

**OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 11/17/1995**



State of Oregon
**Department of
Environmental
Quality**

REVISED AGENDA

ENVIRONMENTAL QUALITY COMMISSION MEETING

November 17, 1995
DEQ Conference Room 3A
811 S. W. Sixth Avenue
Portland, Oregon

Friday, November 17, 1995: Regular Meeting beginning at 8:30 a.m.

Notes:

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

Public Forum: *The Commission will break the meeting at approximately 11:30 a.m. for the Public Forum if there are people signed up to speak. The Public Forum is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for this meeting. Individual presentations will be limited to 5 minutes. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.*

Note: 8:30 a.m. -- Presentation of the Smithsonian Award to the Environmental Quality Commission

- A. Approval of Minutes
- B. Approval of Tax Credits
- C. †**Rule Adoption:** 1992-1994 Triennial Water Quality Standards Review: Proposed Revisions to Standards
- D. †**Rule Adoption:** Temporary Rules: Delay Effective Date of Requirements for Certain Very Small Landfills
- E. †**Rule Adoption:** Asbestos Program Requirements, Division 22 Redefinition of Volatile Organic Compound, Primary Aluminum Plant Rules, and Housekeeping Revisions

- F. **Action Item:** Issuance of Pollution Control Bonds
- G. **Action Item:** DEQ v. Oregon Coast Sanitation, Case Numbers HW-WR-94-038 & HW-WR-94-051--Appeal of Hearings Officer Findings of Fact
(This item is scheduled for 1:30 p.m. and may be taken out of order)
- H. **Action Item:** Earth Science Technology, Inc., Case Number UT-NWR-94-218 -- Appeal of Hearing Order Regarding Assessment of Civil Penalty and Revocation of UST License
(This item is scheduled for 1:30 p.m. and may be taken out of order)
- I. **Action Item:** Citizens Interested in Bull Run, Inc. Appeal of Hearings Officer Denial of Full Party Status
(This item is scheduled for 1:30 p.m. and may be taken out of order)
- J. **Action Item:** Extension of the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order
- K. **Action Item:** Deputy Director Position
- L. Commissioners' Report (Oral)
- M. Director's Report (Oral)

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

The Commission has set aside January 11-12, 1996 for their next meeting. The location has not been established.

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

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

January 5, 1996

Approved _____
Approved with Corrections _____

Minutes are not final until approved by the EQC

ENVIRONMENTAL QUALITY COMMISSION
Minutes of the Two Hundred and Forty Sixth Meeting

August 18, 1995
REGULAR MEETING

The Environmental Quality Commission regular meeting was convened at 9:00 a.m. on Friday, August 18, 1995, in the conference room at the High Desert Museum, south of Bend, Oregon. The following Commission members were present:

William Wessinger, Chair
Henry Lorenzen, Member
Linda McMahan, Member

(Commissioner Whipple was unable to attend this meeting. One Commissioner position is vacant.)

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

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

A. Approval of minutes

Chair Wessinger moved approval of the April 14, 1995, regular meeting minutes. Commissioner Lorenzen seconded the motion. The motion was unanimously approved. Commissioner Lorenzen moved approval of the May 18, 1995, regular meeting minutes. Commissioner McMahan seconded the motion and it was unanimously approved.

B. Approval of tax credits

The Department recommended the Commission approve certification for the tax credit applications listed below.

Environmental Quality Commission Minutes

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August 18, 1995

Application No.	Applicant	Description
TC 4268	Johnson Controls Group Battery Group, Inc. \$164,384	A noise and air pollution control facility consisting of conical flow silencers, noise reduction enclosures for motors, a model 7CDL11 Cycloblower Power Unit and a natural gas burner to minimize the oxidation of lead in the lead-acid battery manufacturing process.
TC 4307	Northwest Foam Products, Inc. \$16,000	A plastic product reclamation facility consisting of a Freffner Varag 6 EF regenerator for the manufacture of expanded polystyrene (EPS) pellets.
TC 4354	Columbia Forest Products \$138,452	An air pollution control facility consisting of a Wellons W120 boiler multicyclone system including fans and support equipment for a plywood manufacturing plant.
TC 4405	Mullen Farms \$120,541	An air pollution control "field burning" facility consisting of a 180hp John Deere 8200 tractor, a Kello-bilt 18' disc, and a Rear's 15' Pak-Flail chopper.
TC 4407	Berger Bros. \$54,800	An air pollution control "field burning" facility consisting of a 1992 John Deere 4960 200 hp tractor and a 1992 Case IH 720 6 bottom plow.
TC 4413	Solidur Pacific Co. \$40,759	A plastic product reclamation facility consisting of a model 402 Air Sentry Dust Recovery unit.
TC 4416	TRICO Farms \$23,325	An air pollution control "field burning" facility consisting of a Case IH 20'5" 770 disc.
TC 4421	Truax Harris Energy Company \$24,033	An air pollution control facility consisting of OPW nozzles, adapters and safety valves, Dayco hoses, piping and miscellaneous equipment to prevent the escape of gasoline vapors into the atmosphere.
TC 4430	Willamette Seed Company \$23,445	An air pollution control facility consisting of a baghouse, a blower and supporting equipment for a grass seed, grain and wildflower cleaning and storage plant.
TC 4451	Galen & Vernon Kropf \$51,675	An air pollution control "field burning" facility consisting of a John Deere 2810 8 bottom plow and a Kello-bilt 24' heavy duty disc.

TC 4453	Vernon Kropf \$86,599	An air pollution control "field burning" facility consisting of a 1995 Manteca roadrunner hay squeeze.
TC 4483	Leroy & Lowell Kropf \$103,401	An air pollution control "field burning" facility consisting of a John Deere 145 hp 7800 tractor and a Kello-bilt 21' disc.
TC 4484	Allen D. Chapman \$12,750	An air pollution control "field burning" facility consisting of a 15' Rear's flail chopper.

Tax application review reports with facility costs over \$250,000.

Application No.	Applicant	Description
TC 4266	Johnson Controls Battery Group, Inc. \$2,356,563	A water pollution control facility consisting of a 54,600 square foot building that provides covered storage for battery components and lead ingots to prevent storm water contamination.
TC 4348	Jeld-Wen, Inc. \$696,035	An air pollution control facility consisting of a Geoenergy E-Tube System, model 1013-189 wet electrostatic precipitator, for the control of wood particulate emissions from a wood pellet manufacturing concern.
TC 4370	Tillamook County Creamery Association \$3,459,901/95%	A water pollution control facility consisting of an expanded and upgraded activated sludge wastewater treatment plant.

Willamette Industries, Inc. requested an extension of 90 days to file for a pollution control facility tax credit. Commissioner McMahan moved to grant a revised extension of one year contingent upon receiving a request from Willamette Industries, Inc. to do so. The motion was seconded by Commissioner Lorenzen. The motion was unanimously approved. Commissioner Lorenzen moved approval of the tax credits as presented, as well as approval of a request to transfer pollution control tax credit certificate 2495 from Ronald and Diane Gustafson to James and Harold Pliska. Commissioner McMahan seconded the motion and it was unanimously approved.

C. Action item: Revisions to the Klamath Falls PM10 Control Plan as Amendment to the Oregon Clean Air Act State Implementation and Rule Clarifications and Housekeeping Amendments to Divisions 25, 28, and 32

Highlights of the proposed State Implementation Plan (SIP) revision were summarized for the Commission by Greg Green, Air Quality Division Administrator. These included information regarding the proposed Washburn Way interchange project in Klamath Falls, and new information on the Klamath Falls Weyerhaeuser facility. Mr. Green explained that under transportation conformity requirements the Washburn Way project can not proceed unless the SIP is revised to include a motor vehicle emissions budget that can accommodate the small emissions increase that will occur as a result of the project. He explained that the Department has reviewed the relevant information, including the safety margin built into the original attainment plan, and has determined that there is sufficient room in the plan to accommodate this project. Therefore, the Department has revised the SIP to establish a new motor vehicle emissions budget which will allow the Washburn Way project to go forward.

Mr. Green also outlined that the Klamath Falls Weyerhaeuser facility has voluntarily agreed to reduce their permitted emission levels; and that initial results of a recent modeling analysis at this new emission level indicates that Weyerhaeuser is no longer a significant contributor to the Klamath Falls nonattainment area. Mr. Green stated that the Department would continue to review the modeling results, and by October 1, 1995, make a determination regarding whether Weyerhaeuser should continue to be included in the SIP contingency plan. Based on the initial modeling results, Mr. Green stated that Weyerhaeuser would likely be removed from the Department's industrial contingency requirements. Mr. Green then briefly summarized the proposed minor changes to Divisions 25, 28 and 32.

The Commission asked about the timing of construction for the Washburn Way project, with Mr. Green responding that the project was scheduled to go forward by the first of next year. There were no more questions or testimony. Commissioner McMahan moved approval of revisions to the Klamath Falls PM10 Control Plan as Amendment to the Oregon Clean Air Act State Implementation and Commissioner Lorenzen seconded the motion. The motion was unanimously approved.

Note: Agenda Item D (Rule Adoption: Rule Clarifications and Housekeeping Amendments 25, 28 and 32) was included in Agenda Item C.

E. Information Item: Willamette River Basin Water Quality Study Phase II

Russell Harding, Manager of the Standards and Assessment Section, Water Quality Division, introduced Barbara Priest as the study coordinator. Ms. Priest introduced members of the Willamette River Basin Water Quality Study Technical

Advisory Steering Committee: Don Sterling, Chairman, Dave Leland of the Health Division and Steve Anderson, representing Associated Oregon Industries.

The Committee members presented a summary of the study's major findings (attachment to the staff report) which included a short slide presentation. Due to a time limitation, Chair Wessinger asked DEQ staff and Advisory Committee members to return to the next Environmental Quality Commission meeting on September 29, 1995, and continue the briefing.

Note: The Commission broke from the regular agenda at 10:00 a.m. to allow the Forum on Growth in Central Oregon to proceed on schedule.

Special Forum on Growth in Central Oregon: a panel discussion between the EQC and an invited panel from Crook, Deschutes and Jefferson Counties

Panel members included Rick Allen, Commissioner, Jefferson County; Dennis Hansen, Bend Clean Air Committee; Suzanne Johansen, Bend City Council; Tom DeWolf, Commissioner, City of Bend; Peter Geiser, The Environmental Center; Joe Hannan, City Manager, Redmond; Michael Hollern, Brooks Resources, Bend; George Read, Deschutes County Planning; Bill Smith, Smith Properties, Bend; JoAnne Sutherland, Former City Administrator, Madras, and Todd Vallie, Mayor of Prineville.

Following a welcome and introduction from Chair Wessinger and Director Marsh, Stephanie Hallock, DEQ's Eastern Region Administrator, provided an overview of the major environmental issues affecting Eastern Oregon. Todd Vallie, Rick Allen, Tom DeWolfe and George Read discussed growth issues specific to Deschutes, Jefferson and Crook Counties. The panel members then presented perspectives on their communities concerns about growth and ideas about what the Department of Environmental Quality and other state agencies should do respond to the pressures of growth.

Governor John Kitzhaber joined the panel discussion for a portion of the presentation, and emphasized the need of communities and state agencies working together to "get to yes."

PUBLIC FORUM

John Boyle discussed his concerns regarding water and septic problems in the La Pine area.

John Charles of the Oregon Environmental Council addressed issues related to growth management, specifically substituting user fees (market pricing) for general taxation.

John Schubert of the Environmental Center emphasized the need for both local flexibility and state guidance in dealing with traffic impacts on land use issues in Eastern Oregon.

F. DEQ v. Bolch, et al. HW-SWR-92-241

This case came before the Environmental Quality Commission on the respondents' appeal of the Hearings Officer's Interim Order, dated April 1, 1994 and Second Interim Order, dated November 8, 1994. The parties agreed that the Interim Orders taken together constitute the Hearings Officer's final order, as stated in the Stipulation signed by all parties, dated January 30, 1995 and February 2, 1995. In the April 1, 1994 Interim Order, the Hearings Officer found that a) Bolch was barred from litigating the waste status of the stored hazardous materials since Bolch had failed to contest the June 30, 1992 compliance order; and b) that the materials constituted hazardous wastes regulated by RCRA. The Hearings Officer in her Second Interim Order, dated November 8, 1994, found that Bolch was negligent in failing to take reasonable care to avoid the risk of violation.

After consideration of the appeal in this case, Commissioner Henry Lorenzen moved to affirm the decisions of the Hearings Officer. Commissioner McMahan seconded the motion. The motion was unanimously approved (three yes votes).

G. Commissioners reports.

There were no Commission reports.

H. Director's report.

Director Marsh introduced Kurt Schmidt of the new Klamath Falls DEQ office.

Director Marsh announced Carolyn Young's new position as Assistant to the Director dealing with legislative issues.

Hyundai 401 Hearings On August 16, 1995, in Eugene, over 600 people attended a hearing on the issuance of a Water Quality Certificate on the Corps of Engineers' permit for disturbance of wetlands on the site. There was not enough time to hear all those signed up to speak and it was decided to continue the hearings on August 24, 1995.

There was no further business, and the meeting adjourned at 12:30 p.m.

Approved _____
Approved with Corrections _____

Minutes are not final until approved by the EQC

Environmental Quality Commission
September 11, 1995
Telephone Conference Call

The Environmental Quality Commission telephone conference call was convened at 11:00 a.m. on Monday, September 11, 1995. The following Commission members were connected for the call.

William Wessinger, Chair
Henry Lorenzen, Member
Linda McMahan, Member
Tony Van Vliet, Member
Carol Whipple, Member

Also present by phone was Langdon Marsh, Director, DEQ.

Chair Wessinger welcomed Commissioner Tony Van Vliet, whose appointment to the Commission was confirmed on September 7, 1995. Chair Wessinger stated the purpose of the conference call was to determine 1996 meeting dates for the Commission. The dates proposed were:

January 11-12, 1996
February 22-23, 1996
April 11-12, 1996
May 16-17, 1996
July 11-12, 1996
August 22-23, 1996
October 10-11, 1996
November 14-15, 1996

Chairman Wessinger polled the Commission members and all were in agreement with these dates.

There was no further business, and the telephone conference call was adjourned. Following adjournment of official business, the Commissioners spoke briefly about orientation procedures for Commissioner Tony Van Vliet.

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item B
November 17, 1995 Meeting

Title:

Approval of Tax Credit Applications

Summary:

New Applications - Sixty-nine (69) tax credit applications with a total facility cost of \$42,389,723 are recommended for approval as follows:

- | | |
|------------------------------------------------------------------------------------------------------------------|--------------|
| - 4 Air Quality facilities with a total facility cost of: | \$2,325,468 |
| - 1 CFC facility costing: | \$ 1,850 |
| - 4 Field Burning related facilities recommended by the Department of Agriculture with a total facility cost of: | \$ 282,357 |
| - 2 Noise pollution facilities costing: | \$ 67,786 |
| - 2 Plastic Product Reclamation facilities with a facility cost of: | \$ 189,056 |
| - 3 Solid Waste Recycling facilities with a facility cost of: | \$ 438,203 |
| -14 Water Quality facilities costing: | \$35,961,678 |
| -39 Water Quality UST facilities with a total facility cost of: | \$ 3,123,325 |

Ten applications with claimed facility costs exceeding \$250,000 are included in this report. The external accounting review statements for these claims are included with the application reports.

Department Recommendation:

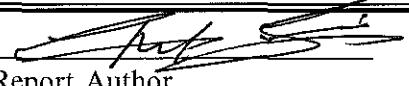
Approve issuance of tax credit certificates for 69 applications as presented in Attachment A of the staff report.

The Department also recommends that the Commission approve a request by Matsushita Electronic Materials, Inc. for an extension of 180 days (until March 20, 1996) to file for tax credit relief for their Forest Grove manufacturing facility. A letter from the firm is included in this report.

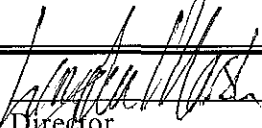
The Department further recommends granting an extension of one year for Chevron U.S.A., Inc. to complete the filing requirements for tax credit numbers 4499, 4500 and 4501. The applicant's letter is attached.

The Department recommends that the Commission approve a request from Willamette Industries, Inc. to transfer the remaining value of Tax Credit Certificate 3344 from Lumber Tech, Inc. to Willamette Industries, Inc. as of January 1, 1996. Willamette Industries purchased the manufacturing site at which the pollution control facility is located in August of this year. A letter from the applicant is attached.

The Department also recommends the revocation of four tax credit certificates whose facilities have been replaced and are no longer operating to prevent pollution. These include certificates 1990, Valentine & Dolores Miller; 2168, Pride of Oregon; 2324, Merritt Truax, Inc. and 2630, Merritt Truax, Inc.


Report Author


Division Administrator


Director

November 1, 1995

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

Date: November 17, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director
Subject: Agenda Item B, November 17, 1995 EQC Meeting
Approval of Tax Credit Applications

Statement of the Need for Action

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

Tax Credit Application Review Reports:

Application No.	Applicant	Description
TC 4302	United Disposal Service \$51,278	A Solid Waste Recycling facility consisting of a Model UD 1800 1995 Nissan truck and a plastic compactor.
TC 4319	United Disposal Service \$119,437/45%	A Reclaimed Plastic facility consisting of a 1995 White GMC drop box truck (model WX64) with a Magnum roll-off system, an hydraulic hook assembly and rear stabilizers.
TC 4334	WWDD Partners \$69,619	A Reclaimed Plastic facility for transforming plastic waste into plastic product feedstock pellets. The facility consists of a Weighmaster Gravimetric Blender, a Turbo mixer and support equipment.
TC 4335	Bassett-Hyland Energy Company \$103,286/99%	An Underground Storage Tank (UST) facility consisting of doublewall fiberglass piping, spill containment basins, line leak detectors, automatic shutoff valves, sumps, an oil/water separator and Stage I and II vapor recovery piping.

Memo To: Environmental Quality Commission
 Agenda Item B
 November 17, 1995 Meeting
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Application No.	Applicant	Description
TC 4341	Truax Harris Energy Company \$126,856/89%	An Underground Storage Tank (UST) facility consisting of three doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system, automatic shutoff valves, turbine leak detectors, monitoring wells and Stage I vapor recovery equipment.
TC 4355	Chevron USA, Inc. \$36,888	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4356	Chevron USA, Inc. \$37,800	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4357	Chevron USA, Inc. \$45,436	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4358	Chevron USA, Inc. \$45,088	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4359	Chevron USA, Inc. \$49,061	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4360	Chevron USA, Inc. \$54,169	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Application No.	Applicant	Description
TC 4361	Chevron USA, Inc. \$54,966	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4362	Chevron USA, Inc. \$58,696	An Underground Storage Tank (UST) facility consisting of spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.
TC 4366	Truax Harris Energy Company \$139,179/93%	An Underground Storage Tank (UST) facility consisting of two doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system with overfill alarm, turbine leak detectors, sumps, an oil/water separator and Stage I vapor recovery equipment.
TC 4384	Ernest R. Rieben \$12,086	A Water Pollution Control facility consisting of an underground manure tank, a PTO agitator, a pump, collection sumps and pipelines and related equipment. The facility prevents manure runoff from contaminating a nearby stream.
TC 4393	Western Stations Company \$111,613/99%	An Underground Storage Tank (UST) facility consisting of cathodic protection for three tanks, doublewall fiberglass piping, spill containment basins, tank gauge and overfill alarm systems, line/turbine leak detectors, automatic shutoff valves, sumps, an oil/water separator and Stage I and II vapor recovery equipment.
TC 4394	Portland General Electric Company \$9,599	A Noise Pollution Control facility consisting of a sound-absorbing barrier wall installed next to a transformer at an electric substation in Portland.

Application No.	Applicant	Description
TC 4396	Portland General Electric Company \$12,936	A Water Pollution Control facility consisting of a catch basin, a vault and an oil stop valve for preventing oil runoff contamination of the storm sewer system.
TC 4399	Eugene Truck Haven, Inc. \$78,873/77%	An Underground Storage Tank (UST) facility consisting of three doublewall fiberglass/steel tanks and piping, spill containment basins, an automatic tank gauge system with overflow alarm, turbine leak detectors and automatic shutoff valves.
TC 4406	Russell Oil Company \$68,818/88%	An Underground Storage Tank (UST) facility consisting of two fiberglass tanks (one compartmentalized), doublewall fiberglass piping, spill containment basins, a tank gauge system, turbine leak detectors, sumps, an oil/water separator, an overflow alarm system and monitoring wells.
TC 4408	Twigg Farm \$118,557	A Water Pollution Control facility consisting of two sewage water holding lagoons, a D & H manure separator, two concrete manure pits, pumps, an Evergreen irrigation sprinkler and associated equipment. The facility prevents pollution of the nearby stream system.

Application No.	Applicant	Description
TC 4420	Truax Harris Energy Company \$154,331/94%	An Underground Storage Tank (UST) facility consisting of two doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system with an overflow alarm, automatic shutoff valves, turbine leak detectors, sumps, an oil/water separator, monitoring wells and Stage I and II vapor recovery equipment.
TC 4427	Portland General Electric Company \$55,216	A Water Pollution Control facility consisting of a 10' high concrete lined containment dike encircling a fuel oil pump station, curbed containment at the fuel oil filter pad, a storm drain catch basin, an oil/water separator and associated piping. The facility prevents oil contamination of the water supply in case of a spill.
TC 4435	Intel Corporation \$ 112,189	An Air Pollution Control facility consisting of an engineered flue gas recirculation system to optimize combustion for natural gas-fired boilers.
TC 4437	Weyerhaeuser Company \$177,167	A Water Pollution Control facility consisting of concrete diversions and drains to act as containment in case of a spill of "black liquor" from the applicant's containerboard manufacturing facility in Springfield, OR.
TC 4442	Portland General Electric Company \$89,874	An Air Pollution Control system that controls the level of nitrous oxide (NOx) emissions produced by gas turbines.

Application No.	Applicant	Description
TC 4445	Synthetech, Inc. \$24,845	A Water Pollution Control facility consisting of a closed-loop pump for eliminating the waste stream from a pharmaceutical manufacturing lab in Albany, OR.
TC 4446	Western Stations Company \$145,723/92%	An Underground Storage Tank (UST) facility consisting of three doublewall composite tanks and doublewall fiberglass piping, spill containment basins, a tank gauge system with overflow alarm, line/turbine leak detectors, automatic shutoff valves, sumps and Stage I and II vapor recovery equipment.
TC 4469	Portland General Electric Company \$30,837	A Water Pollution Control facility consisting of an impermeable membrane liner/barricade to retard the passage of oil from the site in case of a spill.
TC 4471	Portland General Electric Company \$58,187	A Noise Pollution Control facility consisting of a quilted fiberglass barrier with a cement pad and associated equipment to absorb noise from electric power transformers.
TC 4474	Portland General Electric Company \$231,636	A Water Pollution Control facility for filtering wastewater from a coal fired power generating facility consisting of a collection sump, pumps, piping, filtration equipment and a metal building to store the equipment.
TC 4481	Valentine and Delores Miller \$28,507/64%	A Field Burning facility consisting of a 23' x 60' x 104' grass seed storage shed, which replaces a previously certified facility.

Application No.	Applicant	Description
TC 4482	Robert D. MacPherson \$120,498	A Field Burning facility consisting of tile and underground outlet piping for draining farmland to allow for crop rotation in lieu of field burning.
TC 4485	Elwyn D. Bingaman \$17,600	A Field Burning facility consisting of a 596 Tandem Disk Harrow.
TC 4491	May-Slade Oil Company, Inc. \$47,003	An Underground Storage Tank (UST) facility consisting of doublewall fiberglass piping, epoxy tank lining and cathodic protection for four tanks.
TC 4492	May-Slade Oil Company, Inc. \$41,776	An Underground Storage Tank (UST) facility consisting of epoxy lining for four tanks and cathodic protection for five tanks.
TC 4493	May-Slade Oil Company, Inc. \$37,372	An Underground Storage Tank (UST) facility consisting of cathodic protection for four tanks and associated piping.
TC 4494	May-Slade Oil Company, Inc. \$28,770	An Underground Storage Tank (UST) facility consisting of three fiberglass tanks, doublewall fiberglass piping and spill containment basins.
TC 4495	May-Slade Oil Company, Inc. \$20,654	An Underground Storage Tank (UST) facility consisting of doublewall fiberglass piping.
TC 4496	May-Slade Oil Company, Inc. \$20,554	An Underground Storage Tank (UST) facility consisting of doublewall fiberglass piping.
TC 4502	Chevron USA, Inc. \$103,386/99%	An Underground Storage Tank (UST) facility consisting of spill containment basins, a tank gauge system with overfill alarm, automatic shutoff valves and Stage II vapor recovery equipment.

Application No.	Applicant	Description
TC 4503	Chevron USA, Inc. \$195,345/94%	An Underground Storage Tank (UST) facility consisting of a composite tank, doublewall reinforced plastic piping, a spill containment basin, a tank gauge system with overfill alarm, turbine leak detectors, automatic shutoff valves, sumps and Stage II vapor recovery equipment.
TC 4504	Chevron USA, Inc. \$220,198/95%	An Underground Storage Tank (UST) facility consisting of spill containment basins, doublewall piping, a tank gauge system with overfill alarm, turbine leak detectors, automatic shutoff valves, sumps and Stage II vapor recovery equipment.
TC 4507	Winmar of Jantzen Beach, Inc.. \$90,656/89%	An Underground Storage Tank (UST) facility consisting of two doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system with overfill alarm, line/turbine leak detectors, sumps, monitoring wells, automatic shutoff valves and Stage I vapor recovery equipment.
TC 4511	Byrnes Oil Company, Inc. \$71,673/85%	An Underground Storage Tank (UST) facility consisting of two fiberglass tanks and doublewall fiberglass piping, spill containment basins, a tank gauge system with overfill alarm, sumps and automatic shutoff valves.
TC 4513	Byrnes Oil Company, Inc. \$2,440	An Underground Storage Tank (UST) Program facility consisting of secondary containment for three aboveground storage tanks.

Application No.	Applicant	Description
TC 4514	Byrnes Oil Company, Inc. \$1,948	An Underground Storage Tank (UST) Program facility consisting of secondary containment for four aboveground storage tanks.
TC 4515	Byrnes Oil Company, Inc. \$13,083	An Underground Storage Tank (UST) Program facility consisting of epoxy lining for two aboveground storage tanks.
TC 4516	Kurt A. Kayner \$115,752	A Field Burning facility consisting of a 25' x 124' x 180' grass seed straw storage building.
TC 4518	Willamette Industries \$14,085	A Solid Waste Recycling facility consisting of a Dings Model 33 Electromagnet for removing nails and other metal from recovered wood.
TC 4522	Harold & Jim Pliska \$81,897/96%	An Underground Storage Tank (UST) facility consisting of epoxy lining and cathodic protection for three steel tanks, fiberglass piping, spill containment basins, a tank gauge system with overflow alarm, line leak detectors, sumps, monitoring wells and Stage I and II vapor recovery equipment.
TC 4525	Western Stations Company \$118,789/99%	An Underground Storage Tank (UST) facility consisting of epoxy lining and cathodic protection for three steel tanks, doublewall fiberglass piping, spill containment basins, a tank gauge system with overflow alarm, line/turbine leak detectors, sumps, an oil/water separator, automatic shutoff valves and Stage I and II vapor recovery equipment.

Application No.	Applicant	Description
TC 4526	Prewitt's Quality Body and Paint \$1,850/62%	An Air Quality CFC facility consisting of a machine that removes and cleans automobile air conditioner coolant.
TC 4529	Carter's Service Stations, Inc. \$107,273/88%	An Underground Storage Tank (UST) facility consisting of three fiberglass tanks and piping, spill containment basins, a tank gauge system, line leak detectors, automatic shutoff valves, sumps and Stage I and II vapor recovery equipment.
TC 4531	May-Slade Oil Company, Inc. \$25,897	An Underground Storage Tank (UST) facility consisting of doublewall fiberglass piping, spill containment basins, sumps and line leak detectors.
TC 4532	May Slade Oil Company, Inc. \$20,160	An Underground Storage Tank (UST) facility consisting of epoxy lining for two steel tanks, cathodic protection for three tanks and spill containment basins.
TC 4536	Mary Lou Loar \$14,928/99%	An Underground Storage Tank (UST) facility consisting of three doublewall fiberglass/steel tanks, piping, spill containment basins, a tank gauge system with overfill alarm, line/turbine leak detectors and sumps.
TC 4537	Western Stations Company \$125,541/99%	An Underground Storage Tank (UST) facility consisting of epoxy lining and cathodic protection for three steel tanks, doublewall fiberglass piping, spill containment basins, a tank gauge system with overfill alarm, line/turbine leak detectors, automatic shutoff valves, sumps, an oil/water separator and Stage I recovery equipment.

Application No.	Applicant	Description
TC 4541	Eugene Truck Haven, Inc. \$137,527/87%	An Underground Storage Tank (UST) facility consisting of three doublewall fiberglass/steel tanks and piping, spill containment basins, a tank gauge system with overfill alarm, line/turbine leak detectors and sumps.

**Tax Credit Application Review Reports With Facility Costs Over \$250,000
 (Accountant Review Reports Attached).**

Application No.	Applicant	Description
TC 2329	Simpson Timber Company \$1,431,011	An Air Pollution Control facility consisting of a regenerative thermal oxidizer for the destruction of volatile organic compounds (VOCs) at the applicant's Portland plant.
TC 4339	Weyerhaeuser Company \$1,218,902	A Water Pollution Control facility vacuum seal water recycling system consisting of 2 Gormann Rupp vacuum pumps, a system screen, a 5,000 gallon collection tank, an Alfa heat exchanger, an Evapco cooling tower, three 8" Hayward strainers and associated equipment to reduce wastewater contamination from the applicant's Springfield paper mill.
TC 4363/64	Weyerhaeuser Company \$692,394	An Air Pollution Control facility consisting of continuous emissions monitoring (CEM) systems to control emissions from the applicant's boiler stack, package boiler and lime kiln located in Springfield.

Application No.	Applicant	Description
TC 4371	Weyerhaeuser Company \$392,615	A Water Pollution Control facility consisting of a custom designed outfall diffuser, which reduces wastewater contamination by providing for appropriate mixing of wastewater and river water at the applicant's Springfield mill.
TC 4398	Pope & Talbot \$23,774,824	A Water Pollution Control facility consisting of an oxygen delignification system to replace a portion of the applicant's chlorine bleaching (pulp) system. The facility is designed to reduce wastewater contamination from dioxin, adsorbable halides and effluent color at the applicant's Halsey, OR mill.
TC 4414	Weyerhaeuser Company \$7,049,488	A Water Pollution Control wastewater treatment facility consisting of a 15 acre (58 million gallon) aerated stabilization basin (ASB), nine surface aerators, a double HDPE liner with leak detection and collection capacity and associated equipment.
TC 4417	Tidewater Barge Lines \$1,012,000/64%	A combined Water and Air Pollution Control facility consisting of the second hull of a double-hulled barge and a vapor recovery system to prevent petroleum and vapor contamination of Oregon waters and air.

Application No.	Applicant	Description
TC 4418	Elf Atochem North America \$1,850,569	A Water Pollution Control wastewater treatment facility consisting of a 100,000 gallon lined carbon steel primary treatment tank, a 30,000 gallon fiberglass secondary treatment tank and a 480,000 gallon lined carbon steel surge tank and associated pumps and containment structures.
TC 4419	Truax Harris Energy Company \$285,672/91%	An Underground Storage Tank (UST) facility consisting of five doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system with overflow alarm, automatic shutoff valves, turbine leak detectors, sumps, an oil/water separator, monitoring wells and Stage I vapor recovery equipment.
TC 4490	Willamette Industries, Inc. \$372,840	A Solid Waste Recycling facility consisting of a Model 9100 Norkot Maxigrind Hammermill system that converts waste wood into usable wood shavings for use in producing particleboard.

Background and Discussion of Issues

The Department of Justice has arrived at an opinion regarding two issues that were raised by the Commission at the September 29, 1995 meeting. The Attorney General's Office indicates that the Commission probably does not have the authority to limit the availability of tax credits for alternative methods of field burning and field sanitation, even given the fact that field burning is to be phased out under a field burning permitting system. In the opinion of the Office of the Attorney General, ORS 468.150 gives the Department the authority only to designate approved "methods", not to delineate the circumstances under which an approved method can qualify for the tax credit. Moreover, the general pollution control facility tax credit statute clearly allows for investments made to comply with the pollution control laws.

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On the question of whether gravity tables, which are used to separate clean grass seed from weed seed and infected grass seed, can qualify for tax credit relief, the Office of the Attorney General indicates that the rules are subject to two reasonable interpretations. Therefore, the decision lies with the Commission as to whether these facilities are eligible for tax credit relief.

A discussion of these issues in the form of a letter from the Office of the Attorney General is included in this report.

On another issue related to the September meeting, JSG, Inc. claimed a John Deere model 8870 350hp tractor to pull and power a Rear's 12' grass vacuum and a John Deere 2810 Moldboard plow. The Department of Agriculture has determined that the Rear's firm recommends a tractor horsepower in the range of 165-200 for powering the Rear's 12' vacuum, depending upon variables such as straw load, speed of operation, condition of terrain and acres treated per season. However, Rear's added that larger operations (2,000 acres +) often choose higher horsepower for enhanced durability. Fisher implements priced the John Deere 8300 200hp tractor at between \$100-115 thousand; the claimed facility cost of the model 8870 was \$122,640. JSG, Inc. has 3,593 acres of perennial and 395 acres of annual grass seed under cultivation.

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Authority to Address the Issue

ORS 468.150 through 468.190 and OAR 340-16-005 through 340-16-050 (Pollution Control Facilities Tax Credit).

ORS 468.925 through 468.965 and OAR 340-17-010 through 340-17-055 (Reclaimed Plastic Product Tax Credit).

Alternatives and Evaluation

None.

Summary of Any Prior Public Input Opportunity

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

Conclusions

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

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o Proposed November 17, 1995, Pollution Control Tax Credit Totals:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>Certified Allocable Costs**</u>	<u>No.</u>
Air Quality	\$2,325,468	\$2,325,468	4
CFC	1,850	1,147	1
Field Burning	282,357	272,094	4
Noise	67,786	67,786	2
Hazardous Waste	0	0	0
Plastics	189,056	123,366	2
SW - Recycling	438,203	438,203	3
SW - Landfill	0	0	0
Water Quality	35,961,678	35,597,358	14
UST	<u>3,123,325</u>	<u>2,938,811</u>	<u>39</u>
	\$42,389,723	\$41,764,233	69

o Calendar Year Totals Through September 29, 1995:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>Certified Allocable Costs**</u>	<u>No.</u>
Air Quality	\$ 1,994,229	\$ 1,994,229	12
CFC	10,130	8,039	5
Field Burning	2,315,832	2,043,879	28
Noise	388,234	372,565	2
Hazardous Waste	77,083	77,083	1
Plastics	111,525	111,525	5
SW - Recycling	40,759	40,759	1
SW - Landfill	290,496	290,496	2
Water Quality	51,616,547	51,438,486	32
UST	<u>361,304</u>	<u>300,939</u>	<u>2</u>
	\$57,206,139	\$56,678,000	90

*These amounts represent the total facility costs. The actual dollars that can be applied as credit is calculated by multiplying the total facility cost by the determined percent allocable and dividing by 2.

****These amounts represent the total eligible facility costs that are allocable to pollution control. To calculate the actual dollars that can be applied as credit, the certifiable allocable cost is multiplied by 50 percent.**

Recommendation for Commission Action

- A) The Department recommends that the Commission approve certification for the tax credit applications as presented in Attachment A of the Department Staff Report.
- B) The Department recommends approval of the Matsushita Electronic Materials, Inc.'s request for an extension of 6 months (until March 20, 1996) to file for their pollution control facility located in Forest Grove.
- C) The Department recommends approval of Willamette Industries, Inc's request to transfer the remaining value of tax credit certificate 3344 from Lumber Tech, Inc. to Willamette Industries, Inc. as of January 1, 1996. Willamette Industries purchased the wood products manufacturing facility at which the pollution control facility is located on August 1, 1995. The Department therefore requests that certificate # 3344 be revoked as of the end of this year and a replacement certificate for the remaining value of the credit be provided to Willamette Industries, effective January 1, 1996.
- D) The Department also recommends granting an extension of up to one year for Chevron U.S.A., Inc. to complete the filing requirements for applications 4499, 4500 and 4501.
- E) The Department further recommends that the Commission revoke tax credit certificates 1990, 2168, 2324 and 2630, which pertain to facilities that have been replaced by facilities recommended for tax credit that are presented for approval in this report.

Intended Followup Actions

Notify applicants of Environmental Quality Commission actions.

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Attachments

A. Pollution Control Tax Credit Application Review Reports.
Reference Documents (available upon request)

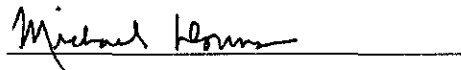
1. ORS 468.150 through 468.190.
2. OAR 340-16-005 through 340-16-050.
3. ORS 468.925 through 468.965.
4. OAR 340-17-010 through 340-17-055.

Approved:

Section:



Division:



Report Prepared By: Charles Bianchi

Phone: 229-6149

Date Prepared: November 1, 1995

Charles Bianchi
NOVEQC
November 1, 1995

THEODORE R. KULONGOSKI
ATTORNEY GENERAL



THOMAS A. BALMER
DEPUTY ATTORNEY GENERAL

1515 SW 5th Avenue
Suite 410
Portland, Oregon 97201
FAX: (503) 229-5120
TDD: (503) 378-5938
Telephone: (503) 229-5725

DEPARTMENT OF JUSTICE
PORTLAND OFFICE

November 1, 1995

Michael Downs, Administrator
Water Quality Division
Department of Environmental Quality
811 Southwest Sixth Avenue
Portland, OR 97204

Re: Tax Credits for Alternatives to Field Burning: Commission Questions

Dear Mr. Downs:

The Department of Environmental Quality (DEQ) and the Environmental Quality Commission (EQC) have asked two questions regarding tax credits for alternatives to field burning. These questions, our answers, and a discussion follow.

QUESTION 1

Does the EQC have authority to limit the availability of tax credits for alternative methods of field burning and field sanitation in light of the fact that the field burning statutes require that field burning be phased out?

SHORT ANSWER

Probably not. ORS 468.150 gives the Department authority only to designate approved "methods," not to delineate circumstances under which an approved method can qualify for the tax credit. Moreover, the general pollution control facility tax credit statute clearly allows tax credits for investments made to comply with pollution control laws.

QUESTION 2

Can gravity table installations, used to separate clean grass seed from weed seed and infected grass seed, qualify as a pollution control facility eligible for a tax credit under ORS 468.150 and 468.155?

Michael Downs, Administrator

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SHORT ANSWER

The rules are subject to two reasonable interpretations. Therefore, the decision lies with the EQC. A literal reading of the EQC's rules appear to limit approved alternative field burning methods and facilities to facilities related to *straw* handling, propane flammers or mobile field sanitizers, and drainage tile installations. Because the gravity table installation relates to grass seed, and not straw, it cannot qualify as a facility that prevents, controls, or reduces pollution.

A contrary, reasonable argument can be made that gravity table installations are part of a broader process involving grass straw that still meets the intent of reducing open field burning.

DISCUSSION

A. **The EQC Probably Does Not Have the Authority to Phase Out or Limit Tax Credits for Field Sanitation and Straw Utilization Even Though Field Burning Is Being Reduced**

Alternatives to field burning can, by special provision, qualify for pollution control facility tax credits. ORS 468.150. Senator Roberts introduced this tax credit provision into SB 311 in 1975 because she was concerned about giving farmers an incentive to use alternatives to field burning. MINUTES TO THE SENATE COMMITTEE ON AGRICULTURE AND NATURAL RESOURCES, 3/18/75, at 17. Before SB 311 was finally adopted, the House and Senate first removed, then reinstated, this provision, commenting that it was needed "mainly for tax credits for people who purchase the [sanitation] machines." CONFERENCE COMMITTEE ON FIELD BURNING, 6/11/75, at 3. The legislative history of ORS 468.150 thus indicates that the legislature intended this tax credit to encourage farmers to use alternatives to field burning and to provide a financial benefit to those who purchase alternative methods of field sanitation.

In 1991, without changing ORS 468.150, the legislature enacted a field burning reduction plan, "declar[ing] it to be the policy of this state to reduce the practice of open field burning while developing and providing alternative methods of field sanitation and alternative methods of utilizing and marketing crop residues." ORS 468A.555. The terms of this policy thus yoke the reduction of field burning to the development of alternatives; the two processes are statutorily envisioned as proceeding simultaneously.

The exact reduction in acreage burned is also governed by statute, dropping from 180,000 acres in 1991 to 40,000 acres burned in 1998 and thereafter. ORS 468A.610(2). In

Michael Downs, Administrator
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addition, the EQC has authority to allow experimental field sanitation, including experimental burning, on an additional 1000 acres. ORS 468A.620.

Neither ORS 468.150 nor the field burning reduction statutes expressly give the EQC authority to limit the availability of tax credits because of the field burning reduction plan. Nor, given the language and legislative intent of these statutes, can such authority reasonably be implied. As discussed, both the legislative history of ORS 468.150 and the policy stated in ORS 468A.155 tie the reduction of field burning to the encouragement and development of alternative methods of field sanitation and straw utilization and disposal.

In addition, ORS 468.150 gives DEQ discretion only as to the *methods* that qualify for a tax credit, not as to the circumstances under which the tax credit may be claimed. The committee and DEQ must approve alternative methods before such methods can qualify for a tax credit. ORS 468.150. Once a method has been approved, however, "pollution control facility" *shall* include such approved alternative methods," *id.*, leaving the EQC no discretion to distinguish an approved method used by someone who had actually could have or might have engaged in field burning from the same method used by someone who had no intention of burning.

The introduction of the field burning reduction plan, moreover, does not undermine the purposes or intent of the tax credit for field burning alternatives. Alternatives to field burning qualify for a tax credit as a species of pollution control facility: ORS 468.150 essentially acts to expand the definition of "pollution control facility" to "include such approved alternative methods," so that "persons purchasing and utilizing such methods shall be eligible for the benefits allowed by ORS 468.155 to 468.190." ORS 468.150.

The general pollution control facility tax credit provision, however, explicitly allows facilities to qualify for a tax credit even though the pollution reduction involved is already required by law. Thus, a pollution control facility is "any land, structure, building, installation, excavation, machinery, equipment * * * if"

The principal purpose of such use, erection, construction or installation is to comply with a requirement imposed by the department, the federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil * * * .

ORS 468.155(1)(a)(A). Therefore, allowing tax credits for alternatives to field burning even though statutes require field burning to be reduced is consistent with the general intent of pollution control facility tax credits. In contrast, eliminating or reducing the availability of

Michael Downs, Administrator
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the tax credit because reduction of field burning is already mandated would arguably contradict legislative intent and therefore be outside the scope of the EQC's authority.

Finally, the field burning reduction statutes require that "permits *shall* be issued and burning *shall* be allowed for the maximum acreage specified" unless burning conditions require otherwise, or unless "[t]he commission finds after hearing that other reasonable and economically feasible, environmentally acceptable alternatives to the practice of annual open field burning have been developed." ORS 468A.610(8). Until the EQC holds this hearing, therefore, it must allow the maximum burning allowed by statute. As such, it would act contrary to legislative intent if it limited tax credits for field burning alternatives to persons who already had permits: the tax credit would require that the permittee *not* burn and hence the EQC's policy would have the effect of not allowing the maximum acreage to be burned, as is required by statute.

Even if the EQC holds the hearing mentioned in ORS 468A.610(8)(b), however, it cannot deny tax credits under ORS 468.150. The legislature has done nothing to tie the availability of tax credits to the field burning reduction plan, nor has it chosen to repeal ORS 468.150. Moreover, the 1995 legislature amended many of the field burning statutes — in part to mandate a transfer of the field burning program to the Department of Agriculture — but again left the tax credit untouched. HB 3044 (1995). Therefore, any limitation the EQC might wish to place on the availability of tax credits because of the field burning reduction plan arguably contradicts a legislative intent to leave the tax credit in place. Moreover, if the EQC were to deny the tax credit altogether or severely restrict it in light of mandated field burning reduction, it could be held to have effectively repealed ORS 468.150, a power only the legislature can exercise. *Gilliam County v. Dept. of Env'tl. Quality*, 114 Or App 369, 380, 837 P2d 965 (1992), *aff'd* 316 Or 99, 849 P2d 500 (1993), *rev'd on other grounds sub nom Oregon Waste Systems, Inc. v. Dept. of Env'tl. Quality*, 114 S Ct 1345 (1994).

B. Gravity Table Installations Cannot Qualify for the Tax Credit Unless They Are Interpreted to Be Part of a Broader Process Involving Straw That Reduces Open Field Burning

Gravity table installations serve a field sanitation purpose by sorting clean grass seed from weed seed and from infected grass seed. The percentage of infected seed and weed seed in grass seed crops has been increasing because of the reduction in field burning, and the gravity table installations can more efficiently sort seed than machinery that sorts seed based on size.

DEQ can approve "alternative methods for field sanitation and straw utilization and disposal" to be eligible for a tax credit. ORS 468.150. Under this provision, the gravity table installations could qualify for a tax credit as an alternative to field sanitation because

Michael Downs, Administrator
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the installations perform essentially the same function as field burning as far as sanitation is concerned by providing farmers with a method of efficiently procuring a "clean" crop.

However, the EQC has, by rule, further limited the scope of alternative field burning methods. Pollution control facilities must prevent, control, or reduce pollution. OAR 340-16-025(1). "Such prevention, control or reduction required by this subsection shall be accomplished by:"

(f) Approved alternative field burning methods and facilities which shall be limited to:

(A) Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating *grass straw or straw based products* which will result in reduction of open field burning;

(B) Propane flammers or mobile field sanitizers which are alternative to open field burning and reduce air quality impacts; and

(C) Drainage tile installations which will result in a reduction of grass seed acreage under production.

OAR 340-16-025(2).

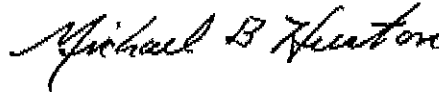
The gravity table installations are clearly not drainage tile installations nor propane flammers, nor would they easily qualify as mobile field sanitizers. Nor do the installations qualify under the express terms of OAR 340-16-025(2)(f)(A): the installations do not gather, densify, process, handle, store, transport or incorporate grass straw or straw based products. Instead, the installations sort *grass seed*. Therefore, under a literal reading of the current rules, the installations do not qualify as approved alternative field burning methods and cannot receive a tax credit.

There is a contrary interpretation of the rules that we believe the commission could adopt. According to Jim Britton of the Oregon Department of Agriculture, the gravity table installations are merely part of a broader flail-chop-vacuum system that does involve grass straw and meets the goal of reducing open field burning. It is within the EQC's authority to

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decide whether it agrees with this interpretation. The issue may depend on whether the EQC determines that the gravity table installations are integral to a broader system for dealing with grass straw.

Sincerely,



Michael B. Huston
Assistant Attorney General

MBH:rkc:ki/MBH0129.LET

c: Charles Bianchi, DEQ
Jim Britton, Manager, Smoke Mgmt. Program, DOA



Member of Matsushita Group

Matsushita Electronic Materials, Inc.

4114 Heather Street
Forest Grove, OR 97116
Tel (503) 357-8695
Fax (503) 357-8868

September 20, 1995

OR-DEQ

Attn: Mike Downs

811 SW 6th Avenue
Portland, OR 97204

Re: Request for an extension to file for Pollution Control Tax Credits

Dear Mr. Downs:

Matsushita Electronic Materials, Inc., (MEM) completed construction of its administrative and manufacturing facility at 4114 Heather Street, Forest Grove, Oregon, on September 30, 1993. MEM made significant investments in pollution control equipment and accordingly intends to file for Pollution Control Tax Credits. However as the internal review of the application is taking much longer than expected (MEM is part of the Matsushita Group), MEM herewith requests a six (6) month extension to file the application.

I look forward to your response. Should you have questions, I am available at 357-8695, ext 124.

Most sincerely,

Ian H. Goodridge LRSC, CHMM
EHS Manager

cc Charles Bianchi, DEQ
Dennis Cartier, SJO
Larry Winkle, MEM
Rod Goodrich, MEM

SEP 21 1995
10:01 AM
MEMPHIS, TN 38103



WILLAMETTE INDUSTRIES, INC.
3800 First Interstate Tower
Portland, OR 97201

LUMBER TECH, INC.
P.O. Box 624
Lebanon, OR 97355

October 2, 1995

State of Oregon
Department of Environmental Quality
Management Services Department
811 SW Sixth Avenue
Portland, OR 97204

Re: Lumber Tech, Inc. and Willamette Industries, Inc.
Request for Transfer of Pollution Control Tax Credit
Certificate No. 3344

Gentlemen:

On August 1, 1995, Willamette Industries, Inc. purchased from Lumber Tech, Inc. their wood products facility located at 800 East Milton Street in Lebanon, Oregon. This facility is a secondary wood products manufacturing facility. It produces cut stock for the door and window industry. Included in the purchase was a Western Pneumatics Baghouse which had been certified as eligible for the pollution control tax credit by the EQC on August 26, 1994 (copy of Certificate No. 3344 attached).

Lumber Tech, Inc. and Willamette Industries, Inc. hereby request that Pollution Control Tax Credit Certificate No. 3344 be transferred from Lumber Tech, Inc. (EIN 93-0846211) to Willamette Industries, Inc. (EIN 93-0312940). Willamette plans to continue to operate this pollution control device for its remaining useful life. This transfer is requested to be effective for 1996 and forward. Lumber Tech will take the 1995 portion of the tax credit.

Thank you for your cooperation and consideration in this matter.

Cordially,

LUMBER TECH, INC.

WILLAMETTE INDUSTRIES, INC.

Steve Latimer
President

Don McNeill
Vice President

Enclosures

October 12, 1995



Chevron Corporation
Tax Department
225 Bush Street, Room 1291
San Francisco CA 94104

Mailing Address:
P O Box 7053
San Francisco CA 94120 7053

Gary S. Hook
Tax Counsel
Phone 415 894 3046
Fax 415 894 4796
Internet hsga@chevron.com

Via Facsimile (503) 229-6954

Mr. Larry D. Frost, P.E.
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390

**Chevron U.S.A. Inc. Pollution Control
Tax Credit Application Nos. 4499, 4500, & 4501**

Dear Mr. Frost:

Per your letter to me of October 11, 1995 (copy attached) regarding the Oregon pollution control tax credit applications noted above, Chevron U.S.A. Inc. requests a one-year extension of time to collect and review the information in support of these applications. The discrepancies in cost figures between the tax credit work sheets and the applications cannot likely be resolved by October 17, 1995. Therefore, we will resubmit the necessary information so that the applications can be approved as soon as possible in 1996.

We regret the discrepancies you identified in your letter, and will submit corrected applications to you as soon as possible. Should you have any questions, please call me at the telephone number above.

Yours very truly,

A handwritten signature in dark ink, appearing to read "Gary S. Hook", is written over a printed name.

Gary S. Hook

GSH/gsh
Attachment

Application No. TC-4302

State of Oregon
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT
POLLUTION CONTROL TAX CREDIT
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

United Disposal Service, Inc.
2215 N. Front Street
Woodburn, Oregon 97071

The applicant is a corporation providing recycling, residential and commercial refuse collection in Wilsonville, Woodburn, Aumsville, and Silverton.

Application was made for Reclaimed Plastic Tax Credit. The portion of the collection truck used to collect recyclable material other than plastic was separately evaluated for Solid Waste Pollution Control Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consisting of:

1995 Nissan Truck, Model UD 1800, VIN JNAMA20H6SGE501668, and 1995 Plastic Compactor, Model FC-60B, Serial No. PP-9449

The entire investment in the plastics compactor, and the portion of the collection truck that is used for collecting reclaimed plastic (twenty percent) were evaluated for plastics tax credits under ORS 468.451 to 468.491. The cost of this investment was \$20,600.

The portion of the collection truck that is used for collecting material other than plastic (eighty percent) was evaluated for solid waste pollution control tax credits under ORS 469.150 to 468.190. The cost of this investment was \$30,678.

The total eligible cost of the facilities amounts to \$51,278.

Invoices for all products and services were provided. An accountant's certification was provided.

3. Procedural Requirements

The portion of the investment concerning reclaimed plastic is governed by ORS 468.451 through 468.491, and by OAR Chapter 340, Division 17. The portion of the investment concerning pollution control and solid waste reduction/recycling other than reclaimed plastic is governed by ORS 468.150 through 468.190 and by OAR Chapter 340 Division 16.

The investment met all statutory deadlines in that:

- a. The request for plastic preliminary certification was received on September 26, 1994. The preliminary application was filed complete, and a waiver to purchase was issued on September 26, 1994.
- b. The request for preliminary certification was approved on October 12, 1994.
- d. The investment was made on September 30, 1994. The request for final certification was submitted on July 10, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Evaluation of the facility portion claimed for plastics tax credits:

- A) The investment is eligible because the equipment is necessary to process reclaimed plastic.
- B) Allocable Cost Findings

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.486 have been considered and analyzed as indicated:

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

This factor is applicable because the purpose of this truck is to transport recyclable plastic to a plastic processor where it is processed into a feed stock to be used to manufacture reclaimed plastic products. The waste plastic transported by this truck is generated by persons other than the applicant.

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

No other factors were considered relevant.

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

b. Evaluation of the facility portion claimed for solid waste pollution control tax credits:

- A. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The collection truck is used to collect newspaper, glass, tin cans, used motor oil, cardboard, and other recyclable material from households.

B. Eligible Cost Findings

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

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

This factor is applicable in that the facility is necessary for the recovery and utilization of and number of recyclable materials that are ultimately used to make numerous products.

- 2) The ratio of the time the facility is used for prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil bears to the entire time the facility is used for any purpose.

This factor is applicable under ORS 468.190, as amended by Section 4 of Enrolled House Bill 2255 (1995 Session), as the cost claimed for the solid waste pollution control facility does not exceed \$50,000. The claimed facility is used 100% of the time for solid waste pollution control through recycling collection. The Department has identified no ineligible costs relating to the purchase of the collection truck. As such, the portion of costs properly allocable is 100 percent under the new statute.

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

The applicant investigated different trucks and methods of collection, and concluded that the equipment purchased would be the most efficient and effective.

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

Revenue from the sale of recyclables collected is exceeded by the

cost of collection and operating the collection equipment.

- 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 recycle or properly dispose of used oil.

No other factors have been found to be applicable.

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

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment in a plastics reclamation facility is eligible for final tax credit certification in that the equipment is necessary to manufacture a reclaimed plastic product.
- c. The solid waste pollution control facility was constructed in accordance with all regulatory deadlines.
- d. The facility is eligible for tax credit certification in that the sole purpose of collection vehicle is to collect newspaper, glass, cardboard, tin cans, used motor oil, and other material for recycling.
- e. The qualifying business complies with DEQ statutes and rules.
- f. The portion of the investment cost in the plastics reclaiming facility that is properly allocable to reclaiming and recycling plastic is 100%.
- g. The portion of the solid waste pollution control facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

The actual certifiable cost of the facilities is \$51,278.00

However, based upon these findings, it is recommended that two certificates be issued. A Reclaimed Plastic Tax Credit Certificate bearing the cost of \$20,600.00, 100% allocated to reclaiming plastic material, and a Pollution Control Facility certificate bearing the cost of \$30,678.00 with 100% allocable to pollution control are recommended to be issued for the investment claimed in Tax Credit Application No. TC-4302.

Application TC-4319

State of Oregon
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

United Disposal Service, Inc.
2215 N. Front Street
Woodburn, Oregon 97071

The applicant is a corporation providing recycling, residential and commercial refuse collection in Wilsonville, Woodburn, Aumsville, and Silverton.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment and installation cost: \$119,437.00

The claimed equipment consisting of:

1995 White GMC Truck, model WX64, VIN 4V2DCFBE7SN69136, Drop box truck used for collection and transporting of reclaimed plastics. In addition to the vehicle itself, installed equipment includes Peerless Model MRH60 Magnum Roll-off System, Serial No. OWI-70-94, Hot shift P.T.O. Hydraulic from hook assembly and rear stabilizers.

Invoices for all products and services were provided. Copies of the checks for payment were provided. The accounting firm of Boldt, Carlisle, and Smith provided an independent review of the project costs.

3. Procedural Requirements

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

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on October 24, 1994. The preliminary application was filed complete.

- b. The request for preliminary certification was approved with a waiver on October 24, 1994.
- c. The investment was made on October 26, 1994. The request for final certification was submitted on July 10, 1995 and was filed complete on August 7, 1995.

4. Evaluation of Application

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

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.486 have been considered and analyzed as indicated:

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

This factor is applicable because the purpose of this truck is to transport recyclable plastic to a plastic processor where it is processed into a feed stock to be used to manufacture reclaimed plastic products. The waste plastic transported by this truck is generated by persons other than the applicant. The truck and equipment will be used 45% of the time to collect and transport reclaimed plastic.

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

The applicant investigated other alternatives and determined that this equipment is the most efficient and productive from an economic standpoint.

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

No other factors were considered relevant.

