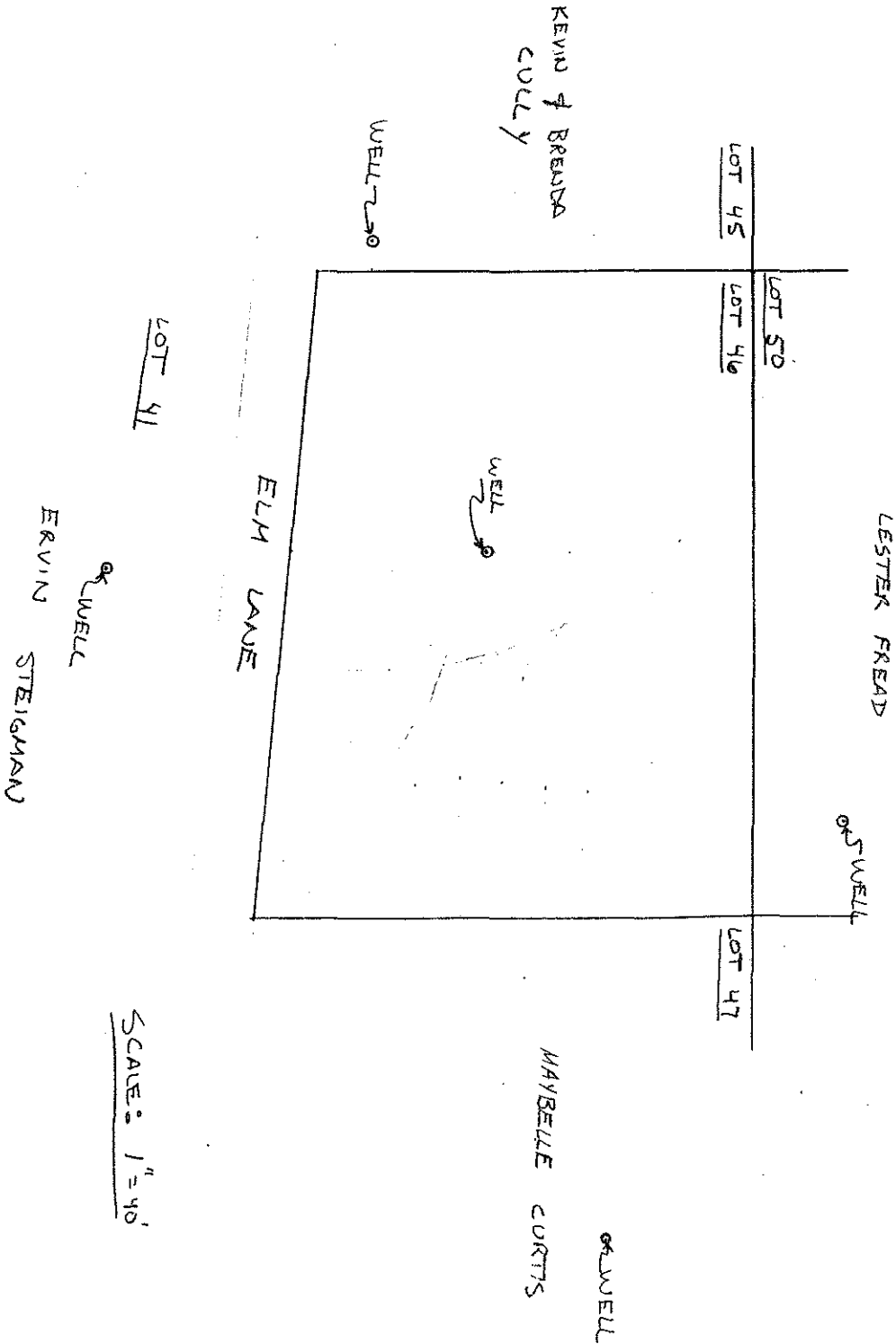
Scale - 1" = 30'

N.





T. 16 S.
R. 12 E.
SEC. 31



The original and first copy of this report are to be filed with the

WATER WELL REPORT

RECEIVED ATTACHMENT E

WATER RESOURCES DEPARTMENT.
SALEM, OREGON 97310
within 30 days from the date
of well completion.

STATE OF OREGON

(Please type or print)

AUG 01 1978

State Well No. 16.5/2E-31D

State Permit No.

(Do not write above this line) WATER RESOURCES DEPT.

(1) OWNER:

Name Ervin Steigman
Address 19939 Elm Lane
Tumalo, Oregon

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Driven
Cable Jetted
Dug Bored

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) CASING INSTALLED:

Threaded Welded
.....6....." Diam. from0..... ft. to28..... ft. Gage250.....
5.9/16" Diam. from24..... ft. to45..... ft. Gage188.....
....." Diam. from ft. to ft. Gage

(6) PERFORATIONS:

Perforated? Yes No.

Type of perforator used Torch
Size of perforations 8 in. by 1/8 in.
.....20..... perforations from31..... ft. to45..... ft.
..... perforations from ft. to ft.
..... perforations from ft. to ft.

(7) SCREENS:

Well screen installed? Yes No

Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? Yes No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " " "
" " " " "
Baller test 30 gal./min. with 1 ft. drawdown after 1 hrs.
Artesian flow g.p.m.
Temperature of water 54 Depth artesian flow encountered ft.

(9) CONSTRUCTION:

Well seal—Material used cement
Well sealed from land surface to 27 ft.
Diameter of well bore to bottom of seal 10 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 6 sacks
How was cement grout placed?

Was a drive shoe used? Yes No Plugs Size: location ft.
Did any strata contain unusable water? Yes No
Type of water? depth of strata
Method of sealing strata off
Was well gravel packed? Yes No Size of gravel:
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:

County Deschutes Driller's well number
1/4 Section 31D T16 R. 12 W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.

Depth at which water was first found 32 ft.
Static level 25 ft. below land surface. Date 7-25-78
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:

Diameter of well below casing 6"

Depth drilled 45 ft. Depth of completed well 45 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
Siol brown	0	1	
cobble-boulders grey	1	12	1
Cinders black	12	19	1
Pumice pink	19	32	
Pumice pink W.B.	32	45	25

Steigman Well

Work started 8-22 19 78 Completed 7-25 19 78
Date well drilling machine moved off of well 7-25 19 78

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.

[Signed] Robert Stites Date 7-31, 19 78
(Drilling Machine Operator)

Drilling Machine Operator's License No. 776

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Name A.C. Stites
(Person, firm or corporation) (Type or print)

Address 28290 S. Dryland Rd. Canby, Oregon

[Signed] A.C. Stites
(Water Well Contractor)

Contractor's License No. 533 Date July 31, 19 78

are to be filed with the
 WATER RESOURCES DEPARTMENT,
 SALEM, OREGON 97310
 within 30 days from the date
 of well completion.

WATER WELL REPORT

STATE OF OREGON AUG 10 1981

State Well No. 1625/20-3107

(Please type or print)

WATER RESOURCES DEPT

Permit No. _____

(Do not write above this line)

SALEM, OREGON

(1) OWNER:

Name Jim ST. JOHN
 Address 19920 Elm Ln, BEND, ORE.

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
 If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Driven
 Cable Jetted
 Dug Bored

(4) PROPOSED USE (check):

Domestic Industrial Municipal
 Irrigation Test Well Other

(5) CASING INSTALLED:

Threaded Welded
6" Diam. from +1 ft. to 60 ft. Gage 250
 " Diam. from _____ ft. to _____ ft. Gage _____
 " Diam. from _____ ft. to _____ ft. Gage _____

(6) PERFORATIONS:

Perforated? Yes No.

Type of perforator used TORCH
 Size of perforations 1/16 in. by 8 in.
50 perforations from 40 ft. to 60 ft.
 perforations from _____ ft. to _____ ft.
 perforations from _____ ft. to _____ ft.

(7) SCREENS:

Well screen installed? Yes No

Manufacturer's Name _____
 Type _____ Model No. _____
 Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.
 Diam. _____ Slot size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? Yes No If yes, by whom?
 Yield: 25 gal./min. with 5 ft. drawdown after 1 hrs.
 " " " " "
 " " " " "
 Baller test 30 gal./min. with 10 ft. drawdown after 1 hrs.
 Artesian flow NONE g.p.m. -
 Temperature of water 56 Depth artesian flow encountered _____ ft.

(9) CONSTRUCTION:

Well seal—Material used CEMENT GROUT
 Well sealed from land surface to _____ ft.
 Diameter of well bore to bottom of seal 10 in.
 Diameter of well bore below seal 8 in.
 Number of sacks of cement used in well seal 6 sacks
 How was cement grout placed? POURED THRU TRENCH PIPE, PLACED FROM BOTTOM UP.
 Was a drive shoe used? Yes No Plugs _____ Size: location _____ ft.
 Did any strata contain unusable water? Yes No
 Type of water? _____ depth of strata _____
 Method of sealing strata off _____
 Was well gravel packed? Yes No Size of gravel: 1/4 min.
 Gravel placed from 20 ft. to 60 ft.

(10) LOCATION OF WELL:

County Oregon Driller's well number 98
N.W. 1/4 N.E. 1/4 Section 31 T. 16S R. 12E W.M.
 Bearing and distance from section or subdivision corner _____

(11) WATER LEVEL: Completed well.

Depth at which water was first found 28 ft.
 Static level 25 ft. below land surface. Date 8-5-81
 Artesian pressure NONE lbs. per square inch. Date _____

(12) WELL LOG:

Diameter of well below casing _____
 Depth drilled 60 ft. Depth of completed well 60 ft.
 Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
TOP SOIL	0	1	
GRAVEL & CLAY	1	8	
YELLOW CLAY	8	28	
W/B. GRAVEL	28	35	
MED. COARSE SAND	35	55	
BR. SANDSTONE	55	60	

Cully Well

Work started 8-7-81 1981 Completed 8-5 1981
 Date well drilling machine moved off of well 8-5 1981

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
 [Signed] Curt Clauson Date 8-6, 1981
 (Drilling Machine Operator)
 Drilling Machine Operator's License No. 1237

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
 Name CLAUSON WELL DRILLING
 (Person, firm or corporation) (Type or print)
 Address RT. BOX 780 PANCOVILLE, OR
 [Signed] Curt Clauson
 (Water Well Contractor)
 Contractor's License No. 741 Date 8-6, 1981

STATE OF OREGON
WATER WELL REPORT
(as required by ORS 537.765)

(1) OWNER: Well Number: _____
Name Lester Fread
Address 19929 Fir Lane Tualuma, Or
City _____ State _____ Zip _____

(2) TYPE OF WORK:
 New Well Deepen Recondition Abandon

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable
 Other _____

(4) PROPOSED USE:
 Domestic Community Industrial Irrigation
 Thermal Injection Other _____

(5) BORE HOLE CONSTRUCTION:
Special Construction approval Yes No Depth of Completed Well _____ ft.
Explosives used Yes No Type _____ Amount _____

HOLE			SEAL			Amount sacks or pounds
Diameter	From	To	Material	From	To	

How was seal placed: Method A B C D E
 Other _____
Backfill placed from _____ ft. to _____ ft. Material _____
Gravel placed from _____ ft. to _____ ft. Size of gravel _____

(6) CASING/LINER:

Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Liner: _____

(7) PERFORMANCE
 Perform Screen
From _____ To _____
Fread Well on the subject property.

(8) WELL
 Pump
Yield gal/min _____
1 hr. _____

Temperature of water _____ Depth Artesian Flow Found _____
Was a water analysis done? Yes By whom _____
Did any strata contain water not suitable for intended use? Too little
 Salty Muddy Odor Colored Other _____
Depth of strata: _____

(9) LOCATION OF WELL by legal description:
County Des Latitude _____ Longitude _____
Township 16 N or S Range 12 E or W, W.M.
Section 31 NW 1/4 NW 1/4
Tax Lot _____ Lot _____ Block _____ Subdivision _____
Street Address of Well (or nearest address) _____

(10) STATIC WATER LEVEL:
_____ ft. below land surface. Date _____
Artesian pressure _____ lb. per square inch. Date _____

(11) WATER BEARING ZONES:
Depth at which water was first found _____

From	To	Estimated Flow Rate	SWL

(12) WELL LOG: Ground elevation _____

Material	From	To	SWL
<i>This well was abandoned by filling with 1/2 yard of concrete to land surface 12/16/87</i>			
<i>See attached log of original well.</i>			
<i>Method of abandonment satisfactory in eyes of watermaster? NOT according to Mr. Main!</i>			

Date started _____
(unbonded) Water Well Contractor
I certify that the work I _____, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.
Signed _____ WWC Number _____ Date _____

(bonded) Water Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief. *Land owner*
Signed Lester Fread WWC Number _____ Date 12-33-87

Attachment #

April 21, 1988

RECEIVED
APR 27 1988

Water Quality Division
Dept. of Environmental Quality

Mr. Sherman Olson
Dept. of Environment Quality
Water Quality Division
311 S.W. 6th Ave.
Portland, Or 97204

Dear Sir,

Regarding our telephone conversation on April 20, 1988 concerning lot #46 and lot #50 of the Dechutes River Tract. Laidlaw Water District will be able to provide domestic drinking water for both lots.