The actual cost of the investment properly allocable to processing reclaimed plastic as determined by using these factors is 45%, based on the

percentage of the time that the truck and equipment will be used to collect and transport reclaimed plastic.

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment is eligible for final tax credit certification in that the equipment is necessary to manufacture a reclaimed plastic product.
- c. The qualifying business complies with DEQ statutes and rules.
- d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 45%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$119,437.00, 45% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application TC-4319.

Rick Paul & Peter Spendelow:rap/phs
SWRSHARE\TAXCRED\TC4319RR.STA
(503) 229-5253
September 28, 1995

Application No. TC-4334

State of Oregon
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

WDD Partners
230 N. W. 10th
Portland, OR 97209

The applicant is an investment partnership which has purchased a Weigh Master Gravimetric Blender; a Turbo Mixer, driven by a TEFC, 230/460 V drive motor; Model 980 Blender control Panel; and a clear acrylic chute. A conveying system to unite the extruder and blender was added to create an automated handling system. The claimed equipment will be used by Denton Plastic exclusively to transform plastic destined for the landfill into pellets ready to use as feedstock in the production of products.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consisting of:

1 Weigh Master Gravimetric Blender, WM2000-5,VIB,CS
1 Turbo Mixer, 100L, Dual INLT
1 Control Panel, WM2000-5Comp,VBR
1 Panel. MCC,BLNR, 2.00HP
1 Chute, Clear Acrylic 5' X 5'
1 Vacuum Loader, %hp, 2"
1 Panel, 601, 5HP, 14STA, Wall Mount
Installation tubing and fittings.

Invoices were provided. An accountant's certificate was provided.

3. Procedural Requirements

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

The investment met all statutory deadlines in that:

a. The request for preliminary certification was received

on December 13, 1994. The preliminary application was filed complete.

- b. The request for preliminary certification was approved on December 20, 1994.
- c. The investment was made on March 24, 1995, prior to June 30, 1995.
- d. The request for final certification was submitted on August 28, 1995 and was filed complete on September 11, 1995.

4. Evaluation of Application

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

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

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

This factor is applicable because the sole purpose of this truck is to transport recyclable plastic to a plastic processor where it is processed into a feed stock to be used to manufacture reclaimed plastic products. The waste plastic transported by this truck is generated by persons other than the applicant.

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

The applicant investigated other alternatives and determined that this equipment is the most efficient and productive from an economic standpoint.

- 3) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection,

transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product.

No other factors were considered relevant.

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

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$69,619.00 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4334.

RAP:Rick Paul
wp51\tax\tc4334rr.sta
(503) 229-5934
September 11, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Bassett-Hyland Energy Co.
P O Box 689
Coos Bay, OR 97420

The applicant owns and operates a retail gas station and commercial cardlock at 1059 Evans Blvd., Coos Bay, OR, Facility No. 5154.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall fiberglass piping, spill containment basins, line leak detectors, automatic shutoff valves, sumps, oil/water separator and Stage I vapor recovery and Stage II vapor recovery piping.

Claimed facility cost \$105,471
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$103,286. This represents a difference of \$2,185 from the applicant's claimed cost of \$105,471 due to a determination by the Department that the cost of monitoring wells is not eligible pursuant to the definition of a pollution control facility in ORS 468.155 because they exist for the purpose of remediation and not leak detection.

3. Procedural Requirements

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

The facility was substantially completed on December 2, 1993 and placed into operation on December 3, 1993. The application for certification was submitted to the Department on December 16, 1994, and was considered to be complete and filed on August 4, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, oil/water separator and automatic shutoff valves.
- 3) For leak detection - Line leak detectors.

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

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

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass piping	\$ 9,900	85% (1)	\$ 8,415
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	835	100	835
Oil/water separator	14,217	100	14,217
Sumps	5,116	100	5,116
Automatic shutoff valves	2,938	100	2,938
<u>Leak Detection:</u>			
Line leak detectors	1,316	100	1,316
<u>VOC Reduction:</u>			
Stage I vapor recovery	158	100	158
Stage II piping	2,805	100	2,805
Labor and materials	66,001	100	66,001
Total	\$103,286	99%	\$101,801

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$9,900 and the bare steel system is \$1,476, the resulting portion of the eligible piping cost allocable to pollution control is 85%.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g):

"Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$103,286 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4335.

Barbara J. Anderson
(503) 229-5870
August 4, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Truax Harris Energy Co.
P O Box 607
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 1701 E. Marine Drive, Astoria, OR, Facility No. 5094.

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

2. Description of Claimed Facility

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

Claimed facility cost \$126,856
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on October 13, 1994 and placed into operation on October 13, 1994. The application for certification was submitted to the Department on December 30, 1994, and was considered to be complete and filed on August 12, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, monitoring wells and turbine leak detectors.
- 4) For VOC reduction - Stage I vapor recovery equipment.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$126,856) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

- b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass tanks and piping	\$36,103	62% (1)	\$22,384
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	627	100	627
Automatic shutoff valves	368	100	368
<u>Leak Detection:</u>			
Tank gauge system	7,184	90 (2)	6,466
Turbine leak detectors	921	100	921
Monitoring wells	119	100	119
Stage I vapor recovery	483	100	483
Labor and materials	81,051	100	81,051
Total	\$126,856	89%	\$112,419

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$36,103 and the bare steel system is \$13,627, the resulting portion of the eligible tank and piping cost allocable to pollution control is 62%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 89%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$126,856 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4341.

Barbara J. Anderson
(503) 229-5870
August 12, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 30 West Powell Blvd., Gresham, OR 97030, Facility ID No. 5833.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$36,888
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on July 3, 1993 and placed into operation on July 4, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 30, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$36,888) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$ 760	100	\$ 760
Automatic shutoff valves	399	100	399
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 12 hoses and nozzles on 6 dispensers)	5,240	100	5,240
Labor and materials	30,489	100	30,489
	_____	_____	_____
Total	\$36,888	100%	\$36,888

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$36,888 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4355.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 15670 SW Upper Boones Ferry Rd., Lake Oswego, OR 97034, Facility ID No. 1358.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$37,207
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$37,800. This represents a difference of \$593 from the applicant's claimed cost of \$37,207 due to (1) an error in addition on the part of the applicant (increasing the project cost by \$1,687) and (2) a determination by the Department that the cost of a Tokheim submersible pump is not eligible pursuant to the definition of a pollution control facility in ORS 468.155 (decreasing the project cost by \$1,094).

3. Procedural Requirements

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

The facility was substantially completed on June 12, 1993 and placed into operation on June 13, 1993. The application for certification was submitted to the Department on

February 28, 1995 and was considered to be complete and filed on June 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	=====	=====	=====
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$1,013	100	\$1,013
Automatic shutoff valves	674	100	674
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 12 hoses and nozzles on 6 dispensers)	4,987	100	4,987
Labor and materials	31,126	100	31,126
	=====	=====	=====
Total	\$37,800	100%	\$37,800

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$37,800 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4356.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 1850 SW Skyline Blvd., Portland, OR 97221, Facility ID No. 782.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$46,530
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$45,436. This represents a difference of \$1,094 from the applicant's claimed cost of \$46,530 due to a determination by the Department that the cost of a Tokheim submersible pump is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on July 3, 1993 and placed into operation on July 4, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$1,520	100	\$1,520
Automatic shutoff valves	807	100	807
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 16 hoses and nozzles on 8 dispensers)	5,240	100	5,240
Labor and materials	37,869	100	37,869
	_____	_____	_____
Total	\$45,436	100%	\$45,436

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$45,436 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4357.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 15901 SE 82nd Dr., Clackamas, OR 97015, Facility ID No. 971.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$45,088
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on July 24, 1993 and placed into operation on July 24, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 30, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$45,088) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$1,520	100	\$1,520
Automatic shutoff valves	1,358	100	1,358
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 16 hoses and nozzles on 8 dispensers)	5,240	100	5,240
Labor and materials	36,970	100	36,970
	_____	_____	_____
Total	\$45,088	100%	\$45,088

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$45,088 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4358.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 12105 N. Jantzen Ave., Portland, OR 97217, Facility ID No. 1332.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$50,155
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$49,061. This represents a difference of \$1,094 from the applicant's claimed cost of \$50,155 due to a determination by the Department that the cost of a Tokheim submersible pump is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on June 12, 1993 and placed into operation on June 13, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$2,229	100	\$2,229
Automatic shutoff valves	1,299	100	1,299
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 18 hoses and nozzles on 9 dispensers)	5,240	100	5,240
Labor and materials	40,293	100	40,293
	_____	_____	_____
Total	\$49,061	100%	\$49,061

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$49,061 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4359.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 11520 SW Canyon Rd., Beaverton, OR 97005, Facility ID No. 501.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$55,263
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$54,169. This represents a difference of \$1,094 from the applicant's claimed cost of \$55,263 due to a determination by the Department that the cost of a Tokheim submersible pump is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on June 18, 1993 and placed into operation on June 19, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$1,773	100	\$1,773
Automatic shutoff valves	3,366	100	3,366
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 24 hoses and nozzles on 8 dispensers)	4,987	100	4,987
Labor and materials	44,043	100	44,043
	_____	_____	_____
Total	\$54,169	100%	\$54,169

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$54,169 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4360.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 10215 NE Halsey St., Portland, OR 97220, Facility ID No. 1089.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$56,060
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$54,966. This represents a difference of \$1,094 from the applicant's claimed cost of \$56,060 due to a determination by the Department that the cost of a Tokheim submersible pump is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on July 23, 1993 and placed into operation on July 24, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$ 760	100	\$ 760
Automatic shutoff valves	599	100	599
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 15 hoses and nozzles on 9 dispensers)	5,240	100	5,240
Labor and materials	48,367	100	48,367
	_____	_____	_____
Total	\$54,966	100%	\$54,966

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$54,966 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4361.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron USA, Inc.
6001 Bollinger Canyon Rd., Bldg. L
San Ramon, CA 94583

The applicant owns and operates a retail gas station at 15710 SE McLoughlin Blvd., Milwaukie, OR 97267, Facility ID No. 1107.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, automatic shutoff valves and Stage II vapor recovery equipment.

Claimed facility cost \$59,790
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$58,696. This represents a difference of \$1,094 from the applicant's claimed cost of \$59,790 due to a determination by the Department that the cost of a Tokheim submersible pump is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on July 3, 1993 and placed into operation on July 4, 1993. The application for certification was submitted to the Department on February 28, 1995 and was considered to be complete and filed on June 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility had only partial spill and overfill prevention and no Stage II vapor recovery equipment.

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

- 1) For spill and overfill prevention - Spill containment basins and automatic shutoff valves.

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

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

Based on information currently available, the applicant is in compliance with DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	\$2,989	100	\$2,989
Automatic shutoff valves	1,355	100	1,355
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 24 hoses and nozzles on 12 dispensers)	4,480	100	4,480
Labor and materials	49,872	100	49,872
	_____	_____	_____
Total	\$58,696	100%	\$58,696

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- 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 \$58,696 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4362.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Truax Harris Energy Co.
P O Box 607
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 4292 Liberty Rd., SE, Salem, OR, Facility No. 8491.

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

The applicant has claimed equipment in this application that replaced equipment claimed in prior tax credits TC-2569 and TC-3202 issued in 1990. The equipment was replaced before the end of its useful life. See Section 2 below for an explanation of the adjustment made to costs claimed in this application. TC-2569 and TC-3202 will be submitted for revocation.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two doublewall fiberglass tanks and piping, spill containment basins, tank gauge system with overflow alarm, turbine leak detectors, sumps, oil/water separator and Stage I vapor recovery equipment.

Claimed facility cost \$146,917
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$139,179. This represents a difference of \$7,738 from the applicant's claimed cost of \$146,917. This is due to:

- (1) an adjustment (\$7,641) made by the Department to the claimed cost of the tank gauge system with overflow alarm, spill containment basins and installation of those items because they replaced the same type of equipment claimed in prior tax credits TC-2569 and TC-3202 issued in 1990. The previously claimed equipment was replaced before the end of its useful life and the adjustment reflects the amount of the tax credit remaining pursuant to Oregon Administrative Rules 340-16-025(3)(g)(B). The adjustment is detailed in Worksheets 1 and 2 attached to the end of this report;
- (2) a determination by the Department that the cost of observation wells (\$97) claimed by the applicant is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on December 28, 1994 and placed into operation on December 28, 1994. The application for certification was submitted to the Department on March 6, 1995, and was considered to be complete and filed on August 12, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Doublewall fiberglass tanks and piping.

- 2) For spill and overflow prevention - Spill containment basins, overflow alarm, sumps and an oil/water separator.
- 3) For leak detection - Tank gauge system and turbine leak detectors.

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

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

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Doublewall fiberglass tanks and piping	\$26,966	66% (1)	\$17,798
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	259(3)	100	259
Oil/water separator	2,899	100	2,899
Sumps	2,643	100	2,643
<u>Leak Detection:</u>			
Tank gauge w/alarm	3,344(3)	90 (2)	3,010
Turbine leak detectors	614	100	614
<u>VOC Reduction:</u>			
Stage I vapor recovery	322	100	322
Labor and materials	102,132(3)	100	102,132
	_____	_____	_____
Total	\$139,179	93%	\$129,677

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$26,966 and the bare steel system is \$9,062, the resulting portion of the eligible tank and piping cost allocable to pollution control is 66%.

- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.
- (3) Adjusted for prior tax credit claim (see attached Worksheets 1 and 2).

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$139,179 with 93% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4366.

Barbara J. Anderson
(503) 229-5870
October 7, 1995

WORKSHEET 1.

PRIOR TAX CREDIT REMAINING ADJUSTMENT WORKSHEET

TRUAX HARRIS ENERGY CO.

Current Application: TC-4366

Prior Tax Credit: TC-2569

ADJUSTMENT OF CURRENT TAX CREDIT CLAIM BASED ON PRIOR TAX CREDIT REMAINING WHERE EQUIPMENT IS REPLACED BEFORE THE END OF ITS USEFUL LIFE (OAR 340-16-025(3)(g)(B))

A. DETERMINATION OF AMOUNT AND PERCENT OF PRIOR TAX CREDIT REMAINING:

Total amount of prior tax credit (\$1,852 X .50)	=	\$926
Total tax credit claimed to date on income tax returns	=	(\$391)
Total tax credit remaining on prior tax credit	=	\$535
Tax credit remaining as a percent (535 / 926)	=	58%

B. ADJUSTMENT OF CURRENT TAX CREDIT APPLICATION CLAIMED COSTS:

Total current claimed costs of items replaced	=	\$767
Adjusted total current claimed costs (767 X .58)	=	\$391

C. AMOUNT REMAINING TO BE CLAIMED (breakdown below) = \$445 (1)

ITEMS REPLACED	CURRENT APPLICATION CLAIMED COST	AMOUNT REMAINING TO BE CLAIMED (58%)
TOTAL	\$767	\$445
Spill containment basins	446	259
Installation cost (labor and materials)	321 (2)	186

D. AMOUNT OF ADJUSTMENT (767 - 445) = \$322
 =====

- (1) This is the full amount eligible to be claimed on the current tax credit application. The actual tax credit received will be no greater than 50% of that amount.
 (2) Prorated from total project installation cost to represent installation cost of items replaced only.

WORKSHEET 2.

PRIOR TAX CREDIT REMAINING ADJUSTMENT WORKSHEET

TRUAX HARRIS ENERGY CO.

Current Application: TC-4366

Prior Tax Credit: TC-3202

ADJUSTMENT OF CURRENT TAX CREDIT CLAIM BASED ON PRIOR TAX CREDIT REMAINING WHERE EQUIPMENT IS REPLACED BEFORE THE END OF ITS USEFUL LIFE (OAR 340-16-025(3)(g)(B))

A. DETERMINATION OF AMOUNT AND PERCENT OF PRIOR TAX CREDIT REMAINING:

Total amount of prior tax credit (\$10,380 X .50)	=	\$5,190
Total tax credit claimed to date on income tax returns	=	(\$2,919)
Total tax credit remaining on prior tax credit	=	\$2,271
Tax credit remaining as a percent (2,919 / 5,190)	=	44%

B. ADJUSTMENT OF CURRENT TAX CREDIT APPLICATION CLAIMED COSTS:

Total current claimed costs of items replaced	=	\$13,070
Adjusted total current claimed costs (13,070 X .44)	=	\$5,751

C. AMOUNT REMAINING TO BE CLAIMED (breakdown below) = \$5,751 (1)

ITEMS REPLACED	CURRENT APPLICATION CLAIMED COST	AMOUNT REMAINING TO BE CLAIMED (44%)
TOTAL	\$13,070	\$5,751
Tank gauge system with alarm	7,599	3,344
Installation cost (labor and materials)	5,471 (2)	2,407

D. AMOUNT OF ADJUSTMENT (13,070 - 5,751) = \$7,319
=====

- (1) This is the full amount eligible to be claimed on the current tax credit application. The actual tax credit received will be no greater than 50% of that amount.
 (2) Prorated from total project installation cost to represent installation cost of items replaced only.

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Ernest R. Rieben
39125 NW Mountaindale Road
Banks OR 97106

The applicant owns and operates a pig farm in Banks, Oregon.

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

2. Description of Facility

The facility includes a 10 foot deep x 48 foot diameter below-ground manure tank, a PTO-driven agitator; a pump; collection sumps and pipelines; roofing, gutters, and downspouts over a dry manure storage slab.

Claimed Facility Cost: \$12,086
Documentation of costs were provided.

3. Procedural Requirements

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

The facility met the statutory deadline in that construction, erection and installation of the facility was substantially completed on July 1, 1994 and the application for certification was found to be complete on April 24, 1995, 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 water pollution. This prevention is accomplished by redesign to eliminate industrial waste as defined in ORS 468B.005

Prior to the installation of the facility pig manure had to be hauled from the pens to the disposal field every 3 to 4 weeks, year round, even during wet conditions. Manure contaminated runoff was discharged to nearby ditches.

With the installation of the facility manure is collected and stored in the in-ground tank. Then it is pumped to the disposal field during drier conditions. Storm runoff from the roof is diverted away from the dry manure storage slab and directly discharged to nearby ditches.

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.
A portion of the waste products are converted into a salable or usable commodity consisting of 420,750 gallons of manure. This has a value of \$9.72 per 1000 gallons for a total of \$4089.69. Equipment operating costs are \$75 per hour, and the equipment can haul 7,500 gallons per hour for a total cost of \$4,208 annually. This is a net annual cost of \$118 for the facility.

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

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

There is no return on investment for this facility.

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

An aboveground storage tank was considered which would have had a similar cost but would have had to have the manure pumped into it. The in-ground storage tank can be filled utilizing the natural slope of the site.

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

There are no savings from the facility. The cost of maintaining and operating the facility is

\$4,208 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 tax credit certification in that the sole purpose of the facility is to prevent a substantial quantity of water pollution and accomplishes this purpose by redesign to eliminate industrial waste as defined in ORS 468B. 005.
- 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 \$12,086 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4384.

Elliot J. Zais:ejz
T-4384
(503) 229-5292
WQTCSR-1/95

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

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

The applicant owns and operates a retail gas station and convenience store at 7510 N. Interstate, Portland, OR, Facility No. 6211.

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

2. Description of Claimed Facility

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

Claimed facility cost \$111,438
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$111,613. This represents a difference of \$175 from the applicant's claimed cost of \$111,438 because the applicant claimed the difference between steel piping and fiberglass piping rather than the full cost of fiberglass piping.

3. Procedural Requirements

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

The facility was substantially completed on November 15, 1994 and placed into operation on November 19, 1994. The application for certification was submitted to the Department on May 4, 1995, and was considered to be complete and filed on September 29, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of two steel tanks without corrosion protection, three with epoxy lining, piping with no corrosion protection, and no spill and overfill prevention or leak detection equipment.

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

- 1) For corrosion protection - Impressed current cathodic protection in three epoxy lined tanks and doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, automatic shutoff valves, sumps and an oil/water separator.
- 3) For leak detection - Tank gauge system and line/turbine leak detectors.

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant found no substantial alternatives available for consideration. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
DW fiberglass piping	\$ 6,174	97% (1)	\$ 5,989
Cathodic protection system	19,274	100	19,274
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,044	100	1,044
Overfill alarm	201	100	201
Automatic shutoff valves	945	100	945
Sumps	4,827	100	4,827
Oil/water separator	3,400	100	3,400
<u>Leak Detection:</u>			
Tank gauge system	6,721	90 (2)	6,049
Line/turbine leak det.	1,209	100	1,209
<u>VOC Reduction:</u>			
Stage I vapor recovery	298	100	298
Stage II vapor recovery (incl. 6 hoses and nozzles on 3 dispensers)	7,450	100	7,450
Labor and materials	60,070	100	60,070
	-----	-----	-----
Total	\$111,613	99%	\$110,756

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$6,174 and the bare steel system is \$175, the resulting portion of the eligible piping cost allocable to pollution control is 97%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$111,613 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4393.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland General Electric Company
Glencoe Substation (PGE Job 14119)
121 SW Salmon Street, 1WTC-0402
Portland, Oregon 97204

The applicant owns and operates an electric substation in Portland, Oregon.

Application was made for tax credit for an excessive noise source control facility.

2. Description of Facility

The claimed facility is a noise barrier wall erected to reduce excessive noise levels generated by an electric substation transformer. The noise barrier wall consists of sound-absorbing fiberglass panels mounted on a steel frame that is installed next to the transformer.

Claimed Facility Cost: \$11,042

A distinct portion of the claimed facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$7.00 for material loading and \$397.86 for capitalized property tax. The applicant also claimed \$1,887.00 as overhead expenses of the facility. A distant portion of these claimed expenses, \$1037.85, were allocated from corporate expenditure pools which would have been incurred without the construction of the facility.

Ineligible Costs: \$1,442.71

Adjusted Facility Cost: \$9,599.29

The applicant indicated that the useful life of the facility is ten years.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 35.

The facility met all statutory deadlines in that:

Construction and erection of the facility was substantially completed on May 18, 1993 and placed into operation on May 16, 1993. The application for final certification was received by the Department on May 4, 1995. The application was found to be complete May 4, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the DEQ to control noise pollution. This is in accordance with OAR Chapter 340, Division 35, rule 035. The Noise Control Regulations for Industry and Commerce requires the noise source owner to not allow operation of a noise source if Existing Industrial and Commercial Noise Source Standards (Table 7 of OAR 340-35-035) are exceeded.

In response to continued complaints by a neighbor of excessive noise emanating from the substation property, the applicant measured an average sound level of 58 dBA, which exceeds nighttime noise standards of 50 dBA. On May 16, 1993 after installation of the facility the applicant conducted sound measurements which indicated an average noise level of 42 DBA.

The claimed facility consists of eight sheets of noise absorbing fiberglass sheets 48" x 92" sewn to eight sheets of noise absorbing sheets 54" x 96" and supported on a steel frame. The steel frame is erected adjacent to the source of excessive noise, an electric transformer located in the applicant's substation.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant estimated the cost to install a transformer that generates lower noise levels to be \$400,000.

- 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 noise pollution.

Other than the adjustments to the claimed facility cost referenced in section 2, 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 principal purpose of the facility is to prevent a substantial quantity of air pollution.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by DEQ to reduce excessive noise levels from an existing source.
- c. The facility complies with Oregon Administrative Rules 340-35-035, Noise Control Regulations for Industry and Commerce.
- d. The portion of the facility cost that is properly allocated 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 \$9,599 with 100% allocated to noise control, be issued for the facility claimed in Tax Credit Application No. TC-4394.

Kevin G. McGillivray
SJO Consulting Engineers, Inc.

October 2, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland General Electric Company
Barnes Substation
121 S.W. Salmon Street
Portland, OR 97204-2901

The applicant owns and operates an investor owned electric utility which produces and distributes electrical energy throughout Oregon.

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

2. Description of Facility

Claimed facility consists of catch basin, vault and oil stop valve.

Claimed Facility Cost: \$12,936

3. Procedural Requirements

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

The facility met the statutory deadline in that installation of the facility was substantially completed on October 13, 1993 and the application for certification was found to be complete on August 28, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution. This prevention is accomplished by redesign to eliminate industrial waste as defined in ORS 468B.005.

Drainage within the substation site is modified to divert all oil contaminated runoff including spills to the catch basin. Collected runoff discharges into the oil stop valve vault where water is allowed to pass through and discharges to the nearby storm sewer. If oil is present

the oil stop valve will close. The system will allow adequate time for a cleanup crew to be dispatched to the site and properly dispose of the collected oil.

b. Eligible Cost Findings

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

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

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

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

There is no income from this facility. Therefore, there is no return on investment.

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

Other alternatives considered are transformer/oil circuit breaker pits and a sand filter system. The circuit breaker pit is too expensive (\$43,000 to \$62,000) and the sand filter would not contain spilled oil. There are no savings or increased costs as a result of the facility modification.

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

There are no savings or increase in costs as a result of the facility 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution and accomplishes this purpose by the redesign to eliminate industrial waste as defined in ORS 468B.005.
- c. The facility complies with federal regulations.
- 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 \$12,936 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4396.

Tom Fisher

(503) 378-8240 ext. 236

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Eugene Truck Haven, Inc.
32910 Pearl St.
Coburg, OR 97408

The applicant owns and operates a commercial cardlock facility at 65 North Seneca Rd., Eugene, OR, Facility No. 11335.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass/steel tanks, fiberglass piping, spill containment basins, automatic tank gauge system with overfill alarm, turbine leak detectors and automatic shutoff valves.

Claimed facility cost \$78,873
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on February 1, 1994 and placed into operation on February 1, 1994. The application for certification was submitted to the Department on May 8, 1995, and was considered to be complete and filed on August 12, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

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

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

- 1) For corrosion protection - Doublewall fiberglass/steel tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm and automatic shutoff valves.
- 3) For leak detection - Automatic tank gauge system and turbine leak detectors.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$78,873) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Fiberglass/steel tanks and fiberglass piping	\$44,924	62% (1)	\$27,853
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,997	100	1,997
Automatic shutoff valves	342	100	342
<u>Leak Detection:</u>			
Tank gauge with alarm	8,652	90% (2)	7,787
Turbine leak detectors	4,548	100	4,548
Labor and materials	18,410	100	18,410
	_____	_____	_____
Total	\$78,873	77%	\$60,937

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$44,924 and the bare steel system is \$17,257, the resulting portion of the eligible tank and piping cost allocable to pollution control is 62%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 77%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$78,873 with 77% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4399.

Barbara J. Anderson
(503) 229-5870
August 12, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Russell Oil Company
P O Box 7
Boardman, OR 97818

The applicant owns and operates a retail gas station and carwash at 712 SE Court St., Pendleton, OR, Facility No. 4158.

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

2. Description of Claimed Facility

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

Claimed facility cost \$68,818
(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 underground storage tanks were installed July 1, 1994 and the facility was substantially completed on January 15, 1995 and placed into operation on January 15, 1995. The application for certification was submitted to the Department on May 16, 1995, and was considered to be complete and filed on September 29, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment. These were removed in 1992 by a previous owner.

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

- 1) For corrosion protection - Three fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, oil/water separator and an overflow alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and turbine leak detectors.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$68,818) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
Fiberglass tanks and piping	\$20,965	65% (1)	\$13,627
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	627	100	627
Overfill alarm	219	100	219
Oil/water separator	3,581	100	3,581
Sumps	3,212	100	3,212
<u>Leak Detection:</u>			
Tank gauge system	7,590	90 (2)	6,831
Turbine leak detectors	798	100	798
Monitoring wells	162	100	162
Labor and materials	31,664	100	31,664
	-----	-----	-----
Total	\$68,818	88%	\$60,721

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$20,965 and the bare steel system is \$7,420, the resulting portion of the eligible tank and piping cost allocable to pollution control is 65%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. An installation checklist and certificate of compliance have been submitted by the facility's licensed service provider indicating compliance with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 88%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$68,818 with 88% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4406.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

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

1. Applicant

Twigg Farm
31500 SW Firdale Road
Cornelius, OR 97113

The applicant owns and operates a farm in Cornelius, Oregon.

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

2. Description of Facility

The facility consists of 2 lagoons with a total storage capacity of 6.3 million gallons, one D & H manure separator, two concrete manure pits, a wall and concrete slab at the rear of the barns to direct flush water into manure pit, a 120 hp Gorman Rupp pump, one 30 hp Mitchell pump, gutters, one recirculating pump, one Evergreen irrigation sprinkler, one 3 hp chopper pump and one 50 hp irrigation pump.

Claimed Facility Cost: \$152,583
(Accountant's certification was provided).

Adjusted claimed facility cost: \$118,557.

The claimed facility cost was \$152,583. However, the Agricultural Stabilization and Conservation Service (ASCS) provided a total of \$34,026 as a cost share for the project. Therefore, the claimed facility cost has been adjusted to reflect that benefit as the actual cash investment of the taxpayer in the pollution control facility.

3. Procedural Requirements

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

The facility met the statutory deadline in that construction, erection, and installation of the facility was substantially completed in December 1993 and the application for certification was found to be complete on May 18, 1995, within 2 years of substantial completion of

the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent water pollution. The requirement is to comply with Department Stipulation and Final Order WQAW-NWR-92-084 issued on May 29, 1992.

The applicant operates a confined animal feeding operation (CAFO) and has been issued CAFO General Permit 800 for its wastewater control facility. The permit requires that all wastewater will be land irrigated and prohibits discharge of wastewater to waters of the state. Based on an inspection by the Oregon Department of Agriculture (ODA) it was found that the previous wastewater control facility was inadequate in that manure contaminated runoff and wastewater were being discharged to a nearby stream. ODA negotiated a stipulated final order with the applicant to install an adequate wastewater control facility.

The facility is now in compliance with all applicable regulations.

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.

A portion of the waste products are converted into a salable or usable commodity consisting of about 20 cubic yards per week of separated solids which can be sold for \$1.50 per cubic yard for a total gross income of \$1,560. The annual cost of operating the facility is \$12,379. This results in a negative annual cash flow of \$10,819..

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

There is no return on investment for this

facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective. The applicant considered not flushing any barns, but scraping manure into a pit instead. However, this is very labor intensive and the separators do not handle such a thick consistency of manure. Flushing one barn and scraping the old barn and mixing together the flushed fluid with the scraped manure is the most cost effective and easiest way to handle the wastes.
- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings from the facility. The cost of maintaining and operating the facility is \$12,379 annually. Sale of separated solids brings in \$1,560 per year leaving a net annual cost of \$10,819.

- 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.

The claimed facility was designed by the US Department of Agriculture, Soil Conservation Service (USDASCS). The applicant entered into an agreement with the Washington County Soil and Water Conservation District and the USDASCS to operate the claimed facility and implement the Animal Waste Management System Plan as a condition of the cost-share program. The ASCS provided funds for this facility in the amount of \$932 in 1990 and \$33,094 in 1991 for a total of \$34,026.

The actual cost of the facility that the applicant may claim for the facility is therefore required to be reduced by \$34,126. The actual cost of the facility properly allocable to pollution control as determined by using these factors is \$118,557.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.

- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent water pollution.
- c. The facility complies with DEQ statutes and rules and Commission orders.
- 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 \$118,557 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4408.

Elliot J. Zais:ejz
T-4408
(503) 229-5292
WQTCSR-1/95

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Truax Harris Energy Co.
P O Box 607
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 608 N. State St., Lake Oswego, OR, Facility No. 4924.

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

The applicant has claimed equipment in this application that replaced equipment claimed in prior tax credit TC-3551 issued in 1991. The equipment was replaced before the end of its useful life. See Section 2 below for an explanation of the adjustment made to costs claimed in this application. TC-3551 will be submitted for revocation.

2. Description of Claimed Facility

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

Claimed facility cost	\$159,795
(Accountant's certification was provided)	

The Department concludes that the eligible facility cost for the project is \$154,331. This represents a difference of \$5464 from the applicant's claimed cost of \$159,795. This is due to an adjustment made by the Department to the claimed cost of the tank gauge system, overflow alarm and installation of those items because they replaced the same type of equipment claimed in prior tax credit TC-3551 issued in 1991. The previously claimed equipment was replaced before the end of its useful life and the adjustment reflects the amount of the tax credit remaining pursuant to Oregon Administrative Rules 340-16-025(3)(g)(B). The adjustment is detailed in Worksheet 1 attached to the end of this report.

3. Procedural Requirements

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

The facility was substantially completed on May 1, 1995 and placed into operation on May 1, 1995. The application for certification was submitted to the Department on May 26, 1995, and was considered to be complete and filed on August 12, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, sumps, oil/water separator and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, turbine leak detectors and monitoring wells.
- 4) For VOC reduction - Stage I and II vapor recovery equipment.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass tanks and piping	\$30,858	71% (1)	\$21,909
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	418	100	418
Overfill alarm	114(3)	100	114
Oil/water separator	1,586	100	1,586
Sumps	1,782	100	1,782
Automatic shutoff valves	252	100	252
<u>Leak Detection:</u>			
Tank gauge system	3,333(3)	90 (2)	3,000
Turbine leak detectors	614	100	614
Monitoring wells	239	100	239
<u>VOC Reduction:</u>			
Stage I vapor recovery	351	100	351
Stage II vapor recovery (incl. 8 hoses and nozzles on 4 dispensers)	13,024	100	13,024
Labor and materials	101,760(3)	100	101,760
Total	\$154,331	94%	\$145,049

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$30,858 and the bare steel system is \$9,021, the resulting portion of the eligible tank and piping cost allocable to pollution control is 71%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other

purposes, for example, inventory control.

(3) Adjusted for prior tax credit claim (see attached Worksheet 1.)

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 94%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$154,331 with 94% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4420.

Barbara J. Anderson
(503) 229-5870
February 12, 1995

WORKSHEET 1.

PRIOR TAX CREDIT REMAINING ADJUSTMENT WORKSHEET

TRUAX HARRIS ENERGY CO.

Current Application: TC-4420

Prior Tax Credit: TC-3551

ADJUSTMENT OF CURRENT TAX CREDIT CLAIM BASED ON PRIOR TAX CREDIT REMAINING WHERE EQUIPMENT IS REPLACED BEFORE THE END OF ITS USEFUL LIFE (OAR 340-16-025(3)(g)(B))

A. DETERMINATION OF AMOUNT AND PERCENT OF PRIOR TAX CREDIT REMAINING:

Total amount of prior tax credit (\$9,160 X .50)	=	\$4,580
Total tax credit claimed to date on income tax returns	=	(\$2,261)
Total tax credit remaining on prior tax credit	=	\$2,319
Tax credit remaining as a percent (2,319 / 4,580)	=	51%

B. ADJUSTMENT OF CURRENT TAX CREDIT APPLICATION CLAIMED COSTS:

Total current claimed costs of items replaced	=	\$11,151
Adjusted total current claimed costs (11,151 X .51)	=	\$5,687

C. AMOUNT REMAINING TO BE CLAIMED (breakdown below) = \$5,687 (1)

ITEMS REPLACED	CURRENT APPLICATION CLAIMED COST	AMOUNT REMAINING TO BE CLAIMED (51%)
TOTAL	\$11,151	\$5,687
Tank gauge system	6,535	3,333
Overfill alarm	223	114
Installation cost (labor and materials)	4,393 (2)	2,240

D. AMOUNT OF ADJUSTMENT (11,151 - 5,687) = \$5,464
=====

- (1) This is the full amount eligible to be claimed on the current tax credit application. The actual tax credit received will be no greater than 50% of that amount.
 (2) Prorated from total project installation cost to represent installation cost of items replaced only.

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

1. Applicant

Portland General Electric Company
Bethel plant
121 SW Salmon Street
Portland, OR 97204-2901

The applicant owns and operates an investor owned utility company which produces and distributes electrical energy throughout Oregon.

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

2. Description of Facility

The claimed facility includes a 10 foot high concrete lined containment dike around the fuel oil pump station, curbed containment at the fuel oil filter pad, storm drain catch basin, an oil/water separator and associated piping system.

Claimed Facility Cost: \$55,216
(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 the statutory deadline in that installation of the facility was substantially completed on January 13, 1995 and the application for certification was found to be complete on August 16, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution. This prevention is accomplished by redesign to eliminate industrial waste as defined in ORS 468B.005.

All contaminated runoff and/or oil spill from the fuel oil pump station is contained within the diked area and is collected by 2 sumps. Contaminated runoff from the fuel pad area is collected and pumped also into the fuel pump station containment system. The collected contaminated runoff is then pumped from the 2 sumps to a new oil/water separator located at the tank farm containment. The treated runoff is mixed with any runoff that is collected within the tank farm and it is released to the nearby city drainage system through positively controlled drain lines. The drain lines have manually operated gate valves which are normally closed.

b. Eligible Cost Findings

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

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

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

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

There is no income from the facility and therefore there is no return on investment.

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

There are no known alternatives.

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

There are 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution and accomplishes this purpose by redesign to eliminate industrial waste as defined in ORS 468B.005.
- c. The facility complies with federal Environmental Protection Agency regulations.
- d. The portion of the facility cost that is properly allocable to pollution control is 100 %.

5. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$55,216 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4427

Tom Fisher

(503) 378-8240 ext. 236

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Intel Corporation
Oregon Site
3065 Bowers Avenue
Santa Clara, California 95051

The applicant owns and operates a microcomputer chip manufacturing facility in Aloha, Oregon.

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

2. Description of Facility

The claimed facility is an engineered flue gas recirculation system that has been retrofitted onto three large, natural gas-fired boilers to automatically control and optimize combustion conditions. Emission rates of the air pollutants nitrogen oxides (NO_x) and carbon monoxide (CO) are reduced in the boiler air discharges as a result of the claimed facility operation.

Claimed Facility Cost: \$112,189

An Accountant's Certification was provided.

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

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed in December 1994 and placed into operation in December 1994. The application for final certification was received by the Department on June 12, 1995. The application was found to be complete on October 6, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the DEQ to control air pollution. The Air Contaminant Discharge Permit for this source, 34-2681, item 8 requires the permittee to restrict Plant Site Emissions of NO_x to not exceed 16.5 tons annually and emissions of CO to not exceed 4.0 tons annually. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility is an engineered flue gas recirculation system that has been retrofitted onto three large boilers (500 to 700 BHP). The system monitors exhaust conditions and adjusts combustion air, flue gas recirculation and fuel input rates to optimize combustion and reduce oxides of nitrogen in the boiler's stack emission. The claimed facility consists of exhaust gas sensing instrumentation, a proprietary computer program and hardware, and controllers to automatically adjust combustion conditions via the fan drives, flue gas recirculation dampers and fuel valves.

b. Eligible Cost Findings

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

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

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

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

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

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

The claimed facility prevents the emission of air contaminants to the atmosphere. The cost of this approach for prevention compares

favorably to emission control methods such as a wet scrubber.

- 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 pollution.

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 principal purpose of the facility is to control a substantial quantity of air pollution.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by DEQ to control air pollution.
- c. The facility complies with permit conditions.
- d. The portion of the facility cost that is properly allocated 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 \$112,189 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4435.

Kevin G. McGillivray
SJO Consulting Engineers, Inc.
October 9, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Containerboard Packaging
785 N. 42nd Street
Springfield, OR 97478

The applicant owns and operates a containerboard manufacturing plant (pulp/paper mill) in Springfield, Oregon.

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

2. Description of Facility

The facility which a tax credit is being requested involves the installation of concrete diversions and drains to act as containment during a spill of black liquor. The subject area is near the fiber filter and the No. 1, 2 & 3 evaporators.

Claimed Facility Cost: \$177,167
(accountants 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 the statutory deadline in that construction and installation of the facility was substantially completed on October 6, 1994 and the application for certification was found to be complete on June 20, 1995, 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 control a substantial quantity of water pollution. This control is accomplished by the redesign of existing equipment to eliminate industrial waste as defined in ORS 468B.005.

Prior to the installation of the equipment black liquor spills were directed to the wastewater treatment system

and eventually discharged to the McKenzie River. The new system will return the black liquor to a storage tank and then back into the system.

The claimed facility is currently in operation and has successfully contained and diverted black liquor spills back into the system.

b. Eligible Cost Findings

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

- 1) The facility does not recover or convert significant amounts of waste products into a salable or usable commodity.

The new containment and diversion system returns relatively small amounts of a weak black liquor material to the recovery boilers where it is burned. There is basically no usable fiber in the black liquor so it can not be made into a salable product.

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

There is no annual percent return on the facility.

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

There are no known alternatives other than the previous method of sending the black liquor to the wastewater treatment system and eventually the McKenzie River.

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

There are no savings or increase in costs as a result of the facility 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 tax credit certification in that the sole purpose of the facility is to control a substantial quantity of water pollution and accomplishes this purpose by the redesign of existing systems to eliminate industrial waste as defined in ORS 468B.005.
- c. The facility complies with DEQ statutes, rules, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$177,167 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4437.

Timothy C. McFetridge

(503) 378-8240, Extension: 235
August 2, 1995

WQTCSR-1/95

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland General Electric Company
Beaver Plant
121 SW Salmon St., 1WTC-0402
Portland, Oregon 97204

The applicant owns and operates an electrical power generation facility in Clatskanie, Oregon.

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

2. Description of Facility

The claimed facility reduces the nitrogen oxide, NO_x emissions, from six gas turbines consuming either natural gas or fuel oil. The system measures the NO_x levels in the exhaust gases and then adjusts the amount of water entering the turbine which reduces the NO_x emissions. NO_x is produced during combustion and is reduced using a water spray injection system.

Claimed Facility Cost: \$106,729

A distinct portion of the claimed facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$10,673 for a portion of the display/control process computer that is used to calculate and display information that does not relate to the claimed facility. The applicant agrees with this reduction. The applicant also claimed \$11,240.00 of overhead expenses for the facility. A distinct portion of these claimed expenses, \$6,182.00, were allocated from corporate expenditure pools which would have been incurred without the construction of the facility.

Ineligible Costs: \$16,855.00

Adjusted Facility Cost: \$89,874.00

Accountant's Certification was provided.

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

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed on May 24, 1994 and placed into operation on May 24, 1994. The application for final certification was received by the Department on June 14, 1995. The application was found to be complete on October 2, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Oregon Department of Environmental Quality to prevent NO_x emissions from exceeding the levels listed in the Air Contaminant Discharge Permit #05-2520. This is in accordance with OAR Chapter 340, Division 25, rule 645. The Air Contaminant Discharge Permit for this source, 05-2520, Section 3 requires the permittee to limit NO_x emissions to the atmosphere. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility controls the level of NO_x emissions generated by the six gas turbines consuming either fuel oil or natural gas. NO_x levels are controlled by the injection of water into the turbine. A NO_x sensor in the turbine exhaust stack transmits an input signal to an Allen-Bradley Programmable Logic Control (PLC), based on the NO_x levels, the PLC will transmit a signal to a water flow control valve that meters the water into a manifold on the turbine. A Dell 486 PC is used to monitor and display the NO_x levels, water flow, alarms and trends. All six turbines are controlled from the one PLC.

b. Eligible Cost Findings

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

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

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

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

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

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

A custom engineered NO_x scrubber installed on the exhaust stack of each turbine was considered. This alternative was not used due to cost.

- 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 operation.

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

Other than the adjustment to the claimed facility cost referenced in Section 2, the cost allocation review of this application has identified no issues to be resolved and confirms the cost allocation as submitted in the application. The principal purpose of the facility is to control a substantial quantity of air pollution.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Oregon Department of Environmental Quality to control air pollution.
- c. The facility complies with Oregon Department of Environmental Quality statutes, rules and permit conditions.
- d. The portion of the cost that is properly allocated 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 \$89,874.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number T-4442.

Dennis E. Cartier
SJO Consulting Engineers, Inc.

October 6, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

SYNTHETECH INC
1290 Industrial Way
Albany, OR 97321

The applicant owns and operates a pharmaceutical manufacturing lab in Albany, Oregon.

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

2. Description of Facility

The claimed facility is a closed loop vacuum pump which replaced a liquid ring vacuum pump. The old pump used water as a seal fluid. Approximately 80 gallons of water per day passed through the pump and was discharged to the City of Albany sewer system. The new pump uses oil as a seal fluid, and completely eliminates the waste stream.

Claimed Facility Cost: \$24,844.97
(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 the statutory deadline in that installation of the facility was substantially completed on 4/29/94 and the application for certification was found to be complete on 10/11/95, 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 water pollution. This prevention is accomplished by the elimination of industrial waste as defined in ORS 468B.005.

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.

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

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

There is no return on the investment for this facility.

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

There are no known alternatives.

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

There are no savings or increase in costs as a result of the facility 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 tax credit certification in that the sole purpose of the facility is to prevent a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$24,845 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4445.

William J. Perry: WJP
e:\wp51\taxgen\t-4445
(503) 686-7838, ext.236
10/11/95

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

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

The applicant owns and operates a retail gas station and car wash at 3911 SE Powell Blvd., Portland, OR, Facility No. 6203.

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

2. Description of Claimed Facility

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

Claimed facility cost \$134,948
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$145,723. This represents a difference of \$10,775 from the applicant's claimed cost of \$134,948 because the applicant claimed the difference between steel tanks and piping and the equipment bought rather than the actual cost of that equipment.

3. Procedural Requirements

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

The facility was substantially completed on June 1, 1994 and placed into operation on June 1, 1994. The application for certification was submitted to the Department on June 21, 1995, and was considered to be complete and filed on September 29, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

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

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant found no substantial alternatives available for consideration. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
Doublewall composite tanks and fiberglass piping	\$35,638	70% (1)	\$24,947
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,365	100	1,365
Overfill alarm	197	100	197
Automatic shutoff valves	894	100	894
Sumps	6,374	100	6,374
<u>Leak Detection:</u>			
Tank gauge system	7,470	90 (2)	6,723
Line/turbine leak det.	1,402	100	1,402
<u>VOC Reduction:</u>			
Stage I vapor recovery	325	100	325
Stage II vapor recovery (incl. 10 hoses and nozzles on 5 dispensers)	9,430	100	9,430
Labor and materials	82,628	100	82,628
	-----	-----	-----
Total	\$145,723	92%	\$134,285

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$35,638 and the bare steel system is \$10,775, the resulting portion of the eligible tank and piping cost allocable to pollution control is 70%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 92%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$145,723 with 92% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4446.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland General Electric Company
Delaware Substation
121 SW Salmon Street, 1WTC-0402
Portland, OR 97204-2901

The applicant owns and operates an electrical substation in Portland, Oregon.

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

2. Description of Facility

The facility is an impermeable membrane liner/barricade which retards the passage of oil from the yard in the event of an oil spill. This system allows adequate time for a cleanup crew to be dispatched to the site before oil can enter the City of Portland's storm drain. The liner/barricade consists of a transformer oil resistant high density polyethylene (HDPE) impermeable membrane liner. The curbing consists of rock berms and and HDPE fabric.

Claimed Facility Cost: \$30,837
(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 the statutory deadline in that construction and installation of the facility was substantially completed on October 25, 1994, and the application for certification was found to be complete on June 14, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency, to prevent water pollution. The requirement is to

comply with Title 40 Code of Federal Regulations, Part 112, Oil Pollution Prevention.

This site does not have any permits issued by DEQ.

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

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

There is no return on investment.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective. PGE considered the following three alternatives;

1. Transformer/oil circuit breaker pits at a cost of \$30,000 to \$40,000 plus operational expenses;
2. Sand berm with liner at \$25,000;
3. Oil stop valve, piping, and storage container at \$24,000 to \$30,000.

Alternatives were rejected due to cost and/or operational maintenance expense.

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

There are no savings or increase in costs as a result of the facility 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$30,837 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4469.

Elliot J. Zais:EJZ
T-4469
(503) 229-5292
WQTCSR-1/95

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland General Electric Company
121 SW Salmon Street, 1WTC - 0402
Portland, OR 97204

The applicant owns and operates an electric power substation located at the corner of North Delaware Avenue and Lombard Street in Portland, Oregon.

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

2. Description of Facility

The claimed facility absorbs and reflects the noise generated from the two power transformers located at the substation. The facility consists of a noise barrier which was installed on the south side of the substation.

Claimed Facility Cost: \$68,098.61

A distinct portion of the claimed facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$525.00 for material loading. The applicant also claimed \$17,066 as construction overhead expenses of the facility. A distant portion of these claimed expenses, \$9,386.30 were allocated from corporate expenditure pools which would have been incurred without the construction of the facility.

Ineligible costs: \$9,911.3

Adjusted claimed facility cost: \$58,187.31

Accountant's Certification was provided.

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

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed on April 25, 1995 and placed into operation on April 25, 1995. The application for final certification was received by the Department on July 3, 1995, within two years of substantial completion of the facility. The application was found to be complete on September 18, 1995.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the DEQ to control noise pollution. This is in accordance with OAR Chapter 340, Division 35, rule 035. The Noise Control Regulations for Industry and Commerce requires the noise source owner to not allow operation of a noise source if Existing Industrial and Commercial Noise Source Standards (Table 7 of OAR 340-35-035) are exceeded.

Prior to installation of the new facility, noise from the electric power substation exceeded the DEQ noise limit of fifty dBA. Noise measurements at the residences south of the substation indicated noise levels of 57 dBA.

The claimed facility consists of a quilted fiberglass and barrier combination, a concrete pad, and associated equipment. The claimed facility was installed on the south end of the property in between the transformer and the residences. The noise emitted by the transformer is then absorbed and reflected away from the residences by the noise barrier. After installation of the noise barrier noise levels were measured at 50 dBA.

b. Eligible Cost Findings

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

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

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

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

The applicant did not provide details of the annual operating expenses for the claimed facility. However, because there is no annual income from the claimed facility, the annual operating expenses exceed income from the facility, so there is no return on investment.

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

Noise barriers are technically recognized as an acceptable method for noise control. The applicant considered replacing the transformers with National Electrical Manufacturers Association standard sound level transformers with 10 dBA reduced sound level units. However, the cost of replacing the two transformers would have been \$800,000.

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

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

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

Other than the adjustments to the claimed facility cost referenced in section 2, 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 principal purpose of the facility is to prevent a substantial quantity of air pollution.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by Department to control noise pollution.
- c. The facility complies with the Department 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 \$58,187 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4471.

Tonia C. Garbowsky : PRC Environmental Management, Inc.
September 18, 1995.

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Portland General Electric Company
Boardman Plant
121 S.W. Salmon St., 1WTC-04-022
Portland, OR 97204

The applicant owns and operates a coal fired electric power generating facility in Boardman, Oregon

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

2. Description of Facility

The claimed facility removes coal fines from water that is used in cleaning the coal handling facilities. The system consists of a collection sump, pumps, piping, filtration equipment and a metal building.

Claimed Facility Cost: \$253,499

A distinct portion of the claimed facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$317 for a loading cost for materials that were supplied by PGE central stores. The applicant also claimed \$39,174.00 as construction overhead expenses of the facility. A distant portion of these claimed expenses, \$21,545.70, were allocated from corporate expenditure pools which would have been incurred without the construction of the facility.

Ineligible Costs: \$21,862.70

Adjusted Facility Cost: \$231,636.30

Accountant's Certification was provided.

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

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Construction and installation of the facility was substantially completed on May 31, 1995 and placed into operation on May 31, 1995. The application for final certification was received by the Department on July 3, 1995. The application was found to be complete on October 6, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Oregon Department of Environmental Quality to reduce water pollution. This is in accordance with OAR Chapter 340, Division 41, Rule 655. The facilities Water Pollution Control Facilities Permit Number 100189, Schedule A, Numbers 2 and 8 requires the permittee to treat the wash water from the coal handling area before discharge to the reservoir. The claimed facility reduces water pollution as defined in ORS 468.155.

The dust suppression and wash water from the coal handling facility contain coal fines that need to be removed before the water can be discharged to the reservoir. The claimed facility consists of a central coal slurry collection sump that has a Flygt model CP3140-480 15hp sump pump that feeds three Blace filters, model 166D. Each filter unit has 60 ft² of filtration area. There is a filter precoat and backwash system that support the filters supplied by Blace Filtronics. The claimed facility also includes the necessary piping, controls and a new 16' by 28' metal building that houses the system.

b. Eligible Cost Findings

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

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

A portion of the waste product is converted into a salable or usable commodity consisting of 1,500 tons per year of recovered coal fines that are used as fuel for the generation of electricity.

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

The average annual cash flow is \$4,836 which results from the value of the recovered coal less operating costs. Dividing the average annual cash flow into the cost of the facility gives a return on investment factor of 52.42. Using Table 1 of OAR 340-16-30 for a useful life of 20 years gives an annual return on investment of 0%. As a result, the percent allocable is 100%.

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

The applicant considered mixing the coal slurry with the bottom ash, but due to design problems with the existing systems this alternative was considered too expensive to pursue

- 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 \$30,000 per year savings from the coal that is recovered. The cost of maintaining and operating the facility is \$25,164 annually.

It is estimated that the claimed facility will recover 1500 tons of coal per year from the dust suppression and equipment wash water. The current cost of coal is \$20 per ton. The annual operating expenses are \$25,164 per year. Included in this is the cost of labor to operate the system, maintenance, property taxes and cost of electricity.

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

Other than the adjustments to the claimed facility cost referenced in section 2, 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 principal purpose of the facility is to prevent a substantial quantity of air pollution.

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

5. Summation

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

6. Director's Recommendation

Based on these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$231,636 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4474.

Dennis E. Cartier
SJO Consulting Engineers, Inc.

October 12, 1995

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Valentine and Delores Miller
8626 Wabash Dr. NE
Salem, Oregon 97305

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

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

2. Description of Claimed Facility

The facility described in this application is a 23' x 60' x 104' grass seed straw storage shed, located at 8626 Wabash Drive NE, Salem, Oregon. The land and the buildings are owned by the applicant.

This facility is a like-for-like replacement of the original facility certified as TC-2297. The facility is eligible for tax credit certification (340-16-025) (3) (g) (A) up to an amount equal to the difference between the cost of the new facility (\$49,416) and the like-for-like replacement cost of the original facility (\$10,800). The new facility was constructed for \$7.92 a square foot. Like-for-like replacement cost of the original facility would then be \$20,909 (\$7.92 x 2,640 square feet). The value of the qualitative improvement, therefore, is \$28,507 (\$49,416-\$20,909).

Claimed facility cost: \$28,507
(Accountant's Certification was provided.)

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

The applicant has 170 acres of perennial grass seed under cultivation. Prior to investigating alternatives to thermal sanitization the applicant open field burned as many acres as the smoke management program and weather permitted.

One of the alternatives investigated involved baling off one-third of the applicants acreage and burning the stacked straw. The applicant built a storage shed for the straw to discontinue the stack burning practice and protect the straw from inclement weather. The applicant now bales off all the acreage and needs the new facility to accommodate the increased tonnage.

4. Procedural Requirements

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

Construction of the facility was substantially completed on August 30, 1993. The application for final certification was found to be complete on July 7, 1995. The application was filed within two years of substantial completion of the facility.

5. Evaluation of Application

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

b. Eligible Cost Findings

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

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 protection from inclement weather.

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

The actual cost of claimed facility (\$28,507) divided by the average annual cash flow (\$1,781) equals a return on investment factor of 16.006 Using Table 1 of OAR 340-16-030 for a life of 20 years, the annual percent return on investment is 2.25 Using the annual percent return of 2.25 and the reference annual percent return of 5.5, 59% is allocable to pollution control.

A facility that replaces a previously certified facility before the end of its useful life is eligible for the remainder of the tax credit certified to the original facility (340-16-025) (3) (g) (B). The applicant's previous application was certified for \$5,184 (\$10,800 x .48) in tax relief. The certification was issued in 1988, at a rate of 5% per year for ten years. The remainder of the tax credit eligible to the new facility is \$778 (\$5,184 x .15).

Therefore, the adjusted claimed facility cost of \$28,507 multiplied by 59 percent allocable to pollution control, multiplied by 50 percent of the certified cost of the facility, plus the \$778 remainder of the previously certified tax credit provides a 64 percent portion of the facility that is allocable to pollution control.

$$\$28,507 \times .59 \times .50 + \$778 = \$9,188/.50 = \$18,376/\$28,507 = 64\%.$$

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

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

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

There is an increase in operating costs of \$1,000 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

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

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

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 64%.

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 64%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$28,507, with 64% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4481.

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

JB/rc.4481
August 31, 1995

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Robert D. MacPherson
31580 Oakville Road
Shedd, Oregon 97377

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

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

2. Description of Claimed Facility

The facility described in this application is 400' of 15" tile, 590' of 12" tile, 550' of 8" tile, 74,800' of 4" tile, and 109,500' of 3" tile with multiple outlet pipes installed underground on 300 acres, located at 31580 Oakville Road, Shedd, Oregon.

Claimed facility cost: \$120,498
(Accountant's Certification was provided.)

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

The applicant has 1,600 acres of perennial grass seed and 450 acres of annual grass seed under cultivation. The applicant states that all of this acreage was open field burned prior to investigating and implementing alternative methods to thermal sanitization. The alternative methods include baling the bulk straw off the perennial fields, flail chopping the bulk straw on annual fields and the remaining residue on perennial fields, plowing the flailed straw under on annual fields and vacuuming the flailed straw off perennial fields. A deleterious effect of these alternatives is an increase in the weed population.

The best farming practice recommended for weed control to avoid increasing chemical application is crop rotation. Drainage tile enhances crop rotation because tiling extends the season so land can be prepared earlier for standard row crop plantings. The tiling drains the land making it available for staggered planting of cannerly crops and occasional wheat production.

The Division of State Lands has determined this 300 acres to be prior converted wetlands and not subject to the Food Security Act unless the area reverts to wetlands as a result of abandonment.

4. Procedural Requirements

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

Construction of the facility was substantially completed on July 1, 1994 . The application for final certification was found to be complete on October 3, 1995. The application was filed within two years of substantial completion of the facility.

5. Evaluation of Application

- a. The facility is eligible under ORS 468.150 because the facility is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f).
C): Drainage tile installation which will result in a reduction of grass seed acreage under production."

b. Eligible Cost Findings

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

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

The facility does not recover or convert waste products into a salable or usable commodity.
2. The estimated annual percent return on the investment in the facility.

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

The method chosen is an accepted method for reduction of air pollution. The method is one of the least costly, most effective methods of reducing air pollution.
4. Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There is no savings or increase in costs as a result of the facility.
5. Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

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

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

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$120,498, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4482.

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

JB:rc
October 3, 1995

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Elwyn D. Bingaman
65545 Imbler Road
Cove, Oregon 97824

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

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

2. Description of Claimed Facility

The equipment described in this application is a 596 Tandem Disk Harrow, located at 65545 Imbler Road, Cove, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$17,600
(The applicant provided copies of the invoice.)

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

The applicant averages approximately 390 acres of perennial grass seed under cultivation each year. Prior to seeking alternatives to thermal sanitization, the applicant open field burned all the perennial acreage the weather permitted.

In grass seed fields, the applicant now bales off the bulk straw and at the conclusion of the fourth year of a stand the 596 Tandem Disk is run over the sod four to five times as a seed bed preparation in lieu of open field burning. The applicant has reduced open field burning of perennial grass seed fields by approximately fifty percent.

4. Procedural Requirements

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

Purchase of the equipment was substantially completed on December 12, 1994. The application was submitted on July 5, 1995; and the application for final certification was found to be complete on August 31, 1995. The application was filed within two years of substantial completion of the equipment.

5. Evaluation of Application

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

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

6. Summation

- a. The equipment was constructed in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$17,600, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4485.

Jim Britton, Manager
Smoke Management Program
Natural Resources Division
Oregon Department of Agriculture
(503) 986-4701
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JB/rkc TC4485
August 31, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Company, Inc.
953 Spring Street
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station and food mart at 30625 Hwy 97 N, Chilquin, OR 97624, Facility No. 1525.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall fiberglass piping, epoxy tank lining and cathodic protection of four tanks.

Claimed facility cost \$47,003
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on August 6, 1993 and placed into operation on August 6, 1993. The application for certification was submitted to the Department on July 20, 1995, and was considered to be complete and filed on August 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection.

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

- 1) For corrosion protection - Doublewall fiberglass piping, epoxy tank lining and cathodic protection of four tanks.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$47,003) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
DW fiberglass piping	\$ 3,947	100%	\$ 3,947
Epoxy tank lining	20,455	100	20,455
Cathodic protection	9,200	100	9,200
Labor and materials	13,401	100	13,401
	_____	_____	_____
Total	\$47,003	100%	\$47,003

5. Summation

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

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance 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 \$47,003 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4491.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Company, Inc.
953 Spring Street
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station and food mart at 2075 Oregon Ave., Klamath Falls, OR 97601, Facility No. 4777.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining in four tanks and cathodic protection on five tanks.

Claimed facility cost \$41,776
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on September 20, 1993 and placed into operation on September 20, 1993. The application for certification was submitted to the Department on July 20, 1995, and was considered to be complete and filed on August 1, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of five steel tanks with no corrosion protection.

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

- 1) For corrosion protection - Epoxy tank lining in four tanks (the fifth tank was too small to accommodate lining) and cathodic protection on five tanks.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$41,776) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Epoxy tank lining	32,576	100%	32,576
Cathodic protection	9,200	100	9,200
Total	\$41,776	100%	\$41,776

5. Summation

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

or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance 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 \$41,776 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4492.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Company, Inc.
953 Spring Street
Klamath Falls, OR 97601

The applicant owns and operates a Bulk fueling station at 865 Spring St., Klamath Falls, OR 97601, Facility No. 5879.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are cathodic protection on four tanks and piping.

Claimed facility cost \$39,055
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$37,372. This represents a difference of \$1,683 from the applicant's claimed cost of \$39,055 due to a determination by the Department that the cost of bare steel product piping is not eligible pursuant to the definition of a pollution control facility in ORS 468.155.

3. Procedural Requirements

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

The facility was substantially completed on June 30, 1994 and placed into operation on June 30, 1994. The application for certification was submitted to the Department on July 20, 1995, and was considered to be complete and filed on October 2, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection.

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

- 1) For corrosion protection - Cathodic protection on four tanks and piping.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Cathodic protection	\$12,358	100%	\$12,358
Labor and materials	25,014	100	25,014
Total	\$37,372	100%	\$37,372

5. Summation

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

- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance 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 \$37,372 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4493.

Barbara J. Anderson
(503) 229-5870
October 2, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Company, Inc.
953 Spring Street
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station at 1st & Chocktoot, Chiloquin, OR 97624, Facility No. 1517.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three fiberglass tanks, doublewall fiberglass piping, and spill containment basins.

Claimed facility cost \$28,770
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on August 15, 1994 and placed into operation on August 15, 1994. The application for certification was submitted to the Department on July 20, 1995, and was considered to be complete and filed on September 29, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Three fiberglass tanks and doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$28,770) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	=====	=====	=====
<u>Corrosion Protection:</u>			
Fiberglass tanks and piping	\$ 9,820	100%	\$ 9,820
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	2,044	100	2,044
Labor and materials	16,906	100	16,906
	=====	=====	=====
Total	\$28,770	100%	\$28,770

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance 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 \$28,770 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4494.

Barbara J. Anderson
(503) 229-5870
October 2, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Company, Inc.
953 Spring Street
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station at 3732 S. Sixth St., Klamath Falls, OR 97603, Facility No. 622.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall fiberglass piping.

Claimed facility cost \$20,654
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on July 23, 1993 and placed into operation on July 23, 1993. The application for certification was submitted to the Department on July 20, 1995, and was considered to be complete and filed on July 20, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of steel piping with no corrosion protection.

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

- 1) For corrosion protection - Doublewall fiberglass piping.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$20,654) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass pipe	\$ 3,000	100%	\$ 3,000
Labor and materials	17,654	100	17,654
Total	\$20,654	100%	\$20,654

5. Summation

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

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance 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 \$20,654 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4495.

Barbara J. Anderson
(503) 229-5870
October 2, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Company, Inc.
953 Spring Street
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station at 5419 S. Sixth St., Klamath Falls, OR 97603, Facility No. 1519.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall fiberglass piping.

Claimed facility cost	\$20,554
(Accountant's certification was provided)	

3. Procedural Requirements

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

The facility was substantially completed on November 11, 1993 and placed into operation on November 12, 1993. The application for certification was submitted to the Department on July 20, 1995, and was considered to be complete and filed on September 29, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

Prior to the installation of pollution control, the facility consisted of steel piping with no corrosion protection.

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

- 1) For corrosion protection - Doublewall fiberglass piping.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$20,554) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Doublewall fiberglass pipe	\$ 3,150	100%	\$ 3,150
Labor and materials	17,404	100	17,404
	_____	_____	_____
Total	\$20,554	100%	\$20,554

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This

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

- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance 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 \$20,554 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4496.

Barbara J. Anderson
(503) 229-5870
October 2, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron U.S.A., Inc.; Chevron U.S.A. Products Company
6001 Bollinger Canyon Road, Building L
San Ramon, CA 94583

The applicant owns and operates a retail service station at 2 Monroe Parkway, Lake Oswego, OR, Facility ID No. 1215.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are spill containment basins, tank gauge system with overflow alarm, automatic shutoff valves, and Stage II vapor recovery equipment.

Claimed facility cost \$103,386
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on October 8, 1993 and placed into operation on October 9, 1993. The application for certification was submitted to the Department on August 1, 1995, and was considered to be complete and filed on October 6, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

Prior to the installation of pollution control, the facility consisted of five fiber reinforced plastic (FRP) tanks, FRP piping with no spill and overflow prevention or leak detection equipment.

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

- 1) For spill and overflow prevention - Spill containment basins, overflow alarm and automatic shutoff valves.
- 2) For leak detection - Tank gauge system.

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$103,386) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,520	100%	1,520
Automatic shutoff valves	734	100%	734
<u>Leak Detection:</u>			
Tank gauge system w/alarm	12,938	90% (1)	11,644
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 24 hoses and nozzles on 4 dispensers)	7,262	100%	7,262
Labor and materials	80,932	100%	80,932
Total	\$103,386	99%	\$102,092

- (1) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$103,386 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4502.

Larry Frost
(503) 229-5769
October 6, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron U.S.A., Inc.; Chevron U.S.A. Products Company
6001 Bollinger Canyon Road, Building L
San Ramon, CA 94583

The applicant owns and operates a retail service station at 9025 S.W. Barbur Blvd, Portland, OR, Facility ID No. 1113.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are one new composite tank with doublewall fiber reinforced plastic (FRP) piping, doublewall FRP piping for three existing tanks, one spill containment basin, tank gauge system with overflow alarm for four tanks, three turbine leak detectors, three automatic shutoff valves, four dispenser sumps and Stage II vapor recovery equipment for the facility.

Claimed facility cost \$195,345
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on October 20, 1993 and placed into operation on October 21, 1993. The application for certification was submitted to the Department on August 1, 1995 and was considered to be complete and filed on October 6, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Double wall FRP tank and doublewall FRP piping.
- 2) For spill and overfill prevention - Spill containment basin, overfill alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system and turbine leak detectors.

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$195,345) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

The equipment does not recover or convert waste products into a salable or usable

commodity.

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Amount Allocable	Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass tank and fiberglass piping	\$29,928	65% (1)	\$19,453
<u>Spill & Overflow Prevention:</u>			
Spill containment basins	206	100%	206
Automatic shutoff valves	275	100%	275
Sumps	2,080	100%	2,080
<u>Leak Detection:</u>			
Tank gauge system w/alarm,	15,000	90% (1)	13,500
Turbine leak detectors	2,976	100%	2,976
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 24 hoses and nozzles on 4 dispensers)	7,030	100%	7,030
Labor and materials	137,850	100%	137,850
Total	\$195,345	94%	\$183,370

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$29,928 and the bare steel system is \$10,545, the resulting portion of the eligible tank and piping cost allocable to pollution control is 65%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider and/or owner.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules in that appropriate compliance documents relating to the project have been filed.
- d. The portion of the facility cost that is properly allocable to pollution control is 94 percent.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$195,345 with 94% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4503.

Larry Frost
(503) 229-5769
October 6, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Chevron U.S.A., Inc.; Chevron U.S.A. Products Company
6001 Bollinger Canyon Road, Building L
San Ramon, CA 94583

The applicant owns and operates a retail service station at 15905 S.W. Lower Boones Ferry Rd. Lake Oswego, OR, Facility ID No. 795.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four spill containment basins, replacement of single wall fiberglass (FRP) piping with double wall FRP piping, tank gauge system with overflow alarm for four tanks, four turbine leak detectors, five automatic shutoff valves, four dispenser sumps and Stage II vapor recovery equipment for the facility.

Claimed facility cost	\$220,198
(Accountant's certification was provided)	

3. Procedural Requirements

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

The facility was substantially completed on October 20, 1993 and placed into operation on October 21, 1993. The application for certification was submitted to the Department on August 1, 1995, and was considered to be complete and filed on October 9, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

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

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$220,198) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

The equipment does not recover or convert waste products into a salable or usable

commodity.

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Double wall fiberglass piping	\$15,246	39% (1)	\$5,946
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	4,209	100%	4,209
Automatic shutoff valves	431	100%	431
Sumps	20,000	100%	20,000
<u>Leak Detection:</u>			
Tank gauge system w/alarm,(2)	18,000	90% (2)	16,200
Turbine leak detectors	3,747	100%	3,747
<u>VOC Reduction:</u>			
Stage II vapor recovery (incl. 24 hoses and nozzles on 4 dispensers)	8,998	100%	8,998
Labor and materials	149,567	100%	149,567
Total	\$220,198	95%	\$209,098

- (1) The Department has determined the percent allocable where existing steel piping is replaced with double wall corrosion resistant piping is the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$15,246 and the bare steel system is \$9,295, the resulting portion of the eligible piping cost allocable to pollution control is 39%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$220,198 with 95 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4503.

Larry Frost
(503) 229-5769
October 9, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Winmar of Jantzen Beach, Inc.
700 Fifth Avenue
Seattle, WA 98104

The applicant owns and operates a marine fueling station at 1130 N. Jantzen, Portland, OR 97217, Facility No. 7011.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included air quality Stage 1 vapor recovery.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two doublewall fiberglass tanks, doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, line/turbine leak detectors, sumps, monitoring wells, automatic shutoff valves and stage I vapor recovery.

Claimed facility cost \$90,656
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on April 1, 1995 and placed into operation on April 1, 1995. The application for certification was submitted to the Department on August 1, 1995, and was considered to be complete and filed on September 29, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Two doublewall fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, overfill alarm and automatic shutoff valves
- 3) For leak detection - Tank gauge system, monitoring wells and line/turbine leak detectors.

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$90,656) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Fiberglass tanks and piping	\$23,204	59% (1)	\$13,690
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	575	100	575
Overfill alarm	575	100	575
Automatic shutoff valves	3,119	100	3,119
Sumps	1,500	100	1,500
<u>Leak Detection:</u>			
Tank gauge system	5,394	90 (2)	4,855
Line/turbine leak detectors	978	100	978
Monitoring wells	403	100	403
Stage I vapor recovery	460	100	460
Labor and materials	54,448	100	54,448
Total	\$90,656	89%	\$80,603

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$23,204 and the bare steel system is \$9,404, the resulting portion of the eligible tank and piping cost allocable to pollution control is 59%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$90,656 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4507.

Barbara J. Anderson
(503) 229-5870
September 29, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Byrnes Oil Co., Inc.
P O Box 700
Pendleton, OR 97801

The applicant owns and operates a cardlock fueling station at Main & Columbia, Helix, OR 97835, Facility No. 11499.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two fiberglass tanks, doublewall fiberglass piping, spill containment basins, tank gauge system, overflow alarm, sumps and automatic shutoff valves.

Claimed facility cost \$71,673
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on July 1, 1995 and placed into operation on August 1, 1995. The application for certification was submitted to the Department on August 14, 1995, and was considered to be complete and filed on October 7, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

This is a new, not a replacement facility. There is no prior condition to report.

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

- 1) For corrosion protection - Two fiberglass tanks and piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, overflow alarm and automatic shutoff valves
- 3) For leak detection - Tank gauge system.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$71,673) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Fiberglass tanks and piping	\$16,580	38% (1)	\$6,300
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	4,711	100	4,711
Overfill alarm	267	100	267
Automatic shutoff valves	2,467	100	2,467
Sumps	2,600	100	2,600
<u>Leak Detection:</u>			
Tank gauge system	4,160	90 (2)	3,744
Labor and materials	40,888	100	40,888
	_____	_____	_____
Total	\$71,673	85%	\$60,977

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$16,580 and the bare steel system is \$10,245, the resulting portion of the eligible tank and piping cost allocable to pollution control is 38%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. An installation certificate of compliance has been submitted by the facility's licensed service provider indicating compliance with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 85%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$71,673 with 85% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4511.

Barbara J. Anderson
(503) 229-5870
October 7, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Byrnes Oil Co., Inc.
P O Box 700
Pendleton, OR 97801

The applicant owns and operates a petroleum bulk plant on NW Cedar, Pilot Rock, OR 97868, an aboveground storage tank facility.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are secondary containment for three aboveground storage tanks.

Claimed facility cost \$2,440
(Documentation of cost was provided)

3. Procedural Requirements

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

The facility was substantially completed on March 31, 1995 and placed into operation on April 1, 1995. The application for certification was submitted to the Department on August 16, 1995, and was considered to be complete and filed on October 8, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of

facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the aboveground tanks had no secondary containment.

The applicant installed secondary containment on three aboveground storage tanks.

The Department concludes that the costs claimed by the applicant (\$2,440) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

- 5) Any other factors which are relevant in establishing the portion of the

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
Secondary containment on three aboveground tanks	\$2,440	100%	\$2,440
	-----	-----	-----
Total	\$2,440	100%	\$2,440

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to information provided by the applicant.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The 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 \$2,440 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4513.

Barbara J. Anderson
(503) 229-5870
October 8, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Byrnes Oil Co., Inc.
P O Box 700
Pendleton, OR 97801

The applicant owns and operates a petroleum bulk plant at Hwy 244 & Alba St., Ukiah, OR 97880, an aboveground storage tank facility.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are secondary containment for four aboveground storage tanks.

Claimed facility cost \$1,948
(Documentation of cost was provided)

3. Procedural Requirements

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

The facility was substantially completed on May 31, 1995 and placed into operation on June 1, 1995. The application for certification was submitted to the Department on August 16, 1995, and was considered to be complete and filed on October 8, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of

facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the aboveground tanks had no secondary containment.

The applicant installed secondary containment on four aboveground storage tanks.

The Department concludes that the costs claimed by the applicant (\$1,948) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
Secondary containment on four aboveground tanks	\$1,948	100%	\$1,948
	_____	_____	_____
Total	\$1,948	100%	\$1,948

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to information provided by the applicant.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The 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 \$1,948 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4514.

Barbara J. Anderson
(503) 229-5870
October 8, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Byrnes Oil Co., Inc.
P O Box 700
Pendleton, OR 97801

The applicant owns and operates a petroleum bulk plant at 513 SW 6th, Pendleton, OR 97801, an aboveground storage tank facility.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining in two aboveground storage tanks.

Claimed facility cost \$13,083
(Documentation of cost was provided)

3. Procedural Requirements

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

The facility was substantially completed on July 24, 1995 and placed into operation on July 25, 1995. The application for certification was submitted to the Department on August 16, 1995, and was considered to be complete and filed on October 8, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to prevent pollution of soil, water or air. This is accomplished by preventing releases into

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

Prior to the installation of pollution control, the aboveground tanks had no corrosion protection.

The applicant installed epoxy lining in two aboveground storage tanks.

The Department concludes that the costs claimed by the applicant (\$13,083) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

- 5) Any other factors which are relevant in establishing the portion of the

actual cost of the facility properly allocable to pollution control.

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
Epoxy tank lining including labor	\$13,083	100%	\$13,083
	_____	_____	_____
Total	\$13,083	100%	\$13,083

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to information provided by the applicant.
- b. The facility is eligible for tax credit certification in that the sole purpose of the claimed facility is to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$13,083 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4515.

Barbara J. Anderson
(503) 229-5870
October 8, 1995

State of Oregon
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Kurt A. Kayner
26135 Peoria Road
Halsey, Oregon 97348

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

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

2. Description of Claimed Facility

The facility described in this application is a 25' x 124' x 180' grass seed straw storage building, located at 33449 Highway 228, Halsey, Oregon. The land and the buildings are owned by the applicant.

Claimed facility cost: \$115,752
(Accountant's Certification was provided.)

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

The applicant has 400 acres of annual grass seed under cultivation. The original alternative (plowing the straw under) employed by the applicant reduced open field burning by approximately fifty percent (50%) but the method has created a build-up of straw in the soil and an increase in the weed population.

To relieve the straw build-up in the soil and avoid an increase in chemical usage to control weeds the applicant has arranged to have the straw baled off prior to plowing, disking and harrowing. The applicant is required to provide the storage to ensure the dependability and timeliness of the baling service. In 1994 and 1995, the applicant did not open field burn any grass seed acreage.

4. Procedural Requirements

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

Construction of the facility was substantially completed on August 10, 1995. The application for final certification was found to be complete on August 30, 1995. The application was filed within two years of substantial completion of the facility.

5. Evaluation of Application

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

b. Eligible Cost Findings

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

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 protection from inclement weather.

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

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

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

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

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

There is an increase in operating costs of \$959 to annually maintain and operate the facility. These costs were considered in the return on investment calculation.

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

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

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

6. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$115,752, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-4516.

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

JB/rkc
August 29, 1995

rc/wp/taxcredits/4516

Application TC-4518

STATE OF OREGON
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. **Applicant**

Willamette Industries
Eugene Particleboard Division
3800 First Interstate Tower
Portland, OR 97201

The applicant owns and operates a particleboard manufacturing plant, located at 50 North Danebo Avenue in Eugene, Oregon.

2. **Description of Facility**

The facility is a Dings Model 33 Electromagnet, designed for inline installation over a 30-inch troughed inclined conveyor. The magnet is installed suspended over the head pulley of the feed conveyor, and serves the function of removing nails and other metal from the recovered wood. Without a large magnet, discarded pallets and other recovered "urban wood" would not be usable as a raw material for making particleboard due to the high level of contamination by metal. More than 4000 dry tons of "urban woodwaste" are processed at the plant each month.

Total cost claimed is \$14,085.00.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. Installation of the facility was started in July 1993
- b. The facility was placed into operation on September 30, 1993
- c. The application for tax credit was filed with the Department on September 11, 1995 within two years of substantial completion of the facility.

4. **Evaluation of Application**

- a. The sole purpose of the facility is to prevent or reduce a substantial amount of solid waste. This prevention or reduction uses a material recovery process which obtains useful material from material that would otherwise be solid waste, pursuant to Oregon Administrative Rule 340-16-025(1)(b) and (2)(d). The installation of the overhead magnet allows the removal of metal contaminants such as nails from the

pallets and other "urban" waste wood, and is necessary for this waste wood to be utilized to make particleboard.

b. Eligible Cost Findings

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

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

This factor applicable in that the facility is necessary for the recovery and utilization of waste wood to produce particleboard.

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

A) The Applicant has claimed a facility cost of \$14,085.00. The Department has identified no ineligible costs relating to the purchase of the magnet for cleaning waste wood for recovery.

B) Annual Percentage Return on Investment

The annual percentage return on investment was calculated and determined does not apply. There was no salvage value of any facility removed from service. No direct income has been identified from this activity. Annual operating expenses of \$1,380.00 are identified.

ORS 468.190, as amended by Section 4 of Enrolled House Bill 2255 (1995 Session), provides that:

"If the cost of the facility does not exceed \$50,000, the portion of the actual costs properly allocable shall be in the proportion that the ratio of the time the facility is used for prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil bears to the entire time the facility is used for any purpose."

The magnet is used 100% of the time as part of a recovery process for obtaining useful material from wood waste, and so the portion of costs properly allocable is 100 percent under the new statute.

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

The use of a magnet to eliminate metal from the urban wood raw material

stream was determined to be the only viable method available.

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

The facility allows the applicant to utilize "urban" wood waste, thus ensuring a more stable supply of raw materials for manufacturing particleboard, but no direct cost savings have been identified.

- 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 recycle or properly dispose of used oil.

No other factors have been found to be applicable.

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

5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of magnet is to allow the cleaning of urban wood waste such that the wood can be used as raw material for making particleboard.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$14,085.00 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application TC-4518.

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

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

The applicant owns and operates a retail gas station at 5840 SE 17th, Portland, OR 97236, Facility No. 8379.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included air quality Stage 1 & II vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining in and cathodic protection around three steel tanks, fiberglass piping, spill containment basins, tank gauge system, overflow alarm, line leak detectors, sumps, monitoring wells and stage I & II vapor recovery equipment.

Claimed facility cost \$81,897
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on November 11, 1993 and placed into operation on November 11, 1993. The application for certification was submitted to the Department on September 20, 1995, and was considered to be complete and filed on October 8, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Epoxy lining and cathodic protection on three steel tanks, fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps and an overfill alarm.
- 3) For leak detection - Tank gauge system, monitoring wells and line leak detectors.

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$81,897) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
Fiberglass piping	\$ 6,750	67% (1)	\$ 4,523
Epoxy tank lining	15,957	100	15,957
Cathodic protection	621	100	621
 <u>Spill & Overfill Prevention:</u>			
Spill containment basins	780	100	780
Overfill alarm	231	100	231
Sumps	1,310	100	1,310
 <u>Leak Detection:</u>			
Tank gauge system	6,432	90 (2)	5,789
Line leak detectors	897	100	897
Monitoring wells	201	100	201
 <u>VOC Reduction:</u>			
Stage I vapor recovery	475	100	475
Stage II vapor recovery (incl. 8 hoses and nozzles on 4 dispensers)	3,931	100	3,931
Labor and materials	44,312	100	44,312
	-----	-----	-----
Total	\$81,897	96%	\$79,027

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$6,750 and the bare steel system is \$2,210, the resulting portion of the eligible piping cost allocable to pollution control is 67%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$81,897 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4522.

Barbara J. Anderson
(503) 229-5870
October 8, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

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

The applicant owns and operates a retail gas station at 1111 NW 21st, Portland, OR 97209, Facility No. 6216.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining in and impressed current cathodic protection around three steel tanks, doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, line/turbine leak detectors, sumps, oil/water separator, automatic shutoff valves and stage I & II vapor recovery equipment.

Claimed facility cost \$118,789
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on December 31, 1994 and placed into operation on December 31, 1994. The application for certification was submitted to the Department on September 20, 1995, and was considered to be complete and filed on

October 8, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

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

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$118,789) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Fiberglass piping	\$ 4,000	97% (1)	\$ 3,880
Epoxy tank lining	29,500	100	29,500
Cathodic protection	8,060	100	8,060
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,044	100	1,044
Overfill alarm	201	100	201
Sumps	4,026	100	4,026
Oil/water separator	3,500	100	3,500
Automatic shutoff valves	383	100	383
<u>Leak Detection:</u>			
Tank gauge system	6,721	90 (2)	6,049
Line/turb leak detectors	1,437	100	1,437
<u>VOC Reduction:</u>			
Stage I vapor recovery	363	100	363
Stage II vapor recovery (incl. 4 hoses and nozzles on 2 dispensers)	5,879	100	5,879
Labor and materials	53,675	100	53,675
Total	\$118,789	99%	\$117,997

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$4,000 and the bare steel system is \$133, the resulting portion of the eligible piping cost allocable to pollution control is 97%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$118,789 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4525.

Barbara J. Anderson
(503) 229-5870
October 8, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Prewitt's Quality Body and Paint
238 Market Street
Klamath Falls, OR 97601

The applicant owns and operates an automotive body repair and painting establishment in Klamath Falls, Oregon.

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

2. Description of Facility

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

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

Claimed Facility Cost: \$1,850
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on December 13, 1994. The facility was placed into operation on January 1, 1995. The application for final certification was submitted to the Department on September 22, 1995. The application was found to be complete on October 12, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J2210, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

- b. Eligible Cost Findings

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

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

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

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

The actual cost of the facility does not exceed \$50,000. In accordance with ORS 468.190 (3), the portion of the actual costs properly allocable shall be in proportion that the ratio of the time the facility is used for prevention, control, or reduction of air pollution to the entire time the facility is used for any purpose.

In addition to preventing the release of auto coolant to the environment the facility returns coolant to (recharge) coolant to automobile air conditioning systems. The portion of the

claimed facility costs attributable to the recharge capabilities are addressed in number 5 of this section. The portion of time the recovery and recycling components of the facility are used for air pollution prevention is 100%.

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

There are no alternatives to recovery of automotive air conditioner coolant.

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

Due to ORS 468.190 (3), this factor no longer applies to facilities having actual costs of \$50,000 or less. The actual cost of the facility does not exceed \$50,000.

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

A distinct portion of this automobile air conditioning coolant recovery and recycling equipment makes an insignificant contribution to the principal purpose of the claimed facility. This coolant recovery equipment has the capability to return (recharge) coolant to automobile air conditioning systems. Recharge capabilities in coolant recovery and recycling equipment is not required by state or federal law. The additional expense incurred in the purchase of equipment with recharge capabilities is not allocable to pollution control. The Department estimates the additional expense incurred is \$700.00.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 62%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to to reduce air pollution.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 62%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,850 with 62% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4526.

BKF: Air Quality Division
(503) 229-5365
October 27, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Carter's Service Stations, Inc.
10215 NE Halsey
Portland, OR 97220

The applicant owns and operates a retail gas station and convenience store at 860 Molalla Ave., Oregon City, OR, Facility No. 3819.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three fiberglass tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, line leak detectors, automatic shutoff valves, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$107,273
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on May 22, 1994 and placed into operation on May 22, 1994. The application for certification was submitted to the Department on October 4, 1995, and was considered to be complete and filed on October 17, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

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

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

- 1) For corrosion protection - Fiberglass tanks and doublewall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, automatic shutoff valves and sumps.
- 3) For leak detection - Tank gauge system and line leak detectors.

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

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

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$107,273) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

The applicant found no substantial alternatives available for consideration. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

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

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

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

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

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Fiberglass tanks and DW fiberglass piping	\$28,648	56% (1)	\$16,043
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	4,440	100	4,440
Automatic shutoff valves	3,617	100	3,617
Sumps	6,950	100	6,950
<u>Leak Detection:</u>			
Tank gauge system	6,541	90 (2)	5,887
Line leak detectors	876	100	876
<u>VOC Reduction:</u>			
Stage I vapor recovery	1,124	100	1,124
Stage II vapor recovery (incl. 24 hoses and nozzles on 4 dispensers)	1,115	100	1,115
Labor and materials	53,962	100	53,962
Total	\$107,273	88%	\$94,014

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$28,648 and the bare steel system is \$12,717, the resulting portion of the eligible tank and piping cost allocable to pollution control is 56%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$107,273 with 88% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4529

Barbara J. Anderson
(503) 229-5870
October 17, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Co., Inc.
865 Spring St.
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station and food mart at 135 Main St., Klamath Falls, OR 97601, Facility No. 1521.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall fiberglass piping, spill containment basins, sumps and line leak detectors.

Claimed facility cost \$25,897
(Accountant's certification was provided)

3. Procedural Requirements

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

The facility was substantially completed on June 27, 1995 and placed into operation on June 27, 1995. The application for certification was submitted to the Department on October 3, 1995, and was considered to be complete and filed on October 12, 1995, within two years of the completion date of the project.

4. Evaluation of Application

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

qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to construction the facility was bare steel piping, no leak detection on lines, and no spill and overfill prevention.

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

- 1) For corrosion protection - Doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins and sumps.
- 3) For leak detection - Line leak detectors.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$25,897) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

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

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

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

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

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

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

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

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

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

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

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control of reduction of pollution.

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Doublewall fiberglass piping	\$ 9,928	100%	\$ 9,928
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	819	100	819
Sumps	4,612	100	4,612
<u>Leak Detection:</u>			
Line leak detectors	1,946	100	1,946
Labor and materials	8,592	100	8,592
	_____	_____	_____
Total	\$25,897	100%	\$25,897

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider.

- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. Appropriate compliance documentation relating to the facility has been provided indicating compliance 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 \$25,897 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4531.

Barbara J. Anderson
(503) 229-5870
October 12, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

May-Slade Oil Co., Inc.
865 Spring St.
Klamath Falls, OR 97601

The applicant owns and operates a retail gas station and food mart at 19777 Hwy 97, South, Klamath Falls, OR 97601, Facility No. 1524.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining in two steel tanks, cathodic protection and spill containment basins on three tanks.

Claimed facility cost \$20,160
(Accountant's certification was provided)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility was substantially completed on May 25, 1995 and placed into operation on May 25, 1995. The application for certification was submitted to the Department on October 3, 1995, and was considered to be complete and filed on October 12, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases into soil, water or air. The facility

qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to construction the facility consisted of three steel tanks, two of which were unlined. None of the tanks had spill and overflow prevention.

To comply with Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Epoxy lining in two tanks and cathodic protection on three tanks.
- 2) For spill and overflow prevention - Spill containment basins.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that the tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$20,160) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not indicate that alternative methods were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control of reduction of pollution.

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Epoxy tank lining	\$ 8,250	100%	\$ 8,250
Cathodic protection	7,800	100%	7,800
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	4,110	100	4,110
Total	\$20,160	100%	\$20,160

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements according to signed statements made by the installation service provider.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water or air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation

or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. Appropriate compliance documentation relating to the facility has been provided indicating compliance 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 \$20,160 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4532.

Barbara J. Anderson
(503) 229-5870
October 12, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Mary Lou Loar
Camp Sherman Store
P O Box 638
Camp Sherman, OR 97730

The applicant owns and operates a retail gas station and grocery store at Center of Main Rd., Camp Sherman, OR, Facility No. 9058.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

The applicant received a 75% not to exceed \$75,000 essential services grant through DEQ's Underground Storage Tank Financial Assistance Program for expenses claimed in this tax credit application. Section 2 summarizes the cost adjustment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two doublewall fiberglass/steel tanks and fiberglass piping, spill containment basins, tank gauge system with overflow alarm, line leak detectors and sumps.

Claimed facility cost \$14,928
(Accountant's certification was provided)

The above claimed facility cost is based on a total facility cost of \$59,711 detailed on Page 2. The applicant subtracted grant funds received for the project prior to submitting this tax credit claim of \$14,928 using the Department's adjustment methodology summarized below.

The Department concludes that \$14,928 is the actual facility cost to the applicant when an adjustment is made deducting an essential services grant previously awarded the project under DEQ's UST financial assistance program (see Attachment A for details of the calculation) with a breakdown as follows:

	Claimed Facility Cost	Percent Adjustment	Adjusted Claimed Facility Cost
	-----	-----	-----
Fiberglass/steel tanks and fiberglass piping	\$ 8,922	25 %	\$ 2,231
Spill containment basins	418	"	105
Tank gauge system w/alarm	7,500	"	1,875
Line leak detectors	452	"	113
Sumps	990	"	248
Labor & Materials	41,429	"	10,356
	-----	-----	-----
Total	\$59,711	25 %	\$14,928

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility was substantially completed on June 26, 1995 and placed into operation on June 26, 1995. The application for certification was submitted to the Department on October 10, 1995, and was considered to be complete and filed on October 10, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of two steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass/steel tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm and sumps.
- 3) For leak detection - Tank gauge system and line leak detectors.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not find alternative methods available for consideration. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control of reduction of pollution.

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
Fiberglass/steel tanks and fiberglass piping	\$ 2,231	100%	\$ 2,231
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	105	100	105
Sumps	248	100	248
<u>Leak Detection:</u>			
Tank gauge system w/alarm	1,875	90 (1)	1,688
Line leak detectors	113	100	113
Labor and materials	10,356	100	10,356
	_____	_____	_____
Total	\$14,928	99%	\$14,741

- (1) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility

qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$14,928 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4536.

Barbara J. Anderson
(503) 229-5870
October 10, 1995

ATTACHMENT A.

TAX CREDIT/GRANT ADJUSTED FACILITY COST WORKSHEET
APPLICATION NO. TC-4536

Camp Sherman Store
Center of Main Rd.
Camp Sherman, OR 97730
Facility ID No. 9058

A. TOTAL STATE GRANT AWARDED TO APPLICANT: \$45,904

B. PROJECT EQUIPMENT AND COSTS:	UST PROJECT WORK ELIGIBLE FOR GRANT	POLLUTION CONTROL EQUIPMENT ELIGIBLE FOR TAX CREDIT	ADJUSTED EQUIPMENT COSTS (Using % in F. below)
DW Fiberglass/steel tanks	\$4,782	\$4,782	\$1,196
Doublewall Fiberglass piping	4,140	4,140	1,035
Spill containment basins	418	418	105
Tank gauge system with alarm	7,500	7,500	1,875
Line leak detectors	452	452	113
Sumps	990	990	248
Labor & materials	41,429	41,429	10,357
Fuel pumps, CPA fee	1,495	0	0
C. TOTAL PROJECT COST	\$61,206	\$59,711	\$14,928

D. CALCULATION OF APPLICANT'S ACTUAL EQUIPMENT COST AND ADJUSTMENT PERCENT:

1. Equipment costs eligible for tax credit
as a percent of total project cost: $\$59,711 / 61,206 = 97.56\%$

2. Portion of State grant applicable to equip-
ment costs eligible for tax credit: $\$45,904 \times .9756 = \$44,783$

E. APPLICANT'S ACTUAL EQUIPMENT COST: $\$59,711 - 44,783 = \$14,928$

F. Applicant actual equipt cost percent: $\$14,928 / 59,711 = 25\%$

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State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Western Stations Co.
2929 NW 29th
Portland, OR 97210-1705

The applicant owns and operates a retail gas station at 925 6th Ave. West, Eugene, OR, 97402, Facility No. 6219.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I vapor recovery equipment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining and cathodic protection for three steel tanks, doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, line/turbine leak detectors, automatic shutoff valves, sumps, oil/water separator and Stage I recovery equipment.

Claimed facility cost \$125,141
(Accountant's certification was provided)

The Department concludes that the total facility cost for the project is \$125,541. This represents a difference of \$400 from the applicant's claimed cost of \$125,141 because the applicant claimed the difference between the cost of steel piping and fiberglass piping rather than the total cost of fiberglass piping.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility was substantially completed on July 8, 1995 and placed into operation on July 13, 1995. The application for certification was submitted to the Department on October 10, 1995, and was considered to be complete and filed on October 17, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks and piping with no corrosion protection, spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Epoxy lining and cathodic protection for three steel tanks and doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, automatic shutoff valves, oil/water separator and sumps.
- 3) For leak detection - Tank gauge system and line/turbine leak detectors.

In addition, the following equipment was installed to reduce air quality emissions.

- 1) For VOC reduction - Stage I vapor recovery equipment.

Based on information currently available, the applicant is in compliance with DEQ permitting requirements in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant found no substantial alternatives available for consideration. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control of reduction of pollution.

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
Epoxy tank lining and cathodic protection	\$32,098	100%	\$32,098
DW fiberglass piping	11,301	96% (1)	\$10,849
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,253	100	1,253
Overfill alarm	217	100	217
Automatic shutoff valves	1,221	100	1,221
Sumps	5,818	100	5,818
Oil/water separator	3,600	100	3,600
<u>Leak Detection:</u>			
Tank gauge system	8,312	90 (2)	7,481
Line/turbine leak det.	1,292	100	1,292
<u>VOC Reduction:</u>			
Stage I vapor recovery	628	100	628
Labor and materials	59,801	100	59,801
	-----	-----	-----
Total	\$125,541	99%	\$124,258

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$11,301 and the bare steel system is \$400, the resulting portion of the eligible piping cost allocable to pollution control is 96%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$125,541 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4537.

Barbara J. Anderson
(503) 229-5870
October 17, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Eugene Truck Haven, Inc.
32910 East Pearl Street
Coburg, OR 97408

The applicant owns and operates a retail gas station and truck stop at 32910 East Pearl Street, Coburg, OR, Facility No. 1601.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

The applicant received a 75% not to exceed \$75,000 essential services grant through DEQ's Underground Storage Tank Financial Assistance Program for expenses claimed in this tax credit application. Section 2 summarizes the cost adjustment.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass/steel tanks and fiberglass piping, spill containment basins, tank gauge system with overfill alarm, line leak detectors, turbine leak detectors and sumps.

Claimed facility cost \$137,527
(Accountant's certification was provided)

The above claimed facility cost is based on a total facility cost of \$202,016 detailed on Page 2. The applicant subtracted grant funds received for the project prior to submitting this tax credit claim of \$137,527 using the Department's adjustment methodology summarized below.

The Department concludes that \$137,527 is the actual facility cost to the applicant when an adjustment is made deducting an essential services grant previously awarded the project under DEQ's UST financial assistance program (see Attachment A for details of the calculation) with a breakdown as follows:

	Claimed Facility Cost	Percent Adjustment	Adjusted Claimed Facility Cost
	-----	-----	-----
Fiberglass/steel tanks and fiberglass piping	\$64,012	68.0772%	\$43,578
Spill containment basins	594	"	404
Tank gauge system w/alarm	7,982	"	5,434
Line leak detectors	1,791	"	1,219
Turbine leak detectors	6,270	"	4,268
Sumps	8,434	"	5,742
Labor & Materials	112,933	"	76,882
	-----	-----	-----
Total	\$202,016	68.0772%	\$137,527

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility was substantially completed on December 1, 1994 and placed into operation on December 1, 1994. The application for certification was submitted to the Department on October 10, 1995, and was considered to be complete and filed on October 10, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of five steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass/steel tanks and fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm and sumps.
- 3) For leak detection - Tank gauge system, line leak detectors and turbine leak detectors.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant did not find alternative methods available for consideration. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control of reduction of pollution.

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Fiberglass/steel tanks and fiberglass piping	\$43,578	59% (1)	\$25,711
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	404	100	404
Sumps	5,742	100	5,742
<u>Leak Detection:</u>			
Tank gauge system w/alarm	5,434	90 (2)	4,891
Line leak detectors	1,219	100	1,219
Turbine leak detectors	4,268	100	4,268
Labor and materials	76,882	100	76,882
Total	\$137,527	87%	\$119,117

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$64,012 and the bare steel system is \$26,456, the resulting portion of the eligible tank and piping cost allocable to pollution control is 59%.

- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 87%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$137,527 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4541.

Barbara J. Anderson
(503) 229-5870
October 10, 1995

ATTACHMENT A.

TAX CREDIT/GRANT ADJUSTED FACILITY COST WORKSHEET
APPLICATION NO. TC-4541

Eugene Truck Haven
32910 East Pearl St.
Coburg, OR 97408
Facility ID No. 1601

A. TOTAL STATE GRANT AWARDED TO APPLICANT: \$75,000

B. PROJECT EQUIPMENT AND COSTS:	UST PROJECT WORK ELIGIBLE FOR GRANT	POLLUTION CONTROL EQUIPMENT ELIGIBLE FOR TAX CREDIT	ADJUSTED EQUIPMENT COSTS (Using % in F. below)
Fiberglass/steel tanks	\$42,663	\$42,663	\$29,044
Doublewall Fiberglass piping	21,349	21,349	14,534
Spill containment basins	594	594	404
Tank gauge system	7,982	7,982	5,434
Line leak detectors	1,791	1,791	1,219
Turbine leak detectors	6,270	6,270	4,268
Sumps	8,434	8,434	5,742
Labor & materials	112,933	112,933	76,882
Fuel pumps	6,270	0	0
Contaminated soil/groundwater cleanup costs	26,656	0	0
C. TOTAL PROJECT COST	\$234,942	\$202,016	\$137,527

D. CALCULATION OF APPLICANT'S ACTUAL EQUIPMENT COST AND ADJUSTMENT PERCENT:

1. Equipment costs eligible for tax credit
as a percent of total project cost: $\$202,016 / 234,942 = 85.99\%$

2. Portion of State grant applicable to equip-
ment costs eligible for tax credit: $\$75,000 \times .8599 = \$64,489$

E. APPLICANT'S ACTUAL EQUIPMENT COST: $\$202,016 - 64,489 = \$137,527$

F. Applicant actual equipt cost percent: $\$137,527 / 202,016 = 68.0772\%$

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State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Simpson Timber Company
Oregon Overlay Division
2301 N. Columbia Blvd.
Portland, OR 97217

The applicant owns and operates a phenolic resin manufacturing and paper coating facility in Portland, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

The claimed facility consists of a regenerative thermal oxidizer for the destruction of volatile organic compounds (VOCs) emitted from the Line #3 curing oven.

Claimed Facility Cost: \$1,652,179

A distinct portion of the claimed facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$204,727.70 for process related ducting and equipment which are not directly involved in pollution control. Most of this process ducting and equipment provides for recirculation of pre-heated air to the drying ovens, improving the efficiency of the manufacturing process. The remainder of the ineligible cost is related to that portion of process ducting which serves only to remove fumes to the exterior of the building, and would have been installed by the facility even without the thermal oxidizer. The applicant has agreed to reduce the claimed facility cost by \$204,727.70.

Ineligible Costs: \$204,727.70

Adjusted Facility Cost: \$1,447,451.30

Accountant's Certification was provided.

The applicant indicated the useful life of the facility is 15 years.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

The facility received preliminary certification from the Department on September 4, 1987. Installation of the facility was substantially completed on January 9, 1989, and placed into operation on February 3, 1989. The facility submitted a notice of approved construction completion to the Department on June 22, 1989. The application for final certification was received by the Department on July 26, 1995. The application was found to be complete on August 28, 1995, within seven years of substantial completion of the facility. This is in accordance with ORS 468.165.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution. This is in accordance with OAR Chapter 340, Division 22, rule 170. The Air Contaminant Discharge Permit for this source, ACDP 26-3009, item number 13 requires the permittee to maintain plant emissions below 2,019 tons/year. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility destroys volatile organic compounds (VOC) generated in the Line #3 oven during curing of papers coated with phenolic resins. During 1994, this curing process generated 3045 tons of VOCs, of which 2710 tons were converted to carbon dioxide and water by the claimed facility, a REECO Model "G" 58,000 scfm fume incinerator. Net emissions from the Line #3 oven were reduced to 335 tons of VOCs in 1994. The regenerative thermal oxidizer is fired with natural gas and has a combustion chamber temperature of 1500F with a residence time of about one second. A regenerative thermal oxidizer uses the heat from exhaust air to preheat incoming fumes, resulting in greater destructive efficiencies for high volume air streams. Additional equipment in the claimed facility includes foundation and support structures, ducting, fans, motors, instrumentation, controls, and the exhaust stack.

Source testing conducted in 1994 indicates that the facility achieves a destruction efficiency greater than 90%. A portion of the exhaust air from the incinerator is filtered and returned to the drying ovens. The cost of ducting used to return this air has been deducted from the eligible cost of the claimed facility.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

The applicant indicates in the application so there is no income or savings from the facility, so there is no return on the investment.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Regenerative thermal oxidizers are considered technically recognized for controlling VOC emissions at the volumes, composition, and concentration generated by the Line #3 oven.

- 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 average annual cost of maintaining and operating the facility is \$166,226. These increased costs include natural gas consumption, equipment maintenance and repair, instrumentation costs, and property taxes.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

The adjusted eligible facility cost has been determined to be \$1,431,011.30. A total of \$221,168 was not eligible because it did not directly reduce pollution. See Section 2 for additional details.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with DEQ statutes, rules, and permit conditions.
- d. The portion of the facility cost that is properly allocated 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 \$1,431,011 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-2329.

Michael T. Gordon
SJO Consulting Engineers, Inc.

October 12, 1995

water or noise pollution or solid or hazardous waste or to recycling or appropriately disposing of used oil [as set forth in ORS 468.190(2)].

(3) The director may require any further information the director considers necessary before a certificate is issued.

(4) The application shall be accompanied by a fee established under subsection (5) of this section. The fee may be refunded if the application for certification is rejected.

(5) By rule and after hearing the commission may adopt a schedule of reasonable fees which the department may require of applicants for certificates issued under section 6 (Note: Section 6 provides for precertification of facilities) of this 1995 Act and ORS 468.170. Before the adoption or revision of any such fees the commission shall estimate the total cost of the program to the department. The fees shall be based on the anticipated cost of filing, investigating, granting and rejecting the applications and shall be designed not to exceed the total cost estimated by the commission. Any excess fees shall be held by the department and shall be used by the commission to reduce any future fee increases. The fee may vary according to the size and complexity of the facility. The fees shall not be considered by the commission as part of the cost of the facility to be certified.

(6) The application shall be submitted after construction of the facility is substantially completed and the facility is placed in service and within two years [of substantial completion of] after construction of the facility is substantially completed. Failure to file a timely application shall make the facility ineligible for tax credit certification. An application shall not be considered filed until it is complete and ready for processing. The commission may grant an extension of time to file an application for circumstances beyond the control of the applicant that would make a timely filing unreasonable.

However, the period for filing an application shall not be extended to a date beyond December 31, 2003. [If a facility is completed before January 1, 1984, the application shall be submitted within two years after January 1, 1984.] [Formerly 449.625; 1974 s.s. c.37 §2; 1975 c.496 §3; 1977 c.795 §3; 1979 c.802 §3; 1981 c.359 §1; 1983 c.637 §2; 1989 c.802 §5]

To be added to 468.165:

(1) Notwithstanding ORS 468.165(6), application for certification under ORS 468.170 of a pollution control facility or portion thereof may be submitted after two ^{years} after construction of the facility is substantially completed if:

(a) The application is submitted within seven years after construction of the facility is substantially completed;

(b) The facility received preliminary certification under ORS 468.175 (1987 Replacement Part) on or before December 31, 1987; and

(c) The facility submitted a notice of approved construction completion to the Department of Environmental Quality on or before December 31, 1989.

(2) Any application for certification filed pursuant to this section must be filed on or before December 31, 1995.

468.170 Action on application; rejection; appeal; issuance of certificate; certification.

(1) The Environmental Quality Commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or [properly] appropriately disposing of used oil [as set forth in ORS 468.190(2)]. The actual cost or portion of the actual cost certified shall not exceed the taxpayer's own cash investment in the facility or portion of the facility. Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or [properly] appropriately disposing of used oil than was claimed in the application for certification, the commission shall cause written notice of

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission
811 S.W. Sixth Avenue
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to Simpson Timber Company's (the Company's) Pollution Control Tax Credit Application No. TC-2329 (the Application) filed with the State of Oregon, Department of Environmental Quality (the DEQ) for the Air Pollution Control Facility in Portland, Oregon (the Facility). The Application has a claimed Facility cost of \$1,652,179. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We inspected vendor invoices which aggregated approximately 98% of the claimed cost of the Facility.
3. We discussed the Application, the Statutes, and OAR's with Brian Fields of the DEQ; Charles Bianchi, a contractor for the DEQ; and Mike Gordon of SJO Consulting Engineers, Inc. (SJO).
4. We discussed certain components of the Application with various Company personnel, including David Berg, Mark Zimmerman and Pete Plowman.
5. We toured the Facility with Mr. Berg.
6. We requested that Company personnel confirm the following:
 - A. There were no related parties or affiliates of the Company which had billings which were included in the Application.
 - B. The capacity of the Facility is adequate for the Company's present operations and does not include significant capacity for potential future operations.

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

- C. All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.
- D. There were no internal labor costs included in the Application.
- E. There was no salvage value related to equipment or structures that were removed during the construction of the Facility for which the Company previously received pollution control tax credits and for which the Company did not deduct the items from the Facility costs as "like-for-like" replacements in accordance with the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Section 468.155(2)(e)(A).
- F. The determination and allocation of pollution control related costs for work performed by U.S. Metal Works, Inc. is true and accurate.

Findings:

- 1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for the following:

Non-allowable costs identified by SJO

Process related ducting and equipment not related to pollution control	\$ 204,728
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Non-allowable costs identified by Symonds, Evans & Larson

Spare parts	<u>16,440</u>
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Total non-allowable costs	<u>\$ 221,168</u>
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As a result, the allowable costs for the Application should be reduced to \$1,431,011.

- 6. Company personnel confirmed in writing that such assertions were true and correct.

Conclusion:

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the specified items should be adjusted, except as noted above. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. TC-2329 with respect to its Air Pollution Control Facility in Portland, Oregon and should not be used for any other purpose.

Symonds, Evans & Larson

October 12, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Containerboard Packaging
785 N. 42nd Street
Springfield, OR 97478

The applicant owns and operates a pulp and paper mill in Springfield, OR.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The new vacuum seal water recycle system consists of 2 Gormann Rupp vacuum pumps, a system screen, a 5,000 gallon collection tank, an Alfa Laval heat exchanger, an Evapco cooling tower, three 8-inch Hayward strainers and miscellaneous pumps and piping system.

Claimed Facility Cost: \$1,254,223
(Accountant's Certification was provided).

Eligible Cost: \$1,218,902.

The Department determined that the costs submitted by the applicant are eligible except for capitalized interest. Capitalized interest has been held by the Commission to represent a cost that exceeds the taxpayer's own cash investment in the facility and is thereby ineligible under the rules governing the Pollution Control Facilities Tax Credit Program. The claimed cost for this facility was thereby reduced by \$18,300 (capitalized interest) and the eligible cost is \$1,235,923. The accountant's review identified additional ineligible costs in the amount of \$17,021 for training not directly related to the installation of the facility.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met the statutory deadline in that construction and installation of the facility were substantially

completed on April 28, 1994 and the application for certification was found to be complete on August 8, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of water pollution. This reduction is accomplished by redesign of treatment works for industrial waste as defined in ORS 468B.005.

The objective of the claimed facility is to reduce the volume of vacuum pump seal water that was being sent to the mill's wastewater treatment system, and eventually the McKenzie River. The previous method of handling the vacuum pump seal water was to pump water through the process on a single pass and then discharge it to the wastewater treatment system. The new system pumps the water in, uses it, collects it, removes pollutants and cools it, and then reuses it. The result is that the wastewater flow to the river has been reduced by 1100 gal/min. This also has resulted in a reduction of a significant heat discharge to the McKenzie River.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on this facility. Annual operating expenses result in a negative cash flow.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There were two alternatives identified by the applicant:

- a) Pump vacuum seal water through cooling tower without heat exchanger and gravity strainer.
- b) Divert all flow to the ASB for treatment.

Both alternatives would not have achieved the level of pollution control and reduction as the selected alterative.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings from the facility. The cost of maintaining and operating the facility is estimated to be \$63,000 annually.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

The Environmental Quality Commission has directed that applications of \$250,000 and greater undergo an accounting review. This review was performed by the firm of Merina, McCoy and Gerritz, P.C.. The accounting review identified ineligible costs of \$17,021 for training costs not directly related to the capital investment in the pollution control facility. Therefore,

Claimed facility cost:	\$1,254,223
Capitalized interest:	(18,300)
Ineligible Training:	(17,021)
Eligible Facility Cost:	\$1,218,902

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of water pollution and accomplishes this purpose by the redesign of treatment works for industrial waste as defined in ORS 468B.005.
- c. The facility complies with DEQ statutes, rules, and permit conditions.

- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,218,902 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4339.

Timothy C. McFetridge, P.E.
T 4339
(503) 378-8240, extension: 235
August 8, 1995
WQTCSR-1/95

MERINA McCOY GERRITZ, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

PARTNERS

John W. Merina, CPA
Michael E. McCoy, CPA
Gerald V. Gerritz, Jr., CPA

CERTIFIED IN
Oregon
Washington

**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLYING AGREED-UPON PROCEDURES**

Oregon Department of
Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

At your request, we have performed the procedures enumerated below, which were agreed to by the Oregon Department of Environmental Quality (DEQ), solely to assist the DEQ in evaluating Weyerhaeuser Company (the Company) Pollution Control Tax Credit Application No. 4339 (the Application) regarding the Vacuum Seal Water Recycle System (the Facility) in Springfield, Oregon. The claimed facility costs on the Application are \$1,254,223. The agreed-upon procedures and related findings are:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Sections 469.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-050 (OARs).
2. We reviewed and discussed the Application, supporting documents, and Statutes with Charles Bianchi of the Oregon Department of Environmental Quality (DEQ).
3. We reviewed and discussed the Application, supporting documents, Statutes and OARs with Kris Lewis, Mill Accountant and Gary Shearer, Accounting Supervisor.
4. We inquired as to whether there were any direct or indirect Company costs charged or allocated to the facility costs claimed in the Application.

We were informed that engineering and direct labor costs were included in the Application and that no indirect Company costs except capitalized interest were included in the Application. The engineering and direct labor costs, which included payroll taxes and fringe benefits, were found to be supported, reasonable as to amount and properly included in the application.

5. We reviewed the documents and workpapers of applicant's certified public accountants that related to the facility claim.

The claimed facility cost in the Application was \$1,254,223. The Accountant's Certificate was for costs totaling \$1,254,223.

6. We reviewed all costs claimed in the Application for Pollution Control Tax Credit certification under the rules and statutes that govern the Program.

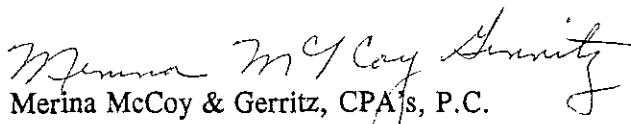
We determined that the claimed facility costs for pollution control tax credit certification under the rules and statutes that govern the program should be adjusted as follows:

Original claim	\$1,254,223
Remove operator's training (\$16,576 in Education line item plus \$445 in Mill Engineering line item)	(17,021)
Remove capitalized interest	<u>(18,300)</u>
Adjusted claimed facility cost	<u>\$1,218,902</u>

7. We visited the site and visually inspected the facility. During the tour we noted the facility did not have any of the items disallowed under OAR 340-16-025(3).
8. The Company has confirmed to us that no billings from related parties or affiliates of the Company have been included in the claimed costs.
9. We reviewed the calculations in Section 5 of the Application for Final Certification of Pollution Control Facility and found them to be correct.

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except as detailed in procedure seven. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. The report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in evaluating the Association's Pollution Control Tax Credit Application and should not be used for any other purpose.