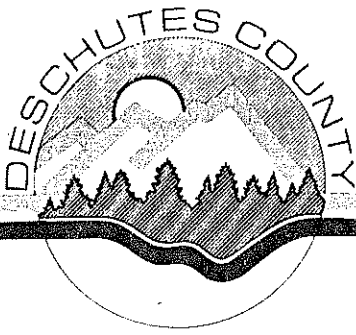
Also thank you for connecting me with Air Quality control.

Sincerely,

Linda L. Brooks

Linda L. Brooks

Acting Chairman



Board of Commissioners

Administration Bldg. / Bend, Oregon 97701 / (503) 388-6570

April 5, 1988

Sherm Olson
 Department of Environmental Quality
 811 S.W. Sixth Avenue
 Portland, Oregon 97204

RECEIVED
 APR - 8 1988
 Lois Bristow Prante
 Dick Maudlin
 Tom Throop

Water Quality
 Dept. of Environmental Quality

Dear Sherm:

Enclosed is a copy of a letter you recently received from Jay E. Langley, the Director of Deschutes County's Environmental Health Division, on the Lester Freed variance.

We concur strongly in Jay Langley's comments and suggestions to you on the Freed variance. Deschutes County understands the reason for the discrepancy between your views on lateral distance to a well and Bob Paeth's views on vertical distance to a water table. In the Freed's case, the setback variance is warranted, as there is latitude between the respective positions between you and Bob Paeth and DEQ approval for the variance to avoid hooking up to a limited water supply is justified.

This issue has been dragging on for months, and we would appreciate a satisfactory resolution to the issue. We urge you to approve this variance, as the resources would clearly achieve the necessary levels of protection with the variance. Your help and consideration is appreciated.

Sincerely,

DESCHUTES COUNTY BOARD OF COMMISSIONERS

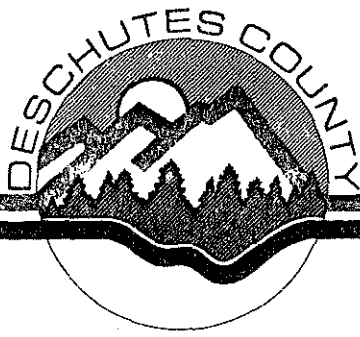
Lois Bristow Prante
 Lois Bristow Prante, Commissioner

Tom Throop
 Tom Throop, Commissioner

Dick Maudlin
 Dick Maudlin, Chairman

BOCC/slc
 Enclosure

cc: John Hector
 Fred Hansen
 Jay Langley



Community Development Department

Administration Bldg. / Bend, Oregon 97701
(503) 388-6575

Planning Division
Building Safety Division
Environmental Health Division

March 15, 1988

Sherm Olson
Department of Environmental Quality
811 SW 6th Avenue
Portland, Oregon 97204

Dear Sherm:

In regard to the Lester Freed variance, I have the following comments:

Mr. Freed has requested a setback variance from existing wells to avoid the expense of hook-up fees, monthly fees, and limited water supply of the Laidlaw water district.

The variance decision should be based on the possible impacts on the water table in Tumalo. In speaking to Bob Paeth, Head Soil Scientist for DEQ, in regard to sewage disposal treatment in the soils of Tumalo, his opinion is that treatment quality is based on vertical distance to the water table, not lateral distance to a well.

We know that the vertical distance to the water table is greater than 20 feet. We also know that DEQ rules require at least a 4 foot separation from the trench bottom to the water table to maintain water quality.


If a drainfield system was placed 3 foot deep in the ground, a vertical separation distance of at least 17 feet would be maintained. This separation distance would be at least 13 feet more than the DEQ rules require. The excess vertical distance separation should allow for a reduction in the lateral distance separation.

Page 2
Sherm Olson
Department of Environment Quality

In conclusion, a variance is requested when strict adherence to the rules would be unreasonable considering there would be no adverse impacts on the regional water table. I hope this will be taken into consideration on your decision.

Sincerely,

ENVIRONMENTAL HEALTH DIVISION


Jay E. Langley, Director

JEL/jlb

cc: Dan Bramhall - DEQ
Deschutes County Commissioners
Lester Freed



Department of Environmental Quality

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

CERTIFIED MAIL

April 27, 1988

Mr. and Mrs. Lester Fread
19929 Fir Lane
Bend, Oregon 97701

Re: WQ-SDS; Variance Denial,
Lot 46, Deschutes River Tract;
T.L. 5200; Sec. 31; T. 16S.;
R. 12E.; Deschutes County

Dear Mr. and Mrs. Fread:

In response to your application for variance from the on-site sewage disposal rules, I visited the above described property and conducted an information gathering hearing on January 5, 1988. The hearing remained open to gather additional information concerning your proposal, and was ultimately closed on April 11, 1988, after a letter from the Deschutes County Board of Commissioners was entered into the file record.

Staff with the Deschutes County Environmental Health Division previously evaluated the property to determine the methods of on-site sewage disposal that might be appropriate. They examined two (2) pits and found a loamy sand soil texture to a depth of four (4) feet. They did not observe indications of the presence of a shallow water table at either pit. However, because private water wells were located on adjacent properties to the north, south, east, west, and on the subject property, the County determined it was not possible to locate a sewage disposal system and future repair/replacement system on the property and maintain the required separation distance of one hundred (100) feet from each and every well. Although the County issued a denial, they indicated the decision could be reconsidered if the well on the subject property and the well on your property to the north (Lot 50, Deschutes River Tract) were properly abandoned. This action would provide the area needed by the system to maintain a minimum separation distance of one hundred (100) feet from the three (3) remaining wells.

As an alternative, you requested variance consideration be given to allow the sewage disposal system and its repair/replacement area to be located less than one hundred (100) feet from your well on Lot 50 and the wells owned by your neighbors: Mr. and Mrs. Kevin Cully, Mr. Ervin Steigman, and Ms. Maybelle Curtis. Your proposal would also place the system immediately adjacent to the common lot line between your property and the property to

Mr. and Mrs. Lester Fread
Page 2

the east owned by Ms. Curtis. This also requires consideration of variance from the administrative rule requiring a ten (10) foot separation distance between the system and the property line.

The variance record contains a letter from Mr. Steigman stating he has no objection to placing the sewage disposal system within ninety (90) feet of his well. The record also shows that Ms. Curtis would allow the proposed sewage system to be placed on your property and closer than ten (10) feet from the common property line.

The well on the subject property was filled with one-half ($\frac{1}{2}$) yard of concrete to the land surface by Mr. Fread on December 16, 1987, thus rendering the well unusable. I discussed this procedure of abandonment with Mr. Robert F. Main, District 11 Watermaster, Oregon Water Resources Department. Mr. Main indicated he was not present when the concrete was placed into the well, and therefore could not state that the well had been abandoned in accordance with the adopted requirements of the Water Resources Department.

I also asked Mr. Main to review the water well reports pertaining to the wells involved in this action and comment on whether their construction would support locating a sewage disposal system less than one hundred (100) feet away. He stated that the reports indicate mixed geological formations in the area. Based on this and his knowledge of the area, if the situation concerned the construction of a new well, additional well construction standards above those normally followed would be needed to approve its location less than 100 feet from a drainfield. The wells surrounding the subject property were not constructed to provide additional protection to the underlying aquifer. He stated he does not support granting a variance from the minimum separation distance to the wells.

The variance record also indicates a community water system serves the area. The Laidlaw Water District was contacted to determine if water service could be provided to Lots 46 and 50 in case you decide to properly abandon the wells there. The District states that water service is available to both properties, subject to a nominal connection fee. According to both the District and the Oregon State Health Division, concerns that the water supply is unreliable (in terms of quantity and quality) are not founded. A new well was recently connected to and made a part of the District's system.

Variance from particular requirements of the rules pertaining to on-site sewage disposal systems may be granted if a finding can be made that strict compliance with the rule is inappropriate for cause, or that special physical conditions render strict compliance unreasonable, burdensome, or impractical. The maintenance of a separation distance between a disposal system and a water well is important because it reduces the possibility that partially treated septic tank effluent may follow a pathway along the well casing and contaminate the underlying groundwater. In some situations,

Mr. and Mrs. Lester Fread
Page 3

reduction of the separation distance may warrant consideration provided the well is constructed with additional protective construction standards to the satisfaction of the watermaster. The wells surrounding the subject property do not appear to have been constructed with special or unique features that support a reduction in the separation distance between them and a disposal system. Mr. Main expressed doubt that special well construction standards in this instance would satisfy his concerns, given the area's geology. In consideration of the relatively shallow depth to the aquifer and the numerous wells closely surrounding the property, the possibility of partially treated effluent contacting the water table and being drawn into a nearby well can not be ruled out. If the wells on Lots 46 and 50 are properly abandoned, it would be possible to construct a sewage disposal system that fully complies with the rules of the Environmental Quality Commission. The Laidlaw Water District is willing and able to provide water service to both lots. It has not been shown that connection to the community water system is unduly burdensome. Therefore, based upon my review and evaluation of the variance record, I am unable to make a favorable finding. Your variance request is regretfully denied.

Pursuant to OAR 340-71-440, my decision to deny your variance request may be appealed to the Environmental Quality Commission. Requests for appeal must be made by letter, stating the grounds for appeal, and addressed to the Environmental Quality Commission, in care of Mr. Fred Hansen, Director, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204, within twenty (20) days of the date of the certified mailing of this letter.

The hardship consideration box was marked on your variance application. In cases of extreme and unusual hardship, the Environmental Quality Commission may consider the following factors in reviewing an application for variance based on hardship:

1. Advanced age or bad health of applicant;
2. Need of applicant to care for aged, incapacitated or disabled relatives;
3. Relative insignificance of the environmental impact of granting a variance.

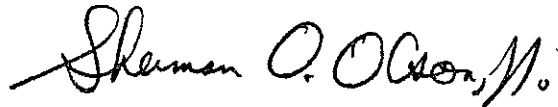
Documentation of hardship must be provided before your application is referred to the Commission for their consideration. The information originally submitted with your application is not sufficient to establish the hardship. Please be aware the Commission may impose conditions affecting the use of the system if a hardship variance is granted, such as limiting the number of residents using the system and requiring abandonment of the system upon cessation of the hardship. As an alternative, you may wish to consider the hardship placement of a mobile home in accordance with OAR 340-71-205(8) (copy enclosed). With this alternative, the mobile home would be connected to the sewage disposal system serving your home, and

Mr. and Mrs. Lester Fread
Page 4

could remain as long as the hardship existed and provided the sewage disposal system continued to function properly.

Please feel free to contact me at 229-6443 if you have questions regarding this decision.

Sincerely,



Sherman O. Olson, Jr.
Senior Environmental Analyst
Sewage Disposal Section
Water Quality Division

S00:kjc
WJ456
Enclosure

cc: Mr. and Mrs. Kevin Cully
Ms. Maybelle Curtis
Mr. Ervin Steigman
Ms. Linda Brooks, Laidlaw Water District
Deschutes County Board of Commissioners
Mr. Jay Langley, Deschutes County
Mr. Robert Main, District 11 Watermaster
DEQ, Central Region Office

Well Cover

690-215-050 All wells shall be securely covered to prevent any foreign substance from entering the well including any material which might contaminate the water-bearing zone.

Access Port or Airline

690-215-060 The access port or airline on all wells required by 690-210-280 shall be maintained in a condition that will prevent contamination of the water body. Access ports and airlines shall be maintained so that the position of the water table can be determined at any time.

Pressure Gauge

690-215-070 The pressure gauge and petcock valve required by rule 690-210-120 shall be maintained so that the artesian pressure can be accurately determined at any time. (See Figure 10.)

Flowmeters

690-215-080 The Director may require the landowner to install totalizing flowmeters on any well, either as a condition of a water right permit or at a later date as circumstances may warrant. The landowner may be required to install flowmeters on existing permitted wells and on wells which are exempted by ORS 537.545.

Conversion to an Artesian Well

690-215-090 If a well becomes artesian upon deepening, the well shall be cased, sealed and completed in accordance with rule 690-210-120.

Drilling in a Dug Well

~~690-215-100 In no case shall a dug well be deepened by drilling methods.~~

DIVISION 220
ABANDONMENT OF WELLS

Temporary Abandonment

690-220-005 Any well to be temporarily removed from service, temporarily abandoned due to a recess in construction, or temporarily abandoned before commencing service, shall be capped with a watertight seal, watertight welded steel cap, or threaded cap. In the event that temporary abandonment is to be of 90 days or less, the temporary steel cap may be welded to the well casing with a minimum of four (4) separate welds, evenly spaced, each at least one-half (1/2) of an inch in length. Steel or cast iron caps shall be at least three-sixteenths (3/16) of an inch in thickness.