Merina McCoy & Gerritz, CPAs, P.C.
West Linn, Oregon
October 4, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Containerboard Packaging
785 North 42nd Street
P.O. Box 275
Springfield, OR 97478

The applicant owns and operates a containerboard manufacturing facility in Springfield, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Facility

Weyerhaeuser purchased and installed continuous emissions monitoring (CEM) systems to control particulate, total reduced sulfur, sulfur dioxide, nitrogen oxides and carbon monoxide emissions from their recovery boiler stack, package boiler and lime kiln. All of the above systems transmit monitoring data to the mill information system (MIS). Special software was developed to put the data in a format that meets the requirements of the Air Contaminant Discharge Permit. An Operations Manual was created to provide operators with a set procedures on what to do if any of the pollutants being monitored reach concentrations above established setpoints. Application Number 4363 is for the recovery boiler and package boiler and Application Number 4364 is for the lime kiln. Since these two applications are for similar equipment and have overlapping systems, for the remainder of this report these two applications will be combined.

Claimed Facility Cost: \$746,919

A distinct portion of the claimed facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$33,462 for the tax credit application fee, the consultant's fee to prepare the tax credit application, the accounting firm's fee to review the tax credit application and capitalized interest.

Ineligible Costs: \$33,462

Adjusted Facility Cost: \$713,457

Accountant's Certification was provided.

The applicant indicated the useful life of the facility is 10 years.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed during May of 1993 and placed into operation in June 1993. The application for final certification was filed on March 2, 1995, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Lane Regional Air Pollution Authority to monitor and reduce air pollution. This is in accordance with OAR Chapter 340, Division 25, rule 180. The Air Contaminant Discharge Permit for this source, Permit Number 208850, the Monitoring and Reporting section requires the permittee to monitor and record the following parameters: opacity, total reduced sulfur, sulfur dioxide, hydrogen sulfide, nitrogen oxides and carbon monoxide. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility consists of a several components that makeup the CEM systems for the recovery furnace, package boiler and the lime kiln. A description of each is discussed below.

Recovery furnaces Number 3 and Number 4 stacks have the following: Graseby/STI API Model 152 Total Reduced Sulfur (TRS)/Sulfur Dioxide (SO₂)/Oxygen analyzers. The main recovery stack has a Land Model 4500 Opacity Monitor. Graseby/STI Model DP0702 probes were used in the stacks. If the TRS emissions exceed 10ppm or the SO₂ emissions exceed 300ppm the operator has a list of corrective action procedures that are to be followed. If the opacity reached 2.0 Kg/admt a corrective action plan is in place for the operators.

The lime kiln stack had to be extended in order to meet the minimum EPA criteria for stack sampling. The following CEM systems were installed on the kiln stack: Land Model 9000 carbon dioxide and a Graseby/STI API Model 152 Total Reduced Sulfur/Sulfur Dioxide/Oxygen analyzers. A Graseby/STI Model DP0702 probe was used in the stack. If the TRS emissions exceed 20ppm or the SO₂ emissions exceed 300ppm the operator has a list of corrective action procedures that are to be followed. If the opacity reached 0.38 Kg/admt a corrective action plan is in place for the operators.

The package boiler stack received a Graseby/STI Model DP0702 probe and a Graseby/STI Model 252 Nitrogen Oxide (NOx) and Oxygen analyzer. If the NOx level reaches 125ppm the operator has a written procedure that list corrective measures that will reduce the NOx emissions.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

The applicant indicates in the application there is no income or savings from the facility, so there is no return on the investment.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There are no other alternatives for Continuous Emissions Monitors.

- 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 \$85,536 annually. The operating costs are for maintenance calibrations, parts and electricity.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air pollution.

The adjusted eligible facility costs have been determined to be \$713,457 for the Continuous Emission Monitoring systems. A total of \$33,462 was not eligible because it did not directly reduce or prevent pollution. See Section 2 for additional details. An accounting review of the applicant's claim was performed by the firm of Merina, McCoy and Gerritz, CPAs. The review identified additional ineligible costs of \$21,063 making the eligible cost of the facility \$692,394. A copy of the accountant's report is attached to this report.

The actual cost of the facility properly allocable to pollution control as determined by using this factor or these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by Lane Regional Air Pollution Authority to prevent air pollution.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocated 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 \$692,394 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4363 and 4364.

Dennis E. Cartier
SJO Consulting Engineers, Inc.
August 8, 1995

MERINA McCOY GERRITZ, P.C.

CERTIFIED PUBLIC ACCOUNTANTS

PARTNERS

John W. Merina, CPA
Michael E. McCoy, CPA
Gerald V. Gerritz, Jr., CPA

CERTIFIED IN
Oregon
Washington

INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

Oregon Department of
Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

At your request, we have performed the procedures enumerated below, which were agreed to by the Oregon Department of Environmental Quality (DEQ), solely to assist the DEQ in evaluating Weyerhaeuser Company (the Company) Pollution Control Tax Credit Application No.'s 4363 and 4364 (the Application) regarding the Continuous Emission Monitoring System (the Facility) in Springfield, Oregon. The combined claimed facility costs on the Application are \$746,919. The agreed-upon procedures and related findings are:

1. We read the Applications, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Sections 469.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-050 (OARs).
2. We reviewed and discussed the Applications, supporting documents, and Statutes with Charles Bianchi and Brian Fields of the Oregon Department of Environmental Quality (DEQ) and Dennis Carter of SJO Consulting Engineers, Inc.
3. We reviewed and discussed the Application, supporting documents, Statutes and OARs with Barbara Dopkus, Fixed Asset Accountant, Gary Shearer, Accounting Supervisor and Russell Ayers, Mill Projects Manager.
4. We inquired as to whether there were any direct or indirect Company costs charged or allocated to the facility costs claimed in the Application.

We were informed that engineering and direct labor costs were included in the Application and that no indirect Company costs except capitalized interest were included in the Application. The engineering and direct labor costs, which included payroll taxes and fringe benefits, were found to be supported, reasonable as to amount and properly included in the Application.

5. We reviewed the documents and workpapers of applicant's certified public accountants that related to the facility claim.

The combined claimed facility cost in the Application was \$746,919. The combined Accountant's Certificates were for costs totaling \$746,919.

6. We reviewed all costs claimed in the Applications for Pollution Control Tax Credit Certification under the rules and statutes that govern the Program.

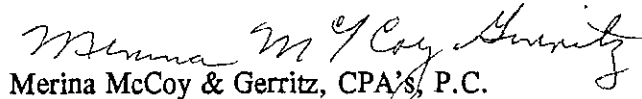
We determined that the combined claimed facility costs for pollution control tax credit certification under the rules and statutes that govern the program should be adjusted as follows:

Original combined claimed facility costs	\$746,919
Remove LRAPA software which is used to produce governmental reports	(18,000)
Reduce project costs for:	
1. Operator's training	(4,076)
2. Tax credit Application assistance	(3,990)
3. Asbestos removal	(125)
4. Travel	(2,864)
5. Air conditioning	(3,380)
Remove capitalized interest	<u>(22,090)</u>
Adjusted combined claimed facility costs	<u>\$692,394</u>

7. We visited the site and visually inspected the facility. During the tour we noted the facility did not have any of the items disallowed under OAR 340-16-025(3).
8. The Company has confirmed to us that no billings from related parties or affiliates of the Company have been included in the claimed costs.
9. We reviewed the calculations in Section 5 of the Application for Final Certification of Pollution Control Facility and found them to be correct.

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except as detailed in procedure seven. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. The report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in evaluating the Association's Pollution Control Tax Credit Application and should not be used for any other purpose.


Merina McCoy & Gerritz, CPA's, P.C.
West Linn, Oregon
October 4, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Containerboard Packaging
785 N. 42nd Street
Springfield, OR 97478

The applicant owns and operates a pulp and paper mill in Springfield, OR.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The claimed facility is a custom designed outfall diffuser consisting of a diversion box in the existing outfall line, a buried 66-inch diameter pipe and a buried 30-inch diameter diffuser pipe extending about 35 feet into the McKenzie River. The diffuser has 5 discharge ports.

Claimed Facility Cost: \$406,464
(Accountant's Certification was provided).

Eligible Cost

The claimed cost was reduced by the cost of capitalized interest and public relations materials. These costs have been held to be ineligible because they are not considered to be included in the actual taxpayer's cash investment in the pollution control facility. An accountant's review identified additional ineligible costs in the amount of \$2,857 for fencing, landscaping and other miscellaneous costs not related to the pollution control facility.

Claimed cost:	\$406,464
Ineligible costs	
Public relations materials	\$8,884
Capitalized interest	2,108
Miscellaneous costs	2,857
Total	<u>13,849</u>
Eligible Facility Cost:	\$392,615

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met the statutory deadline in that construction and installation of the facility was substantially completed on August 26, 1994 and the application for certification was found to be complete on August 8, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control water pollution. The requirement is to comply with NPDES Permit No. 101081.

During the last permit renewal (May, 1993) the need for a new outfall diffuser for the wastewater discharge from the Weyerhaeuser mill was identified. The existing outfall did not employ a diffuser and did not provide adequate mixing of the treated wastewater and the river water. A requirement was put into the permit for Weyerhaeuser to design and construct a new outfall diffuser. The outfall diffuser construction was completed in the fall of 1994 and mixing is much better now than before.

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on this facility.

- 3) The alternative methods, equipment and costs for

achieving the same pollution control objective.

The alternatives available for the installation of an outfall diffuser were driven more by location than design. The location selected dictated the diffuser design. All other alternative locations were deemed to be unsuitable.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings from the facility. The cost of maintaining and operating the facility is estimated to be \$5000 annually. This estimate assumes costs associated with inspection and maintenance of the diffuser.

- 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.

The Department has determined that some portions of the claimed cost are ineligible for because they do not contribute significantly to pollution control. These costs include capitalized interest and public relations material. In addition, an accounting review of the applicant's claim was conducted by the firm of Merina, McCoy, Gerritz, CPAs. The review identified additional ineligible costs of \$2,857.

Claimed cost:	\$406,464
Ineligible costs	
Public relations materials	\$8,884
Capitalized interest	2,108
Other ineligible costs	2,857
Total ineligible cost	\$13,849

The actual cost of the facility properly allocable to pollution control is:

Claimed facility cost	\$406,464
Ineligible cost	<u>(13,849)</u>
Eligible cost	\$392,615

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control water pollution
- c. The facility complies with DEQ statutes, rules, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is \$392,615.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$392,615 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4371.

Timothy C. McFetridge, P.E.
(503) 378-8240, extension: 235
August 8, 1995
WQTCSR-1/95

MERINA McCOY GERRITZ, P.C.
CERTIFIED PUBLIC ACCOUNTANTS

PARTNERS

John W. Merina, CPA
Michael E. McCoy, CPA
Gerald V. Gerritz, Jr., CPA

CERTIFIED IN
Oregon
Washington

**INDEPENDENT ACCOUNTANTS' REPORT
ON APPLYING AGREED-UPON PROCEDURES**

Oregon Department of
Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

At your request, we have performed the procedures enumerated below, which were agreed to by the Oregon Department of Environmental Quality (DEQ), solely to assist the DEQ in evaluating Weyerhaeuser Company (the Company) Pollution Control Tax Credit Application No. 4371 (the Application) regarding the Outfall Diffuser (the Facility) in Springfield, Oregon. The claimed facility costs on the Application are \$406,464. The agreed-upon procedures and related findings are:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Sections 469.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-050 (OARs).
2. We reviewed and discussed the Application, supporting documents, and Statutes with Charles Bianchi of the Oregon Department of Environmental Quality (DEQ).
3. We reviewed and discussed the Application, supporting documents, Statutes and OARs with Barbara Dopkus, Fixed Asset Accountant and Gary Shearer, Accounting Supervisor.
4. We inquired as to whether there were any direct or indirect Company costs charged or allocated to the facility costs claimed in the Application.

We were informed that engineering and direct labor costs were included in the Application and that no indirect Company costs except capitalized interest were included in the Application. The engineering and direct labor costs, which included payroll taxes and fringe benefits, were found to be supported, reasonable as to amount and properly included in the application.

5. We reviewed the documents and workpapers of applicant's certified public accountants that related to the facility claim.

The claimed facility cost in the Application was \$406,464. The Accountant's Certificate was for costs totaling \$406,464.

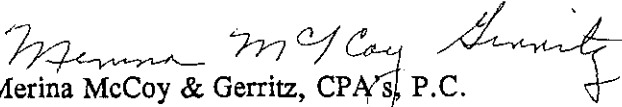
6. We reviewed all costs claimed in the Application for Pollution Control Tax Credit certification under the rules and statutes that govern the Program. We determined that the claimed facility costs for pollution control tax credit certification under the rules and statutes that govern the program should be adjusted as follows:

Original claim	\$406,464
Remove administrative travel in engineering line item	(788)
Remove public relations expense (\$8,884 in public relations line item plus \$294 in Engineering line item)	(9,338)
Remove fencing and landscaping	(1,615)
Remove capitalized interest	<u>(2,108)</u>
Adjusted claimed facility cost	<u>\$392,615</u>

7. We visited the site and visually inspected the facility. During the tour we noted the facility did not have any of the items disallowed under OAR 340-16-025(3).
8. The Company has confirmed to us that no billings from related parties or affiliates of the Company have been included in the claimed costs.
9. We reviewed the calculations in Section 5 of the Application for Final Certification of Pollution Control Facility and found them to be correct.

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except as detailed in procedure seven. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. The report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in evaluating the Association's Pollution Control Tax Credit Application and should not be used for any other purpose.


Merina McCoy & Gerritz, CPA's, P.C.
West Linn, Oregon
October 4, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Pope & Talbot
Fiber Products Division
P.O. Box 8171
Portland, OR 97207

The applicant owns and operates a Pulp Mill in Halsey, Oregon.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

Pope & Talbot produces market grade pulp from virgin douglas fir chips. The chips are cooked in digesters, washed in chip washers, and then bleached to improve pulp brightness. The bleaching sequence is the portion of the process that is the subject of this tax credit application.

Pope & Talbot had used chlorine to bleach out the color of the pulp for brightness purposes. The use of chlorine results in the production of dioxin, furans, and other chlorinated organic compounds. These flows that contained these pollutants could not be handled in the recovery boilers and were therefore sent to the wastewater treatment facilities. Although the treatment system was able to remove some of the pollutants there were still detectable levels in the treated effluent. In December, 1991, Pope & talbot entered into a Consent Order with the Department to address the pollutant levels in their effluent. The Consent Order included a schedule by which Pope & Talbot was to reduce the use of elemental chlorine thereby reducing the production of chlorinated organics.

Pope & Talbot proposed to install an oxygen delignification system to replace a portion of the existing chlorine bleaching system. This system uses pure oxygen to delignify the pulp rather than chlorine. The Department approved the plans and Pope & Talbot installed the system. Use of the oxygen delignification bleach plant has resulted in the reduction of dioxin by 80%, adsorbable organic halides by 15%, and effluent color by 35%.

Claimed Facility Cost: \$24,776,000
(Accountant's Certification was provided).

Application No. T-4398

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met the statutory deadline in that construction of the facility was substantially completed in January, 1995 and the application for certification was found to be complete on May 10, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent, control, and reduce water pollution. The requirement is to comply with Department order No. WQ-WVR-90-246.

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 facility does not recover or convert waste products into a salable or usable commodity.

The facility does not recover or convert waste products into a salable or usable commodity.

2) The estimated annual percent return on the investment in the facility.

There is no return on investment for this facility.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Pope & Talbot considered achieving the goals set forth in the Consent Order by using chlorine dioxide substitution rather than oxygen delignification. This would have required the installation of a chlorine dioxide generating plant. Although the requirements of the Consent Order would have been met the waste liquor from the process would not have been recyclable and would therefore not have the environmental benefits of oxygen delignification.

4) Any related savings or increase in costs which

Application No. T-4398

occur or may occur as a result of the installation of the facility.

There are no savings or increase in costs as a result of the facility 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.

An accounting review of the applicant's claim was performed by the firm of Symonds, Evans and Larson. The accounting review identified ineligible costs amounting to \$1,001,176 for capitalized interest, spare parts, fencing and a warehouse for spare equipment. This results in an eligible cost of \$23,774,824. The accountant's report is attached to this report.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent, control, and reduce water pollution
- c. The facility complies with DEQ statutes and rules, Commission orders, 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 \$23,774,824 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4398.

Timothy McFetridge
(503) 378-8240, extension: 235
July 31, 1995

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission
811 S.W. Sixth Avenue
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to Pope & Talbot, Inc.'s (the Company's) Pollution Control Tax Credit Application No. T-4398 (the Application) filed with the State of Oregon, Department of Environmental Quality (the DEQ) for the Water Pollution Control Facility in Halsey, Oregon (the Facility). The Application has a claimed Facility cost of \$24,776,000. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We inspected vendor invoices which aggregated approximately 65% of the claimed Facility cost.
3. We discussed the Application, the Statutes and OAR's with Timothy McFetridge and Rene Dulay of the DEQ and Charles Bianchi, a contractor for the DEQ.
4. We discussed certain components of the Application with various Company personnel, including Bill Dameworth, Todd Dalebroux, Nicole Pearson and Jim Jensen.
5. We toured the Facility with Mr. Dameworth.
6. We requested that Company personnel confirm the following:
 - A. There were no related parties or affiliates of the Company which had billings which were included in the Application.
 - B. The capacity of the Facility is adequate for the Company's present operations and does not include significant capacity for potential future operations.
 - C. All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

- D. All internal labor costs included in the Application related directly to the installation of the Facility, were not related to maintenance and repairs, and approximated actual costs.
- E. There was no salvage value related to equipment or structures that were removed during the construction of the Facility for which the Company previously received pollution control tax credits and for which the Company did not deduct the items from the Facility costs as "like-for-like" replacements in accordance with the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Section 468.155(2)(e)(A).
- F. Any economic benefits related to improved efficiencies as a result of the Facility would not exceed the related operating costs.
- G. Don Chapin, project manager for the Company, was assigned to oversee the on-site construction of the Facility on a full-time basis from October 1992 through April 1994.
- H. Although the Facility was placed into operation in approximately December 1993, additional costs were incurred from January 1994 through January 1995 to complete the Facility to effectively meet environmental requirements.

Findings:

1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for the following non-allowable costs:

Capitalized interest	\$ 915,773
Spare parts purchased from:	
Gould Pumps	21,232
Ahlstrom Pumps	12,186
Ingersoll-Rand	23,920
Fencing	3,800
Warehouse for spare equipment	24,265
	\$ 1,001,176

As a result, the allowable costs for the Application should be reduced to \$23,774,824.

6. Company personnel confirmed in writing that such assertions were true and correct.

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

Conclusion:

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the specified items should be adjusted, except as noted above. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. T-4398 with respect to its Water Pollution Control Facility in Halsey, Oregon and should not be used for any other purpose.

Symonds, Evans & Larson

October 12, 1995

State of Oregon
Department of Environmental Quality
TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Weyerhaeuser Company
Containerboard Packaging
785 N. 42nd Street
Springfield, OR 97478

The applicant owns and operates a pulp and paper mill in Springfield, Oregon.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The claimed facility includes:

- a. A 15 acre, 58 million gallon aerated stabilization basin (ASB).
- b. Nine surface aerators.
- c. A double HDPE liner with leak detection and collection system.
- d. Miscellaneous equipment.

Claimed Facility Cost: \$7,472,644
(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 the statutory deadline in that construction of the facility was substantially completed on April 30, 1995 and the application for certification was found to be complete on August 7, 1995, 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 control a substantial quantity of

water pollution. This control is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

During the renewal of the current National Pollutant Discharge Elimination System (NPDES) permit in May, 1993, Weyerhaeuser had stated that they intended to increase mill production with the construction of a secondary fiber plant. The Department's position on the subject was that a production increase was allowable but that Weyerhaeuser would have to meet the existing effluent limits. In order for this to be possible additional wastewater treatment facilities were necessary.

The new treatment system is achieving the targeted biochemical oxygen demand (BOD) removal of 92+% and there have been no problems complying with the BOD limit. Other effluent parameters are also under the required permit limits. The mill no longer operates the secondary treatment at 100% capacity and is not vulnerable to operations upsets.

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 facility does not recover or convert waste products into a salable or usable commodity.

The wastewater that is treated in the ASB is high in biochemical oxygen demand (BOD₅), suspended solids, temperature, and can have a variable pH. Large amounts of oxygen are provided by surface aerators to reduce the BOD₅, and detention time is provided to allow the solids to settle. The material that settles in the ASB must be handled in accordance with a Sludge Management Plan approved by the Department. The material is not a salable or usable commodity. It is usually hauled and spread on farm fields as a soil amendment at the cost of Weyerhaeuser.

- 2) The estimated annual percent return on the investment in the facility.

There is no percent return on this investment.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

A number of alternatives were evaluated. The choice of the ASB treatment system was due to the fact that the technology is proven and that the operational procedures of ASBs is firmly known.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings in costs as a result of the facility modification. Providing electricity to operate the aerators will result in a negative cash flow. There are no savings from the facility. The cost of maintaining and operating the facility varies from \$160,000 to \$389,000 annually.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

An accounting review of the applicant's claim was performed by the firm of Merina, McCoy, Gerritz CPAs. The review identified \$423,156 in ineligible costs for capitalized interest, ineligible indirect costs, soil cleanup costs and other expenses making an insignificant contribution to pollution control. This results in an eligible cost of \$7,049,488. A copy of the accountant's report is attached.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to control a substantial quantity of water pollution and accomplishes this purpose by the construction and operation of facilities to reduce industrial waste as defined in ORS 468B.005.
- 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 \$7,049,488 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4414.

Timothy McFetridge
(503) 378-8240, extension: 235
August 7, 1995
WQTCSR-1/95

MERINA McCOY GERRITZ, P.C.

CERTIFIED PUBLIC ACCOUNTANTS

PARTNERS

John W. Merina, CPA
Michael E. McCoy, CPA
Gerald V. Gerritz, Jr., CPA

CERTIFIED IN
Oregon
Washington

INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

Oregon Department of
Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204

At your request, we have performed the procedures enumerated below, which were agreed to by the Oregon Department of Environmental Quality (DEQ), solely to assist the DEQ in evaluating Weyerhaeuser Company (the Company) Pollution Control Tax Credit Application No. 4414 (the Application) regarding the Aerated Stabilization Basin (the Facility) in Springfield, Oregon. The claimed facility costs on the Application are \$7,472,644. The agreed-upon procedures and related findings are:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Sections 469.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-050 (OARs).
2. We reviewed and discussed the Application, supporting documents, and Statutes with Charles Bianchi of the Oregon Department of Environmental Quality (DEQ).
3. We reviewed and discussed the Application, supporting documents, Statutes and OARs with Barbara Dopkus, Fixed Asset Accountant, Gary Shearer, Accounting Supervisor and Susan Zeni, Senior Project Engineer.
4. We inquired as to whether there were any direct or indirect Company costs charged or allocated to the facility costs claimed in the Application.

We were informed that engineering and direct labor costs were included in the Application and that no indirect Company costs except capitalized interest were included in the Application. The engineering and direct labor costs, which included payroll taxes and fringe benefits, were found to be supported, reasonable as to amount and properly included in the application.

5. We reviewed the documents and workpapers of applicant's certified public accountants that related to the facility claim.

The claimed facility cost in the Application was \$7,472,644. The Accountant's Certificate was for costs totaling \$7,472,644.

6. We reviewed all costs claimed in the Application for Pollution Control Tax Credit certification under the rules and statutes that govern the Program.

We determined that the claimed facility costs for pollution control tax credit certification under the rules and statutes that govern the program should be adjusted as follows:

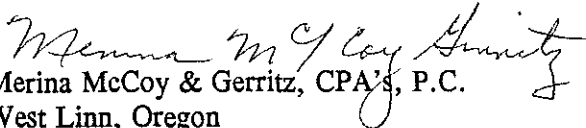
Original claimed facility costs	\$7,472,644
Reduce sediment removal and control line item for:	
1. Cover required because sediment was contaminated	(13,417)
2. Costs to remove contaminated soil under old machinery	(7,982)
Reduce engineering supervision for:	
1. Administrative engineering travel lodging and meetings	(17,447)
2. Operator's training costs	(3,823)
Removal lighting, fence, road and boat expense	(230,432)
Removal capitalized interest	<u>(150,055)</u>
Adjusted claimed facility costs	<u>\$7,049,488</u>

7. We visited the site and visually inspected the facility. During the tour we noted the facility did not have any of the items disallowed under OAR 340-16-025(3).
8. The Company has confirmed to us that no billings from related parties or affiliates of the Company have been included in the claimed costs.
9. We reviewed the calculations in Section 5 of the Application for Final Certification of Pollution Control Facility and found them to be correct.

With regard to potential land appreciation as a source of income, we were informed that the Army Corps of Engineers and the Oregon State Division of Lands intend to declare the area as a permanent wet lands if the property should ever be vacated or be unused for a three year period.

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except as detailed in procedure seven. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. The report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in evaluating the Association's Pollution Control Tax Credit Application and should not be used for any other purpose.


Merina McCoy & Gerritz, CPA's, P.C.
West Linn, Oregon
October 4, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Tidewater Barge Lines, Inc.
5 Beach Drive
Vancouver WA 98661

The applicant owns and operates a barge, The Pioneer,
anchored in the Portland Oregon harbor.

Application was made for tax credit for a water pollution
control facility.

2. Description of Facility

The claimed facilities are 1) the double hull of a steel
petroleum barge and 2) a vapor recovery system on the same
barge.

The double hull is constructed on plate steel and related
steel support beams. It forms a void (containment area)
between the cargo tanks and the water. Exterior hull
damage caused by collision or grounding does not reach the
cargo tanks since the void created by the double hull
creates a buffer for the cargo tanks.

The vapor recovery system traps all gases resulting from
evaporation of petroleum products, particularly during
loading and unloading operations. The gases are returned
to the customer for condensation to liquid form. The
system eliminates the direct venting of petroleum vapors
into the atmosphere. All vapors are captured and returned
shoreside where the petroleum gases are removed prior to
venting the clean air back to the atmosphere.

Claimed Facility Cost: \$1,012,000
Double Hull Costs : (\$ 775,000)
Vapor Recovery Costs : (\$ 237,000)

Accountant's Certification was provided.

Eligible costs: \$1,012,000.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and
by OAR Chapter 340, Division 16.

The facility met the statutory deadline in that construction of the facility was substantially completed in April 1994 and the application for certification was found to be complete on May 31, 1995, 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 water and air pollution. There are no DEQ compliance issues for this facility as it is a new barge.

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. The percent allocable determined by using this factor would be 100%.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual return on this facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There are no known alternatives. Specific requirements are outlined in the Oil Pollution Act of 1990 for the double hulled construction and vapor recovery systems for petroleum vessels.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings or increase in costs as a result of the facility 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.

Although the Tidewater Barge Lines is an Oregon corporation, the Pioneer barge is registered in Washington state. The barge transports petroleum product to and from Washington and Oregon. According to information provided by the applicant, approximately 53% of the tonnage hauled by the barge is to ports within the state of Oregon while 47% is transported to ports located in the state of Washington. Because the requirement for double hulling barges is a federal one, not required by the state of Oregon, an allocation of the costs is being applied based upon the estimated time that the barge spends in Oregon waters.

This allocation method is not being applied to the vapor recover facility. The vapor recovery system controls the emission of volatile organic compound to the atmosphere. Portland is a non-attainment zone for the atmospheric pollutant ozone and the primary air quality benefit of the facility accrues to the Portland airshed.

The eligible cost of the facility is \$1,012,000.

As a result of applying this methodology, the actual cost of the facility properly allocable to pollution control is 64%.

5. Summation

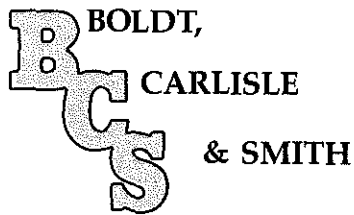
- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water and air pollution.
- c. The facility complies with DEQ statutes and rules.

The portion of the facility cost that is properly allocable to pollution control is 64%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,012,000 with 64% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4417.

Elliot J. Zais:ejz
T-4417
(503) 229-5292
WQTCSR-1/95



CERTIFIED PUBLIC ACCOUNTANTS

2001 FRONT STREET N.E., SUITE D
SALEM, OR 97303-6651
(503) 585-7751
FAX 370-3781

408 NORTH THIRD AVENUE
STAYTON, OR 97383-1797
(503) 769-2186
FAX 769-4312

OREGON DEPARTMENT OF
ENVIRONMENTAL QUALITY

811 S. W. 6th Ave.
Portland, OR 97204

At your request, we have performed agreed-upon procedures with respect to Tidewater Barge Lines, Inc. Pollution Tax Control Credit Application No. 4417 regarding a double hull steel petroleum barge and a vapor recovery system. The aggregate claimed costs on the original application were \$1,012,000. These costs were reduced by 36 percent by the DEQ to eliminate a portion of the cost of the double hull related to the time that the barge spends in waters outside of Oregon.

The agreed-upon procedures and our findings are as follows:

1. We read the application, the Oregon Revised Statutes on Pollution Control Facilities tax credits—Section 468.150-468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits—Sections 340-16-005 through 340-16-050 (OAR's).
2. We discussed the Application and Statutes with Elliot Zais and Brian Fields of the Oregon Department of Environmental Quality and with Charles Bianchi, the Pollution Control Facilities tax credit program consultant.
3. We discussed the Application with James Weisgerber, finance, Tidewater Barge Lines, Inc., and reviewed the accountant's certification issued by Nygaard, Mims & Hoffman, P. C. in connection with the Application for final certification.
4. We inquired as to whether there were any direct or indirect company costs included in the costs claimed in the Application. We were informed no direct or indirect company costs were included in the Application. Based on our review of supporting documentation discussed in item 5, we noted no direct or indirect company costs were included in the Application.
5. We reviewed supporting documents for the cost of the barge and vapor system claimed on the Application through review of vendor correspondence. All costs, which we reviewed, supporting the Application appear to be from the third party vendor.
6. We discussed with James Weisgerber the extent to which non-allowable costs were excluded from the Application. We determined that the company had properly excluded all non-allowable costs from the Application.

Conclusions

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the certifiable facility costs of \$1,012,000, of which 64 percent is allocable to the control of pollution, should be adjusted. Had we performed additional procedures, or had we conducted an audit of the financial statements of the company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in the evaluating of the company's Pollution Control Tax Credit Application and should not be used for any other purpose.

Boldt, Carlisle & Smith, LLC

Certified Public Accountants

Salem, Oregon

October 28, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Elf Atochem North America
Basic Chemicals Division
6400 N.W. Front Avenue
Portland, Oregon 97210

The applicant owns and operates an electrochemical plant that produces chlorine, sodium hydroxide, hydrochloric acid, sodium chlorate, and hydrogen in Portland, Oregon.

Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The facilities being claimed consist of a wastewater treatment system that includes a 100,000 gallon lined carbon steel primary treatment tank, a 30,000 gallon fiberglass secondary treatment tank, and a 480,000 gallon lined carbon steel surge tank. All tanks have open tops with mixing baffles and mechanical mixers. The tanks are located within concrete secondary containment structures. Two transfer pumps recirculate and move the waste water from one tank to another.

The facilities also include a new lined concrete wastewater collection sump, new sump pumps, continuous chlorine analyzers on each tank, automatic valves and chemical feed pumps, and the computerized monitoring and control system.

The principal purpose of the claimed facilities is pollution control.

Claimed Facility Cost: \$1,700,676
(Accountant's Certification was provided).

The claimed facility cost is \$1,700,676 and it is a policy of the Environmental Quality Commission that a tax credit application with claimed facility cost equal or greater than \$250,000 has to be reviewed by a contract accountant. Coopers & Lybrand (Accountant) reviewed the application and determined that additional construction costs incurred were not included in the claimed facility cost. This additional costs are eligible for tax credit certification. The additional cost is \$149,893 and therefore, the claimed facility cost is adjusted to \$1,850,569.

Adjusted Claimed Facility Cost: \$1,850,569

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met the statutory deadline in that construction of the facility was substantially completed on February 17, 1995, and the application for certification was found to be complete on July 10, 1995, 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 control water pollution. This control is accomplished by redesign to eliminate the use of old smaller neutralization tanks and an old lined surge pond for treatment of industrial waste as defined in ORS 468B.005.

Prior to installation of the claimed facility, wastewater was treated in two 15,000 gallon above ground tanks. Due to the small size of these neutralization tanks, the tanks often experienced wide swings of pH. Any water that could not be adequately treated within the residence time of these tanks overflowed into a 600,000 gallon lined surge pond from

which the wastewater could be pumped back to the tanks at a lower rate.

The claimed facility will allow Elf Atochem to eliminate the lined surge pond, which is a potential source of groundwater pollution, and to eliminate the smaller tanks, which are not of adequate size for the waste water to be handled. In addition, the new larger sump pumps have greatly improved the wastewater pumping capacity, which has reduced system overflows to the river during periods of extremely wet weather. Moreover, the improved monitoring and control instrumentation system and the spill containment system have provided a greater level of operational reliability and protection from accidental discharges to the river.

The company is in compliance with its NPDES permit. During the period January 1993 to June 1995 there was one exceedence from the permit limitations for this company. In January 1994, a leak in an overhead hydrochloric acid transfer pipe caused a pH exceedence in the discharge limitations. This was not related to the functioning of the claimed facilities.

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.

The percent allocable determined by using this factor would be 100%.

- 2) The estimated annual percent return on the investment in the facility.

The facility provides no income and therefore there is no return on investment from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There are no known alternatives. The alternative selected is an appropriate method of controlling water pollution.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

There are no savings from the facility. The cost of maintaining and operating the facility is estimated to be approximately \$150,000 annually.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

The Environmental Quality Commission has directed that tax credit applications having claimed facility costs at or above \$250,000 undergo additional departmental accounting review to ensure that all eligible costs are properly allocated to pollution control. The review was performed by the accounting firm of Coopers & Lybrand and additional costs of \$149,893 incurred by Elf Atochem were eligible for tax credit certification.

Since the date Elf Atochem submitted their application, additional project costs were incurred which are as follows:

Installation of pumps and motors	\$4,823
Mechanical and piping	29,559
Electrical and instrumentation	87,812
Foundations and supporting structures	<u>27,699</u>
	\$149,893
Claimed facility cost	\$1,700,676
Additional project costs	<u>149,893</u>
Adjusted facility cost	\$1,850,569

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to control water pollution and accomplishes this purpose by redesign to eliminate the use of old smaller neutralization tanks and an old lined surge pond for treatment of industrial waste as defined in ORS 468B.005.
- 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 \$1,850,569 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4418.

James R. Sheetz, P.E., DEE: js
503-229-5740
October 9, 1995

WQTCSR-1/95

Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

At your request, we have performed certain agreed upon procedures with respect to Elf Atochem North America's (the Company) Pollution Control Facility Tax Credit Application No. 4418 (the Application) regarding the waste water treatment system in Multnomah County, Oregon (the Facility). The aggregate Facility costs claimed on the Application were \$1,700,676. The following are our agreed upon procedures and related findings:

1. We read the Application, the Oregon Revised Statutes regarding Pollution Control Facilities Tax Credits - Sections 468.150 - 468.190 (the Statutes) and the Oregon Administrative Rules regarding Pollution Control Tax Credits - Sections 340-16-005 through 340-16-050 (OAR's).
2. We discussed the Application and Statutes with Charles Bianchi and Jim Sheetz of the Oregon Department of Environmental Quality (DEQ).
3. We discussed the Application and Statutes with Larry Patterson, Environmental Manager, of the Company.
4. We inquired as to whether there were any direct or indirect Company costs included in the Facility costs claimed on the Application. We were informed that \$145,875 of direct and indirect Company costs were included in the Application.

Based on our procedures discussed in item no. 5 below, we noted the direct and indirect Company costs included in the Application appeared to be allowable.

5. We compared supporting vendor invoices, canceled checks and Company job cost records for 79% of the revised total facility cost to (1) the Company's accounting records and (2) the Statutes and OAR's in item no.1 above. All items which we tested appeared to be from third party vendors and Company employees who worked on the construction of the Facility.
6. We discussed with Mr. Patterson, the extent to which non-allowable costs were excluded from the Application. This was accomplished by reviewing specific vendor invoices and the Company's job cost records (see item no. 5) with Mr. Patterson. We determined the Company had properly excluded from the Application all costs which were not allowed by the Statutes or OAR's.

Oregon Department of Environmental Quality
Page Two

Mr. Patterson indicated that the Company had incurred additional project costs since the date of the application. The additional costs incurred, by cost component, are listed below.

	<u>Cost Per Application</u>	<u>Additional Cost Incurred</u>	<u>Revised Total Facility Cost</u>
Installation of pumps and motors	\$ 35,812	\$ 4,823	\$ 40,635
Installation of tanks and agitators	215,369	--	215,369
Mechanical and piping	324,188	29,559	353,747
Electrical and instrumentation	693,269	87,812	781,081
Foundations and supporting structures	<u>432,038</u>	<u>27,699</u>	<u>459,737</u>
Total	<u>\$1,700,676</u>	<u>\$149,893</u>	<u>\$1,850,569</u>

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. Had we performed additional procedures, or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in evaluating the Company's Pollution Control Facility Tax Credit Application and should not be used for any other purpose.

Coogan & Lybrand L.L.P.

Portland, Oregon
October 5, 1995

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. Applicant

Truax Harris Energy Co.
P O Box 607
Wilsonville, OR 97070

The applicant owns and operates a retail gas station and commercial fueling cardlock at 4124 Main St., Springfield, OR, Facility No. 6445.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application also included related air quality Stage I vapor recovery equipment.

The applicant has claimed equipment in this application that replaced equipment claimed in prior tax credit TC-3218 issued in 1990. The equipment was replaced before the end of its useful life. See Section 2 below for an explanation of the adjustment made to costs claimed in this application. TC-3218 will be submitted for revocation.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are five doublewall fiberglass tanks and piping, spill containment basins, tank gauge system with overflow alarm, automatic shutoff valves, turbine leak detectors, sumps, oil/water separator, monitoring wells and Stage I vapor recovery equipment.

Claimed facility cost \$301,859
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$291,353. This represents a difference of \$10,506 from the applicant's claimed cost of \$301,859. This is due to an adjustment made by the Department to the claimed cost of the tank gauge system, overflow alarm and installation of those items because they replaced the same type of equipment claimed in prior tax credit TC-3218 issued in 1990. The previously claimed equipment was replaced before the end of its useful life and the adjustment reflects the amount of the tax credit remaining pursuant to Oregon Administrative Rules 340-16-025(3)(g)(B). The adjustment is detailed in Worksheet 1 attached to the end of this report.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility was substantially completed on February 1, 1995 and placed into operation on February 1, 1995. The application for certification was submitted to the Department on May 26, 1995, and was considered to be complete and filed on August 15, 1995, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of eleven steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Doublewall fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, sumps, oil/water separator and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, turbine leak detectors and monitoring wells.
- 4) For VOC reduction - Stage I vapor recovery equipment.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

b. Eligible Cost Findings

In determining the percent of the eligible pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The equipment does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no annual percent return on investment as the applicant claims no gross annual income from the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The applicant considered the methods chosen to be the most cost effective. The methods chosen are acceptable for meeting the requirements of federal regulations.

- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

An accounting review of the applicant's claim was performed by the firm of Symonds, Evans and Larson. The review identified ineligible costs of \$5,681 related to site survey costs that were not related to the pollution control facility. A copy of the accountant's review is attached.

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Corrosion Protection:</u>			
Doublewall fiberglass tanks and piping	\$86,681	71% (1)	\$61,544
<u>Spill & Overfill Prevention:</u>			
Spill containment basins	1,044	100	1,044
Oil/water separator	4,790	100	4,790
Sumps	8,057	100	8,057
Automatic shutoff valves	616	100	616
<u>Leak Detection:</u>			
Tank gauge w/alarm	3,809(3)	90 (2)	3,428
Turbine leak detectors	1,534	100	1,534
Monitoring wells	229	100	229
<u>VOC Reduction:</u>			
Stage I vapor recovery	716	100	716
Labor and materials	183,877(3)	100	183,877
Less ineligible costs per accountant's review	(5,681)		(5,681)
Total	\$285,672	91%	\$260,154

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$86,681 and the bare steel system is \$24,714, the resulting portion of the eligible tank and piping cost allocable to pollution control is 71%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

(3) Adjusted for prior tax credit claim (see attached Worksheet 1.)

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 91%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$285,672 with 91% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4419.

Barbara J. Anderson
(503) 229-5870
October 26, 1995

WORKSHEET 1.

PRIOR TAX CREDIT REMAINING ADJUSTMENT WORKSHEET

TRUAX HARRIS ENERGY CO.

Current Application: TC-4419

Prior Tax Credit: TC-3218

ADJUSTMENT OF CURRENT TAX CREDIT CLAIM BASED ON PRIOR TAX CREDIT REMAINING WHERE EQUIPMENT IS REPLACED BEFORE THE END OF ITS USEFUL LIFE (OAR 340-16-025(3)(g)(B))

A. DETERMINATION OF AMOUNT AND PERCENT OF PRIOR TAX CREDIT REMAINING:

Total amount of prior tax credit (\$16,208 X .50)	=	\$8,104
Total tax credit claimed to date on income tax returns	=	(\$5,143)
Total tax credit remaining on prior tax credit	=	\$2,961
Tax credit remaining as a percent (8,104 / 2,961)	=	37%

B. ADJUSTMENT OF CURRENT TAX CREDIT APPLICATION CLAIMED COSTS:

Total current claimed costs of items replaced	=	\$16,676
Adjusted total current claimed costs (16,676 X .37)	=	\$6,170

C. AMOUNT REMAINING TO BE CLAIMED (breakdown below) = \$6,170 (1)

ITEMS REPLACED	CURRENT APPLICATION CLAIMED COST	AMOUNT REMAINING TO BE CLAIMED (37%)
TOTAL	\$16,676	\$6,170
Tank gauge system with alarm	10,294	3,809
Installation cost (labor and materials)	6,382 (2)	2,361

D. AMOUNT OF ADJUSTMENT (16,676 - 6,170) = \$10,506
=====

- (1) This is the full amount eligible to be claimed on the current tax credit application. The actual tax credit received will be no greater than 50% of that amount.
 (2) Prorated from total project installation cost to represent installation cost of items replaced only.

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission
811 S.W. Sixth Avenue
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to Truax Harris Energy Company's (the Company's) Pollution Control Tax Credit Application No. TC-4419 (the Application) filed with the State of Oregon, Department of Environmental Quality (the DEQ) for the Water Pollution Control Facility in Springfield, Oregon (the Facility). The Application has a claimed Facility cost of \$301,859. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We inspected vendor invoices supporting all of the claimed costs of the Facility.
3. We read certain other documents which support the claimed cost of the Facility, including Pollution Control Tax Application No. TC-3218 which the Company filed in 1990 related to the Company's previous facility at the same location.
4. We discussed the Application, the Statutes and OAR's with Barbara Anderson of the DEQ and Charles Bianchi, a contractor for the DEQ.
5. We discussed certain components of the Application with Rob Forrest and Larry Petrjanos, employees of the Company.
6. We requested that Company personnel confirm the following:
 - A. There were no related parties or affiliates of the Company which had billings which were included in the Application.
 - B. The capacity of the Facility is adequate for the Company's present operations and does not include significant capacity for potential future operations.
 - C. There were no internal labor costs of the Company included in the Application.

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

- D. The \$43,411 in paving costs included in the claimed cost of the Facility were necessary to replace previously existing pavement that was destroyed as a result of construction of the Facility.
- E. There was no salvage value related to equipment or structures that were removed during the construction of the Facility for which the Company previously received pollution control tax credits and for which the Company did not deduct the items from the Facility costs as "like-for-like" replacements in accordance with the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Section 468.155(2)(e)(A).

Findings:

- 1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for the following:

Non-allowable costs identified by the DEQ

Replacement cost of the tank gauge system and overflow alarm	\$ 10,506
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Non-allowable costs identified by Symonds, Evans & Larson

Estimate of site survey costs not related to pollution control	<u>5,681</u>
----------------------------------------------------------------	--------------

Total non-allowable costs	<u>\$ 16,187</u>
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As a result, the allowable costs for the Application should be reduced to \$285,672, with approximately 91% (\$260,154) allocable to pollution control.

- 6. Company personnel confirmed in writing that such assertions were true and correct.

Conclusion:

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the specified items should be adjusted, except as noted above. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

SYMONDS, EVANS & LARSON
CERTIFIED PUBLIC ACCOUNTANTS

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. TC-4419 with respect to its Water Pollution Control Facility in Springfield, Oregon and should not be used for any other purpose.

Symonds, Evans + Larson

October 9, 1995

STATE OF OREGON
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

1. **Applicant**

Willamette Industries, Inc.
Eugene Particleboard
3800 First Interstate Tower
Portland, Oregon 97201

The applicant owns and operates a facility which accepts dry urban wood waste and converts the material into a usable fiber source for making particleboard.

2. **Description of Facility**

The facility is designed to utilize approximately 1,500 bone dry tons of urban wood waste per month, reducing the wood to particles usable for making particleboard. It includes a hammermill grinder (9100 Norkot Maxigrind), magnets for removing nails, a screen, a front end loader, pneumatic conveyors, bucket elevator, and various other mechanical components and structural supports.

An independent accountant's certification of costs was provided.

Total cost claimed is \$373,314.00. Deductions totalling \$138.00 were discovered in the review process. The final cost claim is \$373,176.00.

3. **Procedural Requirements**

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. Installation of the facility was started on December 1, 1992.
- b. The facility was placed into operation on July 31, 1993.
- c. The application for tax credit was filed with the Department on July 18, 1995, within two years of substantial completion of the facility.

4. **Evaluation of Application**

- a. The principal purpose of the facility is to convert one type of waste material, urban woodwaste, to a usable fiber source of making particleboard.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility is used 100 per cent of the time to recover dry urban woodwaste from the waste stream and convert the recovered material into feedstock for the particleboard process.

- 2) The estimated annual percent return on the investment in the facility.

A) The Applicant has claimed a facility cost of \$373,314.00. The Department has identified ineligible costs relating to the repair of machinery and the purchase of tire for a vehicle, total ineligible costs of \$138.00.

B) Annual Percentage Return on Investment

The annual percentage return on investment was calculated and determined does not apply. There was no salvage value of any facility removed from service. There is no income from this activity, no annual operating expenses and no annual cash flow.

The applicant has claimed a seven (7) year useful life. As a result of using Table 1, OAR 340-16-030, for a seven (7) year useful life, the return on investment for the claimed facility is 0% and the percent allocable is 100%.

- 3) The alternative methods, equipment, and costs for achieving the same pollution control objective.

The applicant did consider other methods of recovery and production, but concluded that no other method will produce a usable raw material from the dry urban woodwaste to make particleboard and composite board.

- 4) Any related savings or decrease in costs which occur or may occur as a result of the installation of the facility.

There are no savings, other than those considered in (2) above, associated with the use of this machinery and process.

- 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 recycle or properly dispose of used oil.

Tax credit claims having costs of \$250,000 or greater are required to undergo an accounting review. The firm of Boldt, Carlisle and Smith, CPAs performed the review and found \$474.00 of ineligible costs that were claimed in the application. The accountant's review report is attached to this report.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100% of the \$372,840.00.

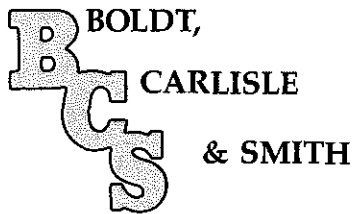
5. **Summation**

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of to convert the bone dry urban woodwaste into a usable raw material for making particleboard.
- c. The facility complies with DEQ statutes and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. **Director's Recommendation**

Based upon the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$372,840.00 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application No. T-4490

Rick Paul:rap
wp51\tax\tc4490RR.STA
(503)229-5934
October 31, 1995



CERTIFIED PUBLIC ACCOUNTANTS

2001 FRONT STREET N.E., SUITE D
SALEM, OR 97303-6651
(503) 585-7751
FAX 370-3781

408 NORTH THIRD AVENUE
STAYTON, OR 97383-1797
(503) 769-2186
FAX 769-4312

OREGON DEPARTMENT OF
ENVIRONMENTAL QUALITY

811 SW Sixth Ave
Portland, OR 97204

At your request, we have performed agreed upon procedures with respect to Willamette Industries, Inc. Pollution Control Tax Credit Application No. 4490 regarding the construction of an Urban Woodwaste Recycling Facility. The aggregate claimed facility costs on the application were \$373,314 of which 100 percent was claimed as eligible for the pollution control credit. The agreed upon procedures and our related findings are as follows:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Section 468.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Section 340-16-005 through 340-16-050 (OAR's).
2. We discussed the Application and Statutes with Mr. Jim Aden of Willamette Industries, Mr. Tom Cusick of KPMG Peat Marwick LLP, and Peter Spendelow of the Oregon Department of Environmental Quality.
3. We inquired as to whether there were any direct or indirect company costs claimed in the Application. We were informed that no direct or indirect company costs were included in the Application. Based upon our review of supporting documentation discussed in item no. 4 below, we noted no direct or indirect company costs included in the Application.
4. We reviewed supporting documentation for 79 percent of the amount claimed on the Application through review of vendor invoices. All costs which we reviewed supporting the Application appeared to be from third party vendors.
5. We discussed with Tom Cusick of KPMG Peat Marwick LLP the practice of Willamette Industries to capitalize costs at gross without consideration of any discounts taken by the company. It was noted that of the invoices we reviewed in item no. 4 above, discounts in the amount of \$336 were taken, but did not reduce the costs claimed on the application. The adjusted eligible pollution control facility cost were determined to be \$372,840, rather than the \$373,176 as adjusted by the Oregon Department of Environmental Quality.

OREGON DEPARTMENT OF
ENVIRONMENTAL QUALITY
Portland, OR 97204

The Oregon Department of Environmental Quality had previously reduced the eligible costs by \$138 for the purchase of a replacement tire on a vehicle and repair of machinery. Based upon our discussions and review of specific contractor invoices (see item no. 4) we agree that the original application overstated the eligible pollution control facility costs by \$474 (\$336 + \$138). Except for these adjustments, the company had properly excluded non-allowable costs from the application.

Conclusion

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except for the \$474 of discounts taken and non-allowable costs noted in item no. 5 above. Had we performed additional procedures, or had we conducted an audit of the financial statements of the company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in the evaluating of the company's Pollution Control Tax Credit Application and should not be used for any other purpose.

Boldt, Carlisle & Smith, LLC

Certified Public Accountants

Salem, Oregon

October 25, 1995

Environmental Quality Commission

X Rule Adoption Item -

Action Item

Information Item

Agenda Item C
Meeting

Title:

1992-1994 Triennial Water Quality Standards Review: Proposed Revisions to Standards


Summary:

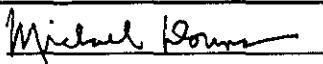
Revision of five water-quality standards is proposed. The standards to be revised include dissolved oxygen, temperature, pH, bacteria, and groundwater nitrate. These standards were selected for review during the 1992-1994 Triennial Review for the following reasons: The standards did not offer adequate protection or were unnecessarily conservative (dissolved oxygen, temperature, and bacteria); were difficult to implement (temperature and bacteria); were originally adopted on an interim basis (groundwater Nitrate); or did not accommodate naturally occurring conditions (pH). Each of the proposed standards revisions is intended to solve the problem which inspired review of the standard.


- The proposed modifications of the temperature and dissolved oxygen standards link the numeric criteria to presence of specific life stages of sensitive beneficial uses.
- The proposed dissolved oxygen standard adds numeric criteria for intergravel dissolved oxygen, which provides more direct protection to early life stages of salmonids than the existing water-column standard.
- The proposed temperature standard allows some flexibility for new development, but requires the use of improved practices or measures by non-point sources in water-quality limited waterbodies. When the Department determines that all feasible steps have been taken to reduce anthropogenic warming in these waterbodies, the rule allows for establishment of new criteria based on the actual temperatures attained.
- The proposed pH standard recognizes that natural conditions vary more than was formerly acknowledged; this change would allow DEQ staff to spend their time addressing issues that will provide greater environmental benefits.
- The proposed bacteria standard mandates use of an indicator species that provides adequate protection, while requiring less disinfection than the indicator species that was adopted during the previous Review. The proposed bacteria rule also provides deadlines and design criteria for sewage treatment facilities to minimize risk to swimmers.
- The proposed nitrate standard provides the final step (for that pollutant) in fulfilling a statutory requirement to adopt maximum measurable levels for groundwater contaminants.

Department Recommendation:

Adopt the water quality standards revisions proposed in Attachment A of this Staff Report.


Report Author


Division Administrator


Director

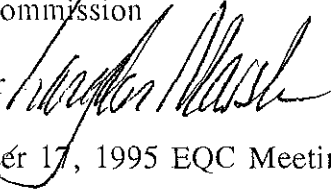
November 17, 1995

†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: November 17, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director 
Subject: Agenda Item C, November 17, 1995 EQC Meeting

1992-1994 Triennial Water Quality Standards Review: Proposed Revisions to Standards

Background

On July 14, 1995, the Director authorized the Water Quality Division to proceed to a rulemaking hearing on proposed rules which would meet the goal of Section 303 of the federal Clean Water Act (CWA). Section 303 requires states to review water quality standards every three years to incorporate recent scientific findings and to consider evolving priorities within society. The proposed rule amendments result from the most recent of the required triennial reviews, and reflect the input and expertise of technical and policy advisory committees.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on August 1, 1995. The hearing notice and informational materials were mailed on July 28, 1995, to the mailing list of those asking to be notified of rulemaking actions and to mailing lists of persons who may be potentially affected by or interested in the proposed rulemaking action.

Public hearings were held on the following dates and at the following locations:

September 5, 1995, 4:00 p.m.
Eastern Oregon State College
The Zabel Bldg., Room 110
1410 L Avenue
La Grande, Oregon

September 6, 1995, 4:00 p.m.
The Conference Center
Garden Room
228 E Main Street
Medford, Oregon

[†]Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

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September 7, 1995, 4:30 p.m.
Naterline Community Center
Room 6
169 S.W. Coast Highway
Newport, Oregon

September 12, 1995, 3:00
DEQ Executive Building
Room 3A
811 S.W. Sixth Avenue
Portland, Oregon

Lynne Kennedy served as the presiding officer at the rulemaking hearings. Neil Mullane provided a description of the proposed rule changes and major policy and technical issues. The presiding officer's report (Attachment C) summarizes the oral testimony presented at the hearing. Written comment was received through September 19, 1995, and was summarized by Katina Olson. A list of written comments received, and the summary of written comment are included as Attachment D.

Department staff have evaluated the comments received (Attachment E). Based upon that evaluation, modifications to the initial rulemaking proposal are recommended by the Department. These modifications are summarized below and detailed in Attachment F.

The following sections provide a summary of this proposed rulemaking action, the authority to address this issue, the process for developing the rulemaking proposal, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments and changes proposed in response to those comments, a summary of how the rule will be implemented, and a recommendation for Commission action.

Issue this Proposed Rulemaking Action is Intended to Address

The standards proposed for review during the 1992-1994 Triennial Review were selected for several reasons, which are explained in greater detail in Attachment B-2. In brief, the reasons include: the standards did not offer adequate protection or exceeded that necessary to provide full protection (dissolved oxygen, temperature, and bacteria); were difficult to implement (temperature and bacteria); were originally adopted on an interim basis (groundwater nitrate); or did not accommodate naturally occurring conditions (pH). Each of the proposed standards revisions is intended to solve the problem which inspired review of the standard.

Relationship to Federal and Adjacent State Rules

Federal Requirements: The proposed groundwater nitrate and bacteria criteria are those recommended by EPA. The temperature, dissolved oxygen, and pH criteria are consistent with the Clean Water Act requirement to protect the most sensitive beneficial uses. (Greater detail on this issue is presented in Attachment B-6, and in the Issue Papers that document the rule development process.)

Adjacent States' Rules: States with native cold-water aquatic species have selected criteria from a range of values which are consistent with the criteria in the proposed dissolved oxygen, temperature, and pH standards. The indicator species, numeric criteria, and approach to sewer overflows in the proposed bacteria standard are consistent with those adopted by other states, although there is variability nationwide. Some states use Fecal Coliform or Enterococcus, and some allow mixing zones or seasonal waivers instead of waiving the criteria during certain storm events as in the Department's proposed rule. Most states that have groundwater standards have adopted the same groundwater nitrate criterion that the Department proposes, which is EPA's drinking water standard.

Authority to Address the Issue

ORS 468B.020, ORS 468B.035, and ORS 468B.048 provide authority for implementation of the Clean Water Act and the setting of water quality standards. ORS 183.310 to 183.550 provide authority to adopt, modify or repeal rules for the administration of water quality standards. ORS 468B.165 mandates adoption of groundwater maximum measurable levels.

Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)

Following identification of the standards to be reviewed, the review process relied heavily on extensive input from a number of Advisory Committees. Two main Advisory Committees were created: one technical (TAC) and one dedicated to policy discussion (PAC). The TAC was composed of experts from other agencies and academia. Subcommittees with additional members having expertise in the particular water quality parameter of concern were established to perform a technical review of each standard, and their work was reviewed by the TAC. The PAC consisted of representatives of environmental and recreation groups, industry, forestry, agriculture, and municipalities.

The Subcommittees of the TAC presented their findings and suggested alternatives to the PAC. The PAC then made recommendations based on the technical findings and considerations of fairness and feasibility. The PAC voted unanimously in support of the proposed standards package in its conceptual form. With one exception regarding the temperature rule, the proposed rules were then unanimously supported, pending modifications discussed during the last full Policy Advisory Committee meeting.

The alternatives considered by the Technical and Policy Advisory Committees included a "no change" alternative, and a number of different numeric and narrative in-stream criteria, as well as possible exceptions, effluent limitations, and implementation approaches for each surface water standard. Discussions of the groundwater nitrate standard were limited to alternative values for the numeric criterion. Further detail on the alternatives considered for each standard is provided in the Issue Papers developed to document the rulemaking process.

Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.

Dissolved Oxygen: The dissolved oxygen standard sent out for public comment included provisions that would:

- Change the numeric criteria from a mixture of percent saturation and concentration to primarily concentration. This change would better reflect the needs of aquatic organisms and reduce the number of streams that violate water quality criteria due to natural conditions.
- Change the criteria for eastern Oregon so that they are protective of the most sensitive of the designated beneficial uses.
- Allow dischargers to meet more flexible in-stream criteria if they provide adequate data to demonstrate that the diurnal variation in dissolved oxygen levels is within protective ranges.
- Establish an intergravel dissolved oxygen standard that includes both a criterion and an action level. The criterion is set at the acute threshold; oxygen levels below the criterion indicate poor to negligible survival of salmonids from the redds. The action level provides a threshold that reflects more optimal conditions.

Temperature: The temperature standard sent out for public comment included provisions that would:

- Establish statewide numeric criteria that apply based on the presence of cold-water aquatic species and their various life stages in a given waterbody. A number of exceptions to the relevant numeric criterion would be allowed.
 - A less stringent criterion (68° F) would be set for the lower Willamette and Columbia Rivers.
 - The numeric criteria would be waived when air temperatures are at abnormally high levels or flows are at unusually low levels.
 - The Environmental Quality Commission could allow individual sources to exceed the relevant criterion if the sources demonstrate that beneficial uses would be fully protected in the basin.
- Provide special protection for: bull trout, cold water refugia, threatened and endangered species, natural lakes, and waterbodies where dissolved oxygen levels are within 0.5 mg/l of the dissolved oxygen criteria.
- Require development and implementation of surface water temperature management plans by those contributing to the temperature problem in basins designated as water-quality limited for temperature.
 - Sources that add thermal loads to surface waters would not be deemed to be causing a violation of the numeric criterion if they are using recommended technologies and best management practices identified in basin management plans required by the rule.
 - One degree cumulative increase in stream temperatures could be allowed from new sources when stream temperatures are above the relevant numeric criterion.
 - When all feasible steps have been taken in a water-quality limited basin to reduce anthropogenic temperature impacts, the temperatures actually attained in the basin would become the relevant criteria.

Hydrogen Ion Concentration: The pH standard sent out for public comment included provisions that would allow for naturally occurring conditions by:

- Lowering the acceptable range of pH's from 6.5 to 6.0 in Cascade lakes.

- Raising the acceptable range of pH's from 8.5 to 9.0 in some additional eastern Oregon basins. A study would be initiated in the appropriate basin when pH's of 8.7 or higher were detected.

Bacteria: The rule sent out for public comment specified a multi-faceted bacteria standard that includes the following major elements:

- Change from the use of fecal coliform or *Enterococci* species in freshwaters and non-shellfish-producing estuaries to *Escherichia coli* (*E. coli*) as the indicator species for the numeric criteria. Set an in-stream 30-day log mean limit of 126 *E. coli* per 100 ml. Require that single in-stream and effluent exceedances of more than 406 *E. coli* per 100 ml be followed up with additional testing to determine whether a systematic or long-term problem exists.
- Adopt a narrative criterion that prohibits surface water discharge of untreated sewage. Some exceptions to the prohibition would apply:
 - The EQC could approve basin management plans that allow for limited overflows from sanitary and combined sewer systems.
 - Statewide, at least by the year 2010, overflows of sewage during winter would be allowed only due to a five year/24 hour storm event or greater. Beginning upon rule adoption, overflows during summer could occur only because of a ten year/24 hour storm or greater. New treatment facilities would need to be designed to meet these conditions from the outset.
 - Managers of storm sewers would be required to remove illicit and cross connections.
- Contamination from nonpoint and non-human sources would be required to be minimized through use of best management practices and treatment technologies.

Groundwater Nitrate: The rule sent out for public comment set a numeric criterion of 10 mg/l for nitrate as nitrogen in groundwater. By statute, groundwaters found to exceed 70 percent of the standard are subject to designation by the Department as groundwater management areas.

Significant technical issues discussed during development of the standards sent out for public comment centered around the identification of the most sensitive beneficial uses and the ranges of criteria that would provide full protection to the use. Values recommended by the Technical Advisory Subcommittees were presented as a range of numbers which reflect the weight of evidence in the relevant scientific literature.

Policy issues discussed during development of the standards sent out for public comment centered on the definition of "full protection" and who should pay the costs of providing that protection. Policy Advisory Committee members agreed that the standards should "fully protect" beneficial uses. However, the exact definition of full protection remained to be identified for each standard. Because, for the standards under review, there is no clear threshold below which beneficial uses face no risk and above which catastrophic impacts occur, there is not a single numeric value which can scientifically be considered the absolute *best* value. Generally, changes in natural dissolved oxygen, temperature, and pH levels may represent an increased risk to native cold water aquatic species. For the bacteria and groundwater nitrate standards, some increased risk results for those who swim in or drink water to which human pathogens or nitrate have been added.

In the case of water-column dissolved oxygen, temperature, and pH, the Policy Advisory Committee identified full protection as that level of a water quality parameter that would not result in significant impacts to the most sensitive beneficial use. That is, some individuals in sensitive populations might show effects, but there should be no significant impact on the long-term viability of the population as a whole.* The intergravel dissolved oxygen criterion was set at the point where measurable, acute impacts may begin to occur in order to accommodate variability within a redd. However, a trigger value which provides greater protection is also included in the rule, which would result in a water-quality limited designation. The groundwater nitrate and bacteria criteria are based on risk to human health. The in-stream mean bacteria criterion is estimated to result in an average of 8 gastro-intestinal illnesses per 1,000 bathers.

In addition to the technical and policy issues considered, the Advisory Committees wrestled with how and whether a rule alternative could be implemented using the limited resources available to state and local agencies for these purposes. If it was clear that an alternative could not be implemented due to resource limitations, other alternatives that would require less resources were preferred. However, consistent with the requirements of the Clean Water Act and federal regulations (40 CFR 130 & 131), lack of staff resources was not considered a valid reason to set standards that fail to protect the designated beneficial uses.

*Sufficient studies of population effects were not available to fully evaluate risks to populations of cold-water aquatic species resulting from changes in dissolved oxygen, temperature, or pH. The criteria were selected based on studies of impacts on groups of individuals, and by inference, it was assumed that if significant impacts to the viability of these groups were not found, the long-term viability of populations would not be affected.

Summary of Significant Public Comment and Changes Proposed in Response

Oral and written testimony confirmed that a number of viewpoints exist regarding the issues discussed by the Technical and Policy Advisory Committees, as identified above. Staff have made some changes in the proposed rules based on these comments. However, none of the changes represents a major policy shift, nor have the numeric criteria been significantly changed.

A brief analysis of the major issues raised by a number of commenters during the public comment period is provided below. Greater detail on a wider range of comments appears in Attachments E and F.

Dissolved Oxygen Comment: Should an intergravel dissolved oxygen standard be established, given the high variability that may occur?

Department Response: Given the importance of intergravel dissolved oxygen to the survival of early life stages of salmonids, staff believe that adequate sampling methodologies exist and that the expected variability of the data is accommodated by the leniency of the proposed criterion.

Temperature Comment: Were the appropriate criteria chosen to provide the desired level of protection? Should the same criteria apply statewide?

Department Response: No data were submitted that call the recommendations of the Advisory Committees into question. Because cold water aquatic species are native statewide, and because their requirements are consistent across locations, staff see no reason to change the proposed criteria.

Temperature Comment: Because most of the state's waters will not meet the proposed temperature criteria, the DEQ, Oregon Department of Agriculture, and local agency resources will be inadequate to establish and implement the required management plans.

Department Response: Staff agree that existing resources are inadequate to fully implement the requirements of the temperature standard, but believe that waterbodies can be prioritized and addressed sequentially. The proposed rule is a major improvement to the existing standard in that it requires all thermal sources to contribute toward problem solving, without the Department first needing to quantify the impacts of each source.

Bacteria Comment: Rather than setting an end-of-pipe standard that doesn't correlate well with swimmer illness but requires high levels of chlorination to meet, the bacteria

standard should allow higher effluent numbers, provided the in-stream criteria are met at the edge of the mixing zone. This would eliminate the need to waive the standard during certain storm events.

Department Response: Staff believe that the suggestion warrants further discussion, but note that the mixing zone rule has been interpreted to require an end-of-pipe criterion for bacteria to protect human health. The mixing zone rule is, however, currently being reviewed by the Department, and consideration will be given to this suggestion. If the Department determines that a change in policy is warranted, the appropriate modifications to the rules will be proposed.

Summary of How the Proposed Rule Will be Implemented

The standards will generally be implemented in the same way that existing standards are implemented. Sources that require NPDES permits or 401 Certifications will need to meet permit conditions designed to meet water quality standards at the edge of the mixing zone. In water-quality limited basins, the Department will work with designated management agencies to identify practices or measures that reduce impacts from nonpoint sources. (For detail on how the rules will be implemented, see Attachment H.)

Implementation of the dissolved oxygen and temperature rules will be deferred until July 1, 1996 to allow time for development of implementation guidance. The rules have been correspondingly modified to take effect on that date. Additionally, because data to determine appropriate design criteria, mixing zones, and wasteload allocations may not be immediately available, the Department will use discretion in enforcing new requirements of the dissolved oxygen, temperature, and bacteria standards during the first permit cycle after the rules become effective.

Recommendation for Commission Action

It is recommended that the Commission adopt the rules/rule amendments regarding acceptable levels of dissolved oxygen, temperature, pH, bacteria, and groundwater nitrate as presented in Attachment A of the Department Staff Report.

Attachments

- A. Rules (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
 - 1. Legal Notice of Hearing
 - 2. Public Notice of Hearing (Chance to Comment)
 - 3. Rulemaking Statements (Statement of Need)
 - 4. Fiscal and Economic Impact Statement
 - 5. Land Use Evaluation Statement
 - 6. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
 - 7. Human Health and Environmental Advisory
- C. Presiding Officer's Report on Public Hearings
- D. List of Written Comments Received
- E. Department's Evaluation of Public Comment
- F. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- G. Policy Advisory Committee Membership
- H. Rule Implementation Plans

Reference Documents (available upon request)

Written Comments Received (listed in Attachment D)
1992 - 1994 Water Quality Standards Review Final Issue Papers
Minutes from Policy Advisory Committee Meetings

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Date Prepared: November 17, 1995

LSK:crw
SA\WC13\WC13781
November 17, 1995

PROPOSED AMENDMENTS TO
OREGON ADMINISTRATIVE RULES

OAR 340-41-[BASIN](2)(a), 340-41-[BASIN](3),
340-41-026, & 340-41-006

NOTE:

The underlined portions of text represent proposed additions made to the rules.

The ~~{bracketed}~~ portions of text represent proposed deletions made to the rules. Because the rules differ by basin, the bracketed portions are examples only. The exact reference to be deleted is given in Figure A.

340-41-[Basin](2)(a)

- (a) Dissolved oxygen (DO): The changes adopted by the Commission on November 17, 1995 become effective July 1, 1996. Until that time, the requirements of this rule that were in effect on November 16, 1995 apply.

~~{(A) Fresh waters: DO concentrations shall not be less than 90 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes;~~

~~{(B) Marine and estuarine waters (outside of zones of upwelled marine waters naturally deficient in DO): DO concentrations shall not be less than 6 mg/l for estuarine waters, or less than saturation concentrations for marine waters;~~

~~{(C) Columbia River: DO concentrations shall not be less than 90 percent of saturation.}~~

(A) For waterbodies identified by the Department as providing salmonid spawning, during the periods from spawning until fry emergence from the gravels, the following criteria apply:

(i) The dissolved oxygen shall not be less than 11 mg/l. However, if the minimum intergravel dissolved oxygen, measured as a

spatial median, is 8.0 mg/l or greater, then the DO criteria is 9.0 mg/l;

(ii) Where conditions of barometric pressure, altitude, and temperature preclude attainment of the 11 mg/l or 9 mg/l criteria, dissolved oxygen levels shall not be less than 95 percent of saturation.

(B) For waterbodies identified by the Department as providing salmonid spawning during the period from spawning until fry emergence from the gravels, the spatial median intergravel dissolved oxygen concentration shall not fall below 6.0 mg/l;

(C) A spatial median of 8.0 mg/l intergravel dissolved oxygen level shall be used to identify areas where the recognized beneficial use of salmonid spawning, egg incubation and fry emergence from the egg and from the gravels may be impaired and therefore require action by the Department. Upon determination that the spatial median intergravel dissolved oxygen concentration is below 8.0 mg/l, the Department may, in accordance with priorities established by the Department for evaluating water quality impaired waterbodies, determine whether to list the waterbody as water quality limited under the Section 303(d) of the Clean Water Act, initiate pollution control strategies as warranted, and where needed cooperate with appropriate designated management agencies to evaluate and implement necessary best management practices for nonpoint source pollution control;

(D) For waterbodies identified by the Department as providing cold-water aquatic life the dissolved oxygen shall not be less than 8.0 mg/l as an absolute minimum. Where conditions of barometric pressure, altitude, and temperature preclude attainment of the 8.0 mg/l, dissolved oxygen shall not be less than 90 percent of saturation. At the discretion of the Department, when the Department determines that adequate information exists, the dissolved oxygen shall not fall below 8.0 mg/l as a 30-day mean minimum, 6.5 mg/l as a seven day minimum mean, and shall not fall below 6.0 as an absolute minimum (Table 21);

(E) For waterbodies identified by the Department as providing cool-water aquatic life the dissolved oxygen shall not be less than 6.5 mg/l as an absolute minimum. At the discretion of the Department, when the Department determines that adequate information exists, the dissolved oxygen shall not fall below 6.5 mg/l as a 30-day mean minimum, 5.0

mg/l as a seven day minimum mean, and shall not fall below 4.0 as an absolute minimum (Table 21);

(F) For waterbodies identified by the Department as providing warm-water aquatic life the dissolved oxygen shall not be less than 5.5 mg/l as an absolute minimum. At the discretion of the Department, when the Department determines that adequate information exists, the dissolved oxygen shall not fall below 5.5 mg/l as a 30-day mean minimum, and shall not fall below 4.0 as an absolute minimum (Table 21);

(G) For estuarine water, the dissolved oxygen concentrations shall not be less than 6.5 mg/l. (for coastal waterbodies);

(H) For marine waters, no measurable reduction in dissolved oxygen concentration shall be allowed;

340-41-[Basin](3)

- (3) Where the naturally occurring quality parameters of waters of the (basin) are outside the numerical limits of the above assigned water quality standards, the naturally occurring water quality shall be the standard. However, in such cases special restrictions, described in OAR 340-41-026(3)(a)(C)(iii), apply to discharges that affect dissolved oxygen.

TABLE 21
DISSOLVED OXYGEN & INTERGRAVEL DISSOLVED OXYGEN CRITERIA
(Applicable to All Basins)

Class	Concentration and Period ¹ (All Units Are mg/L)				Use/Level of Protection
	30D	7D	7mi	Min	
Salmonid Spawning		11.0 ^{2,3}		9.0 ³ 8.0 ⁴ 6.0 ⁵	Principal use of salmonid spawning and incubation of embryos until emergence from the gravels. Low risk of impairment to cold-water aquatic life, other native fish and invertebrates. The IGDO criteria represents an acute threshold for survival based on field studies.
Cold Water	8.0 ⁶		6.5	6.0	Principally cold-water aquatic life. Salmon, trout, cold-water invertebrates, and other native cold-water species exist throughout all or most of the year. Juvenile anadromous salmonids may rear throughout the year. No measurable risk level for these communities
Cool Water	6.5		5.0	4.0	Mixed native cool-water aquatic life, such as sculpins, smelt, and lampreys. Waterbodies includes estuaries. Salmonids and other cold-water biota may be present during part or all of the year but do not form a dominant component of the community structure. No measurable risk to cool-water species, slight risk to cold-water species present.
Warm Water	5.5			4.0	Waterbodies whose aquatic life beneficial uses are characterized by introduced, or native, warm-water species.
No Risk	No Change from Background				The only DO criterion that provides no additional risk is "no change from background." Waterbodies accorded this level of protection include marine waters and waters in Wilderness areas.

¹ 30-D = 30-day mean minimum as defined in definitions section.
² 7-D = Seven (7) day mean minimum as defined in definitions section.
³ 7mi = Seven (7) day minimum mean as defined in the definitions section.
⁴ Min = Absolute minimums for surface samples when applying the averaging period, spatial median of IGDO

² When Intergravel DO levels are 8.0 or greater, DO levels may be as low as 9.0, without triggering a violation.

³ If conditions of barometric pressure, altitude and temperature preclude achievement of the footnoted criteria, then 95% saturation applies.

⁴ Intergravel DO action level, spatial median minimum.

⁵ Intergravel DO criterion, spatial median minimum.

⁶ If conditions of barometric pressure, altitude and temperature preclude achievement of 8.0 mg/L, then 90% saturation applies.

Shaded values present the absolute minimum criteria, unless the Department believes adequate data exists to apply the multiple criteria and associated periods.

POLICIES AND GUIDELINES GENERALLY APPLICABLE TO ALL BASINS

OAR 340-41-026

- (3) The Commission or Department may grant exceptions to sections (2) and (6) of this rule and approvals to section (5) of this rule for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2):
- (a) In allowing new or increased discharged loads, the Commission or Department shall make the following findings:
 - (A) The new or increased discharged load would not cause water quality standards to be violated;
 - (B) The new or increased discharge load would not unacceptably threaten or impair any recognized beneficial uses. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;
 - (C) The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited under OAR 340-41-006(30)(a), unless:
 - (i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or
 - (ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs), load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream; and compliance plans under which enforcement action can be taken have been established; and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or

(iii) Effective July 1, 1996, in waterbodies designated water-quality limited for dissolved oxygen, when establishing WLAs under a TMDL for waterbodies meeting the conditions defined in this rule, the Department may at its discretion provide an allowance for WLAs calculated to result in no measurable reduction of dissolved oxygen. For this purpose, "no measurable reduction" is defined as no more than 0.10 mg/l for a single source and no more than 0.20 mg/l for all anthropogenic activities that influence the water quality limited segment. The allowance applies for surface water DO criteria and for Intergravel DO if a determination is made that the conditions are natural. The allowance for WLAs would apply only to surface water 30-day and 7-day mean minimums, and the IGDO action level;

~~{(iii)}~~ (iv) Under extraordinary circumstances to solve an existing, immediate, and critical environmental problem...

DEFINITIONS

OAR 340-41-006

- (44) "Intergravel Dissolved Oxygen" (IGDO) -- The concentration of oxygen measured in the stream gravel pore water. For the purposes of compliance with criteria, the dissolved oxygen concentration should be measured within a redd or artificial redd, down-gradient of the egg pocket. Measurements should be taken within a limited time period; for example, prior to emergence of fry during the month of March.
- (45) "Spatial Median" -- The value which falls in the middle of a data set of multiple IGDO measurements taken within a spawning area. Half the samples should be greater than, and half the samples should be less than the spatial median.
- (46) "Daily Mean" (dissolved oxygen) -- The numeric average of an adequate number of data to describe the variation in dissolved oxygen concentration throughout a day, including daily maximums and minimums. For the purpose of calculating the mean, concentrations in excess of 100 percent of saturation are valued at the saturation concentration.
- (47) "Monthly (30-day) Mean Minimum" (dissolved oxygen) -- The minimum of the thirty (30) consecutive day floating averages of the calculated daily mean dissolved oxygen concentration.
- (48) "Weekly (7-day) Mean Minimum" (dissolved oxygen) -- The minimum of the seven (7) consecutive day floating average of the calculated daily mean dissolved oxygen concentration.
- (49) "Weekly (7-day) Minimum Mean" (dissolved oxygen) -- The minimum of the seven (7) consecutive day floating average of the daily **minimum** concentration. For purposes of application of the criteria, this value will be used as the reference for diurnal minimums.
- (50) "Minimum" (dissolved oxygen) -- The minimum recorded concentration including seasonal and diurnal minimums.
- (51) "Cold-Water Aquatic Life" -- The aquatic communities that are physiologically restricted to cold water, composed of one or more species sensitive to reduced oxygen levels. Including but not limited to Salmonidae and cold-water invertebrates.
- (52) "Cool-Water Aquatic Life" -- The aquatic communities that are physiologically restricted to cool waters, composed of one or more species having dissolved oxygen requirements believed similar to the cold-water communities. Including but not limited to Cottidae, Osmeridae, Acipenseridae, and sensitive Centrarchidae such as the small-mouth bass.

(53) *“Warm-Water Aquatic Life” -- The aquatic communities that are adapted to warm-water conditions and do not contain either cold- or cool-water species.*

Figure A. Existing Basin Rules for Dissolved Oxygen:
OAR 340-41-205, 245, 285 325, 365, 445, 485, 525, 565, 605, 645, 685, 725, 765,
805, 845, 885, 925, and 965

CURRENT DISSOLVED OXYGEN STANDARDS									
Dissolved oxygen standard format by basin									
All basin criteria are preceded by "(a) Dissolved Oxygen (DO):"									
1	2	3	4	5	6	7	8	9	Comment
(A)	(A)	E(i)	B(i)	B				C(i)	[Salmonid producing waters] [All other Waters] [Fresh waters] [(trout)]; DO concentrations shall not be less than 90 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fish.
(B)	(B)								Marine and estuarine waters (outside of the zones of up-welled marine waters naturally deficient in DO) DO concentrations shall not be less than 6 mg/l for estuarine waters, or less than saturation concentrations for marine waters.
(C)		F	A	A	A				Columbia River: DO concentrations shall not be less than 90 percent of saturation.
		e(ii)	B(ii)					C(ii)	Non-salmonid producing waters: The Dissolved oxygen concentration shall not be less than 6.
		A						A	Multnomah Channel and main stem Willamette River from mouth to the Willamette Falls [Mainstem Klamath River from Klamath Lake to Keno Dam (river miles 255 to 232.5), the DO concentration shall not be less than 5 mg/l.
		B						B	Mainstem Willamette River from the Willamette Falls to Newberg: The dissolved oxygen concentration shall not be less than 6.0 mg/l.
		C							Mainstem Willamette River from Newburg to Salem, River mile 85: [Mainstem Klamath River from Keno Dam to the Oregon-California Border (river miles 232.5 to 208.5): The DO concentration shall not be less than 7 mg/l.
		D							Mainstem Willamette River from Salem to confluence of Coast to Middle Forks (river mile 187), the DO concentrates shall not be less than 90% of saturation.
					B	a	A		All Other [Name] [Except Goose lake] and tributaries; DO concentrations shall not be less than 75 percent of saturation at the seasonal low, or less than 95 percent of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fish.
							B		Goose Lake: DO concentrations shall not be less than 7 mg/l.

(1) North Coast; (2) Mid Coast, Umpqua, South Coast, Rogue; (3) Willamette; (4) Hood; (5) Deschutes and Sandy; (6) John Day, Umatilla; (7) Walla Walla, Grande Ronde, Powder, Malheur, Owyhee, Malheur Lake; (8) Goose & Summer Lakes; (9) Klamath

PROPOSED AMENDMENTS TO
OREGON ADMINISTRATIVE RULES

OAR 340-41-[Basin](2)(b)
OAR 340-41-685(2)(o) & OAR 340-41-026

NOTE:

The underlined portions of text represent proposed additions made to the rules.

The ~~{bracketed}~~ portions of text represent proposed deletions made to the rules. Because the rules differ by basin, the bracketed portions are examples only.

The exact reference to be deleted is given in Figure B.

- (b) Temperature: The changes adopted by the Commission on November 17, 1995 become effective July 1, 1996. Until that time, the requirements of this rule that were in effect on November 16, 1995 apply.

~~{(A) — Columbia River: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 68° F. or greater; or more than 0.5° F. increase due to a single source discharge when receiving water temperatures are 67.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 66° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses;~~

~~{(B) — All other freshwater streams and tributaries thereto: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a~~

~~discharge when stream temperatures are 58° F. or greater; or more than 0.5° F. increase due to a single source discharge when receiving water temperatures are 57.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 56° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses;~~

- ~~(C) Marine and estuarine waters: No significant increase above natural background temperatures shall be allowed, and water temperatures shall not be altered to a degree which creates or can reasonably be expected to create an adverse effect on fish or other aquatic life.]~~

(A) Surface Water Temperature Standard Preamble:

(i) It is the policy of the Environmental Quality Commission (EQC) to protect aquatic ecosystems from adverse surface water warming caused by anthropogenic activities. The intent of the EQC is to minimize the risk to cold-water aquatic ecosystems from anthropogenic warming of surface waters, to encourage the restoration of critical aquatic habitat, to reverse surface water warming trends, to cool the waters of the State, and to control extremes in temperature fluctuations due to anthropogenic activities:

(I) The first element of this policy is to encourage the proactive development and implementation of best management practices or other measures and available temperature control technologies for nonpoint and point source activities to prevent thermal pollution of surface waters;

(II) The second element of this policy is to require the development and implementation of surface water temperature management plans for those basins exceeding the numeric temperature criteria identified in this rule. The surface water temperature management plans will identify the specific best management practices

(BMPs) or measures and approaches to be taken for nonpoint sources, and technologies to be implemented by point sources to limit or eliminate adverse anthropogenic warming of surface waters;

- (ii) Surface water temperatures in general are warming throughout the State. These water temperatures are influenced by natural physical factors including, but not limited to solar radiation, stream-side shade, ambient air temperatures, heated water discharges, cold-water discharges, channel morphology, and stream flow. Surface water temperatures may also be affected by anthropogenic activities that discharge heated water, widen streams, or reduce stream shading, flows, and depth. These anthropogenic activities, as well as others, increase water temperatures. Anthropogenic activities may also result in the discharge of cold water that decreases water temperatures and affects biological cycles of aquatic species;
- (iii) The surface water temperature standard establishes numeric and narrative criteria to protect designated beneficial uses and to initiate actions to control anthropogenic sources that adversely increase or decrease stream temperatures. Natural surface water temperatures at times exceed the numeric criteria identified in the rule due to naturally high ambient air temperatures, naturally heated discharges, naturally low stream flows or other natural conditions. These exceedances are not water quality standards violations when the natural conditions themselves cause water temperatures to exceed the numeric criteria. In these situations the natural surface water temperatures become the numeric criteria. In surface waters where both natural and anthropogenic factors cause exceedances of the numeric criteria, each anthropogenic source will be responsible for controlling, through implementation of a management plan, only that portion of the temperature increase caused by that anthropogenic source;
- (iv) The purpose of the numeric criteria is to protect designated beneficial uses; this includes specific life cycle stages during the time periods they are present in a surface water of the state. Surface water temperature measurements taken to determine compliance with the identified criteria will be taken using a sampling protocol appropriate to indicate impact to the beneficial use. The EQC, in establishing these criteria, recognizes that new information is constantly being developed on water temperatures and how water temperatures affect different beneficial uses. Therefore, continued reevaluation of

temperature information is needed to refine and revise the standard over time. The EOC also recognizes that the development and implementation of control technologies and best management practices or measures to reduce anthropogenic warming is evolving and the achievement of the numeric criteria will be an iterative process;

(v) Surface water temperature management plans will be required according to OAR 340-41-026 (3)(a)(D) when the relevant numeric temperature criteria are exceeded and the waterbody is designated as water-quality limited under Section 303(d) of the Clean Water Act. The plans will identify those steps, measures, technologies, and/or practices to be implemented by those sources determined by the Department to be contributing to the problem. The plan may be for an entire basin, a single watershed, a segment of a stream, single or multiple nonpoint source categories, single or multiple point sources or any combination of these, as deemed appropriate by the Department, to address the identified temperature problem;

(l) In the case of state and private forest lands, the practices identified in rules adopted pursuant to the State Forest Practices Act (FPA) will constitute the surface water temperature management plan for the activities covered by the act. Consequently, in those basins, watersheds or stream segments exceeding the relevant temperature criterion, and for those activities covered by the Forest Practices Act, the forestry component of the temperature management plan will be the practices required under the FPA. If the mandated practices need to be improved in specific basins, watersheds or stream segments to fully protect identified beneficial uses, the Departments of Forestry and Environmental Quality will follow the process described in ORS 527.765 to establish, implement, and improve practices in order to reduce thermal loads to achieve and maintain the surface water temperature criteria. Federal forest management agencies are required by the federal Clean Water Act to meet or exceed the substantive requirements of the state forestry nonpoint source program. The Department currently has Memorandums of Understanding with the U.S. Forest Service and Bureau of Land Management to implement this aspect of the Clean Water Act. These memorandums will be used to identify the temperature management plan requirements for federal forest lands;

(II) The temperature management plan development and implementation for agricultural nonpoint sources will be pursued through a cooperative agreement between the state Departments of Agriculture and Environmental Quality to implement applicable provision of ORS 568.900-933, ORS 561.191, and ORS 486B. If DEQ has reason to believe that agricultural discharges or activities are contributing to temperature increases that result in water quality standards violations, DEQ shall hold a consultation with the Oregon Department of Agriculture. If water quality impacts are likely from agricultural sources in addition to confined animal feeding operations, and DEQ determines that a surface water temperature management plan is necessary, the Director of DEQ shall write a letter to the Director of the Department of Agriculture requesting that such a management plan be prepared and implemented to reduce thermal loads and achieve the surface water temperature criteria;

(III) The Department will be responsible for determining the appropriate surface water temperature management plan for individual and general NPDES permitted sources. The requirement for a surface water temperature management plan and the content of the plan will be appropriate to the contribution the permitted source makes to the temperature problem, the technologies and practices available to reduce thermal loads, and the potential for trading or mitigating thermal loads;

(IV) In urban areas the Department will work with appropriate state, county, municipal, and special district agencies to develop surface water temperature management plans that reduce thermal loads in basins, watersheds, or stream segments associated with the temperature violations so that the surface water temperature criteria are achieved.

(B) For purposes of this rule, unless otherwise stated, the following definitions apply:

(i) Numeric criteria are measured as the seven (7) day moving average of the daily maximum temperatures. If there is insufficient data to establish a seven (7) day average of

maximum temperatures, the numeric criteria shall be applied as an instantaneous maximum. The measurements shall be made using a sampling protocol appropriate to indicate impact to the beneficial uses;

(ii) A “measurable temperature increase” means an increase in stream temperature of more than 0.25°F;

(iii) “Anthropogenic”, when used to describe “sources” or “warming”, means that which results from human activity;

(iv) An “ecologically significant cold-water refuge” exists when all or a portion of a waterbody supports stenotypic cold-water species (flora or fauna) not otherwise widely supported within the subbasin, and either:

(I) Maintains cold-water temperatures throughout the year relative to other segments in the subbasin, providing summertime cold-water holding or rearing habitat that is limited in supply, or;

(II) Supplies cold water to a receiving stream or downstream reach that supports cold-water biota.

(C) Unless specifically allowed under a Department-approved surface water temperature management plan as required under OAR 340-41-026(3)(a)(D), no measurable surface water temperature increase resulting from anthropogenic activities is allowed:

(i) In a basin in which surface water temperatures exceed 64.0°F (17.8°C);

(ii) In the Columbia River or its associated sloughs and channels from the mouth to river mile 309 when surface water temperatures exceed 68.0°F (20.0°C);

(iii) In the Willamette River or its associated sloughs and channels from the mouth to river mile 50 when surface water temperatures exceed 68.0°F (20.0°C);

(iv) In waters and periods of the year determined by the Department to support native salmonid spawning, egg incubation, and fry emergence from the egg and from the gravels in a basin which exceeds 55.0°F (12.8°C);

- (v) In waters determined by the Department to support or to be necessary to maintain the viability of native Oregon bull trout, when surface water temperatures exceed 50.0°F (10.0°C);
- (vi) In waters determined by the Department to be ecologically significant cold-water refugia;
- (vii) In stream segments containing federally listed Threatened and Endangered species if the increase would impair the biological integrity of the Threatened and Endangered population;
- (viii) In Oregon waters when the dissolved oxygen (DO) levels are within 0.5 mg/L or 10 percent saturation of the water column or intergravel DO criterion for a given stream reach or subbasin;
- (ix) In natural lakes.

(D) An exceedance of the numeric criteria identified in subparagraph (C)(i) through (v) of this subsection, will not be deemed a temperature standard violation if it occurs when the air temperature during the warmest 7-day period of the year exceeds the 90th percentile of the 7-day average daily maximum air temperature calculated in a yearly series over the historic record. However, during such periods, the anthropogenic sources must still continue to comply with their surface water temperature management plans developed under OAR 340-41-026(3)(a)(D):

(E) Any source may petition the commission for an exception to subparagraph (C)(i) through (ix) of this subsection for discharge above the identified criteria if;

(i) The source provides the necessary scientific information to describe how the designated beneficial uses would not be adversely impacted; or

(ii) The Commission grants an exception, having found that:

(I) A source is implementing all reasonable management practices or measures;

(II) Its activity will not significantly affect the beneficial uses; and

(III) The cost of treating the parameter to the level necessary to assure full protection would outweigh the risk to the resource.

(F) The EQC encourages the release of stored water from reservoirs to cool surface water in order to achieve the identified numeric criteria as long as there is no significant adverse impact to downstream designated beneficial uses from the cooler water temperatures. If the Department determines that a significant adverse impact is resulting from the cold-water release, the Department shall, at its discretion, require the development of a management plan to address the adverse impact created by the cold-water release;

(G) Maintaining low stream temperatures to the maximum extent practicable in basins where surface water temperatures are below the specific criteria identified in this rule shall be accomplished by implementing technology based permits, best management practices or other measures. Any measurable increase in surface water temperature resulting from anthropogenic activities in these basins shall be in accordance with the antidegradation policy contained in OAR 340-41-026;

(H) Marine and estuarine waters: No significant increase above natural background temperatures shall be allowed, and water temperatures shall not be altered to a degree which creates or can reasonably be expected to create an adverse effect on fish or other aquatic life.

**FIGURE B. RULE SECTIONS TO BE DELETED BY BASIN
Temperature**

Basin	Section and Subsection: (340-41-Basin)
North Coast – Lower Columbia	205(2)(b)[(A),(B),(C)]
Mid Coast	245(2)(b)[(A),(B)]
South Coast	325(2)(b)[(A),(B)]
Umpqua	285(2)(b)[(A),(B)]
Rogue	365(2)(b)[(A),(B)]
Willamette	445(2)(b)[(A),(B),(C),(D)]
Sandy	485(2)(b)[(A),(B)]
Hood	525(2)(b)[(A),(B)]
Deschutes	565(2)(b)[(A),(B)]
John Day	605(2)[(b)]
Umatilla	645(2)[(b)]
Walla Walla	685(2)[(o)]
Grande Ronde	725(2)[(b)]
Powder	765(2)(b)[(A),(B)]
Malheur	805(2)[(b)]
Owyhee	845(2)[(b)]
Malheur Lake	885(2)[(b)]
Goose & Summer Lakes	925(2)[(b)]
Klamath	965(2)(b)[(A),(B)]

POLICIES AND GUIDELINES GENERALLY APPLICABLE TO ALL BASINS

OAR 340-41-026

- (3) The Commission or Department may grant exceptions to sections (2) and (6) of this rule and approvals to section (5) of this rule for major dischargers and other dischargers, respectively. Major dischargers include those industrial and domestic sources that are classified as major sources for permit fee purposes in OAR 340-45-075(2):
- (a) In allowing new or increased discharged loads, the Commission or Department shall make the following findings:
 - (A) The new or increased discharged load would not cause water quality standards to be violated;
 - (B) The new or increased discharge load would not unacceptably threaten or impair any recognized beneficial uses. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other state and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;
 - (C) The new or increased discharged load shall not be granted if the receiving stream is classified as being water quality limited under OAR 340-41-006(30)(a), unless:
 - (i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or
 - (ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs), load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream; and compliance plans under which enforcement action can be taken have been established; and there will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or

(iii) Effective July 1, 1996, in waterbodies designated water-quality limited for dissolved oxygen, when establishing WLAs under a TMDL for waterbodies meeting the conditions defined in this rule, the Department may at its discretion provide an allowance for WLAs calculated to result in no measurable reduction of dissolved oxygen. For this purpose, "no measurable reduction" is defined as no more than 0.10 mg/L for a single source and no more than 0.20 mg/L for all anthropogenic activities that influence the water quality limited segment. The allowance applies for surface water DO criteria and for Intergravel DO if a determination is made that the conditions are natural. The allowance for WLAs would apply only to surface water 30-day and 7-day means, and the IGDO action level;

~~{(iii)}~~ (iv) Under extraordinary circumstances to solve an existing, immediate, and critical environmental problem that the Commission or Department may consider a waste load increase for an existing source on a receiving stream designated water quality limited under OAR 340-41-006(30)(a) during the period between the establishment of TMDLs, WLA, and LAs and their achievement based on the following conditions:

- (I) That TMDLs, WLAs, and LAs have been set; and
- (II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and
- (III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses; and
- (IV) That any waste load increase granted under subparagraph (iii) of this paragraph is temporary and does not extend beyond the TMDL compliance deadline established for the waterbody. If this action will result in a permanent load increase, the action has to comply with subparagraphs (i) or (ii) of this paragraph.

(D) Effective July 1, 1996, in any waterbody identified by the Department as exceeding the relevant numeric temperature criteria specified for each individual water quality management

basin identified in OAR 340-41-205, OAR-340-41-245, OAR-340-41-285, OAR-340-41-325, OAR-340-41-365, OAR-340-41-445, OAR-340-41-485, OAR-340-41-525, OAR-340-41-565, OAR-340-41-605, OAR-340-41-645, OAR-340-41-685, OAR-340-41-725, OAR-340-41-765, OAR-340-41-805, OAR-340-41-845, OAR-340-41-885, OAR-340-41-925, OAR-340-41-965, and designated as water quality limited under section 303(d) of the Clean Water Act, the following requirements shall apply to appropriate watersheds or stream segments in accordance with priorities established by the Department. The Department may determine that a plan is not necessary for a particular stream segment or segments within a water-quality limited basin based on the contribution of the segment(s) to the temperature problem:

- (i) Anthropogenic sources are required to develop and implement a surface water temperature management plan which describes the best management practices, measures, and/or control technologies which will be used to reverse the warming trend of the basin, watershed, or stream segment identified as water quality limited for temperature;
- (ii) Sources shall continue to maintain and improve, if necessary, the surface water temperature management plan in order to maintain the cooling trend until the numeric criterion is achieved or until the Department has determined that all feasible steps have been taken to meet the criterion. In this latter situation, the temperature achieved after all feasible steps have been taken will be the temperature criterion for the surface waters covered by the applicable management plan;
- (iii) Once the numeric criterion is achieved or the Department has determined that all feasible steps have been taken, sources shall continue to implement the practices or measures described in the surface water temperature management plan in order to continually achieve the temperature criterion;
- (iv) For point sources, the surface water temperature management plan will be part of their National Pollutant Discharge Elimination System Permit;

(v) For nonpoint sources the surface water temperature management plan will be developed by designated management agencies (DMAs) which will identify the appropriate BMPs or measures;

(vi) A source in compliance with the Department-approved surface water temperature management plan shall not be deemed to be causing or contributing to a violation of the numeric criterion if the surface water temperature exceeds the criterion.

(vii) In waters the Department determines to be critical for bull trout recovery, the goal of a bull trout surface water temperature management plan is to specifically protect those habitat ranges necessary to maintain the viability of existing stocks by restoring stream and riparian conditions or allowing them to revert to conditions attaining the coolest surface water temperatures possible under natural background conditions;

(E) Waters of the state exceeding the temperature criteria will be identified in the Clean Water Act (CWA), Section 303(d) list developed by the Department according to the schedule required by the Clean Water Act. This list will be prioritized to identify the order in which those waters will be addressed by the Department and the Designated Management Agencies;

(F) In basins determined by the Department to be exceeding the numeric temperature criteria, and which are required to develop surface water temperature management plans, new or increased discharge loads from point sources which require an NPDES permit under Section 402 of the Clean Water Act or hydro-power projects which require certification under Section 401 of the Clean Water Act are allowed a 1.0°F total cumulative increase in surface water temperatures as the surface water temperature management plan is being developed and implemented for the water quality limited basin if:

(i) In the best professional judgment of the Department, the new or increased discharge load, even with the resulting 1.0°F cumulative increase, will not conflict with or impair the ability of a surface water temperature management plan to achieve the numeric temperature criteria; and

(ii) A new or expanding source must demonstrate that it fits within the 1.0°F increase and that its activities will not result in a measurable impact on beneficial uses. This latter showing must be made by demonstrating to the Department that the temperature change due to its activities will be less than or equal to 0.25°F under a conservative approach or by demonstrating the same to the EOC with appropriate modelling.

(G) Any source may petition the Department for an exception to paragraph (F) of this subsection, provided:

(i) The discharge will result in less than 1.0°F increase at the edge of the mixing zone, and subparagraph (ii) or (iii) of this paragraph applies:

(ii) The source provides the necessary scientific information to describe how the designated beneficial uses would not be adversely impacted; or

(iii) The source demonstrates that: it is implementing all reasonable management practices; its activity will not significantly affect the beneficial uses; and the environmental cost of treating the parameter to the level necessary to assure full protection would outweigh the risk to the resource.

(H) Any source may petition the Commission for an exception to paragraph (F) of this subsection, provided:

(i) The source provides the necessary scientific information to describe how the designated beneficial uses would not be adversely impacted; or

(ii) The source demonstrates that: it is implementing all reasonable management practices; its activity will not significantly affect the beneficial uses; and the environmental cost of treating the parameter to the level necessary to assure full protection would outweigh the risk to the resource.

~~(I)~~ (I) The activity, expansion, or growth necessitating a new or increased discharge load is...

**PROPOSED AMENDMENTS TO
OREGON ADMINISTRATIVE RULES**

OAR 340-41-[Basin](2)(d) & Walla Walla 340-41-685(2)(c)

NOTE:

The underlined portions of text represent proposed additions made to the rules.

The ~~bracketed~~ portions of text represent proposed deletions made to the rules.

(pH) Hydrogen Ion Concentration

Basin	Rule
Umpqua 340-41-285(2)(d)	<p>(d) pH (hydrogen ion concentration):</p> <p>(A) Fresh waters <i>(except Cascade lakes)</i> and estuarine waters: pH values shall not fall outside the range of 6.5 to 8.5±. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria;</u></p> <p>(B) Marine waters: pH values shall not fall outside the range of 7.0 to 8.5±;</p> <p><u>(C) Cascade lakes above 3,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>
Rogue 340-41-365(2)(d)	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges:</p> <p>(A) Marine waters: 7.0 - 8.5;</p> <p>(B) Estuarine and fresh waters <i>(except Cascade lakes)</i>: 6.5 - 8.5. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the</u></p>

Basin	Rule
Rogue 340-41-365(2)(d) (Continued)	<p><i>standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</i></p> <p><u>(C) Cascade lakes above 3,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>
Willamette 340-41-445(2)(d)	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges + identified in paragraphs (A), (B), and (C) of this subsection. <i>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</i></p> <p>(A) Columbia River: 7.0 – 8.5;</p> <p>(B) All other basin waters <i>(except Cascade lakes)</i>: 6.5 – 8.5+;</p> <p><u>(C) Cascade lakes above 3,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>
Sandy 340-41-485(2)(d)	<p>(d) pH (hydrogen ion concentration): <i>pH values shall not fall outside the ranges identified in paragraphs (A), (B), and (C) of this subsection. The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</i></p> <p>(A) [Main Stem] <u>Mainstem</u> Columbia River (river miles 120 to 147): pH values shall not fall outside the range of 7.0 to 8.5;</p> <p>(B) All other Basin waters <i>(except Cascade lakes)</i>: pH values shall not fall outside the range of 6.5 to 8.5+;</p> <p><u>(C) Cascade lakes above 3,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>
Hood 340-41-525(2)(d)	<p>(d) pH (hydrogen ion concentration): <i>pH values shall not fall outside the ranges identified in paragraphs (A), (B), and (C) of this subsection. The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures</i></p>

Basin	Rule
<p style="text-align: center;">Hood 340-41-525(2)(d)</p> <p style="text-align: center;">(Continued)</p>	<p><i>have been taken to bring the pH in the impounded waters into compliance with the criteria:</i></p> <p>(A) [Main Stem] <u>Mainstem</u> Columbia River (river miles 147 to 203): pH values shall not fall outside the range of 7.0 to 8.5;</p> <p>(B) Other Hood River Basin streams <u>(except Cascade lakes)</u>: pH values shall not fall outside the range of 6.5 to 8.5[-];</p> <p><u>(C) Cascade lakes above 3,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>
<p style="text-align: center;">Deschutes 340-41-565(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the [following] ranges[-] <u>identified in paragraphs (A), (B), and (C) of this subsection. The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p> <p>(A) Columbia River (river miles 203 to 218): 7.0 - 8.5;</p> <p>(B) All other Basin streams streams <u>(except Cascade lakes)</u>: 6.5 - 8.5[-];</p> <p><u>(C) Cascade lakes above 3,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>
<p style="text-align: center;">Klamath 340-41-965(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the [range of 7.0 to 9.0;] <u>ranges identified in paragraphs (A) and (B) of this subsection. The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p> <p><u>(A) Fresh waters except Cascade lakes: pH values shall not fall outside the range of 6.5 - 9.0. When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin;</u></p> <p><u>(B) Cascade lakes above 5,000 feet altitude: pH values shall not fall outside the range of 6.0 to 8.5.</u></p>

Basin	Rule
<p>John Day 340-41-605(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges identified in paragraphs (A) and (B) of this subsection. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p> <p>(A) Columbia River (river miles 218 to 247): 7.0 – 8.5;</p> <p>(B) All other Basin streams: 6.5 – 8.5; <u>9.0. When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin.</u></p>
<p>Umatilla 340-41-645(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges identified in paragraphs (A) and (B) of this subsection. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p> <p>(A) Columbia River (river miles 247 to 309): 7.0 – 8.5;</p> <p>(B) All other Basin streams: 6.5 – 8.5; <u>9.0. When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin.</u></p>
<p>Walla Walla 340-41-685(2)(c)</p>	<p>(c) pH (hydrogen ion concentration): pH values shall not fall outside the range of 6.5 to 8.5; <u>9.0. When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin. The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p>

Basin	Rule
<p>Grande Ronde 340-41-725(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges identified in paragraphs (A) and (B) of this subsection. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p> <p>(A) Main stem <u>Mainstem</u> Snake River (river miles 176 to 260): 7.0 - 9.0;</p> <p>(B) All other Basin streams: 6.5 - 8.5 <u>9.0.</u> <u>When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin.</u></p>
<p>Powder 340-41-765(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges identified in paragraphs (A) and (B) of this subsection. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p> <p>(A) Main stem <u>Mainstem</u> Snake River (river miles 260 to 335): 7.0 - 9.0;</p> <p>(B) All other Basin streams: 6.5 - 8.5 <u>9.0.</u> <u>When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin.</u></p>
<p>Malheur River 340-41-805(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the range of 7.0 to 9.0 identified in paragraphs (A) and (B) of this subsection. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria:</u></p>

Basin	Rule
<p>Owyhee 340-41-845(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the range of 7.0 to 9.0±. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria;</u></p>
<p>Malheur Lake 340-41-885(2)(d)</p>	<p>(d) pH (hydrogen ion concentration): pH values shall not fall outside the range of 7.0 to 9.0±. <u>The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria;</u></p>
<p>Goose and Summer Lakes 340-41-925(2)(d)</p>	<p>(d) pH (hydrogen ion concentration):</p> <p>(A) Goose Lake: pH values shall not fall outside the range of 7.5 to 9.5;</p> <p>(B) All other basin waters: pH values shall not fall outside the range of 7.0 to 9.0. <u>When greater than 25 percent of ambient measurements taken between June and September are greater than pH 8.7, and as resources are available according to priorities set by the Department, the Department shall determine whether the values higher than 8.7 are anthropogenic or natural in origin. The following exception applies: Dams existing on January 1, 1996 which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria;</u></p>

PROPOSED AMENDMENTS TO
OREGON ADMINISTRATIVE RULES

OAR 340-41-[Basin](2)(e)

NOTE:

The underlined portions of text represent proposed additions made to the rules.

The ~~bracketed~~ portions of text represent proposed deletions made to the rules. Because the rules differ by basin, the bracketed portions are example only.

The exact reference to be deleted is given in Figure C.

(e) Bacteria Standards:

- (A) ~~Effective from July 1, 1995 and through December 31, 1995.~~ Numeric Criteria: ~~{O}~~organisms of the coliform group ~~{where}~~ commonly associated with fecal sources (MPN or equivalent membrane filtration using a representative number of samples) shall not exceed the criteria described in paragraphs (i) and (ii) of this subsection:
- ~~{(i) Freshwaters: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of five samples in a 30 day period with no more than ten percent of the samples in the 30 day period exceeding 400 per 100 ml;}~~
- {(i) Freshwaters and Estuarine Waters Other than Shellfish Growing Waters: A 30-day log mean of 126 E. coli organisms per 100 ml. No single sample shall exceed 406 E. coli organisms per 100 ml;}
- (ii) Marine ~~{w}~~Waters and ~~{e}~~Estuarine ~~{s}~~Shellfish ~~{g}~~Growing ~~{w}~~Waters: A fecal coliform median concentration of 14 organisms per 100 milliliters, with not more than ten percent of the samples exceeding 43 organisms per 100 ml~~{}~~.
- ~~{(iii) Estuarine waters other than shellfish growing waters: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of five samples in a 30 day period with no more than ten percent of the samples in the 30 day period exceeding 400 per 100 ml.}~~
- ~~{(B) Effective January 1, 1996. Bacteria of the coliform group associated with fecal sources and bacteria of the enterococci group (MPN or equivalent membrane filtration using a representative number of samples) shall not~~

exceed the criteria values described in subparagraphs (2)(e)(B)(i) through (iii) of this rule. However, the Department may designate site specific bacteria criteria on a case by case basis to protect beneficial uses. Site specific values shall be described in and included as part of a water quality management plan:

- (i) ~~Freshwaters: A geometric mean of 33 enterococci per 100 milliliters based on no fewer than five samples, representative of seasonal conditions, collected over a period of at least 30 days. No single sample should exceed 61 enterococci per 100 ml;~~
- (ii) ~~Marine waters and estuarine shellfish growing waters: A fecal coliform median concentration of 14 organisms per 100 milliliters, with not more than ten percent of the samples exceeding 43 organisms per 100 ml;~~
- (iii) ~~Estuarine waters other than shellfish growing waters: A geometric mean of 35 enterococci per 100 milliliters based on no fewer than five samples, representative of seasonal conditions, collected over a period of at least 30 days. No single sample should exceed 104 enterococci per 100 ml.~~

(B) Raw Sewage Prohibition: No sewage shall be discharged into or in any other manner be allowed to enter the waters of the State unless such sewage has been treated in a manner approved by the Department or otherwise allowed by these rules;

(C) Animal Waste: Runoff contaminated with non-human, domesticated animal wastes shall be minimized and treated to the maximum extent practicable before it is allowed to enter waters of the State;

(D) Effluent Limitations: Upon NPDES permit renewal or issuance, or upon request for a permit modification by the permittee at an earlier date, effluent discharges to freshwaters and estuarine waters other than shellfish growing waters shall not exceed a monthly log mean of 126 E. coli organisms per 100 ml. No single sample shall exceed 406 E. coli organisms per 100 ml. If a single sample exceeds 406 E. coli per 100 ml, then five consecutive re-samples shall be taken at four hour intervals beginning as soon as practicable (preferably within 28 hours) after the original sample was taken. If the log mean of the five re-samples is less than or equal to 126, a violation shall not be triggered. The following conditions apply:

- (i) If the Department finds that re-sampling within the timeframe outlined in this subsection would pose an undue hardship on a treatment facility, a more convenient schedule may be negotiated in the permit, provided that the permittee demonstrates that the sampling delay will result in no increase in the risk to water contact recreation in waters affected by the discharge;

(ii) The in-stream criterion for chlorine listed in Table 20 shall be met at all times outside the assigned mixing zone.

(E) Sewer Overflows in Winter: Domestic waste collection and treatment facilities are prohibited from discharging raw sewage to waters of the State during the period of November 1 through May 21, except during a storm event greater than the one-in-five-year, 24-hour duration storm. However, the following exceptions apply:

(i) The Commission may on a case-by-case basis approve a bacteria control management plan to be prepared by the permittee, for a basin or specified geographic area which describes hydrologic conditions under which the numeric bacteria criteria would be waived. These plans will identify the specific hydrologic conditions, identify the public notification and education processes that will be followed to inform the public about an event and the plan, describe the water quality assessment conducted to determine bacteria sources and loads associated with the specified hydrologic conditions, and describe the bacteria control program that is being implemented in the basin or specified geographic area for the identified sources;

(ii) Facilities with separate sanitary and storm sewers existing on the date this rule is filed, and which currently experience sanitary sewer overflows due to inflow and infiltration problems, shall submit an acceptable plan to the Department at the first permit renewal, which describes actions that will be taken to assure compliance with the discharge prohibition by January 1, 2010. Where discharges occur to a receiving stream with sensitive beneficial uses, the Department may negotiate a more aggressive schedule for discharge elimination.

(F) Sewer Overflows in Summer: Domestic waste collection and treatment facilities are prohibited from discharging raw sewage to waters of the State during the period of May 22 through October 31, except during a storm event greater than the one-in-ten-year, 24-hour duration storm. The following exceptions apply:

(i) For facilities with combined sanitary and storm sewers, the Commission may on a case-by-case basis approve a bacteria control management plan such as that described in subparagraph(2)(e)(E)(i) of this rule;

(ii) On a case-by-case basis, the beginning of summer may be defined as June 1 if the permittee so requests and demonstrates to the Department's satisfaction that the risk to beneficial uses, including water contact recreation, will not be increased due to the date change;

(iii) For discharge sources whose permit identifies the beginning of summer as any date from May 22 through May 31: If the permittee demonstrates to the Department's satisfaction that an exceedance occurred between May 21 and June 1 because of a sewer overflow,

and that no increase in risk to beneficial uses, including water contact recreation, occurred because of the exceedance, no violation shall be triggered if the storm associated with the overflow was greater than the one-in-five-year, 24-hour duration storm.

- (G) Storm Sewers Systems Subject to Municipal NPDES Storm Water Permits: Best management practices shall be implemented for permitted storm sewers to control bacteria to the maximum extent practicable. In addition, a collection-system evaluation shall be performed prior to permit issuance or renewal so that illicit and cross connections are identified. Such connections shall be removed upon identification. A collection system evaluation is not required where the Department determines that illicit and cross connections are unlikely to exist;
- (H) Storm Sewers Systems Not Subject to Municipal NPDES Storm Water Permits: A collection system evaluation shall be performed of non-permitted storm sewers by January 1, 2005, unless the Department determines that an evaluation is not necessary because illicit and cross connections are unlikely to exist. Illicit and cross connections shall be removed upon identification;
- (I) Water Quality Limited for Bacteria: In those waterbodies, or segments of waterbodies identified by the Department as exceeding the relevant numeric bacteria criteria and designated as water-quality limited under section 303(d) of the Clean Water Act, the requirements specified in OAR 340-41-026(3)(a)(I) shall apply.

**FIGURE C. RULE SECTIONS TO BE DELETED BY BASIN
Bacteria**

Basin	Section and Subsection: (340-41-Basin)
North Coast - Lower Columbia	205(2)(e)(A)(i)
Mid Coast	245(2)(e)(A)(i)
Umpqua	285(2)(e)(A)(i)
South Coast	325(2)(e)(A)(i)
Rogue	365(2)(e)(A)(i)
Willamette	445(2)(e)(A)
Sandy	485(2)(e)(A)
Hood	525(2)(e)(A)
Deschutes	565(2)(e)(A)
John Day	605(2)(e)(A)
Umatilla	645(2)(e)(A)
Walla Walla	685(2)(d)(A)
Grande Ronde	725(2)(e)(A)
Powder	765(2)(e)(A)
Malheur	805(2)(e)(A)
Owyhee	845(2)(e)(A)
Malheur Lake	885(2)(e)(A)
Goose & Summer Lakes	925(2)(e)(A)
Klamath	965(2)(e)(A)

POLICIES AND GUIDELINES GENERALLY APPLICABLE TO ALL BASINS

OAR 340-41-026

(3)(a)

(H) Any source may petition the Commission for an exception to paragraph (F) of this subsection, provided:

(i) The source provides the necessary scientific information to describe how the designated beneficial uses would not be adversely impacted; or

(ii) The source demonstrates that: it is implementing all reasonable management practices; its activity will not significantly affect the beneficial uses; and the environmental cost of treating the parameter to the level necessary to assure full protection would outweigh the risk to the resource.