Permanent Abandonment

690-220-030 Any well that is to be permanently abandoned shall be completely filled in such a manner that vertical movement of water within the well bore, including vertical movement of water within the annular space surrounding the well casing, is effectively and permanently stopped.

Abandonment of Uncased Wells in Unconsolidated Formations

690-220-040 Uncased wells to be abandoned that extend only into unconsolidated materials shall be completely filled with cement grout or concrete. (See Figure 13, 1986.)

Abandonment of Uncased Wells in Consolidated Formations

690-220-050 Uncased wells to be abandoned that penetrate a water-bearing rock formation shall be filled with concrete or cement grout, or alternating layers of cement grout or concrete and clean gravel throughout the water-producing horizon. A concrete or cement grout plug shall be constructed from the top of the rock formation to a depth of at least twenty (20) feet below the top of the rock formation. The remainder of the well above the rock formation shall be filled to land surface with cement grout or concrete. Plugs of cement grout or concrete, at least three (3) feet in length, shall be placed in non-producing zones between all water-bearing zones. In all cases, a cement grout or concrete plug, at least three (3) feet in length, shall be constructed in a non-producing stratum immediately above the uppermost water-bearing zone. (See Figure 14, 1986.)

Abandonment of Cased Wells

690-220-060 If the well casing or the liner pipe is not removed during the abandonment of a well, the casing or liner shall be thoroughly ripped or perforated. The annular space between the casing or liner and the drillhole wall shall be effectively and completely filled with cement grout applied under pressure. The remainder of the well shall be filled with cement grout or concrete. Uncased horizons in a cased well to be abandoned shall be filled in accordance with rules 690-220-030 through 690-220-050. The casing of wells to be abandoned may be severed below land surface and removed. (See Figure 15, 1986.)

Abandonment of Artesian Wells

690-220-070 The flow of artesian wells to be abandoned shall be confined or restricted by cement grout applied under pressure, or by the use of a suitable well packer, or a wooden plug placed at the bottom of the confining formation immediately above the artesian water-bearing zone. Cement grout or concrete shall be used to effectively fill the well to land surface. (See Figure 16, 1986.)

Abandonment of Drilled and Jetted Wells

690-220-080 A cement grout or concrete plug shall be placed opposite all perforations or openings in the well casing. The remainder of the well shall be filled with cement grout, or concrete.

Abandonment of Filter or Gravel Pack Wells

690-220-090 Filter or gravel pack wells may be abandoned only with prior written approval of the Director of the method proposed for abandonment of the particular well. Any method of abandonment proposed must ensure that all perforated sections of the casing will be pressure grouted throughout, and that the remainder of the well is filled with cement grout, or concrete.

Obstructions and Possible Contaminants

690-220-100 All obstructions or debris which may interfere with effective sealing operations shall be removed from the well to be abandoned. Any foreign matter capable of causing ground water contamination shall be removed prior to placing any sealing material.

Removal of Well Casing During Abandonment

690-220-110 If the casing of a well is removed during abandonment, the well shall be plugged and sealed in accordance with rules 690-220-030 through 690-220-050 and shall be filled with sealing materials as the casing is

removed.

Cement Grout

690-220-120 Cement grout for use in abandonment operations shall conform to the requirements of rule 690-210-310.

Concrete

690-220-130 Concrete for use in abandonment operations shall conform to the requirements of rule 690-210-430.

Method of Placement of Concrete or Cement Grout

690-220-140 Concrete or cement grout used as a sealing material in abandonment operations shall be introduced at the bottom of the well or required sealing interval and placed progressively upward to the top of the well. All such sealing materials shall be placed by the use of a grout pipe, tremie, or by dump bailer in order to avoid segregation or dilution of the sealing materials.

DIVISION 225 ENFORCEMENT (See Figure 18, 1986)

Investigation of Alleged Violations

690-225-020 The Water Resources Director, upon the Director's own initiative, or upon complaint alleging violation of statutes, standards or rules governing construction, alteration, or abandonment of wells may cause an investigation to determine whether a violation has occurred. If the investigation indicates that a violation has occurred, the Director shall notify the persons believed responsible for the violation including but not limited to:

- (1) Any well constructor involved; or
- (2) The landowner, if the violation involves construction, alteration, operation, or abandonment of a well.

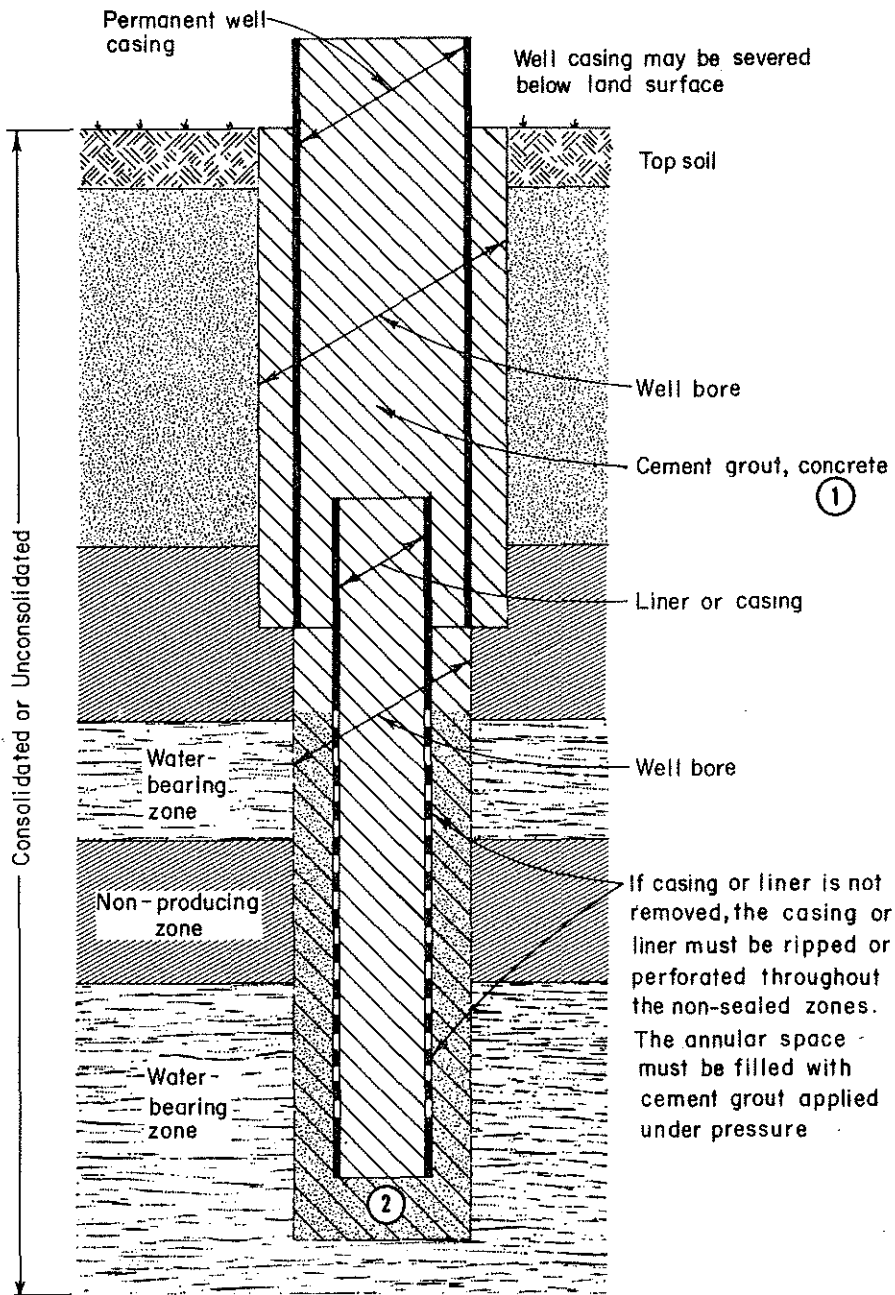
Enforcement Actions

690-225-030(1) If, after notice and opportunity for hearing under ORS 183.310 to 183.550 the Director determines that one or more violations have occurred, the Director may impose one or more of the following:

- (a) Provide a specified time for remedy;
- (b) Assess a civil penalty in accordance with the schedule of civil penalties in OAR 690-225-110;
- (c) Suspend, revoke, or refuse to renew the licenses when one or more persons responsible for the violation hold a well constructor's license;
- (d) Require that a person whose license has been refused renewal pass the constructor test before a new license is issued;
- (e) Impose any reasonable conditions on the well constructor's license to insure correction of the violation and future compliance with the law. These conditions may include but are not limited to (1) fulfilling any outstanding obligations which are the result of administrative action before the constructor can offer any services or construct, alter or abandon any well; (2) requiring additional advance notice be given to the watermaster of construction, alteration or abandonment of any well; (3) requiring a seal placement notice be given to the watermaster 24 hours in advance of placing the seal; or (4) any other conditions the Director feels are appropriate.

ABANDONMENT OF CASED WELL

(690-220-060)



① In all wells to be abandoned, cement grout and concrete must be placed by grout pipe, tremie or dump bailer.

② In all wells to be abandoned, sealing material must be introduced at the bottom of the well and placed progressively upward.

FIGURE 15

OWRD '86

340-71-205 AUTHORIZATION TO USE EXISTING SYSTEMS.

- (1) For the purpose of these rules, "Authorization Notice" means a written document issued by the Agent which establishes that an existing on-site sewage disposal system appears adequate to serve the purpose for which a particular application is made. Applications for Authorization Notices shall conform to requirements of OAR 340-71-160(2) and (4).
- (2) Authorization Notice Required. No Person shall place into service, change the use of, or increase the projected daily sewage flow into an existing on-site sewage disposal system without obtaining an Authorization Notice, Construction-Installation Permit or Alteration Permit as appropriate.

EXCEPTIONS:

- a- An Authorization Notice is not required when there is a change in use (replacement of mobile homes or recreational vehicles with similar units) in mobile home parks or recreational vehicle facilities.
 - b- An Authorization Notice is not required for placing into service a previously unused system for which a Certificate of Satisfactory Completion has been issued within one (1) year of the date such system is placed into service, providing the projected daily sewage flow does not exceed the design flow.
- (3) For placing into service or for changes in the use of an existing on-site sewage disposal system where no increase in sewage flow is projected, or where the design flow is not exceeded; an Authorization Notice valid for a period not to exceed one (1) year shall be issued if:
 - (a) The existing system is not failing; and
 - (b) All set-backs between the existing system and the structure can be maintained; and
 - (c) In the opinion of the Agent the proposed use would not create a public health hazard on the ground surface or in surface public waters.
 - (4) If the conditions of section (3) of this rule cannot be met, an Authorization Notice shall be withheld until such time as the necessary alterations and/or repairs to the system are made.
 - (5) For changes in the use of a system where projected daily sewage flow would be increased by not more than three hundred (300)

gallons beyond the design capacity or by not more than fifty (50) percent of the design capacity for the system, whichever is less; an Authorization Notice valid for a period not to exceed one (1) year shall be issued if:

- (a) The existing system is shown not to be failing; and
 - (b) All set-backs between the existing system and the structure can be maintained; and
 - (c) Sufficient area exists so that a complete replacement area meeting all requirements of these rules (except those portions relating to soil conditions and groundwater) is available; and
 - (d) In the opinion of the Agent the proposed increase would not create a public health hazard or water pollution.
- (6) Only one (1) Authorization Notice for an increase up to three hundred (300) gallons beyond the design capacity, or increased by not more than fifty (50) percent of the design capacity, whichever is less, will be allowed per system.
- (7) For changes in the use of a system where projected daily sewage flows would be increased by more than three hundred (300) gallons beyond the design capacity, or increased by more than fifty (50) percent of the design capacity of the system, whichever is less, a Construction-Installation Permit shall be obtained. Refer to rule 340-71-210.

➔ (8) Personal Hardship:

- (a) The Agent may allow a mobile home to use an existing system serving another dwelling, in order to provide housing for a family member suffering hardship, by issuing an Authorization Notice, if:
 - (A) The Agent receives satisfactory evidence which indicates that the family member is suffering physical or mental impairment, infirmity, or is otherwise disabled (a hardship approval issued under local planning ordinances shall be accepted as satisfactory evidence); and
 - (B) The system is not failing; and
 - (C) The application is for a mobile home; and
 - (D) Evidence is provided that a hardship mobile home placement is allowed on the subject property by the

governmental agency that regulates zoning, land use planning, and/or building.