(I) In waterbodies designated by the Department as water-quality limited for bacteria, and in accordance with priorities established by the Department, development and implementation of a bacteria management plan shall be required of those sources that the Department determines to be contributing to the problem. The Department may determine that a plan is not necessary for a particular stream segment or segments within a water-quality limited basin based on the contribution of the segment(s) to the problem. The bacteria management plans will identify the specific technologies, BMPs and/or measures and approaches to be implemented by point and nonpoint sources to limit bacterial contamination. For point sources, their National Pollutant Discharge Elimination System permit is their bacteria management plan. For nonpoint sources, the bacteria management plan will be developed by designated management agencies (DMAs) which will identify the appropriate BMPs or measures and approaches.

~~(D)~~ (J) The activity, expansion, or growth necessitating a new or increased discharge load is...

PROPOSED AMENDMENTS TO
OREGON ADMINISTRATIVE RULES
OAR 340-40-090

NOTE:

The underlined portions of text represent proposed additions made to the rules.

The ~~bracketed~~ portions of text represent proposed deletions made to the rules.

340-40-090

~~The levels~~ Interim standards are contained in Tables 4A, 5, and 6 of this Division ~~are the interim standards~~ for maximum measurable levels (MMLs) of contaminants in groundwater to be used in the designation of a groundwater management area. Permanent standards for MMLs are found in Table 4B. ~~The~~ permanent or interim levels shall be used in all actions conducted by the Department where the use of maximum measurable levels for contaminants in groundwater is required.

TABLE 4A
(OAR 340-40-090)

**Interim Standards for Maximum Measurable Levels
of Contaminants in Groundwater:^{1,2,3}**

<u>Inorganic Contaminants</u>	<u>Interim Standard (mg/L)</u>
Arsenic	0.05
Barium	1.0
Cadmium	0.010
Chromium	0.05
Fluoride	4.0
Lead	0.05
Mercury	0.002
Nitrate N	10
Selenium	0.01
Silver	0.05

¹All reference levels are for total (unfiltered) concentrations unless otherwise specified by the Department.

²The source of all standards listed is **40 CFR Part 141**.

³MMLs are used to trigger designation of a groundwater management area when concentrations are detected on an areawide basis which exceed 70 percent of the nitrate MML or 50 percent of other MMLs.

PROPOSED AMENDMENTS TO
OREGON ADMINISTRATIVE RULES
OAR 340-40-090

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340-40-090

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TABLE 4A
(OAR 340-40-090)

**Interim Standards for Maximum Measurable Levels
of Contaminants in Groundwater:^{1,2,3}**

<u>Inorganic Contaminants</u>	<u>Interim Standard (mg/L)</u>
Arsenic	0.05
Barium	1.0
Cadmium	0.010
Chromium	0.05
Fluoride	4.0
Lead	0.05
Mercury	0.002
[Nitrate N	10]
Selenium	0.01
Silver	0.05

¹All reference levels are for total (unfiltered) concentrations unless otherwise specified by the Department.

²The source of all standards listed is **40 CFR Part 141**.

³MMLs are used to trigger designation of a groundwater management area when concentrations are detected on an areawide basis which exceed 70 percent of the nitrate MML or 50 percent of other MMLs.

TABLE 4B
(OAR 340-40-090)

Permanent Standards for Maximum Measurable Levels
of Contaminants in Groundwater.^{1,2,3}

<u>Inorganic Contaminants</u>	<u>Standard (mg/L)</u>
<u>Nitrate-N</u> <u>(Nitrate expressed as Nitrogen)</u>	<u>10</u>

¹All reference levels are for total (unfiltered) concentrations unless otherwise specified by the Department.

²The source of all standards listed is 40 CFR Part 141.

³MMLs are used to trigger designation of a groundwater management area when concentrations are detected on an areawide basis which exceed 70 percent of the nitrate MML or 50 percent of other MMLs.

TABLE 5
(OAR 340-40-090)

**Interim Standards for Maximum Measurable Levels
of Contaminants in Groundwater (Continued):^{1,2,3}**

<u>Organic Contaminants</u>	<u>Interim Standard (mg/L)</u>
Benzene	0.005
Carbon Tetrachloride	0.005
p-Dichlorobenzene	0.075
1,2-Dichloroethane	0.005
1,1-Dichloroethylene	0.007
1,1,1-Trichloroethane	0.20
Trichloroethylene	0.005
Total Trihalomethanes (the sum of concentrations bromodichloromethane, dibromochloromethane, tribromomethane (bromoform), and trichloromethane (chloroform))	0.10
Vinyl Chloride	0.002
2,4-D	0.10
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.10
Toxaphene	0.005
2,4,5-TP Silvex	0.01

¹All reference levels are for total (unfiltered) concentrations unless otherwise specified by the Department.

²The source of all standards listed is **40 CFR Part 141**.

³*MMLs are used to trigger designation of a groundwater management area when concentrations are detected on an areawide basis which exceed 70 percent of the nitrate MML or 50 percent of other MMLs.*

TABLE 6
(OAR 340-40-090)

**Interim Standards for Maximum
Measureable Levels of Contaminants in Groundwater:^{1,2}
Radioactive Substances, Microbiological and Turbidity**

<u>Contaminant</u>	<u>Interim Standard</u>
Turbidity	1 T U
Coliform Bacteria	< 1/100 mL
Radioactive Substances	
Gross Alpha ²	15 pCi/l
Combined Radium 226 and 228	5 pCi/l
Gross Beta	50 pCi/l
I - 131	5 pCi/l
Sr - 90	8 pCi/l
Tritium	20,000 pCi/l

¹The source of all standards listed is **40 CFR Part 141**.

²Including Radium 226 but excluding Radon and Uranium.

³MMLs are used to trigger designation of a groundwater management area when concentrations are detected on an areawide basis which exceed 70 percent of the nitrate MML or 50 percent of other MMLs.

NOTICE OF PROPOSED RULEMAKING HEARING

(Rulemaking Statements and Statement of Fiscal Impact **must** accompany this form.)

Department of Environmental Quality

Water Quality Division

OAR Chapter 340

DATE:	TIME:	LOCATION:
Sept 5, 1995	4:00	Eastern Oregon State College Zabel Room 110 1410 L Avenue La Grande, Oregon
Sept 6, 1995	4:00	The Conference Center Garden Room 228 E Main Street Medford, Oregon
Sept 7, 1995	4:30	Naterline Community Center Room #6 169 SW Coast Highway Newport, Oregon
Sept 12, 1995	3:00	DEQ Executive Building Room 3A 811 SW Sixth Avenue Portland, Oregon

HEARINGS OFFICER(s): Neil Mullane, or Alternate

STATUTORY AUTHORITY: ORS 468B.020, ORS 468B.035, and ORS 468B.048 provide authority for implementation of the Clean Water Act and the setting of water quality standards. ORS 183.310 to 183.550 provide authority to adopt, modify or repeal rules for the administration of water quality standards. ORS 468B.165 mandates adoption of groundwater maximum measurable levels.

AMEND: OAR 340-41-006, 026, 205, 245, 285, 325, 365, 445, 485, 525, 565, 605, 645, 685, 725, 765, 805, 845, 885, 925, 965
OAR 340-40-090 and Tables 4, 5, and 6 of the same Division

Amendments or additions to other sections of Division 40 or 41 listed above (or related administrative rules) may be made in response to information or public comment received by the Department.

- This hearing notice is the initial notice given for this rulemaking action.
- This hearing was requested by interested persons after a previous rulemaking notice.
- Auxiliary aids for persons with disabilities are available upon advance request.

SUMMARY: The proposed rule amendments would make an interim maximum measurable level for groundwater nitrate permanent, and would change the numeric criteria and mechanism of implementation for several water quality standards, including dissolved oxygen, temperature, pH, and bacteria. The proposed changes to surface water standards would generally provide greater flexibility to accommodate local conditions than is allowed by the current rules. The dissolved oxygen standard would also add numeric criteria for the water located in the pores between the gravels used by salmonids for spawning and rearing of embryos. The proposed changes are needed in order to maximize protection of beneficial uses, while minimizing constraints on human activities.

LAST DATE FOR COMMENT: September 19, 1995

DATE PROPOSED TO BE EFFECTIVE: Upon adoption by the Environmental Quality Commission and subsequent filing with the Secretary of State.

AGENCY RULES COORDINATOR:

Susan Greco, (503) 229-5213

AGENCY CONTACT FOR THIS PROPOSAL:

Lynne Kennedy, (503) 229-5371

ADDRESS:

Water Quality Division

811 S. W. 6th Avenue

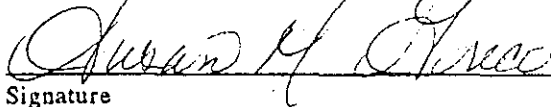
Portland, Oregon 97204

TELEPHONE:

(503) 229-5371

or Toll Free 1-800-452-4011

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.


Signature

9/14/95
Date

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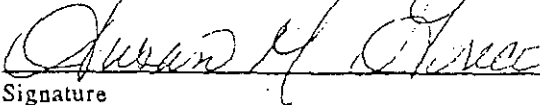
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Signature

9/14/95

Date

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

**1992-1994 TRIENNIAL WATER QUALITY STANDARDS REVIEW:
PROPOSED REVISIONS TO STANDARDS**

Date Issued:	July 28, 1995
Public Hearings:	Sept 5,6,7,12, 1995
Comments Due:	Sept 19, 1995

WHO IS AFFECTED:

- Persons or organizations who have discharges to waters of the state or who otherwise affect groundwater nitrate levels, or the temperature, dissolved oxygen concentration, pH, and bacteria levels of surface waters
- Persons who draw an income from, or recreate in or on rivers and lakes
- Persons whose drinking water source is groundwater

WHAT IS PROPOSED:

The Department of Environmental Quality is responsible for protecting water quality in the state of Oregon. To fulfill that responsibility, the Department sets in-stream water quality standards for each river basin. The standards are set with the goal of providing full protection to beneficial uses. Depending on the basins, beneficial uses may include: drinking water, anadromous fish passage and rearing, swimming, transportation, irrigation, hydropower, and other uses. Standards include narrative or numeric criteria and identification of the associated beneficial uses which they are intended to protect.

Under Section 303 of the Federal Clean Water Act, states must review their water quality standards every three years in order to incorporate the most recent scientific findings and to reflect evolving priorities within society. The proposed rule amendments result from the most recent of these required triennial reviews. The amendments would make an interim maximum measurable level for groundwater nitrate permanent, and would change the numeric criteria and mechanism of implementation for several water quality standards, including dissolved oxygen, temperature, pH, and bacteria.

The proposed changes to surface water standards would generally provide greater flexibility to accommodate local conditions than is allowed by the



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.

B-2-1

current rules. The dissolved oxygen standard would also add numeric criteria for the water located in the pores between the gravels used by salmonids for spawning and rearing of embryos. The proposed changes are needed in order to maximize protection of beneficial uses, while minimizing constraints on human activities.

**HOW WERE THE
PROPOSED RULES
DEVELOPED:**

The proposed rules were developed through consultation with a number of advisory committees and discussions at public workshops.

A technical advisory committee was established for each standard under review. Committee members were drawn from scientific and regulatory agencies, academia, and the regulated community. The technical committees reviewed the scientific literature and provided suggestions for revising the standards based on recent scientific advances.

A policy advisory committee was created to reflect the views of stakeholder groups including a balance of industry, local government, environmental and recreation interests, and the general public. The policy committee considered the suggestions of the scientific committees and worked with them to arrive at workable recommendations. These recommendations were then discussed at a series of six public hearings held around the state.

Based on the input from the advisory committees and the general public, the Department drafted the rules included in this notice as Attachment A.

**WHAT ARE THE
HIGHLIGHTS:**

For each proposed standard, the reason for protecting that particular water quality parameter, the need to change the existing standard, and the Department's recommended revisions are described below:

Dissolved Oxygen: Dissolved oxygen is important for maintaining a healthy and balanced distribution of aquatic life, and was one of the earliest measures chosen for protecting water quality. Salmonid species are the most sensitive beneficial use affected by dissolved oxygen concentrations. In particular, the juvenile stage of salmonids is sensitive to even slight reductions in oxygen during emergence from gravel spawning beds (known as "redds").

There are three main reasons to change the existing dissolved oxygen standard:

- Some of Oregon's dissolved oxygen criteria are expressed as saturation, while others are expressed as concentration.

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There are three main reasons to change the existing dissolved oxygen standard:

- Some of Oregon's dissolved oxygen criteria are expressed as saturation, while others are expressed as concentration.

Concentration criteria better represent the needs of fish than do saturation criteria.

- The concentration of dissolved oxygen needed to protect salmon, trout, or other species is the same statewide, whereas the present criteria are not. The current criterion of 75% of saturation in Eastern Oregon is not fully protective of salmon or trout.
- The present standard does not provide a direct measure of the oxygen needed to protect juvenile salmon in the gravel redds.

The Department therefore recommends that the dissolved oxygen criteria be identified as concentration, rather than saturation, to better reflect the needs of aquatic resources and to reduce the number of streams that violate water quality criteria due to natural conditions. The recommended concentration criteria are given in Table A at the end of this document.

The proposed criteria are identical or numerically less strict than existing standards with the exception of cold water resources in Eastern Oregon. Cold water resources in Eastern Oregon will receive a similar or higher level of protection than under the current standard.

The Department also proposes an intergravel dissolved oxygen standard that includes both a criterion and an action level. The criterion represents an acute threshold; oxygen levels below the criterion indicate poor to negligible survival of salmonids from the redd. The action level provides a threshold for optimum conditions.

Temperature: Channelization, sedimentation, loss of shade, and other results of human activities have caused widescale warming of the state's surface waters. Salmonids are particularly sensitive to these changes, and are the beneficial use of primary concern for the temperature standard.

The existing standard needs to be revised because it is written as a maximum allowable increase above natural conditions due to human activity. Since the reason for high temperatures must be assessed before a violation is proven, implementation and enforcement of the standard requires resources in excess of those available to the Department.

The Department therefore recommends that a criterion of 64° Fahrenheit (F.) be set for all surface waters. The criterion would be measured as a rolling seven day average of daily maximum temperatures. A number of exceptions to this criterion are suggested:

- Waterbodies serving as habitat to Bull Trout should not exceed maximum temperatures higher than 50° F.

- Waterbodies in which salmonid species spawn or rear should not exceed 55° F. during the spawning and rearing seasons.
- A criterion of 68° F. would be set for the lower Willamette and Columbia rivers.
- During periods of flow that are below the 7Q10 level (i.e. the lowest consecutive seven day average flow recorded in a ten year period), or when air temperatures are above the 90th percentile of the seven day average maximum air temperature, the 64° F. criterion could be waived.
- One degree cumulative increase in stream temperature could be allowed from new sources when stream temperatures are above 64° F.
- The Environmental Quality Commission could allow individual sources to exceed the relevant criterion if the source demonstrates that beneficial uses would be fully protected in the basin.
- Sources that add heat loads to surface waters would not be deemed to be causing a violation of the numeric criterion if they are using recommended technologies and best management practices.

The Department also recommends special protection for: cold water refugia, threatened and endangered species, and waterbodies where dissolved oxygen levels are within 0.5 mg/l of the dissolved oxygen criteria. The proposed rule also protects aquatic species in lakes and estuaries from temperature increases caused by human activities.

Hydrogen Ion Concentration (pH): Spawning and rearing of salmonid fish species (including salmon and trout) are the most sensitive beneficial uses affected by pH. Values of pH outside the range in which the species evolved may result in both direct and indirect toxic effects. Direct effects result from interactions with the mechanism that moves ions across cell membranes. Indirect effects occur when pH influences the availability and toxicity of metals, ammonia, and other potentially toxic ions in the water column.

Studies indicate that the existing pH criteria (which, depending on location, allow a range from pH 6.5 to 9.0) are too restrictive. The Department therefore recommends that in Cascade lakes where the natural pH is lower than the existing standard of 6.5, the criterion should be changed to allow pH's of 6.0. Correspondingly, in certain basins in Eastern Oregon where pH's can naturally reach 9.0, the criterion should be raised from 8.5 to 9.0. To assure that high pH's in the Eastern waters are truly the result of naturally occurring processes, a study would be initiated in the appropriate basin when pH's of 8.7 or higher are detected. A violation of the standard would be triggered at pH's above 9.0.

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Bacteria: Protection of Oregonians engaged in water contact recreation such as swimming or windsurfing is the main reason for regulating water-borne pathogens. (Separate standards exist for drinking water.) Contact with or ingestion of bacteria, viruses, protozoa, and other microbes can cause skin and respiratory ailments, gastroenteritis, and other illnesses. Certain species of bacteria are used as indicators for the presence of other microbes because of their common fecal origin and the relative ease by which they can be counted. By controlling the presence of these bacteria, the Department assumes that other harmful microorganisms are also being controlled.

Studies conducted by EPA and experience among sewage treatment plant managers indicate that a standard could be devised that would be as protective as, and more efficient than, the existing interim bacteria standard.

The proposed rules specify a multi-faceted bacteria standard that includes the following major elements:

- Change from the use of fecal coliform or *Enterococci* species in freshwaters and non-shellfish-producing estuaries to *Escherichia coli* (*E. coli*) as the indicator species for the numeric criteria. Set an in-stream 30-day log mean limit of 126 *E. coli* per 100 ml. Require that single in-stream and effluent exceedences of more than 406 *E. coli* per 100 ml be followed up with additional testing to determine whether a systematic or long-term problem exists.
- Adopt a narrative criterion that prohibits surface water discharge of untreated human sewage or animal fecal waste. Some exceptions to the prohibition would apply:
 - The EQC could approve basin management plans that allow for limited overflows from sanitary and combined sewer systems.
 - Statewide, at least by the year 2010, overflows of sewage during winter would be allowed only due to a one in five year storm event or greater. Beginning upon rule adoption, overflows during summer could occur only because of a ten year/24 hour storm or greater. New treatment facilities would need to be designed to meet these conditions from the outset.
 - Managers of storm sewers would be required to remove illicit and cross connections.

- Contamination from nonpoint and non-human sources would be minimized through use of best management practices and treatment technologies.

Groundwater Nitrate: Protection of human health is the primary concern behind regulation of groundwater nitrate. Above certain concentration levels, nitrate in drinking water can cause reduced blood oxygen levels in infants. This condition is known as methemoglobinemia, or blue baby disease, which in its severe form can cause death. Currently there is only an interim criterion for groundwater nitrate, so this review was initiated to determine whether the interim level is appropriate for permanent adoption.

The Department recommends permanent adoption of the interim criterion. The number is widely accepted among public health officials as appropriate, and extensive studies by EPA and others have demonstrated that levels above this concentration may lead to health impacts.

**HOW TO
COMMENT:**

Public Hearings to provide information and receive public comment are scheduled as follows:

Sept 5, 1995 4:00 Eastern Oregon State College
Zabel Room 110
1410 L Avenue
La Grande, Oregon

Sept 6, 1995 4:00 The Conference Center
Garden Room
228 E Main Street
Medford, Oregon

Sept 7, 1995 4:30 Naterline Community Center
Room #6
169 SW Coast Highway
Newport, Oregon

Sept 12, 1995 3:00 DEQ Executive Building
Room 3A
811 SW Sixth Avenue
Portland, Oregon

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Written comments must be received by 5:00 p.m. on September 19, 1995 at the following address:

Department of Environmental Quality
Water Quality Division
811 S. W. 6th Avenue
Portland, Oregon, 97204

In addition to the rules contained in this mailing, the proposed rules may also be reviewed at the above address. Additional copies may be obtained from the Department by calling the Water Quality Division at 229-5279 or calling Oregon toll free 1-800-452-4011.

**WHAT IS THE
NEXT STEP:**

The Department will evaluate comments received and will make a recommendation to the Environmental Quality Commission. Interested parties can request to be notified of the date the Commission will consider the matter by writing to the Department at the above address.

TABLE A

DISSOLVED OXYGEN & INTERGRAVEL DISSOLVED OXYGEN CRITERIA

(Applicable to All Basins)

<u>Class</u>	<u>Concentration and Period¹</u>				<u>Use/Level of Protection</u>
	<u>30D</u>	<u>7D</u>	<u>7mi</u>	<u>Min</u>	
<u>Salmonid Spawning</u>		<u>11^{2,3}</u>		<u>9³</u> <u>8⁴</u> <u>6⁵</u>	Principal use of salmonid spawning and incubation of embryos until emergence from the gravels. Low risk of impairment to cold-water aquatic life, other native fish and invertebrates. The IGDO criteria represents an acute threshold for survival based on field studies.
<u>Cold Water</u>	<u>8⁵</u>		<u>6.5</u>	<u>6</u>	Primarily cold-water communities. Salmon, trout, cold-water invertebrates, and other native cool-water species exist throughout all or most of the year. Juvenile anadromous salmonids may rear throughout the year. No measurable risk level for these communities
<u>Cool Water</u>	<u>6.5</u>		<u>5</u>	<u>4</u>	Mixed native cool-water species, such as sculpins, smelt, and lampreys. Waterbodies includes estuaries. Salmonids and other cold-water biota may be present during part or all of the year but do not form a dominant component of the community structure. No measurable risk to cool-water species, slight risk to cold-water species present.
<u>Warm Water</u>	<u>5.5</u>			<u>4</u>	Waterbodies whose aquatic life beneficial uses are characterized by introduced, or native, warm-water species.
<u>No Risk</u>	<u>No Change from Background</u>				The only DO criterion that provides no additional risk is "no change from background." Waterbodies accorded this level of protection include marine waters and waters in Wilderness areas.

¹ 30-D = 30-day mean minimum as defined in definitions section.
² 7-D = Seven (7) day mean minimum as defined in definitions section.
³ 7mi = Seven (7) day minimum mean as defined in the definitions section.
⁴ Min = Absolute minimums for surface samples, spatial median minimum of IGDO

² When Intergravel DO levels are 8.0 or greater, 7-day DO levels may be as low as 9.0, without triggering a violation.

³ If conditions of altitude and natural temperature preclude achievement of the footnoted criteria, then 95% saturation applies.

⁴ Intergravel DO action level, spatial median minimum.

⁵ Intergravel DO criterion, spatial median minimum.

⁶ If conditions of altitude and natural temperature preclude achievement of 8 mg/l, then 90% saturation applies.

Shaded values present the absolute minimum criteria, unless the Department believes adequate data exists to apply the multiple criteria and associated periods.

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State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
Triennial Water Quality Standards Review:
Proposed Revisions to Standards

Rulemaking Statements

Pursuant to ORS 183.335(7), this statement provides information about the Environmental Quality Commission's intended action to adopt a rule.

1. Legal Authority

ORS 468B.020, ORS 468B.035, and ORS 468B.048 provide authority for implementation of the Clean Water Act and the setting of water quality standards. ORS 183.310 to 183.550 provide authority to adopt, modify or repeal rules for the administration of water quality standards. ORS 468B.165 mandates adoption of groundwater maximum measurable levels.

2. Need for the Rule

The standards proposed for review during the 1992-1994 Triennial Review were selected for several reasons: they did not offer adequate protection or were too stringent; they were not implementable; they were originally adopted on an interim basis; or they did not allow adequate accommodation for naturally occurring conditions.

Each of the proposed standards revisions is intended to solve the problem which inspired review of the standard. The major issues addressed include:

- Dissolved Oxygen: The proposed criteria are set to more closely reflect the needs of sensitive beneficial uses than the existing criteria.
- Temperature: The proposed standard has clear mechanisms for implementation, which are not present in the existing standard.
- Hydrogen Ion Concentration (pH): The proposed criteria recognize natural variability, and thereby reduce the number of exceedances that occur which indicate problems that don't actually exist.
- Bacteria: The proposed standard mandates use of indicator species that require less costly treatment than the existing standard, while still affording protection to beneficial uses.

- Groundwater Nitrate: The proposed maximum measurable level makes an interim standard permanent, as required by rule under the Groundwater Protection Act.

3. Principal Documents Relied Upon in this Rulemaking

Issue Papers for each standard under review were developed that document the literature review, Technical Advisory Committee discussions, alternatives considered, Policy Advisory Committee discussions, input from public workshops, and Department recommendations. These documents are available for review at DEQ Headquarters, Water Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, 97204. They may also be requested by calling (503) 229-5279. Because of the length of the documents (a total of over 500 pages) a small fee may be required.

4. Advisory Committee Involvement

Following identification of the standards to be reviewed, the review process relied heavily on input from a number of Advisory Committees. Two main Advisory Committees were created: one technical (TAC) and one dedicated to policy discussion (PAC). The TAC was composed of experts from other agencies and academia. Subcommittees with additional members were established to perform a technical review of each standard. The PAC consisted of representatives of environmental and recreation groups, industry, forestry, agriculture, and municipalities. The Subcommittees of the TAC presented their findings and suggested alternatives to the PAC. The PAC then made recommendations based on the technical findings and considerations of fairness and feasibility. The PAC voted unanimously in support of the proposed standards. With one small exception regarding the temperature rule, the proposed rules were also unanimously supported.

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State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
1992-1994 Triennial Water Quality Standards Review:
Proposed Revisions to Standards

Fiscal and Economic Impact Statement

Introduction

The Clean Water Act mandates that states set standards to protect designated beneficial uses of water. The State of Oregon has therefore established beneficial uses for each of 19 basins. The proposed numeric criteria chosen to protect these uses are either risk-based (bacteria and groundwater nitrate) or are set at levels that are intended to protect the uses from *measurable*, adverse impacts.

The proposed standards revisions would fully protect beneficial uses, just as the existing standards would if they were fully implemented. However, the proposed standards would generally provide greater flexibility to accommodate local conditions than is allowed by the current rules. In the case of temperature and dissolved oxygen, this flexibility would require that more information be available for use by both the Department and dischargers. The other proposed standards should require either the same, or less, effort from the Department and dischargers as the existing standards.

Assumptions and Caveats

- The impacts foreseen in the assessments contained in this document represent the marginal difference between the existing and proposed standards. The assessments generally assume full implementation of both the existing and proposed standards. Where this assumption has not been applied, a statement indicating the status of the present situation is included. The Department recognizes that the existing temperature standard has proven difficult to fully implement. Implementation of the proposed temperature standard would therefore be perceived as a new requirement by some dischargers whose permits include temperature requirements.
- Although the proposed temperature standard specifies a mechanism for bringing watersheds into compliance, once a waterbody is declared water-quality limited for a given parameter, the process for achieving compliance with the relevant criterion would be the same under the existing standards as under the proposed standards.

General Public

The economic impact of the proposed standards on the general public should be nominal. Some impacts could be felt indirectly due to costs or savings passed on by dischargers, and citizens who own property along riparian zones could find that they are required by local agencies to implement appropriate practices to minimize water quality impacts. (This would also be true under the existing standards if they were fully implemented.)

Large Businesses

Businesses that require neither discharge permits nor pretreatment prior to discharging into municipal sewers would not be affected by the proposed standards. Those businesses that do need surface water discharge permits or that have pretreatment requirements could be affected by the proposed temperature criteria. These effects could be either positive or negative since the proposed criteria are sometimes cooler and sometimes warmer than the existing temperature standard. In cases where the proposed criteria call for temperatures below the existing criteria, discharges that include heat loads could be required to decrease their loads or to mitigate their impacts elsewhere within the affected waterbody.

The proposed dissolved oxygen standard provides a less stringent criterion for dischargers who increase the amount of data provided through monitoring and analysis. This option would mean that businesses which have the capability to do increased sampling would face a more lenient standard than businesses that cannot provide the additional water quality data.

The proposed bacteria, pH, and groundwater nitrate standards are not expected to affect large businesses when compared to the existing standards.

Small Businesses

Businesses that require neither discharge permits nor pretreatment prior to discharging into municipal sewers would not be affected by the proposed standards. Those businesses that do need surface water discharge permits or that have pretreatment requirements could be affected by the proposed temperature criteria. These effects could be either positive or negative since the proposed criteria are sometimes cooler and sometimes warmer than the existing temperature standard. In cases where the proposed criteria call for temperatures below the existing criteria, discharges that include heat loads could be required to decrease their loads or to mitigate their impacts elsewhere within the affected waterbody.

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Agriculture

The proposed temperature and intergravel dissolved oxygen standards could affect farmers and ranchers who hold land in riparian zones or whose operations cause sediment and heat loads to surface waters that provide habitat to cold and cool water fisheries. As is true for the existing temperature standard, in watersheds with designated water-quality limited reaches, the Department of Agriculture would be requested to develop management plans to reduce the impacts from agricultural operations as authorized by ORS 568.900 to 568.933. Examples of appropriate management practices include leaving riparian buffers, contour plowing, and no-till farming.

In some cases, the intergravel dissolved oxygen (IGDO) standard could provide relief for those with sediment loads. The dissolved oxygen criteria for within the water column above the spawning beds may be reduced from 11 mg/l to 9 mg/l if the IGDO criteria are met within the beds.

Forestry

Forestry operations should not be affected by the proposed standards, as long as they are implementing the practices specified in the Forest Practices Act.

Local Government

The bacteria and temperature standards could affect sewage collection and treatment facilities. As with businesses (discussed above), the proposed temperature standard could prove positive or negative, depending on the beneficial uses present in the receiving stream.

Sewage collection and treatment facilities should benefit from the proposed bacteria standard. Those facilities which found the Enterococcus standard difficult to meet should be able to comply with the E. coli criteria more easily. Small facilities may want to negotiate a modified re-sampling schedule in their permits as allowed for in the proposed rule to avoid hardship due to the specified frequency of sampling in the event of a single-sample exceedance. Costs accrued due to assessment and removal of illicit and cross connections and inflow and infiltration problems should be more than offset by the allowance for overflows under specified hydrologic conditions.

State and Federal Agencies

Department of Environmental Quality: Revenues and expenditures other than staff time should not change due to the proposed standards. The proposed temperature and dissolved oxygen standards will require that more information be available for use by both the Department and dischargers. Specific guidance and training for regional personnel will be necessary, and point and nonpoint sources will need to be brought into compliance through appropriate permits or agreements with designated management agencies. (If the existing temperature standard could be fully implemented, the proposed rule would not result in an increase in effort.) The other proposed standards should require either the same, or less, effort from the Department and dischargers as the existing standards. The proposed changes in the pH criteria are suggested in order to reduce the level of attention the Department must devote to investigation of violations which are most probably natural background conditions.

Department of Agriculture: Where agriculture is a contributor to the problems in waterbodies that are designated as water-quality limited, DEQ will request that ODA work with the agricultural community to develop and implement management plans. Where confined animal feeding operations are contributing bacteria loads to surface waters, ODA will need to refine the design criteria and management practices in the non-discharging permits.

Department of Forestry: ODF will be responsible for implementation of the management practices developed pursuant to the Forest Practices Act. (This does not represent a change from the current situation.)

Department of Fish and Wildlife: ODFW has agreed to continue to work with DEQ to identify streams and lakes that provide habitat for various sensitive aquatic species.

Department of Transportation: ODOT and DEQ will need to collaborate to assure that temperature, bacteria, and intergravel dissolved oxygen criteria are met. (With the exception of the intergravel dissolved oxygen criteria, this does not represent a change from the current situation.)

U.S. Army Corps of Engineers: The proposed temperature standard recommends that releases from dams be made in such a way that temperatures are maintained within desirable ranges. DEQ and the Corps will need to discuss the releases from each dam to determine how they can be effectively used to support environmental purposes.

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State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
Rulemaking Proposal
for

1992-1994 Triennial Water Quality Standards Review: Proposed Revisions to Standards

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

The proposed standards revisions are designed to increase protection of beneficial uses and/or allow greater flexibility to accommodate local conditions. Major elements of the standards are as follows:

- The proposed modifications of the temperature and dissolved oxygen standards link the numeric criteria to presence of specific life stages of sensitive beneficial uses.
- The proposed dissolved oxygen standard adds numeric criteria for intergravel dissolved oxygen, which provides more direct protection to early life stages of salmonids than the existing water-column standard.
- The proposed pH standard recognizes that natural conditions vary more than was formerly acknowledged; this change would allow DEQ staff to spend their time addressing issues that will provide greater environmental benefits.
- The proposed bacteria standard mandates use of an indicator species that provides adequate protection, while requiring less disinfection than the indicator species that was adopted during the previous Review. The proposed bacteria rule also provides deadlines and design criteria for sewage treatment facilities to minimize risk to swimmers.
- The proposed nitrate standard provides the final step (for that pollutant) in fulfilling a statutory requirement to adopt maximum measurable levels for groundwater contaminants.

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes No

a. If yes, identify existing program/rule/activity:

National Pollutant Discharge Elimination System (NPDES)
Water Pollution Control Facilities permitting system (WPCF)
Establishment of groundwater management plans based on groundwater maximum measurable levels
Establishment of management plans for total maximum daily load (TMDL) allocations

NPDES and WPCF permitting programs require land use compatibility statements (LUCS) for all new sources. The LUCS must be sent in before the Department can initiate review of engineering plans and specifications.

The Department's development and implementation of groundwater management plans and TMDLs follows Division 18 regulations which require opportunity for local government review and comment.

- b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes No (if no, explain):

- c. If no, apply the following criteria to the proposed rules.

Staff should refer to Section III, subsection 2 of the SAC document in completing the evaluation form. Statewide Goal 6 - Air, Water and Land Resources is the primary goal that relates to DEQ authorities. However, other goals may apply such as Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources; Goal 11 - Public Facilities and Services; Goal 16 - Estuarine Resources; and Goal 19 - Ocean Resources. DEQ programs or rules that relate to statewide land use goals are considered land use programs if they are:

1. Specifically referenced in the statewide planning goals; or
2. Reasonably expected to have significant effects on
 - a. resources, objectives or areas identified in the statewide planning goals, or
 - b. present or future land uses identified in acknowledged comprehensive plans.

In applying criterion 2. above, two guidelines should be applied to assess land use significance:

- The land use responsibilities of a program/rule/action that involves more than one agency, are considered the responsibilities of the agency with primary authority.
- A determination of land use significance must consider the Department's mandate to protect public health and safety and the environment.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

3. If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Division

Intergovernmental Coord.

Date

Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.

The following questions should be clearly answered, so that a decision regarding the stringency of a proposed rulemaking action can be supported and defended:

Note: If a federal rule is relaxed, the same questions should be asked in arriving at a determination of whether to continue the existing more stringent state rule.

1. *Are there federal requirements that are applicable to this situation? If so, exactly what are they?*

The Clean Water Act requires that states set standards to protect the designated beneficial uses. Within certain bounds, states have great flexibility in the choice of criteria they select for each water quality parameter; however the criteria must provide protection to the most sensitive of the designated beneficial uses which are affected by a given parameter. The bounds set by EPA are slightly different depending on whether a waterbody is considered an Outstanding Resource Water, High Quality Water, or Water Quality Limited Water with respect to the parameter under consideration.

2. *Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?*

The applicable federal requirements are both. The Clean Water Act establishes a technology-based program to meet the established instream standards. If this level of protection proves inadequate, the Act requires more stringent water-quality based limits which are often set in conjunction with total maximum daily load allocations.

3. *Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?*

Because local conditions vary, EPA does not specify water quality criteria for states to follow. The proposed standards are however, consistent with EPA guidance. The proposed temperature, pH, and dissolved oxygen standards are based on the needs of cold and cool water species (salmonids and trout), which are among the most sensitive beneficial uses occurring in Oregon.

The federal drinking water standard provided the basis for the proposed groundwater nitrate maximum measurable level of 10 mg/l. Staff found no evidence to suggest that a number either more or less stringent should be adopted instead of the EPA recommendation.

4. *Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?*

The proposed changes to surface water standards would generally provide greater flexibility to accommodate local conditions than is allowed by the current rules. In order to take advantage of this flexibility, both dischargers and the Department will need more information about the local situation before a definitive answer on a given permit application can be provided. (However, based on the additional information, dischargers may face less stringent criteria than they would under the current standards.) The proposed standards therefore trade off some certainty for increased flexibility and efficiency.

5. *Is there a timing issue which might justify changing the time frame for implementation of federal requirements?*

Staff are aware of no such timing issues.

6. *Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?*

The proposed temperature standard specifically includes an allowance for future growth. The proposed bacteria standard provides for an occasional overflow that may occur as flows approach design capacity due to population growth.

7. *Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)*

Equity among various sources was specifically considered during the development of the proposed standards. Where a new requirement was predicted to impose undue hardship on particular types or sizes of dischargers, flexibility to accommodate their needs was written into the proposed rule. For example, dischargers of sewage are allowed by the proposed bacteria rule to negotiate a different resampling plan than that required in the rule if the mandated schedule would pose an undue burden.

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8. *Would others face increased costs if a more stringent rule is not enacted?*

The proposed temperature, dissolved oxygen, and pH criteria are intended to fully protect salmonid species. Fisheries and tourism would suffer from the loss of these species. The proposed bacteria standard assumes a level of risk of 8 cases of gastroenteritis per 1000 swimmers. If a less strict criterion were chosen, the risk of illness would increase.

9. *Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?*

EPA does not specify exact reporting or monitoring requirements for water quality standards. However, if the Department were to recommend standards that provide less protection to sensitive beneficial uses than the existing standards, EPA could fail to approve the new standards.

10. *Is demonstrated technology available to comply with the proposed requirement?*

Technologies and practices exist to comply with the proposed standards. However, due to the potential costs and tradeoffs associated with the technologies and practices, the proposed standards include flexibility to accommodate trades and iterative approaches.

11. *Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?*

The management plans that would be required in water-quality limited situations would require pollution prevention activities from nonpoint sources. The allowance in the proposed temperature rule for mitigation would permit use of least-cost technologies and practices.

HUMAN HEALTH AND ENVIRONMENTAL ADVISORY

PROPOSED DEPARTMENT ACTION: The Department of Environmental Quality proposes to adopt 10 mg/L as the Maximum Measurable Level (MML) for groundwater nitrate. By statute, when groundwater in a geographic area is determined to exceed 70 percent of the MML, the area must be designated a groundwater management area. When a groundwater management area is declared, the following actions occur:

- An investigative study of the groundwater is undertaken to verify the extent, variation, and magnitude of contaminant levels
- If possible, potential sources of the contaminant are identified
- Management plans are developed to reduce future loading of the contaminant to groundwater

REASON FOR THIS ADVISORY: When an MML is proposed for adoption, OAR 340-40-130 requires that the information included in this Advisory be made available to the public. The purpose of the Advisory is to explain the significance of the proposed MML for human health and the environment.

A. **Common Name:** Groundwater Nitrate
Technical Name: Nitrate Nitrogen
Chemical Identity: $\text{NO}_3\text{-N}$
CAS Number: 14797-55-8
Synonyms: None

B. **How Nitrate is Released to the Environment:** Nitrogen is naturally occurring in both the atmosphere and in organic matter. Microbes can transform gaseous nitrogen into nitrate in the soil. Amino acids in plant debris or animal waste can be broken down into various compounds of nitrogen, including nitrate. Nitrogen can also be added to groundwater through leaching of inorganic fertilizers.

How Releases Occur in Nature: Releases may occur whenever nitrate in the soil is not used by plants or soil organisms, and water containing the excess nitrate mixes with groundwater.

Fate of Nitrate in the Environment: Once nitrate has reached an aquifer (a water-bearing layer which contains groundwater), the nitrate remains in the groundwater until a plant or other nitrogen-seeking entity removes it. Aquifers are often located far beyond the depth to which roots penetrate, so groundwater nitrate remains in the aquifer until it is drawn out through wells or discharged to a surface waterbody like a stream or lake.

C. **Actual Occurrence of Nitrate in Groundwater across the State:** Naturally occurring levels of nitrate in surface and groundwater do not generally exceed 2 mg/L. Groundwater nitrate has been found in many areas of the state at levels that exceed this number. Examples of human sources of nitrate include: agricultural operations, confined animal feeding operations, urban horticultural practices, septic systems, leaking land-fills, and emissions from motor vehicles. Currently, based on the interim MML of 10 mg/L, two groundwater management areas have been declared: Lower Umatilla Basin and Northern Malheur County.

Potential Occurrence of Nitrate in Groundwater across the State: Wherever human activities result in nitrogen concentrations that exceed the capacity of plants and soil to remove it, groundwater nitrate can result.

- D. **Means of Human Exposure to Nitrate:** Humans are exposed to groundwater nitrate primarily through ingestion of contaminated water.

Fate of Nitrate in Humans, and Human Health Effects: Nitrate levels above 10 mg/L may represent a serious health concern for infants and pregnant or nursing women. Adults receive more nitrate exposure from food. Infants receive the greatest exposure from drinking water because most of their food is in liquid form. Nitrate can interfere with the ability of the blood to carry oxygen to vital tissues of the body in infants six months old or younger. The result is called methemoglobinemia, or "blue baby syndrome." Pregnant women may be less able to tolerate nitrate, and nitrate in the milk of nursing mothers may affect infants directly. These persons should not consume water containing more than 10 mg/L nitrate either directly, or added to food products and beverages (especially in baby formula). Other domestic use of this water supply is acceptable, including washing and bathing.

Available health information suggests that non-sensitive persons, including healthy adults and children older than six months in age, can consume water containing up to 20 mg/L nitrate without experiencing adverse health effects. At nitrate levels above 20 mg/L the Oregon Health Division recommends that alternate water supplies be used by all persons.

- E. **Environmental Effects of Nitrate (including both aquatic and terrestrial organisms):** As groundwater seeps into surface waters, nitrates can become nutrients for algae and other plant forms. When the algae and other photosynthesizing organisms respire at night, they use oxygen which is needed by fish and other aquatic species. When contaminated groundwater creates a surface-water problem, standards set to protect surface waters may result in additional cleanup requirements for the contaminated groundwater.

- F. **Maximum Measurable Level Established:** 10 mg/L

Basis for Establishment: EPA studies indicate that the health of infants and pregnant women is protected up to about 10 mg/L of nitrate in drinking water. 10 mg/L is generally accepted as the appropriate limit by public health officials nationwide.

- G. **How to Obtain Testing:** Samples drawn from existing wells may be analyzed by certified laboratories. A list of certified laboratories can be obtained by writing to: Oregon Health Division, Drinking Water Section, P.O. Box 14450, Portland, Oregon, 97214, or by calling (503) 731-4010.

- H. **How Citizens may Initiate Establishment of a Groundwater Area of Concern or a Groundwater Management Area:** Citizens may submit test results to the Department of Environmental Quality. The Department will evaluate those results along with others and determine the priority for further investigations.

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State of Oregon
Department of Environmental Quality

Memorandum

Date: November 17, 1995

To: Environmental Quality Commission
From: Lynne Kennedy, Standards and Assessment, Water Quality Division
Subject: Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time: September 5, 1995, 4:00 p.m.
Hearing Location: LaGrande, Oregon

Hearing Date and Time: September 6, 1995, 4:00 p.m.
Hearing Location: Medford, Oregon

Hearing Date and Time: September 7, 1995, 4:30 p.m.
Hearing Location: Newport, Oregon

Hearing Date and Time: September 12, 1995, 3:00 p.m.
Hearing Location: Portland, Oregon

Title of Proposal: 1992-1994 Triennial Water Quality Standards Review:
Proposed Revisions to Standards

The rulemaking hearings on the above-titled proposal were convened at the above listed times. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

Fifteen (15) people attended the LaGrande hearing, and eight (8) people signed up to give testimony. In Medford, five (5) people attended the hearing, and two (2) people signed up to give testimony. Three (3) people attended the hearing in Newport, and no one presented testimony; eight (8) people attended the hearing in Portland, and no testimony was given.

Prior to receiving testimony, Neil Mullane briefly explained the specific rulemaking proposal, the reason for the proposal, and responded to questions from the audience. People were then called to testify in the order of receipt of witness registration forms. When no one else expressed an interest to testify, the hearings were closed.

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Attachments:

Summary of oral testimony submitted for the record.

Public Hearings - Oral Testimony
1992-1994 Water Quality Triennial Water Quality Standards Review:
Proposed Revisions to Standards

LaGrande, Oregon
September 5, 1995

1. **Michael Barlow**
2524 Mitchell Butte Road
Nyssa, Oregon 97913

Mr. Barlow indicated he worked for the Malheur Soil and Water Conservation District but was presenting testimony on behalf of the food producers coalition. He said the hearing was being held at an inopportune time since harvesting occurred at this time. He said more people would have attended the hearing otherwise.

Mr. Barlow said he agrees with the nitrate policy. However, he said, there are some wells in the desert where no one would benefit from the groundwater limit. He commented that volcanic glass and ash, commonly found in eastern Oregon, contains nitrates naturally. Additionally, pH levels are naturally high in this area - above 9.0.

Mr. Barlow said that in regard to the bacteria for confined animal feedlot operations (CAFOs), the rules seem unfair; that is, septic systems are allowed a surface water impact where CAFOs are required to obtain zero amounts.

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He also questioned whether the temperature for eastern Oregon should be the same as western Oregon. He indicated that no salmonids migrate in eastern Oregon, either historically and certainly not now. He said the area will not be able to meet dissolved oxygen standards and that the standards should present multiple uses not just fish.

Concluding, Mr. Barlow invited the Department of Environmental Quality to visit eastern Oregon so that a better understanding could be achieved about how to protect the areas natural resources and economic base.

2. Bill Hart

Union County Soil and Water Conservation District
10507 N. McAlister
LaGrande, Oregon 97850

Mr. Hart said he agreed with Ms. Tromp Van Holst's comments that the notice had been inadequate for the public hearings; however, he said the workshops were a good idea but attendance was low. Mr. Hart commented that if the Department wanted more public involvement, meetings need to be better publicized and more meetings held. He wondered if due process had occurred and asked if the rules were different than those presented in May

Further, Mr. Hart asked about how total maximum daily loads (TMDLs) will be set for each basin. He said the determinations should be presented in more detail.

He said that outstanding resource waters (ORWs) determinations were presented in May at the end of the workshop when most had left. He said ORWs are very different from other standards. Mr. Hart indicated that State Parks and Recreations and the Department of Forestry have jurisdiction over these types of issues and that the DEQ is not the appropriate authority.

Mr. Hart added that a great deal of data is available on the Grande Ronde but is not the continuous, fixed data throughout the basin necessary for showing conclusions.

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3. **Honorable Russ Hirsch**
Malheur County Court Judge
1070 Alameda
Ontario, Oregon 97914

Judge Hirsch said he grew up in Hells Canyon. He said that a more realistic approach is need and that pH will always be a problem along with arsenic and mercury.

4. **Bill Howell**
P. O. Box 151
Imbler, Oregon 97841

Mr. Howell said he was a farmer from Imbler and was also the director of Grande Ronde Model Watershed Council. He said he did not intend to testify but decided to so. Mr. Howell said he had lived in eastern Oregon all his life, and the Grande Ronde River has not changed much. He indicated that conditions will be difficult to change. Mr. Howell commented that inflows to the Grande Ronde are higher than the standard. He said that in the valley floor, the river runs its own course with or without use by man. Mr. Howell said that prior to irrigation, the river had lower summer flows so agriculture should not be blamed.

Mr. Howell asked about implementation of the regulations. He expressed concerned that the rules are not achievable. He said the regulations could haunt us in the future and that most people do not want more regulations. Mr. Howell added that little notice was provided to area residents.

5. **Ron Jones**
863 Morgan Avenue
Ontario, Oregon 97914

Mr. Jones is the Malheur Water Quality Farm Planner for the Soil and Water Conservation District. Mr. Jones also submitted a written copy of his testimony. He said that he opposed the new standards and requested an extension of the comment period. Mr. Jones said he agreed that science is an important background but that these unrealistic standards would not increase flexibility.

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He said the temperature standards will not be met. Mr. Jones indicated there were numerous desert streams in Malheur County and very high air temperatures occurred there. He added that those streams are flat and flow slowly. He said the Department must consider the local conditions.

In regard to CAFOs, Mr. Jones commented that allowances should be provided. He said that other sources may have effect on a waterbody but the CAFO cannot. Mr. Jones indicated that best management practices are being used and asked if the Department would require different methods for achieving similar results.

6. Kit Kamo
2925 S. W. Sixth Avenue
Ontario, Oregon 97914

Mr. Kamo also provided a written copy of his testimony. He said that he received notice only regarding groundwater nitrate not the other standards.

Also, Mr. Kamo said that the temperature standard should not apply to just certain eastern Oregon basins since dams have ended migration of anadromous species to the upper Snake basin. He commented that the temperature rule does not accommodate the hot summer climate of eastern Oregon (e.g., for example, the Owyhee starts very cold but warms quickly; small and intermittent streams heat up naturally).

Further, Mr. Kamo said that land users will be accused of violating standards that could never be met. He indicated that several of the proposed standards will not be met by eastern Oregon streams.

Mr. Kamo proposed the following interim solution: adopt only the groundwater nitrate standard and adopt the remaining standards for western Oregon only. Also, he suggested that waterbodies east of the Cascades should be studied further so that more relevant water quality standards can be developed.

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7. Darrell Standage
1732 Sandhollow Road
Vale, Oregon 97918

Mr. Standage is the chair of the Malheur Owyhee Watershed Council and submitted a written copy of this testimony. He commented that LaGrande was a long distance for him to travel and that the hearing was held at an inconvenient time during harvesting and haying. He added that the hearing was also held too early in the day.

He requested that the comment period for the rules be extended so that the potential effects of the rules could be discussed. Mr. Standage said that without further discussions, assumptions could be made that two basins would immediately be out of compliance. He said the rules seemed to be designed to protect fish, specifically salmon. He commented that no anadromous fish migration has occurred in eastern Oregon since the Hells Canyon Dam was built

Mr. Standage said the temperature standard was unrealistic for the area. He indicated that local participation will be difficult and that people should not be considered guilty until a violation is proven

He said that CAFOs should have a bacteria allowance; that certain land uses will be regulated but practices have not been identified. Mr. Standage asked if the practices will ignore the special conditions of the area.

Mr. Standage suggested that basin-wide citizens groups be to used set local standards.

8. Melanie Tromp Van Holst
65858 McKennon Terrace
Cove, Oregon 97824

Ms. Tromp Van Holst said she represented the Union County Soil and Water Conservation District. She said that many people in eastern Oregon objected to the public notice process. She said the residents did not feel included in the process. Ms. Tromp Van Holst said that the Department advertised only one day

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in the newspaper for the workshops. Additionally, she said that Malheur County was not given notice of the hearing. She indicated that not enough time was provided for the county to meet and review the rules in order to bring a represented response to the hearings.

Medford, Oregon
September 6, 1995

1. **Ivend Holen**
(Jackson County Soil and Water Conservation District)
1119 Ellen Avenue
Medford, Oregon 97501

Mr. Holen provided a copy of his testimony and a copy of Senate Bill 305. He expressed reservations about the proposed rules, especially in regard to the temperature rules. He said that currently the standard applies to point sources (artificial sources) but the new rules will affect nonpoint sources including agricultural practices.

He said that most of the rivers in the state cannot meet the standard during the summer. He said that normal activities could be held accountable for activities such as irrigation withdrawals and watering cattle. However, agricultural lands would be required to develop management plans.

Mr. Holen said that the effects of the E. coli criteria could be contrary to what the public notice presented in the fiscal/economic impact statement. He referred to Senate Bill 305, vetoed by the Governor, which would have provided compensation to landowners complying with environmental regulations. He said this proposed bacteria rule could lead to passage of another such law.

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2. **Honorable Gordon Ross**
Coos County Commissioner
1050 Stock Slough
Coos Bay, Oregon 97420

Commissioner Ross also submitted written testimony from himself and the other county commissioners. He concurred with Mr. Holen's concerns. He said that a bottom-up approach was more effective than a bottom-down approach.

He said that the time needed to create a management plan could be better spent on water quality improvements. Additionally, Commissioner Gordon expressed concern that the 2010 requirement would not allow towns to use a biofiltration system where summer effluent is used to irrigate agricultural land and is discharged into the river off season.

He said that there are two ways to lower temperature: to increase shade and increase the flow. He asked if best management practices would affect the flow.

Commissioner Gordon said that Pam Blake of the Department's Western Regional Office has been working with dairy and oyster farmers in developing cooperative efforts. He said that goals are better than a stick. He added that nonpoint sources are difficult to identify and that inaccurate determinations could leave the Department open to lawsuits.

He said enthusiasm exists in the local areas and that government efforts are not needed. Commissioner Gordon said that the local extension office and Department of Fish and Wildlife work well together in that area.

Newport, Oregon
September 7, 1995

Portland, Oregon
September 12, 1995

No one provided testimony.

No one provided testimony.

State of Oregon
Department of Environmental Quality

Memorandum

Date: November 17, 1995

To: Environmental Quality Commission

From: Lynne Kennedy, Water Quality Division, Standards and Assessments Section

Subject: Summary of Written Comment on the 1992-1994 Triennial Water Quality Standards Review: Proposed Revisions to Standards

The summaries on the following pages capture the major points made in written comment received during the public comment period for the rules proposed as a result of the 1992-1994 Triennial Water Quality Standards Review. The summaries were compiled by Katina Olson, Water Quality Division, Standards and Assessments Section.

In compliance with Oregon statute on public involvement, only those comments that were received by the Water Quality Division between July 28, 1995 and September 19, 1995 are included as part of the legal record. Copies of the original letters are enclosed under separate cover. (The staff report sent to interested persons does not include the summaries or copies of the letters due to the volume of the materials. Copies may be obtained upon request, for a fee, or may be viewed by appointment at DEQ Headquarters, Fifth Floor, 811 SW Sixth Avenue, Portland, Oregon.)

Written Comments Received

	Last Name	First Name	Affiliation
1	Andrews	Bruce	Oregon Department of Agriculture
2	Barlow	Max/Michael	Citizen
3	Bell	Nina	Northwest Environmental Advocates
4	Botts	Cassandra	Citizen, Joseph
5	Buck	Dale	Tillamook County Farm Bureau
6	Cannon	Deb	Oregon Department of Agriculture
7	Carter	Lolita	Portland General Electric
8	Conley	James	North Santiam Watershed Council
9	Coos County		Board of Commissioners
10	Degenhardt	David	Oregon Department of Forestry
11	Douglas County		Board of Commissioners
12	Dryden	William	Boise Cascade
13	Gaffi	Bill	Unified Sewerage Agency
14	Godbout	Kevin	Weyerhaeuser
15	Hamilton	Jessica	Columbia Basin Institute
16	Hart	William	Union Soil and Water Conservation District
17	Heidgerken	Todd	Water for Life, Inc.
18	Kappa	Rob	City of Milwaukie
19	Kelly	John	Confederated Tribes of the Warm Springs Reservation
20	Larson	Larry/Patricia	Citizens, LaGrande
21	Low	Joni	League of Oregon Cities
22	Miller	Janice	Unified Sewerage Agency

	Last Name	First Name	Affiliation
23	Nelson	Dennis	Oregon Department of Human Resources
24	Ollerenshaw	James	Oregon Association of Clean Water Agencies
25	Patterson	Bob	City of Pendleton
26	Perry	Patricia	Grande Ronde Model Watershed Program
27	Power	Laurie	Eugene Water & Electric Board
28	Reynolds	Dennis	Grant County Court Judge
29	Schroeder	Kirk	American Fisheries Society, Oregon Chapter
30	Shock	Clinton	Oregon State University
31	Silva	Louisa	Citizen, Salem
32	Simmons	Mark	Northwest Timber Works Resource Council
33	Sims	Mike	Tillamook Creamery Association
34	Smith	Jack	Omicron Associates
35	Smith	Mike	Grant County Water and Riparian Board
36	Smith	Terry	City of Eugene
37	Stilwell	Carrie	Oregon Natural Desert Association
38	Strong	Ted	Columbia River Inter-Tribal Fish Commission
39	Test	Peter	Oregon Farm Bureau
40	VanNatta	Kathryn	Northwest Pulp & Paper
41	Whitty	James	Associated Oregon Industries

**1992-1994 Triennial Water Quality Standards Review:
Proposed Revisions to Standards**

**Summary of Written Comments Received by the
Oregon Department of Environmental Quality**

1. **Bruce Andrews, Director**
Oregon Department of Agriculture (ODA)
635 Capitol Street, N. E.
Salem, Oregon 97310-0110

Mr. Andrews said that the ODA believes that portions of the proposed rules could not be implemented easily; they have concerns with dissolved oxygen, temperature and bacteria.

General concerns. The ODA suggested organizing the rules by including a preamble, criteria, exceptions and actions to be taken if criteria are violated.

He said the narrative criteria of the rules uses a command and control approach which expands the state's regulatory presence in nonpoint source issues. He said this approach is unworkable, will be difficult to implement and enforce, will be politically unacceptable and is beyond the state's current and projected financial means. Mr. Andrews said the ODA believes regulatory approaches for nonpoint sources should be reserved for specific situations triggered by clearly defined processes.

Mr. Andrews said before triggering narrative criteria requiring management plans by designated management agencies (DMAs) for nonpoint sources in water quality limited (WQL) waterbodies, a clear evaluation, interagency consultation and Environmental Quality Commission (EQC) request process be followed. He suggested the following language to allow this process.

If DEQ has reason to believe that agricultural discharges or activities have made a significant contribution toward the adverse trend, DEQ shall hold a consultation with the ODA. If water quality impacts are likely from agricultural sources in addition to confined animal feeding operations, and the DEQ determines that a management plan is necessary, the DEQ will ask the EQC to adopt a rule requiring an agricultural water quality plan. The DEQ shall then ask the ODA to prepare and implement such a plan pursuant to ORS 568.900 to 568.933 and OAR 603-90-000 through 603-90-120.

Mr. Andrews said that the approach to develop the management plans by DMAs, particularly for temperature and bacteria, is contrary to the ODA's and State Board of Agriculture's purpose and guidance provided in OAR Chapter 603 Division 90.

Dissolved oxygen. The ODA expressed agreement that the DEQ should determine if natural conditions are responsible for violations but urged that the determination process be developed before the proposed rule amendments are adopted. Additionally, Mr. Andrews stated the intergravel dissolved oxygen (IGDO) standard is unclear about whether the rule will be implemented on a site-by-site basis. He said this point needs clarification and that violation actions should be clearly defined.

Temperature. Mr. Andrews said that the ODA had significant concerns with the temperature standard, specifically the narrative criteria. He said the fiscal impact statement indicates little or no effects would be felt if the standard was implemented; nonetheless, the Department has not been able to implement existing temperature standards due to lack of resources. He said that implementation of the proposed standard would require significant commitment of new state and local resources. Additionally, Mr. Andrews said that implementation of the proposed standards is impractical and not feasible in WQL areas. He said that no mechanism exists for identifying sources of temperature pollution in WQL areas. He commented that management plans developed by the ODA for controlling temperature problems created by agricultural nonpoint sources will not be practice or best management practices (BMP) specific. Mr. Andrews said in regard to current landowners being responsible for making riparian improvements that this requirement would not receive public support and appeared to be unjustified. Further, he said the format of the rules appears confusing and that the rules could be interpreted in many different ways.

Bacteria. He said the ODA's concern with this standard are with the narrative criteria, the discrepancies and inequities in applying the standards to livestock and other sources, what happens when violations exist and the potential increased workload.

He said the rules contain conflicting requirements for raw sewage discharge, including livestock, and (Confined Animal Feedlot Operation) CAFO sources of bacteria. He stated that a zero detectable standard is not practical or could not be implemented. Mr. Andrews said the rules should focus on limiting direct discharges from point source conditions of CAFOs, and waste management system plans should be used to correct deficiencies related to indirect discharges from nonpoint sources. He said a clear mechanism should be developed to identifying nonpoint sources of bacterial pollution in WQL areas. For WQL areas for bacteria, the rules pertaining to agricultural sources should be clarified as follows:

- CAFOs operating under a National Pollutant Discharge Elimination System (NPDES) permit: incorporate bacteria standards into the permit.
- CAFOs operating under a general Water Pollution Control Facility (WPCF) permit: modify the permit to require waste management plans for operating in areas designated water quality limited for bacteria.
- Non-permitted CAFO sources: address concerns through an area evaluation and planning process.
- Nonpoint sources: address concerns through an area evaluation and planning process.

Mr. Andrews reiterated that any area management plan developed by the ODA for controlling bacteria problems created by agricultural nonpoint sources would be objective based and not practice BMP specific. Additionally, he said the format of these rules were, again, confusing and open to multiple interpretation.

2. Max and Michael Barlow

Barlow Farms
2524 Mitchell Butte Road
Nyssa, Oregon 97913

The Barlows said that surface soil and water resources are valuable and need to be safeguarded. They said that while the water quality standards were written with good intentions, both present and revised rules do not provide a cohesive relationship between Malheur County and western Oregon. They said that because of the natural conditions in southeastern Oregon, water levels change dramatically with the seasons; water temperatures change drastically between the cool nights and hot days. Because of these variations, plant nutrients, pH and dissolved oxygen can easily go beyond allowed parameters of the rules.

The Barlows said the proposed standards would be unnatural and suggested that the standards be broadened to account for natural regional conditions in regard to temperature and dissolved oxygen standards. Further, they suggested the Department consider modifications. The groundwater nitrate standard and other groundwater standards could be adopted as proposed for the entire state; the surface water standards could be adopted for western Oregon but adoption of surface water quality standards east of the Cascades could be deferred until a study could be completed over the next two summers. Additionally, the Barlows said the study results should be well publicized and made available for public review and comment before adoption.

3. **Nina Bell, Executive Director**
Northwest Environmental Advocates
302 Haseltine Building
133 S. W. Second Avenue
Portland, Oregon 97204-3526

Ms. Bell said the Department needs to identify criteria for the EQC for evaluating bacteria management plans (relevant to Oregon Administrative Rules (OAR) 340-41-Basin (2)(e)(D)(i) and (E)(ii)). Additionally, she said the Department needs to clarify the approved basin surface water temperature management plans referred to in sections were required when criteria were violated anywhere in the basin.

4. **Cassandra Botts**
83374 Airport Lane
Joseph, Oregon 97846

Ms. Botts stated that one-size-fits-all standards do not work in Oregon: that eastern and western Oregon are different in climates and in geography. She said the proposed temperature standard for bull trout is not likely attainable in eastern Oregon. She indicated that eastern Oregon has a great deal of tree density. She said that lack of mobility due to physical barriers or dewatering probably has more to do with the decline in bull and other trout species than water temperature.

She warned that the Department must not cause more problems with these proposed rules while trying to increase bull trout and salmonid populations. Ms. Botts commented that the Department's proposed standards should agree with the state Forest Practices Act (FPA) rules in regard to riparian standards and that the Department should not duplicate Oregon Department of Forestry (ODF) efforts.

Concluding, she said that management plans should be handled by local water boards, and the Department should not try to seek funding and additional staffing to carry out a program that is already in place.

5. **Dale Buck, President**
Tillamook County Farm Bureau
5850 Highway 101 S.
Tillamook, Oregon 97141

Mr. Buck proposed the following changes:

- That the Department use the proposed E. coli indicator species over fecal coliform for the numeric criteria.
- That the Department adopt the interim criterion for groundwater nitrate.

- That the Department set dissolved oxygen and temperature as low as possible to receive warm water discharge from industrial activity while protecting vulnerable streams.

6. Deb Cannon, Shellfish Program Specialist

Food Safety Division, Oregon Department of Agriculture (ODA)
635 Capitol Street, N. E.
Salem, Oregon 97310-0110

Ms. Cannon indicated that several sewage treatment plants and other effluent discharges do not discharge directly to commercial shellfish areas but could effect shellfish areas upstream from discharging sources. She asked if these types of plants would be required to test for fecal coliform or E. coli.

She said that at least three recreational shellfish growing areas could possibly become commercial shellfish growing areas. While these areas may not be considered approved by the ODA, the areas could be managed and considered as conditionally approved. Ms. Cannon said no funding was available to survey and monitor those areas. She said that water quality data gathered in these areas could assist in future classification and beneficial use promotion of the waters.

Ms. Cannon indicated that the ODA's Shellfish Program and related Laboratory Services will continue to monitor shellfish growing areas using the fecal coliform pollution indicator which is required by the U. S. Food and Drug Administration (USFDA). She said that the USFDA has not indicated this directive would be changed, and she expressed hoped that the ODA and Department could continue their good working relationship.

7. Lolita Carter, Ph.D., Environmental Specialist

Portland General Electric (PGE)
121 S. W. Salmon Street
Portland, Oregon 97204

Ms. Carter spoke to the following areas of the standards: flexibility, temperatures, bull trout habitat, releases from reservoirs and one-degree limitation. Each are summarized below:

Flexibility. She said the rules need to be flexible enough for the Department to adjust rule application to different climates, extreme weather conditions, geographic altitude and other geographic or scientific based discrepancies. Also, the rules should provide flexibility so that non-traditional methods can be used to gain compliance.

PGE recommended the rules be based on a watershed-by-watershed basis rather than based on a single fish classification whenever possible. Additionally, the rules need to be flexible while protecting beneficial uses.

Temperature. Ms. Carter said the standards seem to consider freely flowing streams which are not stratified and temperature regimes and stream characteristics used for spawning and rearing anadromous salmonids. She said the proposed standards for IGDO and for temperature are inappropriate at depths found in reservoirs and lakes. PGE recommended the Department define or show the standards are intended for freely flowing streams.

Bull trout habitat. She said that the water quality standards should be limited to stream segments where bull trout are actually spawning and where first year juveniles are present. PGE recommended the Department limit temperature to 10°C for flowing streams where bull trout spawn and live for the first year; uniform water temperature throughout either flowing or standing waters does not provide a productive ecosystem since diversity necessary for survival is lacking.

Releases from reservoirs. Ms. Carter said this standard is not enforceable or practical without defining a significant adverse impact to downstream designated beneficial uses. She commented that the proposed standard could create third-party lawsuits over water for fisheries, power production and water ownership.

PGE recommended changing *shall* to *may* and indicated the rule does not specify who is required to develop a plan. Additionally, the rule provides no determination as to which beneficial use would prevail in conflicts between downstream beneficial uses. Ms. Carter added that no compensation or resolution exists in the rules if the Department changes water temperature and impairs an existing beneficial use.

PGE recommended the Department work with the Oregon Department of Fish and Wildlife (ODFW) to create an interagency memorandum of understanding (MOU) to manage those affected fish.

One-degree limitation. Ms. Carter indicated that this rule does not consider point source discharges as primary sources of heat to water. She said no guidance is provided about separating natural conditions from non-point and point heat sources; this limitation can critically restrict the withdrawal, under legitimate water rights, of water from streams. PGE recommended the rule specifically state that non-point discharges would be regulated and how landowners can attain compliance.

8. **James Conely**
North Santiam Watershed Council
P. O. Box 18361
Salem, Oregon 97305

The Council commented on dissolved oxygen and temperature. Below are specific issues raised.

Dissolved oxygen. The Council suggested that the ODFW rather than the Department should identify the waterbodies which provide salmonid spawning areas. Additionally, they suggested that determining natural surface water temperature could be accomplished by presuming that surface water temperatures are naturally low unless proven otherwise. The Council recommended that units provided in the tables be adequately labeled and defined and that redundancies be eliminated.

Temperature. In regard to OAR 340-41-[Basin](2)(b), the Council stated that the Department is granted excessive discretion and that paragraph (C) and associated subparagraphs be deleted.

Paragraph (H) is a major issue for the Council. They said that the ODFW has an official list of sensitive species, and the Department should not subvert the list. Paragraph (M) and associated paragraphs should be deleted since the proposed rules present conflicting, contradictory actions.

Further, the Council questioned how the Department will determine base temperatures when anthropogenic sources are and have been discharging wastes which will increase temperature. In regard to OAR 340-41-026 subparagraph (v), the proposed rules present conflicting, contradictory actions with subparagraph (vi). They recommended that subparagraph (v) be deleted.

In concluding, the Council said the proposed rules were complicated and that a flow chart or guide would be helpful for easier application. Additionally, they said a list of identified waterways indicating fish temperatures and naturally occurring pH extremes would be useful.

9. Coos County Board of Commissioners
Coos County Courthouse
Coquille, Oregon 97423

In regard to page 4 of the *Chance to Comment On* document, waterbodies in which salmonid species spawn or rear should not exceed 55°F during the spawning and rearing seasons, the Coos County Commissioners suggested the Department specify spawning and rearing seasons from December through May.

In regard to page 5 of the *Chance to Comment On* document, the Commission indicated this requirement would prohibit small towns from using a biofiltration system. The 2010 requirement would not allow towns to recoup investments and would discourage towns from reusing water when they had previously been able to rely upon water right permits.

10. **David Degenhardt, Forest/Water Issues Coordinator**
Oregon Department of Forestry (DOF)
2600 State Street
Salem, Oregon 97310

The DOF suggested wording additions and deletions to help clarify and enhance understanding of the rules (Temperature: (A)(i); (A)(iv); (B); (F); (L)(ii); Dissolved Oxygen: definitions 46, 49 and 52). Additionally, the following changes were recommended:

Temperature. (F) The focus of this rule should be cool water temperatures rather than unaltered conditions since natural conditions are always changing. The DOF suggested alternative language.

(L)(ii) The DOF modified this requirement such that an exempt condition would be a temperature that is great than 9 of 10 in an annual series of 7 days average maximum temperatures.

Dissolved oxygen. In definitions 46 and 49, the term *diurnal* should be *diel*.

11. **Douglas County Board of Commissioners**
1036 s. E. Douglas Avenue, Room 217
Roseburg, Oregon 97470

The Commissioners suggested that the pH issue be further studied. They said that during this extended study period that pH criteria for the south Cascades including Douglas County and physiographic area known as the Klamath Province be included in the Department's proposed revision. Because pH in the Cascade and Klamath Province appear to be naturally in excess of standards, they asked that the standard be increased to pH level 9, the proposed pH levels for eastern Oregon and high lakes.

They expressed concern about the temperature standard and Umpqua River system. The Commissioners questioned why anomalous populations living in areas that would normally be considered unfavorable need to be further studied. They said this issue that affects the Umpqua Basin, Klamath Province and eastern Oregon.

12. **William Dryden, Public and Private Timber Affairs**
Boise Cascade (BC)
One Jefferson Square
Boise, Idaho 83728

Mr. Dryden indicated that Boise Cascade supported the intent of the standards. He commented on point and nonpoint source issues for the proposed temperature and dissolved oxygen standards.

He indicated that BC is concerned the proposed rules do not accurately reflect the Forest Practices Act (FPA) in addressing water quality and Department's involvement in and support of that program. Mr. Dryden made the following recommendations:

- That the ODF be designated the management agency for commercial forestry activities and that the FPA be the accepted management plan for implementing water quality standards for forest operations. Additionally, Mr. Dryden suggested adding the following wording:

Forest operations in compliance with the FPA rules, including the riparian provisions are deemed to be in compliance with the water quality standards.

This proposed wording would help support the Department's policy statement that forestry operations implementing the FPA will not be affected by the proposed standards.

He suggested the Department emphasize throughout the rules the legislative direction regarding water quality and forest practices. Mr. Dryden said the concept of a department-approved basin surface water temperature management plan is duplicative and unnecessary to regulate commercial forestry operations.

- Mr. Dryden commented about the following definitions.

DMA: the rule could develop the criteria to identify DMAs.

Surface waters: this term is nebulous and creates confusion.

Salmonids rearing: the term, *incubation*, should be used instead to refer to the period from spawning through fry emergence.

- BC suggested the temperature standard be adjusted upward to reflect short-term lethal temperature thresholds, or the standard should only be applied to critical season (August and September) average temperature.

In regard to cold water refugia, Mr. Dryden stated that the effects of the proposed rule cannot be assessed because the language is vague and ambiguous. He said that significant cold water refugia had not been clearly

defined and would require subjective determination by the Department. Additionally, BC suggested the Department's approach to cold water refugia rely upon ODF's rules.

Concerning single-species water quality standards, Mr. Dryden discussed the following issues:

-The ODFW is charged with the responsibility to manage fish and wildlife resources.

-To unilaterally develop species-specific standards for bull trout is contrary to the intent and purpose of the FPA rule endorsed by the EQC and Fish and Wildlife Commission.

- Bull trout can survive and flourish in stream temperatures warmed than the proposed 50°F standard; consequently, the rule presumes that bull trout prefers colder water.

- Bull trout recovery should rely upon eliminating or controlling brook and brown trout in contested waters.

Mr. Dryden indicated that the proposed rules do not mandate an increase in surface water temperature for waters containing federal listed threatened and endangered species. He said a site-specific assessment should be based upon data analysis. BC suggested a no-temperature increase that would not impair the biological integrity of the stream but would support the beneficial use. He added that the temperature standard for threatened and endangered species in forest streams is redundant and unnecessary.

- In referring to the temperature management plan, Mr. Dryden questioned the implementation and viability of this planning effort. He indicated the plan needs further development; for forest lands, the temperature management plan should be deleted in favor of the existing FPA processes.

- BC suggested the Department investigate the ability to effectively and efficiently monitor and administer the IGDO standard prior to adoption.

- Mr. Dryden said the proposed rules do not provide criteria for temperature measurement. He made suggestions about where, when, how and what to measure in regard to temperature and about establishing temperature data to meet compliance. He also posed questions about determining natural conditions versus human-caused temperature increases.

13. Bill Gaffi

Unified Sewerage Agency
155 North First Avenue, Suite 270
Hillsboro, Oregon 97124

Mr. Gaffi indicated that he served on the Triennial Water Quality Standards Policy Advisory Committee. He commented on the following issues.

- In regard to temperature and bacteria, he said that temperatures rose to levels not fully protective of beneficial uses since they exceeded 64°F. Bacteria levels have been recorded exceeding the proposed maximum in pristine watersheds during wet weather. He said standards need to be developed which include management strategies.

- Mr. Gaffi said the standards would benefit from development of water quality management goals and strategies supported by sound scientific information.

14. Kevin Godbout, Environmental Manager

Office of the Environment
Weyerhaeuser
Corporate Headquarters
Tacoma, Washington 98477

Mr. Godbout stated that Weyerhaeuser supported and endorsed the comments submitted by the Associated Oregon Industries, Oregon Forest Industries Council and Northwest Pulp and Paper Association. He said that, in general, Weyerhaeuser supported the intent of the rules but that the company had concerns with policy statements, implementation actions, clarification of intent and technical standards. He said concerns were centered around general policy issues, point and nonpoint sources.

General policy issues. Mr. Godbout expressed concern about implementing rules in regard to point and nonpoint sources. He said the draft rules indicate that nonpoint sources will be regulated through management plans developed and implemented by the DMAs. Additionally, he said, the Department presumes that forestry operations should not be affected by the proposed standards as long as the FPA achieves the water quality standards. He said that Weyerhaeuser strongly disagrees with that statements. Mr. Godbout suggested the Department state in the rule how the proposed rules will be implemented.

He said the proposed rules do not appear to allow for temporary disturbances such as those occurring by forestry operations over the life of a forest stand. Changes to the FPA during the 1987 legislative session are reflected in House Bill 3396. Subsection (2) of the Board of Forestry rules assures continuous growing and harvesting of forest tree species and generally maintaining certain widespread resources including water quality and quantity.

He indicated the proposed rule is unclear about whether implementing nonpoint sources, specifically forestry operations, will be through the FPA. The proposed rules should clearly state the Department supports FPA stream rules, and implementing water quality standards for forestry operations occurs through the FPA.

Mr. Godbout disputed the Department's contention that unanimous support was received for the proposed rules. He said that while the rules may have been developed from the standards which were reviewed, discussed and voted on by the policy advisory committee, the Department overstated unanimous support for the proposed rules. He stated the technical and policy process appears to be disjointed since differences occurred between the policy recommendations and final outcome of the proposed rules.

He said the proposed rule for threatened and endangered species misses the intent of the policy committee's recommendation. Mr. Godbout added that the proposed rule missed the qualifier of *impair the biological status* and should reflect policy committee's recommendation.

Mr. Godbout indicated that several terms needed to be defined and clarified. Those terms include DMAs, surface waters, temperature management plan and the terms *anthropogenic* and *stenotypic*.

Weyerhaeuser expressed concern about how, when and where the standards will be applied and monitored for point and nonpoint sources. Further, the proposed rules are unclear about what the Department intends by department-approved basin surface water temperature management plans. Mr. Godbout said the rules appear to suggest that the Department would approve the temperature management plans, the result of which would be a major policy change that could circumvent other state statutes. He said that Weyerhaeuser opposed this intent and asked for clarification.

Technical issues. Mr. Godbout said the point and nonpoint source temperature rule was difficult to interpret and that compliance would be difficult. He said the rule needed revision but the intent was favorable. He said Weyerhaeuser supported the two-phased approach and indicated that having the standard focused on salmon helps identify what is good for fish.

In regard to nonpoint sources, he said the numeric numbers are a concern for Weyerhaeuser. He added that the scientific references used were too selective. Mr. Godbout commented that the temperature standard is a chronic exposure temperature but is being used as a lethal exposure. He said the Department should use a two-step temperature threshold, then the standard would reflect more realistic higher temperatures not having an adverse affect on fish populations.

Weyerhaeuser expressed concern about measuring/monitoring the seven-day average temperature. Mr. Godbout said the rule was not well defined. Additionally, the proposed temperature rule on point sources requires a temperature management plan for all point discharges. He said this requirement was unreasonable and that the National Pollutant Discharge

Elimination System (NPDES) permit was the regulatory management plan for point sources. He said the temperature management plan should be an option not a requirement; only in rare circumstances should separate temperature management plans be required.

Mr. Godbout said the threatened and endangered species standards was unacceptable. He said the standard appears to be a blanket requirement with no qualifiers. In regard to subsection (I), he said the proposed rules appear to have questionable value. He said a site specific evaluation of a situation should be completed before temperature restrictions are implemented. Further, site-specific regulatory flexibility is needed.

Concerning dissolved oxygen and point sources, Mr. Godbout indicated that Weyerhaeuser preferred the proposed numerical standard rather than the percent saturation criteria in the current standards. Additionally, he said

Weyerhaeuser had concerns about implementing and enforcing the standard. He said the intergravel dissolved oxygen (IGDO) standard was not appropriate and asked that this standard be deleted.

He said the dissolved oxygen standard as applied to nonpoint sources lacked reference to recent and present regulated forestry practices. Mr. Godbout said that reliable IGDO monitoring is not easy, routine or inexpensive as the Department implies.

Weyerhaeuser strongly recommended the Department eliminate language for bull trout in the proposed water quality standards. The species-specific rule language seems incongruent with language for water quality standards for other aquatic species living in free-flowing streams. Mr. Godbout said the standards seem to promote bull trout recovery by proposing an overly restrictive and unattainable temperature standard while maximizing cold stream habitat. He suggested a better method would be to control brook, rainbow and brown trout populations thus allowing bull trout to move into warmer but still colder habitats.

- 15. Jessica Hamilton**
Columbia Basin Institute (CBI)
P. O. Box 3795
Portland, Oregon 97208

The CBI said that adopting a maximum measurable level of groundwater nitrate at 10 mg/L was necessary for health safety and economic purposes. Additionally, permanently adopting the interim criteria for groundwater nitrogen and designating an affected area as requiring groundwater management were necessary.

CBI stated they would like to have monitoring and notification included as phases in the action plan for groundwater management areas. They suggested that residents be notified of potential threats to their water supply. CBI also said they believed that polluted drinking water supplies negatively affect property values and sales.

- 16. William Hart, District Manager**
Union Soil and Water Conservation District
Route 1, Box 1707
Agricultural Service Center
La Grande, Oregon 97850

Mr. Hart indicated that very little notification was provided about the September 19 public hearing. He added that the public notice poorly expressed the hearing intent; that is, to solicit comment about the proposed rules. Mr. Hart said the hearing time was not suitable or convenient. Further, he said the public hearing process is flawed, and the Department changed the rules without adequate public involvement. Mr. Hart suggested the Department communicate with and involve local watershed groups and residents to introduce technical information and new ideas.

He said the water temperature standard is of concern in the Grande Ronde Basin. He said that air and water temperatures have not been charted against flows on a continuous basis to determine normal and abnormal conditions in the streams and tributaries for the middle and lower Grande Ronde watersheds. He asked that the Department provide more consistent support of projects that develop awareness, participation and practical change. Additionally, Mr. Hart stated that spending time and money in a trial period experimenting with providing shade is not a good idea.

In regard to the standards, Mr. Hart made several comments. He said that viable and plausible actions need to be explored and that state agencies must succeed at public involvement before changes can be expected. Further, he expressed concern about how the Department develops and applies total maximum daily loads (TMDLs), evaluates surface water and performs the triennial review process.

- 17. Todd Heidgerken, Executive Director**
Water for Life, Inc. (WFL)
P. O. Box 12248
Salem, Oregon 97309-0248

WFL indicated the rules should be developed within, as closely as possible to, the parameters of the federal Clean Water Act (CWA). If that did not occur, the Department should justify the reasons for the variation. They also

expressed a desire that portions of the proposed rules, excluding bacteria, be subject to further public comment. WFL had the following specific comments in regard to dissolved oxygen, temperature and bacteria.

Dissolved oxygen. WFL said this rule should be revised to consider a wide variety of water resource uses. The proposed rule seems to establish protection of salmonids as a priority over other water uses which would contradict provisions of the CWA. WFL recommended the proposed rules reflect an expanded variety of water uses as opposed to an apparent single goal of fish propagation and protection. Additionally, they said the proposed rules show duplication of program responsibilities between the Oregon Department of Fish and Wildlife (ODFW), Department of Environmental Quality (DEQ) and Division of State Lands (DSL). WFL suggests the rules be amended to avoid such a duplication.

Temperature. WFL suggested the Department clarify the rules regarding water quality temperature to point source activities; the proposed rules seem to apply to non-point source activities as well. If the Department plans to apply these rules to non-point source activities, WFL believes the rules should closely mirror the provisions of the CWA and provisions pursuant to ORS 568.900 (agricultural water quality management).

In regard to surface water temperature, the proposed rules seem directed to plants and wildlife and establish conditions that would be impossible to attain. The question of whether a specific cause is increasing surface water temperature and whether that cause is natural or anthropogenic would be difficult to address and quantify.

Additionally, subsection (I) of subsection (C) appears to present two standards: one to implement a plan with best management practices, the other to implement technologies for reversing the warming trend. The WFL suggested modifying the rule to implement the best feasible technology for reversing a warming trend.

In regard to (b) Temperature (H), the WFL suggested the section be deleted or substantially modified. In regard to (e) Bacteria (I), the WFL indicated the proposed rule appears to be unreasonable and impractical. They indicated the rule seems to contradict the WPCF permit and that the Department's policy direction should be defined more clearly. The WFL suggested this section be deleted or modified.

18. Rob Kappa, City Councilor

City of Milwaukie
Milwaukie City Hall
10722 S. E. Main Street
Milwaukie, Oregon 97222

Mr. Kappa indicated the Milwaukie City Council reviewed the proposed rules and that the rules appear to be reasonable. He said the City has no concerns about adopting the rules.

19. John Kelly, Fish Habitat Conservationist

Confederated Tribes of the Warm Springs (CTWS) Reservation of Oregon
Natural Resources Department
P. O. Box C
Warm Springs, Oregon 97761

Mr. Kelly said that water quality is a great concern to the CTWS due to declining anadromous fish populations. He said that serious efforts to prevent further degradation and to protect remaining anadromous fish populations and water quality of the CTWS need to be made. He said that enforcing current standards and laws would provide much needed protection of fish and aquatic resources and contribute to harvesting fish populations for the Warm Springs Tribes. Mr. Kelly added that the Department has neglected to enforce standards to correct non-point source pollution and that current temperature standards are inadequate to protect cold water resources.

The CTWS agrees with the Columbia River Inter-Tribal Fish Commission (CRITFC) that stream water temperatures must be lowered, that standards should be enforced and that temperature exceptions be corrected when salmon and steelhead are not protected.

20. Patricia Larson, Forester

Dr. Larry Larson, Range Ecology
61931 Cottonwood Road
La Grande, Oregon 97850

They said the statewide stream temperature standard was unrealistic but that static statewide standards are not appropriate for dynamic water systems. Additionally, they said that eastern and western Oregon streams are not the same and should not be treated as such. They said that speculating and

assuming cause and effects without proper scientific data is an unrealistic approach to regulation and could solicit litigation. They asked the Department to consider more seriously geographic differences.

Concluding, they indicated the Department was contradictory in asserting that water temperature violations are being caused by man and yet the rules force violators to determine the source of temperature violation. Further, Dr. and

Ms. Larson suggested the Department make better use of research data developed by higher learning institutions. They said that citizens should not be required to comply with water temperature standards that are based on the Department's failure to understand scientific facts about how streams and water perform in the natural world.

21. Joni Low, Senior Staff Associate

League of Oregon Cities (LOC)
Local Government Center
1201 court Street, N. E.
Salem, Oregon 97301

Ms. Low said the LOC supports the process used by the policy and technical advisory committees to review the existing rule. Further, she said the committees were comprised of balanced representatives from the Department, other state agencies, academia, industry, forestry, agriculture, environmental interests and municipalities. She said the LOC also supports the general ideas of the rule revisions as presented in the issue papers and proposed rule language. Ms. Low stressed, however, the delicate balance the proposed standards achieve between protecting water quality and practical reality.

She indicated the LOC advocates developing management plans for temperature and bacteria standards. She said that using the plans provides a phased and comprehensive process which is needed to address water quality problems. Ms. Low said the Department needs to formally adopt this approach for complying with water quality standards.

Concluding, Ms. Low said the Department must provide guidance for implementing the revised rules, especially for dissolved oxygen and intergravel measures. She said the Department must also provide direction in developing temperature management plans and developing proper laboratory methods for measuring and detecting E. coli. She said enforcement actions should not be initiated until the Department develops and provides guidance and technical assistance.

22. Janice Miller

Unified Sewerage Agency
155 North First Avenue, Suite 270
Hillsboro, Oregon 97124

Ms. Miller suggested additional language to the pH criteria.

With the exception of the Klamath Basin, the pH criteria for Cascade lakes above 3,000 feet would be 6.0 to 8.5. For the Klamath Basin Cascade lakes above 5,000 feet elevation, the pH criteria would be 6.0 to 8.5.

23. Dennis Nelson, Groundwater Coordinator

Drinking Water Program
Oregon Department of Human Resources
Health Division
800 N. E. Oregon Street, Suite 21
Portland, Oregon 97232-2162

Mr. Nelson recommended when the rules state that the MML for nitrate is 10 mg/L, that nitrate be expressed as nitrogen to avoid any confusion with reporting nitrate as a molecular nitrate.

24. James Ollerenshaw

Oregon Association of Clean Water Agencies (ACWA)
25 N. E. 11th Avenue, Suite 200
Portland, Oregon 97232

Mr. Ollerenshaw said the ACWA was supportive of the Department's rule revision process. He said the committee's review of the proposed standards allowed for technical and policy issues to be explored and discussed. He said that implementing some of the proposed standards will be challenging and will require significant Department resources to be successful. Mr. Ollerenshaw said that because the ACWA had actively participated in the process leading to the proposed revisions that ACWA did not have substantive suggestions for modifying the proposed standards. However, the ACWA did offer comments for improving clarity and understanding.

Dissolved oxygen. The ACWA suggested the Department provide information about the criteria units in Table 21. Additionally, figures need to be consistently represented in that table. In paragraph (a)(G), ACWA expressed concern about the wording. The following wording was recommended:

The Department will apply the dissolved oxygen criteria with associated intervals established in Table 21, when adequate information exists which has been collected from monitoring conducted using sampling, analytical, and AQ/QC procedures which are acceptable to the Department.

He said that permittees and other interested parties have a clear understanding of the distribution of fisheries uses and that they be provided with maps or other tools. He further suggested that definitions 47, 48 and 49 be consistent as possible.

Temperature. Mr. Ollerenshaw suggested the word *natural* be defined. He said the ACWA also expressed concern with how the proposed new temperature standard would be implemented. Additionally, the ACWA suggested that consistency be used in designating numerical temperature criteria with respect to significant figures (i.e., 18°C instead of 17.8°C).

In (D), paragraph (C) provides a requirements list in subparagraphs (i) through (vi) when any basin exceeds the numeric rule criteria. Mr. Ollerenshaw indicated the paragraph does not clearly state the rule intent and should be worded as follows:

No measurable surface water temperature increase resulting from anthropogenic activities is allowed in any basin which exceeds 64°F (18°C) unless specifically allowed under a Department-approved basin surface water temperature management plan.

Also, the ACWA suggested wording to paragraph (K):

For the Columbia River from the mouth to river mile 309 and Willamette River from the mouth to river mile 50, the criterion for basin management temperature plans is 68°F (20°C).

Also, the ACWA said this rule section needs to clarify whether tributaries are included in the designated portions of the lower Columbia and Willamette rivers. Mr. Ollerenshaw said that paragraphs need to be reordered to improve flow and logic (e.g., A, B, C, D, K, E, F, L, G, H, I, J, M, N, O, P). For (M)(ii), he said that the word *environmental* should be inserted before the word *cost*. Mr. Ollerenshaw said the ACWA membership are supportive of the state's efforts to reduce stream temperatures; on the other hand, he indicated that ACWA does not believe wastewater plans are significant contributors to temperature problems.

In regard to language, the ACWA suggested changing the phrase *treating the parameter* to instead read *reducing the source's impact on surface water temperature...* Further language between M(I) and (ii) and similar paragraphs in proposed OAR 340-41-026(3)(a)(C)(v)(I) and (II) should be similar.

Bacteria. The ACWA supports changing *E. coli* as the indicator organism for fresh water. They also support the numerical criteria being proposed and re-sample program. They offered improvements to the proposed rule language:

E. coli analytical method. At this time, no U. S. Environmental Protection Agency (EPA)-approved method exists for analysis of water samples for *E. coli*. Before *E. coli* testing becomes required for NPDES permittees, the Department needs to supply a list of approved methods. The methods should include specific guidance on holding time for bacteria samples. They asked that 40 CFR Part 236 procedures also be referenced in the water quality standards.

In regard to paragraph (C), the ACWA suggested adding to the end of the paragraph the following wording: *...or otherwise allowed by these rules or similar language.* Further, the ACWA asked for confirmation that the City of

Portland has an approved bacteria control management plan. In paragraph (E), the phrase *Sewer Overflows in Summer* should be added before the existing paragraph.

Mr. Ollerenshaw indicated the ACWA had questions about implementation and how the Department would determine compliance with permitted overflows during the summer and winter. He said that in regard to paragraphs (E) and (F) in comments to the Department on draft issue papers, the ACWA noted that exact timing of hydrologic summer and winter are variable and do not consistently correspond to the proposed regulatory calendar summer and winter. The ACWA suggested the following wording:

(D)(i) The Commission may on a case-by-case basis approve a bacteria control management plan to be prepared by the permittee, for a basin or specific geographic area which describes hydrologic conditions, under which the numeric bacteria criteria would be waived. The plans will identify hydrologic conditions, including definition of hydrologic rainfall seasons, identify the public notification....

(E)(ii) On a case-by-case basis, the beginning of summer and beginning of winter may be defined as June 1 and October 15, respectively, if the permittee so requests and demonstrates....

Mr. Ollerenshaw suggested that if a national sanitary sewer overflow policy is developed, the rule language on sewer system overflows be reconsidered. In regard to paragraphs (F) and (G), he suggested wording be changed to provide clarification: *Storm sewer systems subject o municipal NPDES stormwater permits and storm water systems not subject to municipal NPDES stormwater permits.*

pH. Mr. Ollerenshaw indicated the ACWA has significant problems with the proposed rule language regarding pH. He stated that the text for each basin differs and that the examples given in the draft rule were no adequate to demonstrate the variability in the existing rules. He proposed that the Department break out the proposed new rule by basin.

25. Bob Patterson, Regulatory Specialist

City of Pendleton
Public Works Department
P. O. Box 190
Pendleton, Oregon 97801

Mr. Patterson said that while the proposed standards may offer point sources flexibility in meeting local conditions they will also require more time of municipal staff. That additional time will be used in developing management

plans to demonstrate that discharges are not detrimental to aquatic resources in their basin. He said that much of the sampling conducted by the Department for making a water quality limited determinations will probably be the responsibility of point sources within the basin. Mr. Patterson said this activity will require additional municipal staff time to complete necessary sampling as required by the management plans.

Additionally, Mr. Patterson said that another concern brought about by the proposed standards is that TMDLs have not yet been established for the Umatilla Basin. He said the new standards should not be implemented until the TMDL issue is resolved; by implementing the new water quality standards as part of the TMDL process, a point source would need to develop one management plan for all the standards.

He said that nonpoint sources are larger contributors to water quality limitations than the Umatilla Basin and that nonpoint sources have not yet been regulated like point sources have been regulated. TMDLs need to be established for all sources before the new rules are implemented.

Mr. Patterson had the following questions and comments about the proposed rules:

Dissolved oxygen. In regard to 340-41-(2)(a)(C), Mr. Patterson asked about the process of determining IGDO for identifying impaired areas and about what natural conditions are responsible for the IGDO.

In regard to 340-41(2)(a)(D), he indicated the Department needed to further explain where the dissolved oxygen level will be measured.

In regard to 340-41-006(44), he asked that the Department define the term, *redd*.

Temperature. In regard to 340-41(2)(b)(C)(i), Mr. Patterson asked if the Department will regulate surface impoundments as point discharges due to increased water temperature to the main stem Umatilla River from irrigation discharges. Further, in the scope of a basin management plan, the Department needs to address nonpoint sources affecting temperature.

In regard to 340-41(2)(b)(E), he said the Department needs to determine if instream temperatures in the Umatilla River are natural or anthropogenic; water temperatures in the main stem of the Umatilla River have been greater during the months when spawning occurs.

In regard to 340-41(2)(b)(N), Mr. Patterson indicated that impoundments tend to raise water temperatures in the Umatilla Basin.

Policy and guidelines applicable to all basins. In regard to 340-41-026(3)(v)(I), he asks about the guidelines available for a source to provide the necessary scientific information for demonstrating that beneficial uses will not be affected.

In regard to 340-41-026(3)(v)(II), Mr. Patterson stated the Department's Eastern Regional Office would be best able to determine if a point source in the basin is implementing reasonable management practices, does not affect beneficial uses and provides treatment without environmental costs outweighing risks to the resource. He suggested this section be revised.

Bacteria. In regard to 340-41(2)(e)(B), he said that the sampling criteria needs to be more realistic.

In regard to 340-41(2)(e)(B)(i), he said that a more convenient sampling schedule needs to be written into the rule because re-sampling for municipal point sources within the timeframe outlined presents a hardship.

- 26. Patricia Perry, Executive Director**
Grande Ronde Model Watershed Program
10901 Island Avenue
La Grande, Oregon 97850

Ms. Perry indicated the Department did not adequately provide notice of the workshops or proposed rules. She said that because of the short timeframe, the rules had been forwarded to the Model Watershed Program Board for individual comment. Additionally, Ms. Perry commented that wetlands were not addressed in the proposed rules but that the proposed rules indicated this issue would be discussed in the near future. She expressed the need for the Department to keep the Model Watershed Program aware of all information and activities concerning the Grande Ronde Basin and about the wetland review process.

- 27. Laurie Power, Environmental Manager**
Eugene Water & Electric Board (EWEB)
P. O. Box 10148
Eugene, Oregon 97440-2148

Ms. Power discussed the following issues in regard to the proposed rules. Those issues included confined versus cumulative effects, selecting conservation temperature criteria, weaknesses of the selected standard temperature unit, uncertainty about definition of bull trout habitat, residual implementation problems with the proposed temperature standards, inclusion of exception process, basin temperature management plan implementation issues and potential conflict with water rights.

Confined effects versus cumulative impacts: The Department needs to address the confined effects of a diversion project that, while periodically causing temperature increases in power portions of a bypass reach, does not cause cumulative downstream impacts.

Selecting conservative temperature criteria: The individual numerical absolutes represent conservative temperature levels that may provide more than adequate protection but at great expense to hydropower project operators and customers.

Weaknesses of the selected standard temperature unit: The thermal standard the Department has adopted for uniform application does not address the biological effects of magnitude and duration of diel temperature fluctuations.

Uncertainty about definition of bull trout habitat. The absolute numeric criterion of 50°F for bull trout is a poor biological compromise if the goal is to sustain juvenile bull trout. A more biologically rational standard would result if stream reaches containing bull trout were stratified by life stage expectancy and justifiable decisions about relative quality and importance as bull trout habitat could be negotiated.

Residual implementation problems with the proposed temperature standards. Those problems include applying the standards despite differences in hydropower project types and potential for cumulative thermal effects on downstream environment; lack of the Department's oversight capacity; lack of certainty about the Department's legal authority; continued overprotection during certain times of the year at a hydropower project developers expense; lack of site-specific information from which to draw rational standards and timing of application.

Inclusion of exception process. EWEB supports allowing hydropower developers to demonstrate no adverse effects to beneficial uses.

Basin temperature management plan implementation issues. EWEB expressed concern about the practicality of one entity within a basin developing and implementing a program needing inclusion of multiple land ownership interventions. If the plans prove too expensive or complex, EWEB is concerned the guidelines for biological protection will discourage development of alternate beneficial uses.

Potential conflict with water rights. This approach may cause conflict with the exercise of existing priority water rights.

28. Honorable Dennis Reynolds

Grant County Court Judge
Courthouse, P. O. Box 220
Canyon City, Oregon 97820

Judge Reynolds said the Grant County Court fully endorsed the comments made by the Oregon Farm Bureau Federation submitted by Peter Test and asked the Department to consider that the County offers the same remarks. Additionally, Judge Reynolds said the County questioned how data collection and follow up research needed to determine background levels and contamination would be funded. He added that these issues are too complex for such a short review and asked that public comment be extended. Judge Reynolds said the cities did not have enough time to address the rule effects on sewage treatment plants and expressed discomfort about BMPs without knowing the extent of the practices.

29. Kirk Schroeder

American Fisheries Society (AFS)
Oregon Chapter
P. O. Box 722
Corvallis, Oregon 97339

Mr. Schroeder indicated the Society's review team concentrated their efforts on the dissolved oxygen issue paper and temperature standards.

Dissolved oxygen. He said that dissolved oxygen criteria should eventually be temperature based; oxygen requirements of fish and aquatic invertebrates are clearly related to temperature. Additionally, the Society indicated revision to the standards seemed to be warranted. The following issues were further examined:

- The suggested change from person saturation to concentration-based values allows standards to have greater consistency with changes in elevation and temperature.
- Using statistical standards with duration periods requires more data collection and an accurate description of existing conditions receiving waters but similarly compares to current national Water Quality Criteria methods. A standard for adequate sampling numbers should accompany those criteria.
- Changes in criteria levels would occur for some locations. The changes appear to represent adequate protection for the species considered to use these areas but do not allow for improving or changing species distributions in some cases.
- Criteria levels for dissolved oxygen tied to use and basin appear ideal to protect waters at levels appropriate for the species using those waters.

- A major consideration in the IGDO sampling is whether to sample actual redds or to construct artificial redds. Either approach requires fisheries expertise which has not been needed to assess water quality relative to Department criteria. Time allowance for developing an adequate sampling protocol should be allowed before implementation.

- The 150 percent dissolved oxygen criteria allows more comparable value to situations caused by algal production of oxygen rather than for air supersaturation resulting from entertainment of air at dams or falls. The 110/105 percent current criteria should remain for air saturation.

The AFS said that using the statistical standards allows for greater flexibility and more nearly parallels Oregon standards with National Water Quality Criteria data. Minimum values use should be constrained to situations where many continuous samples are available; only continuous monitoring stations are appropriate for applying mean minimum criteria with adequate levels of protection from short-term lethal concentrations.

Additionally, the AFS indicated the Department needs to provide guidance in implementing statistical criteria. In regard to waste load allocations, a starting point should be developed where any incremental decline from naturally occurring levels would not be allowed. The AFS said the IGDO criteria should be implemented after sampling protocol are developed. The AFS indicated that salmonids are not the only cold water species. They said the Department should set cool water criteria for water bodies or stream reaches naturally supporting only occasional salmonids, sculpins or lampreys.

The AFS said the frequency and timing of dissolved oxygen measurements is unclear from the definitions. Furthermore, they indicated that cold standards above and cool standards below irrigation intakes do not make good management sense.

Temperature. The standard needs to reflect that other species are also cool water or temperature sensitive. In regard to the management plans for controlling nonpoint sources, the AFS made the following comments.

- Management plans and regulations for rangeland, agricultural and urban streams is practically nonexistent. Water withdrawals in those areas is a serious problem to achieving temperature standards.

- Management plans are only as good as the information used to develop them and as good as the people who develop and implement the plans. Implementation and assessment monitoring programs must be adequately funded and staffed; a statistical monitoring design is needed to provide quantitative regional information.

- 30. Clinton Shock, Superintendent and Professor of Crop and Soil Science**
Agricultural Experiment Station, Malheur Experiment Station
Oregon State University
595 Onion Avenue
Ontario, Oregon 97914

Professor Shock said the proposed standards were written with good intent, however, the standards encourage an adversarial relationship between the Department and Malheur County citizens. He said the rules are not relevant to the local environment. He said the proposed 64°F temperature standard is not realistic for eastern Oregon and should be adopted only in western Oregon. Professor Shock said the standards would be unnatural to conditions existing prior to the Oregon Trail when streams lacked the irrigation reservoirs that result in cooling summer flows and lacked the irrigation withdrawals and return flows that heat streams. He said the proposed standards could lead to court-ordered injunctions which will interfere with private business and Department action.

As an interim solution, Professor Shock recommended the following approach:

- Adopt the nitrate groundwater standard and other groundwater standards for the whole state.
- Implement the groundwater standards equitably over the entire state.
- Adopt the surface water standards for western Oregon and the Cascades; defer adoption of surface water quality standards east of the Cascades.
- Study the surface waters east of the Cascades during the next two summers to develop relevant water quality standards and offer those findings for public review and comment.

- 31. Dr. Louisa Silva**
969 13th Street, S. E.
Salem, Oregon 97302

Dr. Silva, commenting on the review, process and content of the view, indicated the goals of the rules were not met. In regard to the purpose, Dr. Silva stated the following:

- The rules fail to address that Oregon's population will grow and that water quality will be affected. She said that 60 percent of Oregon's surface water violated standards, and the regulatory process to protect water quality is failing.
- Dr. Silva said the standards do not apply to new pathogens and carcinogens in surface water which cannot be removed by water treatment plants. She said that since 75 percent of Oregonians receive drinking water from surface water;

the review should address this issue and make appropriate recommendations. She said the review continues to operate on false assumptions that surface water and drinking water are unrelated and that the only beneficial uses of surface water are fishing, swimming and recreation.

In regard to the review process, Dr. Silva made the following comments.

- She said the policy advisory committee lacked a public health representative. As a result, the committee did not have the necessary balance to protect the public interest.

- Review of the mixing zones has been incorporated in this review without discussion by the full technical and policy advisory committees. She said that current mixing zone practices for diluting industrial waste are inadequate to protect beneficial uses. Mixing zones should be considered in a separate document and hearing process.

In regard to the content of the review document, Dr. Silva made the following comments.

- She said the Department is proposing not to require municipalities to stop dumping overflow for another 15 years. She said that Oregon's population is predicted to increase by 22 percent over the next 15 years. If nothing is done, surface waters will contain extremely high levels of pathogens. She said that municipal dumping needs to be considered as quickly as possible .

- Dr. Silva said that by increasing pH levels, the Department would be increasing the amount of acid or alkaline wastes that industry could discharge into surface water without triggering a pH violation. She suggested the Department take a baseline survey to determine the pH of Oregon lakes and exempt only those waterbodies from the rule.

32. Mark Simmons, Representative
Northwest Timber Workers Resource Council
90 S. 21st Street
Elgin, Oregon 97827

Mr. Simmons suggested that the 50°F maximum water temperature standard is not achievable in most eastern Oregon streams. He said a conflict exists between managing bull trout and salmon. He said that since bull trout consume young salmon as a primary food source, to increase bull trout to the detriment of recovering salmon runs made little sense.

Additionally, Mr. Simmons commented the Department had worked with the DOF during the revision of the riparian rules for the FPA. He said the Department should use these rules to revise water quality standards. He said that regulating or eliminating future human activities near riparian zones is no guarantee that water quality or temperature will improve.

Concluding, Mr. Simmons asked about the Department's statutory authority and budget authorization for the management plans. He asked about the Department's proposed monitoring mechanism for the plans and why the Department would consider this action. Mr. Simmons said that many local organizations existed that could more effectively implement rehabilitation and monitoring projects or collect data; no additional bureaucratic layer was needed.

33. Mike Sims

Hanneman & Associates
777 13th Street, S. E., Suite 120
Salem, Oregon 97301

Mr. Sims submitted comments on behalf of the Tillamook County Creamery Association (TCCA). He said the basic position of the TCCA is that standards must not be stronger than necessary to protect health. He said that CAFOs would not be able to attain the bacteria standard (Subsection (I), OAR 340-41-(basin)(2)(e), relating to CAFOs and bacteria).

Additionally, Mr. Sims indicated that a clearer definition of discharge should be made, i.e., *no discharge of animal waste* should be substituted. He said that TCCA members need clear objectives and set management practices so that requirements can be met.

The TCCA recommended using the E. coli test in place of fecal coliform. In regard to dissolved oxygen and temperature, he said the TCCA believed that standards need to be set as low as possible to account for industrial discharges of warm water and unshaded stream areas. Further, Mr. Sims said the Department's fiscal impact statement was inadequate and did not reflect compliance costs imposed upon landowners in affected areas. He said the rule should focus on point-source issues of CAFOs and related management practices and that management plans focus on indirect sources.

34. Jack Smith, Ph.D.

Omicron Associates
Cedar Mill Crossing, Suite 180
12264 N. W. Barnes Road
Portland, Oregon 97229

Dr. Smith said that while the standards proposed for dissolved oxygen and pH are consistent with the CWA Section 303(c) definition of water quality standards, the temperature and bacteria standards deviate from and were inconsistent with CWA definitions and requirements. Dr. Smith said the proposed temperature standard did not include an explicit statement of criteria but offered procedures and policies for allowing increases above acceptable temperature levels.

Dr. Smith said that replacing fecal coliform standard with E. coli as the indicator organism for bacterial was in accordance with EPA recommendations and was an sufficient revision. He went on to say that applying the rule goes beyond the EPA's recommendations or any available epidemiological justification.

Dr. Smith said the fiscal and economic issues resulting from the proposed bacteria standard are misrepresented. He said the economic effects of wet weather discharges as proposed in the rules are not addressed.

He suggested that all of the effluent limits, source controls, practices and policies proposed for inclusion in the water quality standards for temperature and bacteria to be reevaluated for true economic and environmental implications. Dr. Smith concluded by saying that for temperature and bacteria, any effluent limitations, source control specifications, practices or policies designed to implement water quality standards should not be included as part of the water quality standards. He said if those rules are needed, the rules should be included in rules dealing with implementation.

35. Mike Smith

Grant County Water and Riparian Board
c/o 7P Hereford
Prairie City, Oregon

Mr. Smith FAXed his comments to the Department, however, the letter did not transmit clearly. A call was made to Mr. Mike's home asking either he either call the Department toll-free to convey his comments or to re-FAX the comments. As of this time, no response has been received.

The second page of Mr. Smith's letter was a little more readable. He commented about dissolved oxygen and indicated the standard was technically and economically impossible to implement. He asked that a 90-day extension of the comment period be provided.

36. Terry Smith, Deputy Public Works Director

City of Eugene
858 Pearl Street
Eugene, Oregon 97401

Mr. Smith said the City supports the proposed rules and referred to recommendations made by the ACWA for improving the rules. He said the standards are the result of careful consideration of what needs to be accomplished to provide flexibility to make a regulatory system work. He said a balance existed between providing flexibility and stringency.

He said the temperature and bacteria standards may not be achievable. He said that flexibility of the standard will bring additional complexity. Mr. Smith said that for the IGDO, temperature and bacteria standards to be

effectively implemented, the Department must prepare and follow clear guidance documents. Those documents need to deal with technical measurement and management planning but also assess failure to achieve the standards. Mr. Smith said that implementation of the temperature standard will have the greatest effect on Oregonians .

37. Carrie Stilwell, Legal Defense Coordinator

Oregon Natural Desert Association (ONDA)

16 N. W. Kansas

Bend, Oregon 97701

Ms. Stilwell commented on temperature and enforcing the rules. Her comments are as follows:

- In regard to allowing 1°F cumulative increases in stream temperature for new sources, she said this recommendation is scientifically and biologically unjustified to allow temperature increases from new sources where water temperatures exceed recommended levels; these are the waters where efforts should be made to lower water temperatures.

Further, Ms. Stilwell commented that the Department did not provide guidelines about how many new sources would be permitted in a waterbody causing increases in water temperature. She said that to ONDA's knowledge, this provision was included without the advice or recommendation of the technical advisory committee on temperature. The ONDA requested the Department eliminate this exception from the revision and concentrate on bringing surface waters into compliance with the 64°F standard.

The Department's exception of numeric temperature criteria during periods of high air temperature and low water flow should be deleted or at least augmented to provide additional information and public participation in monitoring and enforcement. Ms. Stilwell said the exception is biologically inconsistent, the provision was not recommended by the technical advisory committee for temperature and the process for measuring temperature and determining exceptions should include public participation and guidelines. She said that if this provision is adopted, the Department should provide an analysis of the consequences.

- She said the ONDA is concerned about the lack of enforcement mechanisms in the proposed rules. The ONDA recommend the Department reconsider enforcement issues and encourage and invite public and agency participation. Further, Ms. Stilwell suggested the Department develop and include a method for public participation in determining water temperature violations. She said that guidelines describing low stream flow levels should be provided so that the public can participate in monitoring activities.

38. Ted Strong, Executive Director

Columbia River Inter-Tribal Fish Commission (CRITRC)
729 N. E. Oregon, Suite 200
Portland, Oregon 97232

Mr. Strong indicated the CRITRC review of the proposed water quality standards focused primarily on the temperature standard. He said that water temperature is one of the top two water quality parameters that affect salmonids in Oregon streams. He said to assure that the salmonid beneficial use is provided with adequate protection, a water quality standard must be developed that fully protects the beneficial use, can be implemented and assures that DMAs, such as the ODA, ODFW and U. S. Fish and Wildlife Service (USFS) and Bureau of Land Management (BLM) take management actions to comply with water quality standards. Mr. Strong said the Department's proposed temperature standard does not meet any of those requirements.

He said that temperature control can be achieved by fully protecting and restoring riparian shade, stream bank stability and channel morphology. Because channel morphology can be affected by watershed-wide sediment delivery to streams, leading to channel widening, sediment delivery should be controlled to achieve appropriate temperatures.

Mr. Strong commented that the Department has created a system with many exceptions and exemptions and statistical smoothing that showing violations would be difficult. Additionally, the proposed standard would permit temperature increases of 1°F even in streams with high temperatures.

He said the Department's seven-day moving average of daily maximum water temperatures will not protect the salmonid beneficial use. He said this practice smoothes individual daily peaks by averaging the temperatures with adjoining daily peak values. Mr. Strong said a more logical method would be to take a daily peak exceeding the temperature criterion as a violation. He stressed that hourly temperatures need to be recorded to determine peak daily values, and a computation of the seven-day moving average then must be performed. Mr. Strong suggested that because there are so many streams in Oregon, the Department would have difficulty regulating the temperatures. Further, he said the Department did not indicate how the proposed standard will ease implementation difficulties of the existing standard. He said the data requirements appear to allow violation of temperature standards when no continuous thermograph is present.

Mr. Strong indicated he believed that during periods of naturally high air temperatures, the Department would not have a need to regulate point-source discharges of hot water to salmon streams. He reasoned that hot weather would be the ideal period for dumping hot water discharges.

Mr. Strong said the Department's proposed water quality standard for temperature would allow degradation of the salmonid beneficial use since the standard obviates factoring in the effects of natural warming due to hot weather or low flows. He said the CRITFC believes that allowing temperature increases without regard for the effects of natural conditions is irresponsible resource management. This proposed standard is unfair since those degrading the fish habitat would be able to evade sharing the burden of protecting salmonids and other beneficial uses.

The CRITFC said the proposed standard fails to set an upper limit adequate enough to protect beneficial uses. Mr. Strong said the existing standard better identified temperatures beyond which streams should not be allowed to rise. He said that since many of the streams had unacceptable conditions, temperature increases from new sources was unacceptable. He said the lack of any proposed sanctions on existing sources of thermal loading, except where plans might be developed in response to new sources, is unacceptable. Mr. Strong stated that nothing the Department proposed would lead to protecting or restoring beneficial uses. Concluding on this point, he said that allowing further temperature degradation made no sense whatsoever.

The CRITFC recommended a temperature standard limiting stream temperatures to no more than 60°F; no exceptions should be allowed for periods of high air temperature and low water flow. Further, no interim allowance for stream temperature degradation should be allowed. The CRITFC said that a four-year grace period during which more degradation can occur flouts the intent of the CWA.

Mr. Strong said the proposed standard allows non-measurable temperature increases to accumulate which would harm beneficial uses. He said the Department should not allow the non-measurable sources. He said that attempting to measure increases in a geographically widespread manner is not feasible.

He indicated the Department does not need to become entangled in measurable versus un-measurable temperature increases. In basins at or above the CRITFC's recommended upper temperature limit, management activities should not be allowed that would result in increased heat that will reach streams or that would make streams more susceptible to warming. He said that in streams where no further temperature increases are warranted, allowing those activities to occur that will result in more stream warming makes no sense regardless of measurable or un-measurable increases.

He said that despite the control over stream water temperature exerted by management, the Department is content to allow additional temperature increases and to remain in differentiating natural background from anthropogenic causes or in measuring temperature increases against an

upstream control. Mr. Strong said that if the Department intends to use a spawning temperature criterion, the spawning areas must be identified, and historic spawning periods must be known.

The CRITFC said the proposed standards allow agencies to proceed with polluting activities even when the temperature standard is being violated. Mr. Strong said the proposed temperature standard allows polluters and DMAs to substitute compliance with a plan for actual protection of beneficial uses which violates the CWA. He said that land management activities must not be allowed to proceed when water quality standards are violated even if the activities are consistent with a management plan.

- 39. Peter Test, Assistant Director**
Government Affairs Division
Oregon Farm Bureau (Federation) (OFBF)
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Salem, Oregon 97302-5158

Mr. Test said he did not recall the policy advisory committee discussing or agreeing to the language in the present proposed rules. He said the OFBF should have been put on record as opposing the proposed temperature standards and that they had reservations about the lack of good methodology for measuring IGDO.