- (b) The Authorization Notice shall remain in effect for a specified period, not to exceed cessation of the hardship. The Authorization Notice is renewable on an annual or biennial basis. The Agent shall impose conditions in the Authorization Notice which are necessary to assure protection of public health.
- (9) Temporary Placement:
- (a) The Agent may allow a mobile home to use an existing system serving another dwelling in order to provide temporary housing for a family member in need, and may issue an Authorization Notice provided:
 - (A) The Agent receives evidence that the family member is in need of temporary housing; and
 - (B) The system is not failing; and
 - (C) A full system replacement area is available; and
 - (D) Evidence is provided that a temporary mobile home placement is allowed on the subject property by the governmental agency that regulates zoning, land use planning, and/or building.
 - (b) The Authorization Notice shall authorize use for no more than two (2) years and is not renewable. The Agent shall impose conditions in the Authorization Notice necessary to assure protection of public health. If the system fails during the temporary placement and additional replacement area is no longer available, the mobile home shall be removed from the property.
- (10) An Authorization Notice denied by the Agent shall be reviewed at the request of the applicant. The application for review shall be submitted to the Department in writing within thirty (30) days of the authorization notice denial, and be accompanied by the denial review fee. The denial review shall be conducted and a report prepared by the Department.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
D E @ E H V E D
MAY 13 1988

OFFICE OF THE DIRECTOR

May 9, 1988

Mr. Fred Hansen, Director
Environmental Quality Commission
811 S.W. Sixth Avenue
Portland, Oregon 97204

RE: WQ-SDS; Variance Denial; L. Fread.
Lot 46, Deschutes River Tract

I hereby respectfully appeal the denial of my request, as per your letter dated April 27, 1988. I feel that not enough true geological facts were considered. Also, I feel that certain statements given, and on which the denial was based, were generalities, and can be shown to be erroneous. Please consider the following three paragraphs. Copies of reports, letters, and statements are available for immediate review.

(1) Reference was made to the 90 foot well setback variance. Originally this lot was legally plotted and well within the 50 foot requirement of that time. Development surrounding this lot now seems to be a negative consideration. Accordingly, each lot should stand on it's on merit. Thus, the requirement that I abandon and seal the well on my adjoining lot should not be a consideration, no more than asking the same of the other three adjoining property owners.

(2) A statement by Bob Paeth, Head Soil Scientist for the DEQ, that the concern was not the 90 foot horizontal distance to a well, but the VERTICAL distance to water tables. This was voiced in Jay Langley's letter dated March 15, 1988. It was noted that the minimum distance from the trench bottom to the water table should be four feet, thus no less than seven feet down. I have on hand copies of all the surrounding well permits which show the well logs with the soil formations. The water table is shown as at least 20 feet down, and as such there is 16 additional feet to the water table. This, thus, is four times the minimum requirement.

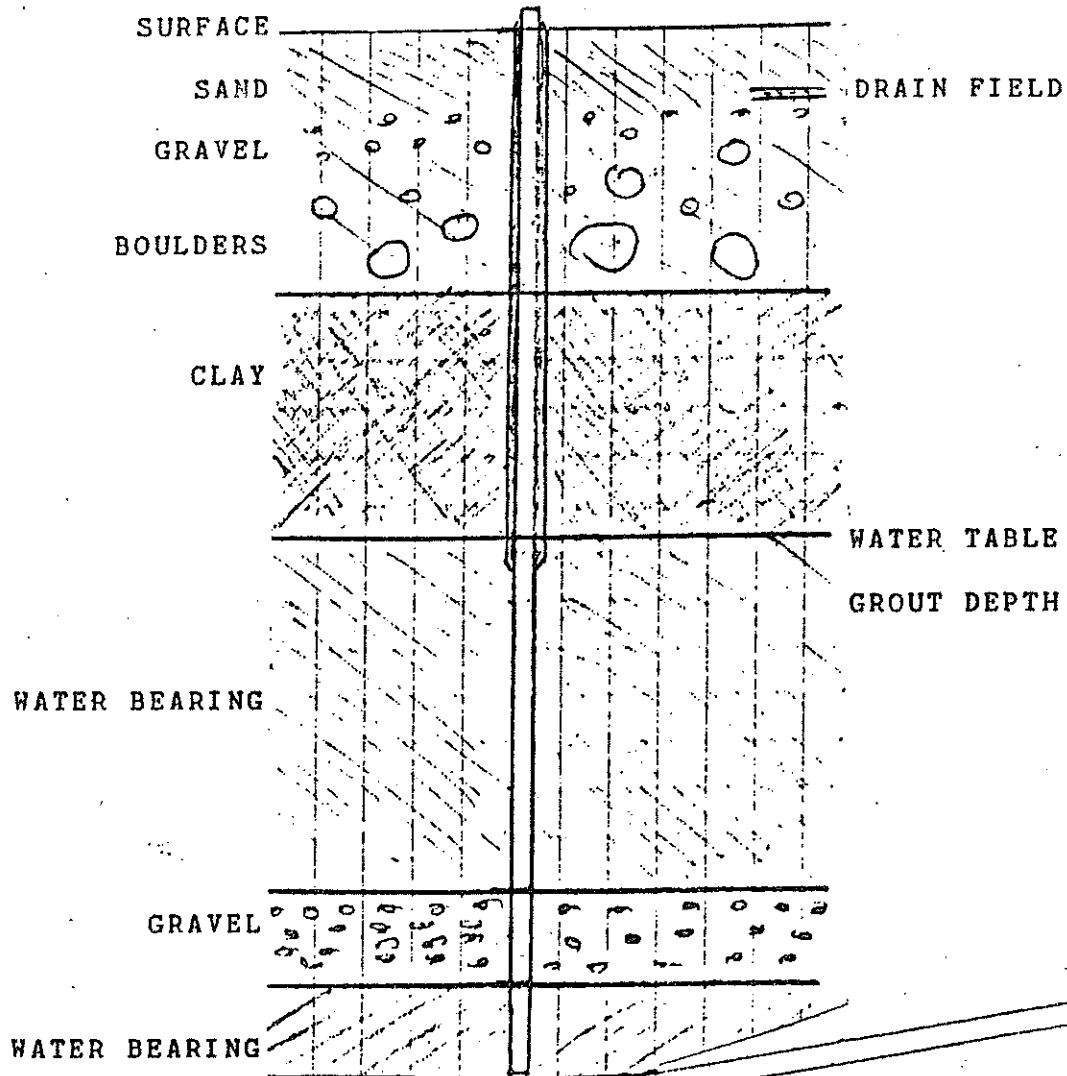
(3) Reference to Bob Main, Deschutes County Watermaster, as to the general formation in the area. It is acknowledged that Deschutes County has varied formations and ground composition as he stated. This residential division containing my lot, though, has one of the best layered stratas for both septic fields and wells. Mr. Main personally stated that he was not familiar with septic systems, but only that of water, in his specific field. I have statements from Mr. Archie Fox and from Mr. Curt Clauson, both licenced well drillers, that this immediate area is ideal because of the natural clay layer between the surface soils and the water bearing soils and aquifers. Mr. Abe Jones, of Jones Septic Tank Service also states that this local soil has excellent drainage, with very few problems of the drain fields of the tanks that he has pumped out nearby. Contrary to Mr. Main's statement, my copies of the neighbor's well reports, filed with the State engineer in Salem, DO show that the surrounding wells are sealed properly, being grouted down to 25 feet.

In conclusion, I feel that a variance should be granted. Then this buildable lot could be connected to the community water system. I have sealed and abandoned the well that was on the property. I have obtained all the required permits and paid all the necessary fees to place a septic system. The setback variance to 90 feet would only reflect on my other, residential lot. Attached is a pictorial diagram based on the immediate, logged land formations. Surely this formation exceeds requirements, with a septic system providing no adverse effect present or future. Neighbors are in favor, and other county staff members along with all the County Commissioners favor the variance.

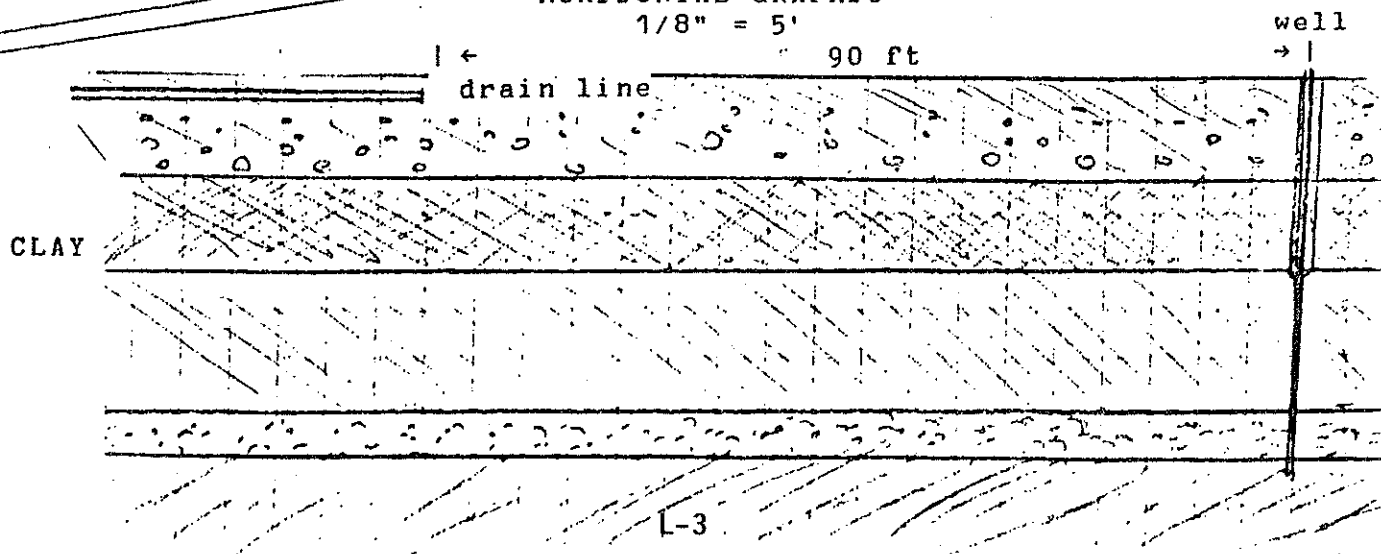
Sincerely,

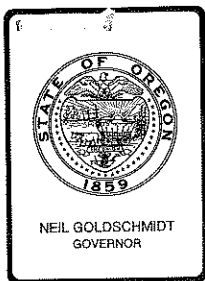
Lester Fread
19929 Fir Lane
Bend, Or 97701

DEPTH GRAPHIC
1/8" = 1'



HORIZONTAL GRAPHIC
1/8" = 5'





Environmental Quality Commission

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

EXECUTIVE SUMMARY

To: Environmental Quality Commission

From: Director *Jed*

Subject: Agenda Item E, July 8, 1988, EQC Meeting. Executive Summary of Staff Report Reviewing Proposed Amendments to Portland's Assessment Deferral Loan Program

In the early 1970's, the Department of Environmental Quality (DEQ) began studies in Mid-Multnomah County that showed that the groundwater contained abnormally high levels of nitrates. Later, the Legislature passed the Threat to Drinking Water Act (ORS 454.275 - .380), which established a procedure to determine if a threat existed based on three out of four specific criteria. Following nearly two years of hearings and evaluation, the EQC found that three of four of the criteria have been met or exceeded in Mid-Multnomah County: more than 50% of the area contains rapidly draining soils; the groundwater is a potential source of drinking water; and more than 50% of the area's sewage is discharged into the ground via cesspools. As a result, on April 25, 1986, the Environmental Quality Commission (EQC) issued an order requiring sewer service to be provided in this area by the year 2005 by the Cities of Portland and Gresham. A very important issue to the EQC in making this decision was the affordability of the project to local homeowners. The Commission was very concerned about being able to assure homeowners that they would not be forced out of their homes due to the inability to pay for sewer charges.

One of the financial programs developed by the 1987 legislature to assist property owners in Mid-Multnomah County, and other areas required to connect to sewers, was the Assessment Deferral Loan Program (also known as the Safety Net Program). Under this new program, public agencies apply to the Department for a loan and in turn provide loans to individual property owners. In order for a public agency to receive a loan, the EQC must approve the public agency's proposed loan program and the Department must enter into a loan agreement with the public agency.

On June 10, the Environmental Quality Commission approved the programs submitted by Portland, Eugene, and Gresham as part of their application for Assessment Deferral Loan Program Revolving Funds. The Commission also indicated at that time that due to the importance of these programs, it

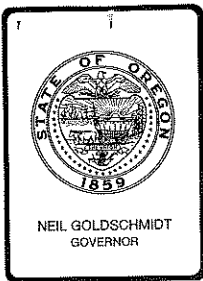
Summary of EQC Agenda Item L
July 8, 1988
Page 2

wanted to review all amendments made by the cities to these programs. After the June 10th Environmental Quality Commission meeting, Portland submitted a copy of the revised Portland Assessment Deferral Program adopted by City Council. The City has requested the Environmental Quality Commission's approval of this amended program.

The proposed amendments are related to eligibility requirements, program administration and loan terms. The major area of change is related to the loan terms. The original program provided deferral of loan payments until failure of the cesspool, sale of the home or December 31, 2005, whichever occurred first. The amended program provides for deferral of the loan for five years or until the house is sold, whichever comes first. If applicants are still eligible after five years, the loan will be continued. If applications are no longer eligible, repayment of the loan must begin.

The Department feels that the proposed changes are consistent with statutory and rule requirement and recommends approval by the Commission.

MJC:kjc
WJ702



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item L, July 8, 1988, EQC Meeting

Review of Amendments to Portland's Assessment Deferral Loan Program

Introduction

On June 10, the Environmental Quality Commission approved Portland's application for Assessment Deferral Loan Program Revolving Funds.

At that time, the City was in the process of revising its program and has since adopted program amendments. Portland's program has been operational for one year with loan funds coming from the Portland Development Commission. During this time the City has discovered areas of the program which need amendment in order to provide additional clarification about the program and to improve program operation.

The City has submitted these program amendments for Environmental Quality Commission approval.

Background

The Assessment Deferral Loan Program (ORS 468.970-.983) was adopted by the 1987 Legislature. This program is intended to provide "assistance to property owners who will experience extreme financial hardship resulting from payment of assessed costs for construction of treatment works required by a federal grant agreement or an order issued by a state commission or agency." (ORS 468.973(1))

Under this new program, public agencies apply to the Department for a loan and, in turn, provide loans to individual property owners. The loans to property owners will be for the assessed costs of the collector sewer, and will be secured by liens against the property being sewered. The loan plus interest is due upon sale of the property. The Department is authorized to loan up to \$300,000 from the Safety Net Loan Fund during the 1987-89 biennium. In December 1987, the Environmental Quality Commission adopted rules to implement the loan program (OAR 340-81-110).

The program amendments submitted by Portland include amendments to its loan program as well as procedures for deferral of sewer connections for certain low-income property owners. The Department, in this report, has only reviewed the portions of the program related to assessment deferral loans. The Department will prepare a Mid-Multnomah County status report in the next few months which will include a review of the connection deferral discussed in Portland's program.

Proposed Program Amendments

The amendments to Portland's program fall into three categories; eligibility requirements, program administration and loan terms. These three categories are all required to be addressed in programs proposed by public agencies under OAR 340-81-110. Before adopting these amendments, the City provided an opportunity for public participation at a City Council hearing and through its Citizen Advisory group which reviewed the proposed amendments at three of its meetings.

1. Eligibility Requirements

A definition section was added to define terms such as gross income, allowable deductions of income, net assets and other terms used in determining financial eligibility of applicants for the program. These definitions do not provide any major changes to the program, but do better explain terms used in the program.

The City has amended one of its two methods for determining eligibility. Previously, in order to determine household income under this method, the applicant had to have a gross household income, less non-reimbursed medical expenses, of 200 percent of the federal poverty level or less; have net household assets of \$20,000 or less; and have total housing expenses, including sewer costs, of 30 percent or more of gross income. The amendment to the program deletes the requirement that housing expenses must exceed 30 percent of gross income. The City believes that this requirement is unnecessary since the other requirements adequately identify low income applicants. The Department believes that this change is not inconsistent with the enabling statutes or administrative rule for this program.

2. Program Administration

The program amendments provide additional details regarding implementation of the program. New sections are included regarding eligibility verification, loan closing documents and filing of documents. These amendments provide further explanation of the loan process but include no major changes regarding dispersal of loans. The Department believes these changes are also consistent with the requirements of both statutes and commission rules.

3. Loan Terms

The term of the deferred payment loan in the original program was until failure of the cesspool, the home is sold, or December 31, 2005, whichever occurred first. Under the new program, for those under age 65, the term is changed to until the home is sold, or five years. This means that those under age 65 would have to reapply. If the applicants still are eligible for an assessment deferral, the loan would be extended. Otherwise, the loan would have to be repayed. The City would allow the deferral loan to be converted to an amortized loan which would allow the City to be paid back on a monthly basis. Our review of this amendment shows that it is not inconsistent with the Commission's regulations for an assessment deferral loan program. The amendment does assure that only those people who continue to keep the loans are those that are under financial hardship.

Alternative

The Commission could require the City to retain the program which has already been approved by the EQC. This action is not recommended because the amended program meets the Commission's rules for the sewer assessment deferral loan program and is the program preferred by the City.

Summary

1. Portland submitted amendments to the EQC approved assessment deferral loan program.
2. The Department finds that the amendments provide a workable program consistent with the requirement of the rules and statutes related to Assessment Deferral Loan programs and recommends approval.

Director's Recommendation

Based on the summation, it is recommended that the Commission approve the proposed amendments to Portland's Sewer Assessment Deferral Loan program.



Fred Hansen

Attachments (3)

- Attachment A--OAR 340-81-110
- Attachment B--ORS 468.970-.983
- Attachment C--June 10, 1988 Staff Report

Maggie F. Conley:kjc
WJ703
229-5257
June 17, 1988

NOTE: THIS IS A NEW RULE.

OREGON ADMINISTRATIVE RULES

Chapter 340, Division 81 - Department of Environmental Quality

Assessment Deferral Loan Program Revolving Fund

340-81-110 Purpose. The Department will establish and administer an Assessment Deferral Loan Program Revolving Fund for the purpose of providing assistance to property owners who will experience extreme financial hardship from payment of sewer assessments. Assessment deferrals will be made available to qualifying property owners from approved assessment deferral loan program administered by public agencies.

- (1) Loans from the Assessment Deferral Loan Program Revolving Fund may be made to provide funds for assessment deferral loan programs administered by public agencies that meet all of the following conditions:
 - (a) The public agency is required by federal grant agreement or by an order issued by the Commission or the Oregon Health Division to construct a sewage collection system, and sewer assessments or charges in lieu of assessments levied against some benefitted properties will subject property owners to extreme financial hardship;

- (b) The public agency has adopted an assessment deferral loan program and the Commission has approved the program; and
 - c) The sewage collection system meets the requirement of section 2 Article XI-H of the Oregon Constitution regarding eligibility of pollution control bond funds.
- (2) Any public agency requesting funding for its assessment deferral loan program from the Assessment deferral Loan Program Revolving Fund shall submit a proposed program and application to the Department on a form provided by the Department. Applications for loans and the proposed program shall be submitted by the following dates:
- (a) By no later than February 1, 1988 for loans to be issued in the 1987-89 biennium;
 - (b) The subsequent bienniums, by no later than February 1 of odd numbered years preceding the biennium.

(3) Any public agency administering funds from the Assessment Deferral Loan Program Revolving Fund shall have an assessment deferral loan program approved by the Department.

(a) The proposed program submitted to the Department shall contain the following:

(A) The number of sewer connections to be made as required by grant agreement or State order;

(B) An analysis of the income level and cost of sewer assessments for affected property owners;

(C) A description of how the public agency intends to allocate loan funds among potentially eligible property owners, including the following:

(i) Eligibility criteria;

(ii) Basis of choosing the eligibility criteria;

(iii) How funds will be distributed for assessment deferrals among eligible property owners.

(D) A schedule for construction of collector sewers;

(E) A description of how the public agency intends to administer the assessment deferral program, including placing liens on property, repayment procedures, and accounting and record keeping procedures;

(F) Assurance that the public was afforded adequate opportunity for comment on the proposed program, and that public comments were considered prior to adoption of the proposed program by the public agency; and

(G) A resolution that the public agency has adopted the program.

(b) The Department shall review proposed programs submitted by public agencies within 30 days of receipt. The Department shall use the following criteria in reviewing submitted programs:

(A) The degree to which the public agency and its proposed program will meet the intent of the Assessment Deferral Loan Program revolving Fund as specified in Section (1)(a) of this rule; and

(B) Whether the required sewers will be constructed and made available to affected property owners within the biennium for which funds are being requested.

(c) The Department shall submit to the Commission recommendations for approval or disapproval of all submitted applications and proposed assessment deferral loan programs.

(4) All public agencies meeting the requirements of OAR 340-81-110(1) shall receive an allocation of up to the amount of funds available based on the following criteria:

(a) The number of sewer connections to be made, as described in the approved program;

(b) The percentage of households within the area described in the program that are at or below 200 percent of the federal poverty level as published by the U.S. Bureau of Census.

(c) The allocation of available funds for qualifying public agencies shall be determined as follows:

(A) Calculate the number of connections to low income households for each public agency:

(total number of) (% of households in project)
(sewer connections) X (area where household income)
(in project area) (is at or below 200 percent of)
(the federal poverty level.)

= number of connections to low income households

- (B) Add the total number of connections to low income households for all qualifying public agencies;
 - (C) Calculate a percentage of the total sewer connections to low income households for each qualifying agency divide (A) above by (B) above);
 - (D) Multiply the percentage calculated in (C) above by the total funds available.
- (5) Within 60 days of Commission approval of the application and allocation of loan funds, the Department shall offer the public agency funds from the Assessment Deferral Loan Program Revolving fund through a loan agreement that includes terms and conditions that:
- (a) Require the public agency to secure the loan with assessment deferral loan program financing liens;
 - (b) Require the public agency to maintain adequate records and follow accepted accounting procedures;
 - (c) Contain a repayment program and schedule for the loan principal and simple annual interest. The interest rate shall be 5% for the 1987-1989 biennium, and shall be set by the Commission , by rule-making procedures for each subsequent biennium prior to allocation of available funds;

- (d) Require an annual status report from the public agency on the assessment deferral loan program; and
- (e) Conform with the terms and conditions listed in OAR 340-81-046.
- (f) Other conditions as deemed appropriate by the Commission.

468.960

PUBLIC HEALTH AND SAFETY

such capital investment, as the case may be, from and after the date that the order of revocation becomes final. [1985 c.684 §8; 1987 c.158 §95]

468.960 Allocation of costs to manufacture reclaimed plastic product. (1) In establishing the portion of costs properly allocable to the investment costs incurred to allow a person to manufacture a reclaimed plastic product qualifying for certification under ORS 468.940, the commission shall consider the following factors:

(a) If applicable, the extent to which the manufacturing process for which the capital investment is made is used to convert reclaimed plastic into a salable or usable commodity.

(b) Any other factors which are relevant in establishing the portion of the actual cost of the capital investment except return on the capital investment properly allocable to the process that allows a person to manufacture a reclaimed plastic product.

(2) The portion of actual costs properly allocable shall be from zero to 100 percent in increments of one percent. If zero percent the commission shall issue an order denying certification.

(3) The commission may adopt rules establishing methods to be used to determine the portion of costs properly allocable to the manufacture of a reclaimed plastic product. [1985 c.684 §9]

468.965 Limit on costs certified by commission for tax credit. (1) The total of all costs of capital investments that receive a preliminary certification from the commission for tax credits in any calendar year shall not exceed \$1,500,000. If the applications exceed the \$1,500,000 limit, the commission, in the commission's discretion, shall determine the dollar amount certified for any capital investments and the priority between applications for certification based upon the criteria contained in ORS 468.925 to 468.965.

(2) Not less than \$500,000 of the \$1,500,000 annual certification limit shall be allocated to capital investments having a certified cost of \$100,000 or less for any qualifying business.

(3) With respect to the balance of the annual certification limit, the maximum cost certified for any capital investments shall not exceed \$500,000. However, if the applications certified in any calendar year do not total \$1,000,000, the commission may increase the certified costs above the \$500,000 maximum for previously certified capital investments. The increases shall be allocated according to the commission's determi-

nation of how the previously certified capital investments meet the criteria of ORS 468.925 to 468.965. The increased allocation to previously certified capital investments under this subsection shall not include any of the \$500,000 reserved under subsection (2) of this section. [1985 c.684 §10]

ASSESSMENT DEFERRAL LOAN PROGRAM

468.970 Definitions for ORS 468.970 to 468.983. As used in ORS 468.970 to 468.983:

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

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

(3) "Extreme financial hardship" has the meaning given within the assessment deferral programs adopted by public agencies and approved by the Department of Environmental Quality.

(4) "Public agency" means any state agency, incorporated city, county, sanitary authority, county service district, sanitary district, metropolitan service district or other special district authorized to construct water pollution control facilities.

(5) "Treatment works" means a sewage collection system. [1987 c.695 §1]

Note: 468.970 to 468.983 were enacted into law by the Legislative Assembly but were not added to or made a part of ORS chapter 468 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

468.973 Policy. It is declared to be the policy of this state:

(1) To provide assistance to property owners who will experience extreme financial hardship resulting from payment of assessed costs for the construction of treatment works required by a federal grant agreement or an order issued by a state commission or agency.

(2) To provide assistance through an interest loan program to defer all or part of property assessments.

(3) To capitalize an assessment deferral loan program with moneys available in the Pollution Control Fund, available federal funds or available local funds. [1987 c.695 §2]

Note: See note under 468.970.

468.975 Assessment Deferral Loan Program Revolving Fund; uses; sources. (1) There is established the Assessment Deferral Loan Program Revolving Fund separate and dis-

distinct from the General Fund in the State Treasury. The moneys in the Assessment Deferral Loan Program Revolving Fund are appropriated continuously to the Department of Environmental Quality to be used for the purposes described in ORS 468.977.

(2) The Assessment Deferral Loan Program Revolving Fund may be capitalized from any one or a combination of the following sources of funds in an amount sufficient to fund assessment deferral loan programs provided for in ORS 468.977:

(a) From the Water Pollution Control Revolving Fund.

(b) From capitalization grants or loans from the Pollution Control Fund.

(3) In addition to those funds used to capitalize the Assessment Deferral Loan Program Revolving Fund, the fund shall consist of:

(a) Any other revenues derived from gifts, grants or bequests pledged to the state for the purpose of providing financial assistance to water pollution control projects;

(b) All repayments of money borrowed from the fund;

(c) All interest payments made by borrowers from the fund;

(d) Any other fee or charge levied in conjunction with administration of the fund; and

(e) Any available local funds.

(4) The State Treasurer may invest and reinvest moneys in the Assessment Deferral Loan Program Revolving Fund in the manner provided by law. All earnings from such investment and reinvestment shall be credited to the Assessment Deferral Loan Program Revolving Fund. [1987 c.695 §§3, 11]

Note: See note under 468.970.

468.977 Conditions for program; administrative expenses; priority; report.

(1) The Department of Environmental Quality shall use the moneys in the Assessment Deferral Loan Program Revolving Fund to provide funds for assessment deferral loan programs administered by public agencies that meet all of the following conditions:

(a) The program demonstrates that assessments or charges in lieu of assessments levied against benefited properties for construction of treatment works required by a federal grant agreement or by an order issued by a state commission or agency will subject property owners to extreme financial hardship.

(b) The governing body has adopted a program and the department has approved the program.

(c) The treatment works meets the requirements of section 2, Article XI-H of the Oregon Constitution concerning eligibility of pollution control bond funds.

(2) The department also may use the moneys in the Assessment Deferral Loan Program Revolving Fund to pay the expenses of the department in administering the Assessment Deferral Loan Program Revolving Fund and to repay capitalization loans.

(3) In administering the Assessment Deferral Loan Program Revolving Fund, the department shall:

(a) Allocate funds to public agencies for assessment deferral loan programs in accordance with a priority list adopted by the Environmental Quality Commission.

(b) Use accounting, audit and fiscal procedures that conform to generally accepted government accounting standards.

(c) Prepare any reports required by the Federal Government as a condition to the award of federal capitalization grants.

(4) The Department of Environmental Quality shall submit an informational report to the Joint Committee on Ways and Means if during the interim between sessions of the Legislative Assembly, to the Emergency Board before awarding the first loan from the Assessment Deferral Loan Program Revolving Fund. The report shall describe the assessment deferral loan program and set forth in detail the operating procedures of the program. [1987 c.695 §§4, 5, 8]

Note: See note under 468.970.

468.980 Application for loan; terms and conditions. Any public agency desiring funding of its assessment deferral loan program from the Assessment Deferral Loan Program Revolving Fund may borrow from the Assessment Deferral Loan Program Revolving Fund in accordance with the procedures contained in ORS 468.220 and 468.970 to 468.983. The public agency shall submit an application to the department on a form provided by the department. After final approval of the application, the department shall offer the public agency funds from the Assessment Deferral Loan Program Revolving Fund through a loan agreement with terms and conditions that:

(1) Require the public agency to repay the loan with interest according to a repayment schedule corresponding to provisions governing repayment of deferred assessments by property owners as defined in the public agency's assessment deferral loan program;

(2) Require the public agency to secure the loan with an assessment deferral loan program financing lien as described in ORS 468.983; and

(3) Limit the funds of the public agency that are obligated to repay the loan to proceeds from repayment of deferred assessments by property owners participating in the assessment deferral loan program adopted by the public agency. [1987 c.695 §6]

Note: See note under 468.970.

468.983 Lien against assessed property; docket; enforcement. (1) Any public agency that pays all or part of a property owner's assessment pursuant to the public agency's adopted assessment deferral loan program shall have a lien against the assessed property for the amount of the public agency's payment and interest thereon as specified in the public agency's assessment deferral loan program.

(2) The public agency's auditor, clerk or other officer shall maintain a docket describing all payments of assessments made by the public agency pursuant to its adopted assessment deferral loan program. The liens created by such payments shall attach to each property for which payment is made at the time the payment is entered in this docket. The liens recorded on this docket shall have the same priority as a lien on the bond lien docket maintained pursuant to ORS 223.230. A lien shall be discharged upon repayment to the public agency of all outstanding principal and interest in accordance with the requirements of the public agency's adopted assessment deferral loan program.

(3) The lien may be enforced by the public agency as provided by ORS 223.505 to 223.650. The lien shall be delinquent if not paid according to the requirements of the public agency's adopted assessment deferral loan program. [1987 c.695 §7]

Note: See note under 468.970.

PENALTIES

468.990 Penalties. (1) Wilful or negligent violation of ORS 468.720 or 468.740 is a misdemeanor and a person convicted thereof shall be punishable by a fine of not more than \$25,000 or by imprisonment in the county jail for not more than one year, or by both. Each day of violation constitutes a separate offense.

(2) Violation of ORS 468.775 is a Class A misdemeanor. Each day of violation constitutes a separate offense.

(3) Violation of ORS 468.760 (1) or (2) is a Class A misdemeanor.

(4) Violation of ORS 454.425 or 468.742 is a Class A misdemeanor.

(5) Violation of ORS 468.770 is a Class A misdemeanor. [1973 c.835 §28; subsection (5) formerly part of 448.990, enacted as 1973 c.835 §177a]

468.992 Penalties for pollution offenses. (1) Wilful or negligent violation of any rule, standard or order of the commission relating to water pollution is a misdemeanor and a person convicted thereof shall be punishable by a fine of not more than \$25,000 or by imprisonment in the county jail for not more than one year, or by both. Each day of violation constitutes a separate offense.

(2) Refusal to produce books, papers or information subpoenaed by the commission or the regional air quality control authority or any report required by law or by the department or a regional authority pursuant to ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter is a Class A misdemeanor.

(3) Violation of the terms of any permit issued pursuant to ORS 468.065 is a Class A misdemeanor. Each day of violation constitutes a separate offense. [1973 c.835 §26]

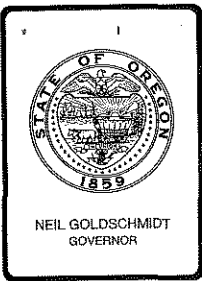
468.995 Penalties for air pollution offenses. (1) Violation of any rule or standard adopted or any order issued by a regional authority relating to air pollution is a Class A misdemeanor.

(2) Unless otherwise provided, each day of violation of any rule, standard or order relating to air pollution constitutes a separate offense.

(3) Violation of ORS 468.475 or of any rule adopted pursuant to ORS 468.460 is a Class A misdemeanor. Each day of violation constitutes a separate offense.

(4) Violation of the provisions of ORS 468.605 is a Class A misdemeanor. [1973 c.835 §27; subsection (6) enacted as 1975 c.366 §3; 1983 c.338 §938]

468.997 Joinder of certain offenses. Where any provision of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter provides that each day of violation of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 or a section of this chapter constitutes a separate offense, violations of that section that occur within the same court jurisdiction may be joined in one indictment, or complaint, or information, in several counts. [Formerly 449.992]



Environmental Quality Commission

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

EXECUTIVE SUMMARY

TO: Environmental Quality Commission

FROM: Fred Hansen, Director

SUBJECT: Agenda Item 0, June 10, 1988, EQC Meeting. Executive Summary of Staff Report Reviewing Applications for Assessment Deferral Loan Program Revolving Funds.

In 1987, the legislature created the Assessment Deferral Loan Program to provide assistance to property owners who will experience extreme financial hardship resulting from sewer assessments for sewer connections required by a federal grant agreement or an order issued by a state commission or agency. Under this new program, public agencies apply to the Department for a loan and in turn provide loans to individual property owners.

The Department has received applications for loan funds from Portland, Gresham, and Eugene. Each of the City's proposed programs have been reviewed by the Department. This staff report recommends approval of all of the programs subject to conditions discussed below.

The City of Portland's program makes loans available to homeowners who meet eligibility criteria including having an income at or below 200 percent of the federal poverty level. A system for reverifying loan eligibility at set intervals after the loan is issued has been established. Also, a recordkeeping system, a system to monitor loan repayments, and a system to enforce liens is in place. The City plans to charge the borrower 5% simple interest which is the same interest rate DEQ charges the City. A nine-member Citizen Advisory Board was established to provide input during the development of the City's Assessment Deferral Program. This group still meets and acts as an advisory group for the Mid-Multnomah County sewer project.

Gresham's program is very similar to Portland's with a few exceptions. First, Gresham provides Assessment Deferral Loans to businesses which can demonstrate that they would suffer extreme financial hardship if required to pay the sewer assessment. Second, Gresham provided citizen involvement during the program development process through a City Council meeting and a public hearing. A Citizen Advisory Committee with five members was only recently established to provide ongoing citizen input to the Mid-Multnomah County sewer project. The Department, however, believes that the level of citizen involvement provided during the plan development stage was adequate to comply with rules and statutory requirements.

Eugene's program would provide loans for the River Road/Santa Clara area and is similar to Portland's program with regard to eligibility criteria, loan enforcement, and interest rates. Eugene developed a Citizen's Advisory Team

Summary of EQC Agenda Item 0
June 10, 1988
Page 2

which was involved before program adoption. Eugene does not have an ongoing citizen group to provide participation. This type of ongoing citizen participation is not, however, required of Eugene under ORS 454.370(2), as it is of Portland and Gresham. This statutory requirement only applies to cities in a county with population of over 400,000.

A total of \$300,000 is available during the 1987 - 1989 biennium to applicants. By following procedures in the rules for allocating funds, Portland would receive \$186,000; Gresham would receive \$30,000; and Eugene would receive \$84,000.

WJ565



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director
Subject: Agenda Item O, June 10, 1988, EQC Meeting.

Review of Applications for Assessment Deferral Loan Program Revolving Funds

Background

In 1987, the legislature adopted ORS 468.970 - .983 creating the Assessment Deferral Loan Program. This program is intended to provide "assistance to property owners who will experience extreme financial hardship resulting from payment of assessed costs for construction of treatment works required by a federal grant agreement or an order issued by a state commission or agency." (ORS 468.973 (1))

Under this new program, public agencies apply to the Department for a loan and in turn provide loans to individual property owners. The loans to property owners will be for the assessed costs of the collector sewers, and will be secured by liens against the property being sewered. The loan plus interest is due upon sale of the property. The Department is authorized to loan up to \$300,000 from the Safety Net Loan Fund during the 1987-89 biennium.

In December 1987, the Environmental Quality Commission adopted rules to implement the loan program (OAR 340-81-110). Under these rules, all public agencies must apply for funding for the 1987-89 biennium by February 1, 1988. Proposed assessment deferral loan programs were received from Portland and Gresham for the Mid-Multnomah County area and from Eugene for the River Road/Santa Clara area. The Mid-Multnomah County area is required, under an EQC order issued pursuant to ORS 454.305, to connect to sewers due to the threat to drinking water. The programs for Portland and Gresham cover the entire Mid-Multnomah County area required to be sewered by the EQC order, including the unincorporated area in Multnomah County. The River Road/Santa Clara area is required, under a federal grant agreement, to connect to sewers due to the threat to groundwater.

The programs submitted by Portland and Gresham also include procedures for deferral of sewer connections for certain low-income property owners. The Department, in this report, has only reviewed the portions of the programs

related to assessment deferral loans. The Department will prepare a Mid-Multnomah County status report in the next few months which will include a review of connection deferrals discussed in Portland's and Gresham's programs.

Under ORS 454.370 - .380, requirements are listed for jurisdictions constructing treatment works in response to an EQC order issued under ORS 454.305 declaring a threat to drinking water. These requirements only apply to Portland and Gresham since ORS 454.305 only applies to cities in a county with a population of over 400,000. In reviewing the programs submitted by Portland and Gresham, the Department has addressed compliance with ORS 454.370 regarding citizen participation requirements because citizen participation is also a requirement of the Assessment Deferral Loan Program rules (OAR 340, Division 81). It should be noted that the citizen involvement requirements under OAR 340-81-110 (3)(a)(F) are different than those under ORS 454.370. OAR 340-81-110 (3)(a)(F) has a general requirement for public involvement during assessment deferral loan program development. ORS 454.370 requires a citizen's advisory committee with detailed membership requirements for on-going participation in the Mid-Multnomah County sewer project, but not specifically for development of an assessment deferral loan program.

No attempt is made in this report to address compliance with ORS 454.375 - .380 regarding limits on sewer charges and spending on non-construction related items. These issues are outside the scope of the Assessment Deferral Loan Program and will be reviewed, as appropriate, in the Mid-Multnomah County status report which will be submitted to the Commission as discussed above.

In conjunction with the Environmental Quality Commission's review of these programs, the Department is developing a loan agreement which it will enter into with each jurisdiction. This agreement will cover items not covered in the proposed programs such as procedures for repayment of the loan to DEQ and the schedule for loan payments by DEQ to the public agency. These agreements will be finalized after the programs are reviewed by the EQC.

OAR 340-81-110 sets out a list of criteria which must be addressed in assessment deferral loan programs proposed by public agencies. These criteria are reviewed below for each jurisdiction which has applied for loan funds.

I. Portland

A. Program

1. Sewer connections to be made in the affected area as required by EQC order.

A total of 2,789 sewer connections are anticipated by July 1, 1989. The City of Portland submitted a map of the Mid-Multnomah area showing the proposed schedule for sewer connection through 1994. This map is available in DEQ's Water Quality Division office.

2. Analysis of the income levels for the affected property owners.

OAR 340-81-110 (4) identifies 200 percent of the federal poverty level as the basis for determining the amount of funds for which the City of Portland will be eligible. The City also uses this figure as a cut-off for assessment deferral loan eligibility. The City of Portland has estimated that 27 percent of the households in the affected area are at or below 200 percent of the federal poverty level. (Source: Mid-Multnomah County Sewer Safety Net Project, Tables 2-8, CH2M Hill, February 1987.)

3. Approximate cost of sewer assessments in the affected area.

The City of Portland has estimated the approximate cost of sewer assessments in the affected area at \$3,150 per household. This is based on an average lot size of 7,000 square feet and an assessment cost/sq. ft. of 45 cents.

4. Allocation of funds among eligible property owners.

The City of Portland adopted eligibility criteria based on the premise that no one should suffer financial hardship or the loss of their home because of sewers. Under Portland's program, assessment deferrals are not available for businesses.

Owner occupied homeowners who meet the following criteria will automatically qualify for a loan to defer all or part of their assessment:

- a. The gross income of all members of the household less any unreimbursable medical expenses must be 200 percent of the federal poverty level or less; (see Attachment I, Table I)

- b. Net assets of all members of the household excluding the primary residence and its contents and one vehicle must not exceed \$20,000; and
- c. Total house related expenses including the proposed cost of sewers must be at least 30 percent of gross income.

Owner occupied homeowners who do not meet the above criteria but have unusually large sewer costs may be eligible for the same benefits. For this group, the City would adjust their monthly gross income by the cost of sewers and other household expenses and use Attachment I, Table II, to determine the level of aid.

Portland's current program also calls for annual reverification of applicant eligibility. City staff members have recently drafted recommendations for amendments to limit the length of safety net loans to five years with the option to re-apply for assessment and connection deferrals. The City's staff believes these amendments will improve administration of the program by allowing a more thorough review of applicant's eligibility every five years rather than a short review annually. City Council review and decision are expected in June 1988. Assessment deferral loans will be granted to homeowners eligible for Safety Net assistance in the order that applications are received and approved.

5. Administration of the Assessment Deferral Loan Program.

- a. Accounting and Record-Keeping Procedures: -- Portland's Financial Administration Agency will prepare a weekly summary of funds dispersed from the Safety Net Fund to the local improvement district (LID) construction fund.

Each quarter, a report will be prepared summarizing the amount and number of deferrals granted in that quarter, the total amount and number of deferrals currently outstanding and the amount of loans paid off because of the sale of property, because of death of a property owner or because of any other reason.

- b. Liens: -- Portland's Financial Administration Agency will prepare documents necessary to record Safety Net loans as liens against the property. Recorded liens will be filed by the Auditor's Office. The City's Lien Collection Task Force adopted a collection process in February 1987, intended to maximize the collection of delinquent loans. This process is currently being refined, and the amended version is expected to be finalized by fall of 1988.
- c. Repayments: -- Upon sale of the property, death of the owner, or a determination that the applicant is no longer eligible, the loan must be repaid.

- d. Interest Rate: -- The City plans to charge the same interest rate on individual property assessment deferral loans as the rate applied by DEQ for assessment deferral funds loaned by the City.

6. Public Involvement.

The City of Portland provided adequate public involvement in adoption of the program in accordance with the requirements of OAR 340-81-110 (3)(a)(F). The City developed a Citizen's Advisory Board in November, 1986, which adopted the loan program in April 1987. In addition, the City held a public hearing to accept testimony on the proposed program on March 9, 1987.

The City also meets the requirement for ongoing citizen participation in the Mid-Multnomah County sewer project as required by ORS 454.370. The Citizens' Advisory Board currently has a membership of six. Of these six, two members are safety net eligible, five live in the area, one works in the area and one is a renter. They are currently seeking more board members to bring the total membership to nine. The Board's membership complies with the requirements of ORS 454.370 (2) because more than two-thirds of the members reside in the area, and one-third of the members are eligible for financial relief under the safety net plan. The City has had problems in the past maintaining the board's membership due to inability to find safety net eligible members and due to the lack of interest by members in participation on the board for long terms. The City has, however, shown a concerted effort to maintain the Board's membership. The minutes from all meetings since September, when HB 3101 took effect, have been submitted to the Commission Assistant and are available to the public upon request.

7. Resolution Adopting the Program.

The City submitted a copy of a resolution passed by the City Council on June 27, 1987, which adopted the program.

B. Program Evaluation

The Department finds that Portland's program meets the intent of the Assessment Deferral Loan Program Revolving Fund to provide assistance to property owners who would experience extreme financial hardship from payment of sewer assessments. The City is currently drafting program amendments which the City has determined are necessary to improve the program. As amendments are made to the program, the Department recommends that the City be required to submit them to the Department for approval.

II. Gresham

A. Program

1. Sewer connections to be made in the affected area as required by EQC order.

A total of 470 sewer connection are anticipated in Gresham by July 1, 1989. The City has submitted a schedule for construction of collector sewers through 1994 in the Mid-Multnomah area. A description of proposed construction is available in DEQ's Water Quality Division office.

2. Analysis of the income levels for the affected property owners.

The City of Gresham has estimated that 26 percent of the households in the affected area are at or below 200 percent of the federal poverty level (Source: Mid-Multnomah County Sewer Safety Net Project, Table 2-8, CH2M Hill, February 1987).

3. Approximate cost of sewer assessments in the affected area.

The City of Gresham has estimated the approximate cost of sewer assessments in the affected area at \$5,111 for a 7,000 sq. ft. lot. This includes a \$1,000 systems development charge, \$1,672 for a house branch, 31 cents/sq. ft. frontage charge and a \$200 interceptor charge.

4. Allocation of funds among eligible property owners.

The City of Gresham developed eligibility criteria to provide assistance to the very needy who have no alternative means of financing the sewer costs.

a. Homeowners

Homeowners are eligible for a loan for all or a portion of their sewer assessment, with loan payments deferred until the home is sold or until the owner no longer qualifies if they meet the following criteria.

- 1) Income -- Homeowners who occupy the assessed property and have a gross household income, less non-reimbursed medical expenses, at 200 percent of the federal poverty level or less.
- 2) Housing Costs -- Homeowners whose housing costs exceed 30 percent of household income.
- 3) Assets -- Homeowners who have net household assets,

excluding the primary residents, its contents and one vehicle, of \$20,000 or less.

All three criteria would have to be met in order for a homeowner to automatically qualify for assistance. Homeowners who meet all three criteria are eligible for a deferred loan from 20 to 100 percent of their sewer assessments. (See Attachment II, Table I.)

Homeowners who do not qualify under the three basic criteria but may need a safety net loan to avoid losing their homes may receive assistance if:

- 1) The income criteria is met and one of the other two criteria -- housing costs of assets -- is also met; and
 - 2) The City determines that a homeowner has extraordinary costs associated with the sewer implementation program.
- b. Business assessment deferral loans are available to businesses that own the building in which they conduct their primary business if they meet the above listed income, building costs and assets criteria.

The City's Financial Operations Division will re-verify eligibility of applicants every three years.

Assessment deferral loans will be allocated to eligible applicants on a first-come, first-serve basis, as long as Safety Net funds are available.

5. Administration of the Assessment Deferral Loan Program.
 - a. Accounting and Record-Keeping Procedures: -- The City's Management Services Department will maintain a list of all loans and outstanding balances. A weekly summary of loans granted will be produced. Each quarter, a summary report will be prepared showing the amount and number of connection deferrals granted in that quarter, connection deferrals now outstanding, loan granted and loans paid.
 - b. Liens: -- Gresham will prepare documents necessary to record Safety Net loans as liens against the property. The City will monitor the liens and require the liens to be satisfied at the time of title transfer. If the property owner becomes ineligible for the safety net deferral or if loans are not repaid, the City will institute foreclosure proceedings similar to those followed for delinquent Bancroft assessments.

- c. Repayments: -- All payments are deferred until the property is sold, until the property no longer belongs to the applicant, until the applicant pays the Safety Net loan, or until the applicant is no longer eligible for the loan.
- d. Interest Rates: -- Gresham plans to charge the same interest rate on assessment deferral loans as that charged by DEQ on the safety net funds loaned to Gresham.

6. Public Involvement.

The Assessment Deferral Loan Program rules (OAR 340-81-110 (3)(a)(F)) require citizen involvement during program development. Gresham provided copies of the program at the September 29, 1987 Gresham City Council meeting when the draft plan was first presented to the council. A public hearing was held on October 20, 1987, at which time citizens were invited to comment on the proposed plan. At that meeting, several citizens raised questions regarding the proposed safety net plan. A written response to these questions was presented to the Council prior to adoption of the safety net plan on November 3, 1987. The Department finds that this citizen participation process was adequate for development of the plan as required by OAR 340-81-110 (3)(a)(F). There is no statutory or rule requirement that the City must have a citizens' sewer advisory committee during program development, only that there must be citizen participation.

As required by ORS 454.370 (2) for on-going involvement in the safety net program, the City has established a citizens sewer advisory committee. The original committee with three members was established in March 1988. In May 1988, it was expanded to have 5 members. Two of the members are homeowners who are safety-net eligible, and the other three reside or do business in the affected area. The Committee's membership complies with the requirements of ORS 454.370(2), because more than two-thirds of the members reside in the area and more than one-third of the members are eligible for financial relief under the safety net plan.

The minutes from all meetings have been submitted and are available upon request.

7. Resolution Adopting Program.

Gresham submitted a copy of the resolution passed by the City Council on November 3, 1987, adopting the program.

B. Program Evaluation

The Department finds that Gresham's program meets the intent of the Assessment Deferral Loan Program Revolving Fund to provide financial

assistance to low-income property owners who would experience extreme financial hardship from payment of sewer assessments.

III. Eugene

A. Program

The City of Eugene currently offers its own assessment deferral program targeted at the elderly and those at the lowest income levels. The City's program implements the State's Assessment Deferral Loan Program and supplements this existing local program.

1. Sewer connections to be made in the affected area as required by a federal grant agreement:

A total of 1,368 sewer connections in the affected area are expected during the 1987-89 biennium. A total of 15 miles of collector sewers are anticipated to be built during the 1987-89 biennium.

2. Analysis of the income levels for the affected property owners.

The City of Eugene has estimated that 25 percent of the households are at or below 200 percent of the federal poverty level. (Source: Cost Implications of a Safety Net Program for the City of Eugene. Moore Breithaupt and Associates, Inc., May 1987).

3. Approximate cost of sewer assessments in the affected area.

The City of Eugene has estimated the approximate cost of sewer assessments in the affected area at \$3,638 per service connection. This is based on an average lot size of 9,200 square feet. The cost includes a lateral sewer charge averaging \$2,668 and a service connection assessment of \$970.

4. Proposed plan for allocating funds among eligible property owners.

The City of Eugene developed eligibility criteria with the goal of reducing the immediate financial impact of sewer assessments to low-income households. No deferral loans are given to businesses.

The City relies on the federal poverty level guidelines to determine eligibility. An applicant is eligible if the household income is at or below 200 percent of the federal poverty level, if applicant's non-income producing assets do not exceed four times the income eligibility level for which the application is made, and the applicant has received no deferrals on other property. Similar to the Portland and Gresham programs, the amount of costs deferred depends on how far the applicant's income is above the poverty level.

The City plans to review the eligibility of program participants every two years. Assessment deferral loans will be granted to property owners with the lowest income levels first and in the order of their original application.

5. Administration of the assessment deferral program.
 - a. Accounting and Record-Keeping Procedures: -- The funds will be accounted for separately by the City of Eugene. Information regarding the amount of the assessments, payment schedules, principal and interest balances and all loan activity will be recorded on a property-by-property basis. State loan funds, deferrals granted, and accrued interest due will be recorded in the accounting system.
 - b. Liens: -- Eugene will place liens on all property receiving assessment deferrals and will enforce the liens when the assessment becomes due.
 - c. Repayments: -- Upon sale or transfer of the property or upon determination that the applicant is no longer eligible, the assessment must be paid in full.
 - d. Interest Rate: -- The rate of interest the Eugene charges shall be equal to the rate of interest the City receives on the loans from the State under the Assessment Deferral Loan Program.

6. Public Involvement.

In 1984, a 15-member River Road/Santa Clara Citizens' Advisory Team (CAT) was formed to allow input to the planning process of the Sanitary Sewer Service Element of the River Road/Santa Clara Urban Facilities Plan. Over 70 informal CAT public meetings and three formal public hearing were held.

The Eugene City Council, Lane County, and the City of Springfield formally adopted the financing recommendations presented by the CAT.

Eugene does not currently have a citizen advisory group for the River Road/Santa Clara sewer project. There is no statutory requirement for Eugene to have on-going citizen involvement as there is for Portland or Gresham, since the requirements of ORS Chapter 454 regarding citizen involvement only apply to cities in counties of over 400,000.

7. Resolution Adopting the Proposed Program.

The City submitted its application for the Assessment Deferral Loan Program in January 1988, before the February 1 application deadline established by OAR 340-81-110 (2)(a). The program was adopted by ordinance by the City Council on May 23, 1988.

B. Program Evaluation

The Department finds that Eugene's program meets the intent of the Assessment Deferral Loan Program Revolving Fund by providing financial assistance to low income property owners who would experience extreme financial hardship from payment of sewer assessments.

Allocation of Loans to Public Agencies

A total of \$300,000 is available during the 1987-89 biennium for the Assessment Deferral Loan Fund.

Based on the information submitted by each jurisdiction the City of Portland would be eligible for \$186,000; the City of Gresham would be eligible for \$30,000; and the City of Eugene would be eligible for \$84,000. These determinations were made as follows according to the procedures outlined in 340-81-110 (4)(c).

<u>City</u>	<u>Total Number Connections</u>	<u>Percent of Households in Project Area at or below 200% of the Federal</u>	<u>Number of Connections to Low-Income</u>	<u>Percent of Total Number of Connections to Low-Income</u>	<u>Allocation of Loans to Public Agencies</u>
Portland	2,789	27 Percent	753	62 Percent	\$186,000
Gresham	470	26 Percent	122	10 Percent	\$ 30,000
Eugene	1,368	25 Percent	<u>342</u>	28 Percent	<u>\$ 84,000</u>
Total			1,217		\$300,000

Alternatives

1. The Commission could approve all three programs. This approval would be based on the determination that all three programs comply with all eligibility requirements, including compliance with the February 1, 1988 application deadline. Under this alternative, Eugene's application would be considered in compliance with the February 1, 1988 deadline, though it would be considered incomplete until May 23, 1988 when it was adopted by ordinance. This is the alternative recommended by the Department.
2. The Commission could approve Portland's and Gresham's programs and deny Eugene's program because it had not been adopted by ordinance before February 1, 1988. Under this alternative, no loan funds would be available to Eugene until the 1989-1991 biennium. This alternative, however, does not seem consistent with the statutory intent of providing assistance to affected property owners.
5. The Commission could require all amendments to approved programs to be approvable only by the Commission. This would allow the Commission on-going involvement in monitoring plan amendments. Alternatively, the Commission could allow amendment to approved programs to be approvable in the Department. This latter alternative would expedite approval of any program amendments and is the alternative recommended by the Department.

Summary

1. Portland, Gresham and Eugene have submitted assessment deferral loan programs for approval by the Commission.
2. The Department finds these programs to be in compliance with the requirements of the rules and statutes related to assessment deferral loan programs and recommends approval.

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3. Amendments to approved programs will be reviewed and approved by the Department.

Director's Recommendation

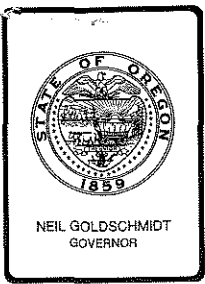
Based on the summation, it is recommended that the Commission approve the proposed assessment deferral loan programs for Portland, Gresham and Eugene.

Fred Hansen

Attachments: (5)

- I. Excerpts from Portland's Proposed Assessment Deferral Loan Program
- II. Excerpts from Gresham's Proposed Assessment Deferral Loan Program
- III. OAR 340-81-110
- IV. OAR 468.970 - .983
- V. ORS 454.275 - .380

Maggie Conley:hs/kjc
(229-5257)
WH2665
April 5, 1988
Amended June 21, 1988



Environmental Quality Commission

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

MEMORANDUM

To: Environmental Quality Commission
From: Director *Jel*
Subject: EQC Breakfast Meeting Item, July 8, 1988

Discussion of Solid Waste Recycling Promotion and Education Standards

BACKGROUND

At the April 29, 1988 Environmental Quality Commission breakfast meeting in Medford, the Commission requested that the staff review the applicability of establishing standards or "goalposts" for recycling promotion and education activities under the Recycling Opportunity Act (ORS 459-165 through 200).

The existing recycling and waste reduction rules (OAR 340-60-040) provide some standards for education, promotion and notification. Specifically, the rules require, among other things, 1) a written notice to all garbage customers to initiate the program, 2) a six month written recycling notice to all persons that generate recyclable materials, 3) written recycling information be made available at landfills for users of that landfill, and 4) recycling information be made available to community groups and the general public upon request.

The statute also provides a funding mechanism for these activities. Local governments and/or garbage haulers can charge fees in order to recoup the costs of implementing a promotion, education and notification program.

Discussion

In the staff's opinion, it is possible to establish additional standards that can be reviewed and evaluated by DEQ. However, any new standards should take into consideration local circumstances and resources.

There are two kinds of standards that could be developed, a qualitative or prescribed set and a quantitative or non-prescribed set. In addition, different standards could be established by population, proximity to markets, and/or types of recyclable materials in the wastesheds.

Qualitative Standards:

Notification- The law requires one notification at the beginning of the recycling program and a written reminder every six months. There is no requirement about the written reminder for what should be included or that DEQ review it.

A performance standard could be designed to tell wastesheds what is acceptable. For example:

- * one direct mail notice per quarter to each household
- * one door hanger notice per year placed at each household, or
- * an insert in the garbage bill sent to each household, semiannually.

An acceptable written notice is NOT:

- * a newspaper ad or notice, or
- * a news release.

Signs- The rule requires a sign to be prominently displayed at disposal sites without attendants. There is no definition of what "prominently displayed" means. A minimum standard could clarify this definition.

Media- The existing rule requires each wasteshed to provide notification and education materials to local media. A standard could be developed that specifies what that means. For example:

- * a semi-annual news release to newspapers and electronic media, and/or
- * a paid newspaper ad, once a year.

The news media standard should leave room for local special events and recycling campaigns.

Education- Schools are not directly addressed in the rules. However, DEQ has developed a nationally recognized recycling curriculum and has encouraged wastesheds to provide educational information to schools.

A new standard could be developed that would require larger wastesheds to more actively support recycling activities in schools. For example:

- * establish a speakers bureau for schools, or
- * develop in-service programs for teachers.

Public education could also be addressed with new standards that require wastesheds to work with citizens groups and neighborhood associations to stimulate the public's interest in and understanding of recycling.

This kind of standard is staff intensive to administer, however, given the controversial nature and difficulty in accurately measuring recycling activity, this approach seems to have merit.

Quantitative Standards:

The Department could establish a set of numerical goals for recycling participation rates and/or tonnage of material recycled. Local jurisdictions would then be free to determine which promotion and education methods would be used to achieve the goal.

Goals should be established allowing for differences in access to markets and population of the wastesheds. In addition, they should be phased in to begin the process.

Examples-

- 1) Achieve 50% curbside participation rate in two years with 70% achieved after 5 years. These numbers could be higher or lower depending on variables such as mentioned above, or
- 2) Achieve 30% curbside participation rate in two years then show a 10% increase in total tonnage recycled each year for 5 years. This could include materials recycled from commercial as well as curbside programs.

Note:

The percentages shown in the examples above are not intended to be recommendations.

This kind of quantitative standard is somewhat easier to administer than the qualitative set provided there is an adequate system for reporting and verifying participation rates and/or tonnages. The current reporting system is not adequate in this regard.

DEQ ROLE

The Department should continue its role of program oversight and evaluation. In addition, the wastesheds would continue to report to the Department on an annual basis, adding any new requirements to their report. To this end, DEQ staff is preparing a recycling report on the implementation of the Opportunity to Recycle Act. Based upon this report, the staff will be making recommendations to the EQC on future directions for the program.

In addition to the above, the Department should commit to provide continued support and assistance through the "RE:Recycling" newsletter, fact sheets, distribution of the recycling curriculum and the other informational materials currently part of the program. With new standards, the Department should provide more extensive support and assistance. This could include

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July 8, 1988
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slide-shows, videotapes, radio PSA's, generic print media ads and other presentation materials.

Finally, the Department is forwarding a legislative concept to the Governor which would put substantial resources into the recycling programs of local jurisdictions in order to implement the solid waste management hierarchy. The availability of this money (about \$4 million/biennium) could help minimize any fiscal problems associated with implementing new recycling standards.

ZB7624

DIRECTOR'S PARAGRAPH

Agenda Item G July 8, 1988 EQC Meeting

The 1987 Legislature passed HB 2022 establishing a comprehensive program governing the storage, transportation and disposal of waste tires. The Department is going through a two-stage rulemaking procedure to implement the program. This rule deals with permitting requirements for waste tire storage sites, waste tire carriers, and chipping standards for tires to be landfilled in solid waste disposal sites. Public hearings were held in Pendleton, Bend, Springfield, Medford and Oregon City. Eighteen persons testified and ten submitted written testimony. A summary of the testimony is included along with the Department's Response to Public Comment. It is recommended that the rule establishing permit requirements and chipping standards be adopted with the changes indicated in the staff report.

SF3157

DIRECTOR'S PARAGRAPH

Agenda Item E, July 8, 1988, EQC Meeting

The 1987 Legislature passed a Waste Tire Bill (HB 2022) which requires regulation of waste tires, and imposes a \$1 fee on new replacement tires to create a Waste Tire Recycling Account. The Account is to be used for a reimbursement program to stimulate the market for recycling of waste tires, and to provide cleanup funds for some tire piles. The Department has worked with a Task Force of affected parties to develop administrative rules for the Waste Tire Program. This request is for public hearings to take testimony on the second part of those rules: those covering the use of reimbursement and cleanup program funds.

SF3176

Agenda Item I

Director's Introduction

Public Hearing and Proposed Adoption of
Temporary Rule OAR 340-60-100 for
Certification of In-State Recycling
Programs under ORS 459.305.

ORS 459.305, passed as part of HB 2619 by the 1987 Oregon Legislature, requires that regional landfills not accept any wastes after July 1, 1988 from any local or regional government unit located within or outside of Oregon unless the governments units have been certified by the Department as having implemented an opportunity to recycle that satisfies the requirements of the Oregon Recycling Opportunity Act.

For out-of-state wastes, because of a possible conflict with federal law regarding interstate commerce, the Department is awaiting guidance from the Oregon Attorney General before proceeding with rule adoption. The proposed temporary rule regards only in-state waste, and uses the existing system for recycling report approvals as the method for determining certification.

David Rozell, Manager of the Waste Reduction Section, is present to answer any questions you may have.

YF3193.A

DIRECTOR'S INTRODUCTION

Agenda Item I
7/8/88, EQC Meeting

Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Division 100, 102, and 104.

This agenda item requests adoption of amendments to the Department's hazardous waste management rules. The Department is again proposing the adoption, by reference, of a group of new federal regulations. This action is necessary, if the Department is to maintain authorization from the Environmental Protection Agency to manage a state-operated hazardous waste program.

The Department is also proposing to repeal specific existing state rules concerning the exportation of hazardous waste. The state's rules are either more or less stringent than the new federal requirements. No state rule may be less stringent than the corresponding federal rule.

Lastly, the Department proposes to expand the reporting requirements for hazardous waste generators and hazardous waste management facilities.

The new federal rules deal with the following subjects:

- Hazardous waste exports;
- Waste minimization certification by small quantity generators;
- Additions to lists of wastes defined as "hazardous wastes";
- Closure and post-closure care of nonpermitted hazardous waste surface impoundments;
- Technical corrections to the definition of "solid waste"; and
- Development of corrective action plans for hazardous waste land disposal facilities.

Gary Calaba, of the Hazardous Waste Program staff, is here to answer any questions you may have.

ZF2906.B

Agenda Item H

Director's Introduction

Public Hearing and Proposed Adoption of
Temporary Rule OAR 340-60-100 for
Certification of In-State Recycling
Programs under ORS 459.305.

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David Rozell, Manager of the Waste Reduction Section, is present to answer any questions you may have.

YF3193.A

New #'s?
yes -
added item.

DIRECTOR'S PARAGRAPH

The 1987 Legislature in HB 2619 required that regional disposal sites, those sites receiving over 75,000 tons of waste from outside the county be required to provide financial assurance. The law requires the Commission to adopt rules on type and amount. The Department's Solid Waste Advisory Committee explored several avenues before making recommendations. The Committee's recommendations were drafted into a rule and a public hearing was held. Based on testimony, several minor modifications have been made to the proposed rule, mainly for clarification.

SB7598P