He said the unreasonable temperature standards could cause most of Oregon's basins to be classified as WQL due to temperature. Mr. Test said that agriculture landowners statewide will be forced to give up managing and directing their own lands. He said the standards would establish bureaucratically identified BMPs that may not cure water temperature problems. Adopting management plans could be costly and impose economic hardships.

The OFBF and Mr. Test had specific comments about temperature, dissolved oxygen, bacteria, nitrates and general concerns. Those comments are listed below.

Temperature. He said the proposed temperature standards are not based on accurate data: single or short-term exceeded standards would have no effect on the beneficial use, that is, fish. He said the temperature standards should either be adjusted upward to accurately reflect short-term lethal temperature thresholds or should only be applied to critical seasonal average temperatures.

He said the OFBF was concerned about the rule language involving temperature measurement and that these requirements could apply to dissolved oxygen and other standards. He said the proposed rule does not specifically prescribe criteria for measurement protocol. He said the advisory committee was clear in pointing out that all temperature measurements occur at a point in the stream relevant to the particular beneficial use.

Additionally, Mr. Test said the proposed rule does not include where water body temperatures are to occur. He said that failure to impose this requirement on temperature readings could allow use of a surface temperature sample to determine BMPs or permit requirements applicable to a spawning area. He said the standards also fail to set criteria for determining where and when measurement occurs, what is considered measurable or whose data can be used for compliance or other purposes. Mr. Test said if measurement requirements and acceptable methods are not specifically in the rule, the Department could be subject to lawsuits asserting violations of temperature standards based on inappropriate third-party data.

The OFBF expressed concern with the exception from the seven-day average when data is unavailable; a minimum threshold for data must be obtained for data to be relevant. Additionally, a sufficient amount of data must be available to demonstrate a problem before action is required. Mr. Test indicated the OFBF would prefer a longer time to gather data since an increased number of samples would decrease the variation that occurs due to climate, stream characteristics or measurement techniques. The OFBF had several concerns and questions about the developing, coordinating and implementing the temperature management plan. Further, the OFBF expressed skepticism about the bull trout information presented in the proposed rules. Mr. Test commented that salmonids rear in most state waters throughout the year and asked if the Department meant to use the word *incubate* instead of *rear*. Further, Mr. Test commented that false assumptions are given in Section (H). The OFBF suggested a standard that provides for no temperature increase that would effect the beneficial use.

In regard to Section (G), he states that without a clear definition of what areas are and who will describe them, that applying the rules will be difficult and potentially disastrous to agriculture producers and other landowners. In regard to Section (K), this requirement limits Columbia and Willamette rivers temperatures because all tributary streams affect temperature of the main rivers.

The OFBF requested the Department define DMAs, surface waters and temperature management plans. Also, they ask that terms be used that are common to the general public. They requested the Department to clarify where anthropogenic and natural factors cause numeric temperature criteria to be exceeded. Further, the OFBF indicated that wetlands should not be governed by the temperature rules.

Dissolved oxygen. Mr. Test said this criteria, except for IGDO, appear reasonable. He said the IGDO criteria are reasonable but will be costly and involve complex monitoring programs producing confusing results. He said that reliable IGDO monitoring is not easy, routine or inexpensive. He requested that this portion of the proposed standard be reviewed and not applied until measurement problems can be further addressed.

Bacteria. Mr. Test said the OFBF generally had little problem with the proposed bacteria standard changes; however, the OFBF believes that Section (I) does not allow flexibility for bacteria from CAFOs while other sources are given flexibility for allowed loads.

Nitrates. The OFBF generally agrees with the Nitrate standard for groundwater; they would not accept a lower standard without convincing information warranting such a change. Some OFBF members are concerned with the 70 percent trigger designation for a groundwater management area.

General. Mr. Test stated he was concerned about changes made to the standards were made at the technical level with little policy direction. He said the technical and policy process appeared to be disjointed since difference between the policy recommendations made for the standards and outcome of the proposed rules occurred. He said that good policy statements were made but that those statements were not accurately translated into like rules.

Mr. Test strongly urged the EQC to withhold action on the rules until all questions have been answered, interpretations made clear and specific problem areas dealt with by the policy advisory committee and Department staff. He said that if the comment period is extended, the OFBF reserved the right to make further comments.

40. **Kathryn VanNatta**

Oregon Governmental Affairs
Northwest Pulp & Paper Association (NWPPA)
1631 Water Street, N. E., No. 39
Salem, Oregon 97303

The NWPPA represents eight pulp and/or paper mills in Oregon including the following companies: Boise Cascade, Georgia Pacific, James River, Pope & Talbot, Simpson Paper and Weyerhaeuser. The Association membership supports the Associated Oregon Industries (AOI) written comments dated September 19, 1995, on the proposed revisions from triennial review. Additionally, the NWPPA made the following comments on bacteria and temperature standards.

Bacteria. The NWPPA supports the proposed change from fecal coliform to the E. coli standard. Additionally, the NWPPA strongly supports the AOI comments on industrial wastewater lagoons. Ms. VanNatta asked for clarification that the bacteria standard does not apply to industrial wastewater lagoons, that effects from wildlife were not meant to trigger control measures.

Temperature. The NWPPA strongly supports the AOI comments on temperature including comments on temperature measurement, protection of threatened and endangered species, development of a temperature management plan, growth allowance, definition of waterbody and clarification of point source responsibility.

Ms. VanNatta said the NWPPA needed clarification of the Department's intent on *developing* and *compliance with* a Department-approved basin surface water temperature management plan. She the proposed rules are not clear about the relationship between a Department-approved basin surface water temperature management plan, a Department-approved temperature management plan and a temperature management plan. Additionally, the NWPPA is concerned with the lack of parallel language on temperature plans in sections (b)(H) and (b)(I).

The NWPPA asked the Department to clarify the protection provided by the combination of proposed amendment subsections (b)(C)(iv) and (b)(C)(vi). Ms. VanNatta said that when the two subsections are read together, an absolute shield from permit violation claims for permittees in compliance with Department-approved temperature management plans required as part of their NPDES permits is provided. However, she said, the rule language provides complete protection from claims that the permittee is violating any temperature criteria in the proposed rule.

She said that language in subsections of section (b) creates confusion about permittee protection. Subsections (b)(D); (E); (F); (G); (J); and (K) allow temperature criteria in each subsection to be exceeded if exceeding the criteria is allowed under a Department-approved basin surface water temperature management plan. Subsections (b)(H) and (I), criteria for waters containing federally listed threatened and endangered species and waters with specific dissolved oxygen levels, do not contain parallel language to the preceding subsections when criteria may be exceeded.

Ms. VanNatta said the NWPPA supports the temperature management plan approach if the plans provide full protection against claims when permits are exceeded. She said the Department needs to clarify the scope of this protection and revise the criteria subsections.

- 41. James Whitty, Legislative Counsel**
Associated Oregon Industries (AOI)
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Mr. Whitty said that to correct the record, the AOI does not recall the policy advisory committee discussing or agreeing to the proposed rule language. Mr. Whitty indicated that the AOI had specific comments relating to temperature and dissolved oxygen. Those comments are provide below.

Temperature measurement. He said the rule does not specifically prescribe criteria for measuring. He said the policy advisory committee was specific that all temperature measurements were to occur at a point in the stream relevant to the particular beneficial use. Mr. Whitty said the rule does not mention where water body temperature readings are to occur. He said that failure to impose this requirement would allow using surface temperature samples to determine BMP. He said the rule fails to set criteria for determining where and when measurements occur, what is measurable or whose data can be used for compliance. If temperature measurement criteria are not specifically set in rule, the Department could be subject to third-party lawsuits asserting violations of temperature standards based on inappropriate third-party data.

Mr. Whitty said the seven-day moving average is an appropriate measuring tool for temperature. However, the AOI objects to an exception from the seven-day moving average where data is unavailable. He said there must be a minimum threshold for data to be relevant.

Protection of threatened and endangered species. He said the proposed rule for protecting threatened and endangered species will consume the entire temperature rule and stop all new development along Oregon's rivers and streams. He said the proposed language requires no temperature increase regardless of whether water temperature is interfering with the viability of threatened or endangered species. He said the proposed rule drops the condition recommended by the policy advisory committee that the biological integrity of the threatened or endangered species be impaired before the no increase requirement is triggered. Mr. Whitty said that if the policy advisory committee's recommendation on biological integrity is not added back to the rule, absurd results would occur.

He also said the proposed rule paragraph (b)(c), requiring management plans for existing sources of heat load, shows no relation to paragraph (b)(H), dealing with threatened and endangered species. The AOI does not take exception with requiring existing anthropogenic activities to develop management plans for controlling stream temperature; AOI does take exception with the idea that existing sources of heat load should be affected by threatened and endangered species provisions. He said that stopping activities of existing heat load sources is authorized to agencies under the federal Endangered Species Act and that the EQC should not assume this authority through water quality rule writing.

Development of temperature management plans. Mr. Whitty suggested wording changes to capture the intent of the policy advisory committee and to clarify the interrelationship of the management plan and threatened and endangered species rule:

No measurable surface water temperature increase resulting from anthropogenic activities is allowed which would impair the biological integrity in stream segments_waters continuing federal listed threatened and endangered species, except as allowed under paragraph (C).

Mr. Whitty said the rules need to be more specific about developing and updating a management plan. Additionally, he said, the rule requires that point sources include the temperature management plan as part of the NPDES permit. He asked if general water quality permit holders would be required to obtain an NPDES permit since not every point source of heat load is required to have an NPDES permit. He suggested the following language for paragraph (b)(C)(iv).

For point sources having National Pollutant Discharge Permits, the temperature management plan may be part of permit.

Growth allowance. The AOI acknowledged that the rule provided growth allowance for streams in developing and implementing management plans. He said a growth allowance recognizes that the state's economic base is constantly in transition.

Definition of waterbody. Mr. Whitty said the Department needs to define the term *waterbody*. He said that surface water impoundments should not be treated as anthropogenic activities under the rules. Additionally, wetlands should not be governed by the temperature rule.

Clarification of point source responsibility. The AOI believes the intent of the numeric temperature criteria is that the anthropogenic source shall be responsible for controlling activities that contribute to exceeding the criteria and shall not be obligated under the rule to control the activities of others. He said the proposed rules do not clearly state that interpretation. Further, Mr. Whitty said the preamble of the rule should clearly indicate that zero tolerance of point source heat load is not intended by the rule. The AOI suggested the following changes to the last sentence of (b)(A)(iii):

In surface waters where both natural and anthropogenic factors cause exceedance of the numeric criteria, each anthropogenic source will be responsible for controlling through implementation of a management plan only that portion of the temperature increase caused by that anthropogenic source.

He added that all the numeric criteria of the temperature rule should be affected by the exception contained in paragraph (b)(L); therefore, the AOI suggested that reference to paragraph (b)(I) be added to the first sentence of paragraph (b)(L) as follows:

An exceedance of the numeric criteria identified in paragraphs (D), (E), (F), (I), or (K) of this subsection, and that occurs during the conditions listed in subparagraphs (I) and (ii) of this paragraph will not be deemed a temperature standard violation.

Bacteria. The AOI asked the Department to clarify that the bacteria standard does not apply to industrial wastewater lagoons since wildlife can affect bacteria levels in lagoons and that wildlife were not intended to be parts of conditions necessary as control measures.

DEPARTMENT EVALUATION AND RESPONSE TO PUBLIC COMMENT

Hundreds of comments were received on the proposed rules. Many were questions of clarification or editorial suggestions. Many of the editorial suggestions were taken, but because they do not change the meaning of the rules, they are not specifically addressed in this staff report. The primary focus of the following summary of comments is on those comments which raised major technical, legal, policy, or implementation issues.

GENERAL COMMENTS

- 1) Comment: Format. The standards should not include design criteria or specifications for management plans. Also, the temperature and bacteria standards should be reorganized to present a more logical ordering of criteria and requirements.

Department Response: Staff agree with the first part of this comment as a general principle, and have moved the language in the temperature and bacteria rules that requires management plans in water-quality limited basins to that section of the rules (OAR 340-41-026(a)(C)) which describes requirements for water quality-limited waterbodies. Staff also agree with the latter part of this comment. The temperature and bacteria rules have been reorganized to reflect a more logical presentation of the criteria.

- 2) Comment: Accessibility. Better notice should have been given, and more time should have been allowed for public comment. A few commenters requested an extension of the public comment period. One person noted that she had attended the public workshops and did not receive notice of the public hearings.

Department Response: Staff agree that more steps could always be taken to include the interested public in rulemaking discussions. However, given the existing rules on public involvement, staff disagree that the notice was inadequate. Staff also do not agree that the public comment period should be extended.

All the rules for public involvement were scrupulously followed. Opportunities for involvement by the general public included:

- Notices of Advisory Committee meetings were sent to a list of interested persons, and a public comment period was held at each Policy Advisory Committee meeting.

- Once the Advisory Committees had made their recommendations, public workshops were held around the state prior to development of the actual rule language. The technical and policy discussions were documented in Issue Papers that were also widely distributed.
- The public notice document ("Chance to Comment") for the rule-making included all of the proposed standards under review and was sent to a surface water mailing list of about 800 persons. Persons who provided their name and address in legible script on the "sign-in sheet" at the public workshops were included in the surface water mailing list. (The commenter who said she had not received the notice was not listed on the sign-in sheet from the public workshops.)
- A separate, extensive mailing was sent to a list of persons interested primarily in groundwater issues. That mailing included detail on the nitrate standard, with mention of the other standards being reviewed. All notices were mailed more than 45 days prior to the close of public comment. (For surface water rules, the requirement is 30 days.)
- Press releases were distributed to all the major news media in the state prior to the public hearings.

3) Comment: Guidance. A large number of comments was received that asked for further clarification regarding how the temperature, dissolved oxygen, and bacteria standards would be implemented. Some commenters doubted whether portions of the rules could be implemented.

Department Response: Staff agree that further clarification is appropriate within the portion of the temperature standard that calls for the development of management plans. Such explanatory language has been added to the preamble. Some editorial changes were made in the dissolved oxygen rule to improve the clarity of the rule language.

In response to concerns that guidance is needed prior to enforcement of the dissolved oxygen, temperature, and bacteria standards several changes were made to the proposed rules. Rule language was added that makes the new portions of the dissolved oxygen and temperature standards effective July 1, 1996 to allow more time for development of implementation guidance. Effluent limitations in the proposed bacteria standard were made effective upon permit renewal or issuance, or upon request by the permittee at an earlier date.

DEQ staff discussed each clarification or implementation question and determined that the issues raised were all resolvable through development of guidance documents and training modules. Discussion stimulated by another comment on the low-flow exemption from the temperature criteria resulted in deletion of the exemption due to lack of data

needed to effectively implement the exemption. (For further detail, see Comment 6 on the temperature rule.)

The implementation plans included as Attachment H of this staff report are more detailed than normal in response to some of the implementation questions. The remaining questions will be answered in the guidance documents to be produced following rule adoption.

DISSOLVED OXYGEN

- 1) Comment: IGDO Standard. Several comments were received regarding the appropriateness of adopting an intergravel dissolved oxygen standard. Some commenters found the proposed standard entirely appropriate. One suggested that no standard be adopted, and others opined that adoption be delayed while guidance on monitoring methodologies is developed. One commenter said that the criteria should be based on a broader review of the literature.

Department Response: No information was received that demonstrates that different numeric criteria should be chosen than those in the proposed rule. Based on an extensive literature survey, staff disagree that additional studies exist that invalidate the findings of the D.O. Technical Subcommittee.

Staff agree that it is appropriate to delay the effective date of the rule until guidance on sampling methodologies has been developed. The proposed rule has been modified to include language making the rule effective July 1, 1996. Further, the Department recognizes that while data are initially being collected, it may not be appropriate to enforce the intergravel D.O. rule language; discretion will be used to take into account the availability of reliable information and methodologies for interpreting the data. This said, staff believe that an intergravel D.O. standard is practical based on experience by other states which currently have IGDO standards. DEQ laboratory personnel have been working to define an acceptable methodology and to write monitoring guidance. These same staff would work with those who wish to take IGDO measurements to assure that appropriate techniques are followed which will minimize both error due to sampling variability, and potential harm to redds.

- 2) Comment: IGDO Determinations. With respect to the Department's response to exceedances of the IGDO trigger value, the word "shall" should be replaced by the word "may" in (a)(C).

Department Response: Staff agree and the proposed rule is changed accordingly. A number of situations, including natural conditions and inappropriate monitoring methods

or failure of QA/QC methods could lead the Department to elect not to identify an area with IGDO below 8.0 mg/l as being water quality limited.

- 3) Comment: Natural Conditions. The word "natural" needs clarification; natural conditions should be identified prior to rule adoption, or at a minimum, the process for identifying natural conditions should be defined prior to rule adoption.

Department Response: Staff agree that references to naturally occurring conditions complicate implementation of the sections of the proposed rule that include the reference. Because of these difficulties, the term "natural" has been edited out of the two sections in which it occurred: with respect to the IGDO action level, and the section relating to the influence of temperature.

Some discussion of the importance of natural conditions with respect to temperature/dissolved oxygen interactions is warranted. The reason for inclusion of the term "naturally occurring temperature" was to recognize that increased temperatures result in lower dissolved oxygen concentrations at saturation. Increased temperatures can therefore lead to violations of the dissolved oxygen standard. The original proposed language would find a violation of standard if the concentration limits could not be met due to a temperature increase, even if the saturation levels could be met.

Inclusion of the term "naturally occurring temperature" will result in more waterbodies being listed as water-quality limited due to violations of the oxygen standard. It will also create substantially more difficult determination of whether a waterbody is water-quality limited because of the need to determine the naturally occurring temperature levels. This additional effort may restrict additional oxygen demanding loads. Municipalities, industries, or others wishing to discharge could be "held hostage" because of another source's impacts on stream temperature.

The dilemma is whether to use the dissolved oxygen standard to encourage application of the temperature standard. Staff believe that the application of the temperature standard should stand on its own merits. Because it is a difficult task to identify conditions that are "naturally occurring," and because the proposed IGDO criteria saturation criteria are conservative, the term "naturally occurring" has been removed from the proposed dissolved oxygen rule.

- 4) Comment: Pre-approval. The language in paragraph (a)(G) mandates a pre-approved plan as a condition for using the alternative criteria. This pre-approval requirement may result in less use of the alternative criteria. The commenter recommends that the rule language require an "acceptable", rather than a "pre-approved" plan.

Department Response: Staff agree with the comment, based on the following rationale:

First, it is important that the Department employ the alternative criteria with adequate data. The quality, abundance, and timing of data to provide an adequate data set will depend on local conditions and will require Department judgment for application. This said, the Department should be able to create guidance on approved methods, including quality assurance/control that would allow others to undertake an adequate monitoring program. Much of our existing regulatory process relies on similar self-monitoring by sources, with the Department retaining the authority to reject inadequate data.

The advantage of requiring pre-approval is that discussion of the monitoring program would occur prior to the actual monitoring, and the Department would ultimately reject less data because it would be of relatively higher quality than if such discussions had not taken place. The disadvantage of requiring pre-approval is the additional time required for Departmental review and comment.

The cost of requiring a simply "adequate" monitoring program without pre-approval would be an increased incidence of the Department rejecting data. However, adequate guidance and the ability to communicate outside of a formal approval process would reduce the probability of rejection. Therefore, the recommendation for modification has been incorporated.

- 5) Comment: Daily Means. If narrowly applied, the definition of daily means included in the proposed rule could lead to erroneous conclusions. Also, a single daily mean should be used rather than the specified minimums.

Department Response: Staff agree that the definitions could be made clearer. The language in the proposed rule is intended to require that data provide a reasonable description of the variation in dissolved oxygen levels occurring throughout the day, including daily minimums and maximums. The definition of a daily mean is changed to read:

"the numeric average of an adequate number of data to describe the daily variation in dissolved oxygen concentrations, including daily minimums and maximums. For the purposes of calculating the mean, concentrations in excess of 100% saturation are valued at the saturation concentration."

The samples do not have to be equally spaced as formerly stated in the rule. Also, it will be pointed out in the guidance developed for implementation of the DO standard that the daily mean may be calculated from interpolation of sample data, rather than just the average of the samples.

Staff disagree that a single daily mean should be used rather than the prescribed minimums. The response of fish and aquatic life is often set by extremes. A single criteria, such as proposed, should therefore establish a minimum.

- 6) Comment: Jurisdiction. The proposed rules show duplication of program responsibilities between the Oregon Department of Fish and Wildlife (ODFW) and the Department of Environmental Quality (DEQ). ODFW should determine when and where various fisheries uses occur.

Department Response: The Department of Fish and Wildlife is responsible for managing fisheries resources, whereas the Department of Environmental Quality is responsible for determining which standards to apply to protect the most sensitive of the designated beneficial uses, which may be aquatic life. The DEQ is therefore responsible to determine where and when to apply criteria, but not how to manage the fisheries resources.

It is reasonable to expect that DEQ can rely on the knowledge of ODFW staff in many circumstances. However, ODFW may not always know whether spawning occurs in a specific waterbody or what the seasonal uses are. In such cases, the Department must make a judgment on whether salmonid spawning occurs. These judgements will be made using site specific information obtained from a variety of sources, including ODFW and other resource agencies.

TEMPERATURE:

1. Comment: Numeric Criteria. Different numeric criteria should have been chosen. Some commenters stated that the criteria are too high, and some found them to be too low. Several persons stated that the same criteria should not apply across the state, maintaining that basins in Eastern Oregon cannot be expected to attain the same temperatures that can be achieved in Western Oregon. Some commenters pointed out that anadromous fish are restricted from some basins due to the presence of dams. They questioned why criteria that are protective of anadromous fish would apply in areas where the fish do not exist.

Department Response: Staff disagree that the criteria should be changed. No new information was presented that would invalidate the findings of the Technical Subcommittee, which indicated that salmonids may begin to experience adverse impacts in a range from about 58-64° F.

Commenters apparently did not realize that the proposed criteria were selected to protect other cold-water aquatic species in addition to salmon. Trout, which are widely distributed throughout the state, are a cold water species which have similar requirements to salmon. Because cold water aquatic species are native to streams across the state, and because these species' requirements are the same across locations, there is no scientific basis for establishing different standards in Eastern and Western Oregon, or for setting different criteria above dams.

Staff do not expect that all portions of all streams will eventually attain the criteria. The proposed rule accommodates situations in which anthropogenic warming cannot reasonably be reduced enough to bring stream temperatures into compliance with the standard. In such cases, the rule provides that once all feasible steps have been taken to reduce temperatures, the Department may declare the resulting temperatures to be the standard.

- 2) Comment: Accountability. Commenters disagreed about who should be held accountable for improving stream temperatures, and about whether that accountability should be mandatory or voluntary. Some commenters believed that point sources should not face increased restrictions for a problem that they see as predominantly a nonpoint source issue. Other commenters did not believe that DEQ should regulate nonpoint source pollution at all, or stated that such regulation should be of only a voluntary and cooperative nature. Still other commenters stated that everyone who affects stream temperatures should be held accountable to fully reverse or mitigate their impacts, and that no activities which result in temperature increases should be allowed in water-quality limited basins.

Department Response: Staff, in agreement with members of the Policy Advisory Committee, believe that everyone who contributes to increases in stream temperatures should be part of the solution. Staff further note that the Clean Water Act mandates that standards be set to protect the most sensitive designated beneficial uses. Standards may *not* be optional, and must have the authority of law.

Staff acknowledge that in most of the state's basins, nonpoint source activities are the greatest contributors to stream warming. For this reason, in water-quality limited basins, the proposed rule explicitly mandates that nonpoint sources propose and adopt appropriate practices to reduce their thermal loads.

Because they are generally less important than nonpoint sources in contributing to temperature violations, two accommodations have been made in the proposed rule for point sources. First, the rule language has been changed to specifically limit use of the one degree growth allowance to point sources. Second, the one degree allowance may be used even if not all of the required management plans have been completed or implemented.

- 3) Comment: Special Cases. The rule should explicitly address waterbodies such as stratified lakes, wetlands, sloughs, and channels.

Department Response: Staff agree that the rule should clarify that sloughs and channels associated with the lower, warmer reaches of the Willamette and Columbia Rivers should be subject to the 68° F criterion. Staff disagree that the rule should explicitly address

wetlands, stratified lakes, and other waterbodies that might not meet the cold-water criteria. However, the rule language has been changed to clarify that temperature measurements should be taken in portions or strata of waterbodies that historically supported cold-water species. If the species were not historically present, a warm water criterion--which has not yet been developed--would apply. For such portions or strata of waterbodies, a use attainability analysis could be done, and the relevant cold-water beneficial uses could be removed from the list of designated beneficial uses.

Staff believe that this comment is also relevant to the pH rule, and have raised the issue as Comment #4 under pH.

- 4) Comment: T&E Protection. The rule does not accurately reflect the recommendation of the Policy Advisory Committee for protection of Federal Threatened and Endangered species. It is both too strict with respect to discharges, and should include state sensitive species.

Department Response: Staff agree that the proposed rule language does not fully reflect the recommendation of the Policy Advisory Committee pertaining to the level of protection to be accorded to T&E species. The proposed rule has been revised to include the Committee's recommended language. Although the Committee briefly discussed special protection for state sensitive species, no vote was taken. Because the information required to determine which species are associated with each waterbody, and the times of critical temperature sensitivity is not available, staff do not recommend inclusion of state sensitive species in the rule at this time.

- 5) Comment: Enforcement. The rule is not as protective as the Department implies in its documentation. The Department does not have the authority to enforce nonpoint source compliance with appropriate practices or objectives, and the paragraphs that provide for enforcement waivers would result in too-frequent waivers of the standard.

Department Response: Staff would like to make clear that no one expects immediate results because of the proposed rule. Implementation will be slow due to limited agency resources and the difficulties some temperature sources may face in determining how they can best improve their practices. Improvements will be gradual: even with immediate, 100 percent adoption of improved practices, the desired results--increased shading, better groundwater inflow, and improved stream channel morphology, will take years to develop. Benefits to cold water aquatic species that result in wider species distribution and healthier populations will require still more time.

Disagreement exists regarding the adequacy of the Department's authority to assure nonpoint source compliance. In the case of agricultural and forestry activities under state jurisdiction, state statutes identify enforcement actions. The DEQ may also act if the lead agencies do not implement their responsibilities. The Forest Practices Act provides

the Oregon Department of Forestry with responsibility for meeting water quality standards established by DEQ, as well as enforcement authority. The Oregon Department of Agriculture has similar authority under ORS 568.900-933. Best management practices adopted by the Oregon Department of Forestry must be approved by the Environmental Quality Commission as being adequate to meet water quality standards. If adopted practices prove inadequate, the EQC can petition the Board of Forestry to change the practices. Statutes developed during the 1993 and 1995 Oregon legislative sessions have created potential for similar authority and feedback mechanisms for cooperation between the EQC and the Board of Agriculture.

In urban areas, the Department will work with appropriate state and local agencies to identify, if necessary, actions needed to reduce urban impacts on stream temperatures. DEQ can use its enforcement authority for NPDES individual and general stormwater permits to encourage compliance.

With respect to the waivers for low flow and high air temperature conditions, staff have deleted the low flow provision from the proposed rule and clarified the high air temperature language. In response to this comment, the Temperature Technical Subcommittee has advised the Department that the low flow condition could not be implemented in Eastern Oregon due to a lack of reference sites appropriate to the diverse streamflow conditions which occur there. The new high air temperature language specifies the method for calculating the 90th percentile in a way that will result in waivers only during truly unusual conditions. (Such conditions would occur on average only once in ten years.)

- 6) Comment: Jurisdiction. DEQ does not have the authority to require protection of sensitive, threatened, or endangered species, or to require management plans and best management practices, since these authorities rest with other agencies.

Department Response: Staff disagree with this statement. The Department has legal authority to protect designated beneficial uses by setting and implementing water quality standards. The uses to be protected include aquatic species, which may or may not be sensitive, threatened, or endangered. While the Department is not the designated management agency for implementing forestry or agricultural practices under state jurisdiction, the Department does have statutory authority to set the standards that the DMAs must meet, and to assure that the measures taken by the DMAs are adequate to assure compliance with water quality standards.

- 7) Comment: Plan as a Shield. The rule should explicitly state that it is the Department's intention to offer protection similar to that offered by the "permit as a shield" rule if individual nonpoint sources are implementing approved practices or meeting required objectives.

Department Response: Staff agree that the intent of the proposed temperature rule is to provide legal protection to individual sources who are implementing approved practices or meeting required objectives. Such protection exists in state statute for state and private forest operations, and the proposed rule is structured to provide similar protection to all sources. To add specific language to the "permit as a shield rule" would require a separate rulemaking process. Staff do not believe this is necessary, but will consider the issue further, and will take appropriate action as needed.

- 8) Comment: Resources. The proposed rule requires too many resources to implement. DEQ does not have the resources to implement either the point source or the nonpoint source requirements. The Oregon Department of Agriculture is similarly resource-limited.

Department Response: Many streams in the state do not meet the current temperature standard. Staff believe that many streams will also fail to meet the proposed temperature criteria, and that agency resources are inadequate to fully implement the rule statewide. This means that a prioritization process is needed to determine the order in which waterbodies will be addressed.

The Department is currently reviewing all available data to determine which waterbodies in the state do not meet water quality standards. Once the list is finalized, DEQ staff will work with members of the public, staff from the state departments of forestry and agriculture, Native American tribes, and other interested parties to establish acceptable prioritization criteria. Water-quality limited waterbodies will then be assessed according to the criteria and given a priority ranking. This ranking will then be available for public comment.

To reduce the effort required of DEQ permit writers, the point source requirements of the proposed rule have been changed to allow Department discretion (rather than an EQC determination) to accommodate new or increased discharges of up to 1.0° F. in water-quality limited basins.

HYDROGEN ION CONCENTRATION (pH)

- 1) Comment: Effluent Limits. Loosening the pH criteria will result in increased discharges of acid or alkaline wastes.

Department Response: Staff disagree. Discharges are currently prohibited to lakes. With respect to rivers, permittees will still be required to use highest and best technologies to reduce pollutants. Further, most pH violations in the state are associated with algal blooms that result from high nutrient and temperature levels more commonly associated with nonpoint sources.

- 2) Comment: Local Conditions. The rules do not accommodate the conditions in all the State's basins. The South Cascades including Douglas County and the Klamath province have naturally-occurring high pH values.

Department Response: Staff disagree that high pH values in the areas in question are due to natural conditions. Rather, they are due to the impact of human nonpoint source activities.

- 3) Comment: Cascade Lakes. The Technical Advisory Committee recommended that the pH range for only high-elevation Cascade Lakes should be changed, but the rule includes all Cascade Lakes.

Department Response: Staff agree that the scientific data support lower pH values in only the high-elevation Cascade Lakes, and have changed the proposed rule language to include this consideration.

Issue Raised by the Department:

- 4) Comment: Impoundments. This issue is borrowed from Temperature Comment #3, regarding special cases. Although members of the public did not make the comment with respect to pH, Department staff believe that the comment is applicable to the special case of existing dams which result in pH violations. Dams impound water, creating conditions suitable for algal growth, which may result in high pH values. Many existing dams won't be able to meet even the 9.0 criterion at the time of recertification.

Department Response: The rule language has been changed to accommodate existing dams, provided that all practicable steps have been taken to bring pH values into compliance with the standard.

BACTERIA:

- 1) Comment: Flexibility. The proposed rule doesn't allow enough flexibility to permitted sources. Specifically, sources should be able to argue for a different date for the beginning of winter, and allowable overflows should accommodate short-duration cloud-bursts that result in less rainfall than a 5 (or ten) year/24 hour storm, yet result in overflows.

Department Response: Staff disagree with these viewpoints. The proposed rule provides adequate flexibility to sources to negotiate the beginning of summer, and the allowable overflows. The rule reflects the recommendations of the Policy Advisory Committee, whose members carefully weighed the need to protect drinking water and water contact recreation with the need to create economically feasible requirements. The commenters

have not provided evidence that would suggest that an inappropriate balance has been struck.

- 2) Comment: Overflows. The waivers of the effluent limitations allowed during certain storm events in the proposed rule are not consistent with the requirements of Clean Water Act Section 303(e) that describe a continuing planning process with explicit direction on effluent limitations, schedules of compliance, area-wide waste management plans, basin plans, TMDLs, etc. No waivers should be allowed, but the effluent limitations should be less strict to reduce necessary chlorination levels.

Department Response: To allow higher levels of bacteria in the effluent, while still maintaining reasonably low levels of in-stream bacteria would require that wasteloads and mixing zones be established for bacteria in permits. Staff believe that the comment deserves further consideration, but note that the mixing zone rule has been interpreted to require end-of-pipe criteria for bacteria. The Department is currently reviewing the mixing zone rule and seeking counsel from the Policy Advisory Committee. Should staff conclude that mixing zones are appropriate for bacteria, the appropriate changes in rule will be proposed.

- 3) Comment: Timing. Sewage collection and treatment facilities should comply with the proposed sanitary sewer overflow limitations within five years--not by 2010, as allowed in the rule.

Department Response: Staff disagree that municipalities with inflow and infiltration (I & I) problems should be required to meet the overflow limitations within five years. Problems with the collection system require extensive study of the entire system. Repairing the collection system can be extremely costly, and may result in significant disruption of streets and services. Most municipalities can not afford to undertake such efforts without first obtaining citizen approval for the expenditures. This process takes time.

- 4) Comment: Biofiltration. The 2010 requirement to resolve inflow and infiltration (I&I) problems would discourage small towns from using biofiltration methods.

Department Response: Staff disagree that the proposed rule would have such an effect. The elimination of I&I problems can significantly reduce the hydrologic flows to a treatment plant, allowing more efficient and effective treatment. The effluent discharged could still go through a biofiltration step.

- 5) Comment: EQC Decisions. The Policy Advisory Committee intended to create criteria for inclusion in the rule by which the Environmental Quality Commission would evaluate alternative overflow schedules proposed by permittees.

Department Response: Staff agree that criteria would be helpful, but after much discussion were not able to devise better criteria than those which already appear in the antidegradation policy (OAR 340-41-026(a)(A)) and the rules pertaining to discharges into water-quality limited basins (OAR 340-41-026(a)(C)). Therefore, no criteria have been added to the rule.

- 6) Comment: Re-sampling. Most cities will have difficulty meeting the re-sampling schedule requirements. Therefore, they should be changed in the rule.

Department Response: Staff disagree. The Department is legally required by the Clean Water Act to protect beneficial uses. Especially in summer, when people are swimming in the State's waters, every violation of the criteria represents an increased risk of illness. Re-sampling is required only if the single sample value is exceeded, so the schedule would have to be met only infrequently. Further, the rule includes a provision that allows those facilities for whom the overtime costs would create a hardship to negotiate a different schedule.

- 7) Comment: CAFOs. The language on confined animal feeding operations (CAFOs) is too strict. CAFOs should be allowed to discharge to surface waters, just as small sewage treatment facilities are permitted to do. Even a CAFO that doesn't normally have a discharge will do so during storm events greater than the system is designed to accommodate.

Department Response: The language on CAFOs has been removed from the proposed rule because it is duplicative of other rules. Under the Clean Water Act CAFOs are not allowed to discharge to surface waters through the NPDES permitting system. Discharges to land allowed under the State's WPCF permitting system have a similar prohibition on discharges to surface waters. This prohibition applies to septic systems as well as CAFOs.

GROUNDWATER NITRATE:

- 1) Comment: Trigger Value. The 70 percent trigger value results in a standard which is effectively lower than that recommended by EPA.

Department Response: Staff do not support changing the proposed criterion. Several different reasons could be given for this--the legal rationale provided below is most definitive.

As the commenter noted, Oregon statute requires that a groundwater management area must be declared when values exceed 70 percent of the groundwater nitrate standard.

Therefore the Department does not have legal authority to choose a different trigger point.

Federal law requires that standards be set to protect the designated beneficial uses. Since the EPA recommends that the standard be set at 10 mg/l to protect infants who drink the water, and the Department has no evidence to suggest that a different figure would be better, there is no legal flexibility to raise the standard to 14.3 mg/l so that the trigger value becomes 10 mg/l.

The following charts detail which commenters made the points addressed in the narrative portion of the Evaluation and Response to Public Comment. Like the narrative, these charts do not detail the editorial comments or requests for clarification. The primary focus of the following summary of comments is on those comments which raised major technical, legal, policy, or implementation issues.

**Chart of Major Comments Received
1992 - 1994 Water Quality Triennial Water Quality
Standards Review:
Proposed Revisions to Standards**

Last Name	First Name	Overall Comments			Nitrate
		Format	Accessibility	Guidance/ Implementation	Trigger Value
Andrews	Bruce	•		•	
Barlow	Max/ Michael				
Bell	Nina			•	
Botts	Cassandra				
Buck	Dale				
Cannon	Deb			•	
Carter	Lolita			•	
Conley	James			•	
Coos County Board of Commissioners				•	
Degenhardt	David			•	
Douglas County Board of Commissioners					
Dryden	William			•	
Gaffi	Bill			•	
Godbout	Kevin			•	
Hamilton	Jessica			•	

Last Name	First Name	Overall Comments			Nitrate
		Format	Accessibility	Guidance/ Implementation	Trigger Value
Hart	William		•	•	
Heidgerken	Todd			•	
Kappa	Rob				
Kelly	John			•	
Larson	Larry/ Patricia			•	
Low	Joni				
Miller	Janice				
Nelson	Dennis				
Ollerenshaw	James			•	
Patterson	Bob			•	
Perry	Patricia		•		
Power	Laurie			•	
Reynolds	Dennis		•	•	
Schroeder	Kirk			•	
Shock	Clinton				
Silva	Louisa				
Simmons	Mark			•	
Sims	Mike			•	
Smith	Jack	•			
Smith	Mike				
Smith	Terry			•	
Stilwell	Carrie				
Strong	Ted			•	
Test	Peter			•	•
VanNatta	Kathryn			•	
Whitty	James			•	

Comments Received
 1992 - 1994 Water Quality Triennial Water Quality Standards Review:
 Proposed Revisions to Standards

Last Name	First Name	<i>Dissolved Oxygen</i>					
		IGDO Standard	IGDO Determinations	Natural Conditions	Pre-approval	Daily Means	Jurisdiction
Andrews	Bruce	•			•		
Barlow	Max/ Michael			•			
Bell	Nina						
Botts	Cassandra						
Buck	Dale						
Cannon	Deb						
Carter	Lolita		•				
Conley	James			•			•
Coos County Board of Commissioners							
Degenhardt	David						
Douglas County Board of Commissioners							
Dryden	William	•		•			•
Gaffi	Bill						
Godbout	Kevin	•					•
Hamilton	Jessica						
Hart	William						
Heidgerken	Todd						•
Kappa	Rob						
Kelly	John						
Larson	Larry/ Patricia						
Low	Joni						

Last Name	First Name	<i>Dissolved Oxygen</i>					
		IGDO Standard	IGDO Determinations	Natural Conditions	Pre-approval	Daily Means	Jurisdiction
Miller	Janice						
Nelson	Dennis						
Oilerenshaw	James	•	•				
Patterson	Bob		•	•			
Perry	Patricia						
Power	Laurie						
Reynolds	Dennis						
Schroeder	Kirk	•	•			•	
Shock	Clinton						
Silva	Louisa						
Simmons	Mark						
Sims	Mike						
Smith	Jack						
Smith	Mike						
Smith	Terry						
Stilwell	Carrie						
Strong	Ted						
Test	Peter	•	•				
VanNatta	Kathryn						
Whitty	James						

Comments Received
 1992 - 1994 Water Quality Triennial Water Quality Standards Review:
 Proposed Revisions to Standards

Last Name	First Name	<i>Temperature</i>							
		Numeric Standard	Accountability	Special Cases	T&E Protection	Enforcement	Jursidiction	Plan as a Shield	Resources
Andrews	Bruce	•	•	•		•	•		•
Barlow	Max/ Michael	•							
Bell	Nina			•					
Botts	Cassandra	•					•		•
Buck	Dale	•							
Cannon	Deb								
Carter	Lolita	•		•			•		
Conley	James						•		
Coos County Board of Commissioners									
Degenhardt	David	•							
Douglas County Board of Commissioners									
Dryden	William	•			•		•		
Gaffi	Bill	•							

Last Name	First Name	<i>Temperature</i>							
		Numeric Standard	Accountability	Special Cases	T&E Protection	Enforcement	Jursidiction	Plan as a Shield	Resources
Godbout	Kevin	•			•		•		
Hamilton	Jessica	•							
Hart	William								
Heidgerken	Todd	•		•					
Kappa	Rob								
Kelly	John				•	•			
Larson	Larry/ Patricia	•		•					
Low	Joni					•			
Miller	Janice								
Nelson	Dennis								
Ollerenshaw	James	•	•						•
Patterson	Bob	•					•		•
Perry	Patricia								
Power	Laurie	•	•			•	•		
Reynolds	Dennis								•
Schroeder	Kirk								•
Shock	Clinton	•		•			•		
Silva	Louisa								



Last Name	First Name	<i>Temperature</i>							
		Numeric Standard	Accountability	Special Cases	T&E Protection	Enforcement	Jursidiction	Plan as a Shield	Resources
Simmons	Mark	•					•		
Sims	Mike	•							
Smith	Jack								
Smith	Mike								
Smith	Terry								
Stilwell	Carrie	•				•			
Strong	Ted	•	•		•	•	•		
Test	Peter	•							
VanNatta	Kathryn	•	•		•			•	
Whitty	James	•	•	•	•				

Comments Received
 1992 - 1994 Water Quality Triennial Water Quality Standards Review:
 Proposed Revisions to Standards

Last Name	First Name	<i>p H</i>		
		Effluent Limits	Cascade lakes	Local Conditions
Andrews	Bruce			
Barlow	Max/ Michael			
Bell	Nina			
Botts	Cassandra			
Buck	Dale			
Cannon	Deb			
Carter	Lolita			
Conley	James			
Coos County Board of Commissioners				
Degenhardt	David			
Douglas County Board of Commissioners				•
Dryden	William			
Gaffi	Bill			
Godbout	Kevin			

Last Name	First Name	<i>pH</i>		
		Effluent Limits	Cascade lakes	Local Conditions
Hamilton	Jessica			
Hart	William			
Heidgerken	Todd			
Kappa	Rob			
Kelly	John			
Larson	Larry/ Patricia			
Low	Joni			
Miller	Janice		.	
Nelson	Dennis			
Ollerenshaw	James			
Patterson	Bob			
Perry	Patricia			
Power	Laurie			
Reynolds	Dennis			
Schroeder	Kirk			
Shock	Clinton			
Silva	Louisa	.		
Simmons	Mark			

Last Name	First Name	<i>pH</i>		
		Effluent Limits	Cascade lakes	Local Conditions
Sims	Mike			
Smith	Jack			
Smith	Mike			
Smith	Terry			
Stilwell	Carrie			
Strong	Ted			
Test	Peter			
VanNatta	Kathryn			
Whitty	James			

Comments Received
 1992 - 1994 Water Quality Triennial Water Quality Standards Review:
 Proposed Revisions to Standards

Last Name	First Name	<i>Bacteria</i>							
		Flexibility	Industrial Lagoons	Biofiltration	Timing	Overflows	EQC Decisions	Re-sampling	CAFOs
Andrews	Bruce								•
Barlow	Max/ Michael								
Bell	Nina						•		
Botts	Cassandra								
Buck	Dale								
Cannon	Deb							•	
Carter	Lolita								
Conley	James								
Coos County Board of Commissioners				•					
Degenhardt	David								
Douglas County Board of Commissioners									
Dryden	William								

Last Name	First Name	<i>Bacteria</i>							
		Flexibility	Industrial Lagoons	Biofiltration	Timing	Overflows	EQC Decisions	Re-sampling	CAFOs
Gaffi	Bill					.			
Godbout	Kevin								
Hamilton	Jessica								
Hart	William								
Heidgerken	Todd								.
Kappa	Rob								
Kelly	John								
Larson	Larry/ Patricia								
Low	Joni								
Miller	Janice								
Nelson	Dennis								
Ollerenshaw	James	.				.			
Patterson	Bob							.	
Perry	Patricia								
Power	Laurie								
Reynolds	Dennis								
Schroeder	Kirk								
Shock	Clinton								

Last Name	First Name	<i>Bacteria</i>							
		Flexibility	Industrial Lagoons	Biofiltration	Timing	Overflows	EQC Decisions	Re-sampling	CAFOs
Silva	Louisa				•				
Simmons	Mark								•
Sims	Mike								
Smith	Jack								
Smith	Mike								
Smith	Terry								
Stilwell	Carrie								
Strong	Ted								
Test	Peter								•
VanNatta	Kathryn		•						
Whitty	James		•						

SPECIFIC CHANGES TO RULE LANGUAGE

The table below offers a comparison between proposed new rules and rules sent out for public comment. New text appears in the left-hand column and is bolded and underlined; deleted text appears in the middle column and is bracketed and struck out. Only changes that correspond to the comments addressed in Attachment E are included. The relevant comment is referenced in the third column. Unless otherwise noted, the comment number applies to the comment summary for that particular standard. No. 1, General Comments, is referenced in two cases where text was reorganized or edited for clarity. Because the temperature and bacteria rules were significantly reorganized, the references in the new text often do not match the reference in the old rule, and some wording differs simply to fit text into a new context.

New Rule	Old Rule	Comment Number
<i>340-41-[Basin](2)(a) - Dissolved Oxygen</i>		
(a) Dissolved oxygen (DO): <u>The changes adopted by the Commission on November 17, 1995, become effective July 1, 1996. Until that time, the requirements of this rule that were in effect on November 16, 1995, apply.</u>	No equivalent language existed in the rule sent out for public comment.	No. 1, General Comments

New Rule	Old Rule	Comment Number
<p>(a)(C)... Upon determination that the spatial median intergravel dissolved oxygen concentration is below 8.0 mg/l, the Department <u>may</u>, in accordance with priorities established by the Department for evaluating water quality impaired waterbodies, determine whether to <u>list the waterbody as water quality limited under Section 303(d) of the Clean Water Act</u>, initiate pollution control strategies as warranted, ...;</p>	<p>(a)(C)... Upon Determination that the spatial median minimum intergravel dissolved oxygen concentration is below 8.0 mg/l, the Department [shall], in accordance with priorities established by the Department for evaluating water quality impaired waterbodies, determine whether [natural conditions are responsible for the observed intergravel dissolved oxygen], initiate pollution control strategies as warranted, ...;</p>	<p>Nos. 2 and 3</p>
<p>(a)(D)... Where conditions of barometric pressure, altitude, and temperature preclude attainment of the 8.0 mg/l, dissolved oxygen shall not be less than 90 percent of saturation;</p>	<p>(a)(D)... Where conditions of barometric pressure, altitude, and [naturally occurring] temperatures preclude attainment of the 8.0 mg/l, dissolved oxygen shall not be less than 90 percent of saturation;</p>	<p>Nos. 3 and 4</p>
<p>(a)(G) At the discretion of the Department, when <u>the Department determines that</u> adequate information exists, the Department may apply the dissolved oxygen criteria with associated intervals established in Table 21.</p>	<p>(a)(G) At the discretion of the Department, when adequate information exists, [usually from an approved monitoring plan and analytical procedure], the Department may apply the dissolved oxygen criteria with associated intervals established in Table 21.</p>	<p>No. 4</p>

New Rule	Old Rule	Comment Number
DEFINITIONS - OAR 340-41-006		
<p>(46) ``Daily Mean`` (dissolved oxygen) -- The numeric average <u>of an adequate number of data to describe the variation in dissolved oxygen concentration throughout a day, including daily maximums and minimums.</u> For the purpose of calculating the mean, concentrations in excess of 100 percent of saturation are valued at the saturation concentration.</p>	<p>(46) ``Daily Mean`` (dissolved oxygen) [means] the numeric average of [dissolved oxygen concentration samples taken at equal time increments spread over a 24-hour diurnal period]. Concentrations in excess of 100 percent of saturation are valued at the saturation concentration for the purpose of calculating the mean.</p>	No. 5
OAR 340-41-[Basin](2)(b) - Temperature		
<p>(b) Temperature: <u>The changes adopted by the Commission on November 17, 1995, become effective July 1, 1996. Until that time, the requirements of this rule that were in effect on November 16, 1995, apply.</u></p>	No equivalent language existed in the rule sent out for public comment.	No. 1, General Comments
<p>(b)(A)(iv) ... this includes specific life cycle stages during the time periods they are present <u>in a surface water of the state. Surface water temperature measurements taken to determine compliance with the identified criteria will be taken using a sampling protocol appropriate to indicate impact to the beneficial use....</u></p>	No equivalent language existed in the rule sent out for public comment.	No. 3

New Rule	Old Rule	Comment Number
<p><u>(b)(A)(v)(I) Surface water temperature management plans will be required according to OAR 340-41-026 (3)(a)(D) when the relevant numeric temperature criteria are exceeded and the waterbody is designated as water quality limited under Section 303(d) of the Clean Water Act. The plans will identify those steps, measures, technologies, and/or practices to be implemented by those sources determined by the Department to be contributing to the problem. The plan may be for an entire basin, a single watershed, a segment of a stream, single or multiple nonpoint source categories, single or multiple point sources or any combination of these, as deemed appropriate by the Department, to address the identified temperature problem:</u></p>	<p>No equivalent language existed in the rule sent out for public comment.</p>	<p>No. 2</p>

New Rule	Old Rule	Comment Number
<p>(I) <u>In the case of state and private forest lands, the practices identified in rules adopted pursuant to the State Forest Practices Act (FPA) will constitute the surface water temperature management plan for the activities covered by the act. Consequently, in those basins, watersheds or stream segments exceeding the relevant temperature criterion and for those activities covered by the FPA, the forestry component of the temperature management plan will be the practices required under the FPA. If the mandated practices need to be improved in specific basins, watersheds or stream segments to fully protect identified beneficial uses, the Departments of Forestry and Environmental Quality will follow the process described in ORS 527.765 to establish, implement, and improve practices in order to reduce thermal loads to achieve and maintain the surface water temperature criteria. Federal forest management agencies are required by the federal Clean Water Act to meet or exceed the substantive requirements of the state forestry nonpoint</u></p>		No. 2

New Rule	Old Rule	Comment Number
<p><u>the Clean Water Act. These memorandums will be used to identify the temperature management plan requirements for federal forest lands;</u></p> <p><u>(II) The temperature management plan development and implementation for agricultural nonpoint sources will be pursued through a cooperative agreement between the state Departments of Agriculture and Environmental Quality to implement applicable provisions of ORS 568.900-933, ORS 561.191, and ORS 486B. If DEQ has reason to believe that agricultural discharges or activities are contributing to temperature increases that result in water quality standards violations, DEQ shall hold a consultation with the Oregon Department of Agriculture. If water quality impacts are likely from agricultural sources in addition to confined animal feeding operations, and DEQ determines that a surface water temperature management plan is necessary, the Director of DEQ shall write a letter to the Director of the Department of Agriculture requesting that such a management plan be prepared</u></p>		No. 2

New Rule	Old Rule	Comment Number
<p><u>surface water temperature criteria;</u></p> <p>(III) <u>The Department will be responsible for determining the appropriate surface water temperature management plan for individual and general NPDES permitted sources. The requirement for a surface water temperature management plan and the content of the plan will be appropriate to the contribution the permitted source makes to the temperature problem, the technologies and practices available to reduce thermal loads, and the potential for trading or mitigating thermal loads;</u></p>		No. 2
<p>(IV) <u>In urban areas the Department will work with appropriate state, county, municipal, and special district agencies to develop surface water temperature management plans that reduce thermal loads in basins, watersheds, or stream segments associated with the temperature violations so that the surface water temperature criteria are achieved.</u></p>		No. 2

New Rule	Old Rule	Comment Number
<p>(b)(B)(i) ... <u>The measurements shall be made using a sampling protocol appropriate to indicate impact to the beneficial uses;</u></p>	<p>No equivalent language existed in the rule sent out for public comment.</p>	<p>No. 3</p>
<p><i>OAR 340-41-[Basin](2)(b) - Temperature</i></p>		
<p><u>(b)(B)(iv) An "ecologically significant cold-water refuge" exists when all or a portion of a waterbody supports stenotypic cold-water species (flora or fauna) not otherwise widely supported within the subbasin, and either:</u></p> <p>(I) Maintains cold-water temperatures throughout the year relative to other segments in the subbasin, providing summertime cold-water holding or rearing habitat that is limited in supply, or;</p> <p>(II) Supplies cold water to a receiving stream or downstream reach that supports cold-water biota.</p>	<p>[(b)(C) ... Ecological significance will be found to exist when the cold-water refuge supports] stenotypic cold-water species (flora or fauna) not otherwise widely supported within the subbasin, and either:</p> <p>(I) Maintains cold-water temperatures throughout the year relative to other segments in the subbasin, providing summertime cold-water holding or rearing habitat that is limited in supply, or;</p> <p>(II) Supplies cold water to a receiving stream or downstream reach that supports cold-water biota.</p>	<p>No. 1, General Comments</p>
<p>(b)(C)(vii) In stream segments containing federally listed Threatened and Endangered species <u>if the increase would impair the biological integrity of the Threatened and Endangered population;</u></p>	<p>(b)(H) No measurable surface water temperature increase resulting from anthropogenic activities is allowed in waters containing federally listed Threatened and Endangered species;</p>	<p>No. 4</p>

New Rule	Old Rule	Comment Number
<i>OAR 340-41-026 - Temperature</i>		
<p>(b) (D) An exceedance of the numeric criteria identified in subparagraph (C) (i) through (v) of this subsection will not be deemed a temperature standard violation when the air temperature during the warmest 7-day period of the year exceeds the 90th percentile of the 7-day average daily maximum air temperature <u>calculated in a yearly series over the historic record</u>. However, during such periods, the anthropogenic sources must still continue to comply with their surface water temperature management plans developed under OAR 340-41-026(3) (a) (D):</p>	<p>(L) An exceedance of the numeric criteria identified in paragraphs (D), (E), (F), or (K) of this subsection, and that occurs during the conditions listed in subparagraphs (i) and (ii) of this paragraph will not be deemed a temperature standard violation. However, during these periods the anthropogenic sources must still continue to comply with their surface water temperature management plans:</p> <p>[(i) When natural streamflows are below the 7Q10 level, or]</p> <p>(ii) When the air temperature exceeds the 90th percentile of the 7-day average daily maximum air temperature [for the warmest 7 day period of the year].</p>	No. 5

New Rule	Old Rule	Comment Number
<p>(3)(a)(D)(vii) <u>In waters the Department determines to be critical for bull trout recovery</u>, the goal of a bull trout surface water temperature management plan is to specifically protect those habitat ranges necessary to maintain the viability of existing stocks by restoring stream and riparian conditions or allowing them to <u>revert to conditions</u> attaining the coolest surface water temperatures possible under natural background conditions;</p>	<p>(b)(F) The goal of the bull trout surface water temperature management plan is to specifically protect those ranges necessary to maintain the viability of existing stocks by restoring stream and riparian conditions or allowing them to [return] to [the most unaltered] conditions [feasible for the purpose of] attaining the coolest surface water temperatures possible under natural background conditions;</p>	<p>No. 1, General Comments</p>

New Rule	Old Rule	Comment Number
<p>(3) (a) (F) ...<u>point sources which require an NPDES permit under Section 402 of the Clean Water Act or hydro-power projects which require certification under Section 401 of the Clean Water Act are allowed</u> ...:</p> <p>(i) In the best professional judgment of the Department, <u>the new or increased discharge load, even with the resulting 1.0°F cumulative increase, will not conflict with or impair the ability of a surface water temperature management plan to achieve the numeric temperature criteria; and</u></p>	<p>(3) (a) (C) (iv) In basins determined by the Department to be exceeding the numeric temperature criteria, and which are required to develop surface water temperature management plans, new or increased discharge loads from [expanded anthropogenic sources] are allowed a 1°F total cumulative increase in surface water temperatures as the temperature management plan is being developed and implemented for the water quality limited basin if:</p> <p>(I) In the best professional judgement of the Department [there has been significant progress towards the development and implementation of the temperature management plan; and]</p> <p>[(II)] This 1°F increase will be factored into the final temperature management plan so that final anthropogenic temperature increases achieve the numeric criteria; and</p>	<p>No. 2</p>

New Rule	Old Rule	Comment Number
<p><u>(3)(a)(G) Any source may petition the Department for an exception to paragraph F, provided:</u></p> <p><u>(i) The discharge will result in less than 1.0°F increase at the edge of the mixing zone, and subparagraph ii or iii of this paragraph applies;</u></p> <p><u>(ii) The source provides the necessary scientific information to describe how the designated beneficial uses would not be adversely impacted; or</u></p> <p><u>(iii) The source demonstrates that: it is implementing all reasonable management practices; its activity will not significantly affect the beneficial uses; and the environmental cost of treating the parameter to the level necessary to assure full protection would outweigh the risk to the resource.</u></p>	<p>No equivalent language existed in the rule sent out for public comment.</p>	<p>No. 8</p>

New Rule	Old Rule	Comment Number
<i>OAR 340-41-[Basin](2)(d) - pH</i>		
<p>All Basins:</p> <p>(A) ... <u>The following exception applies: Dams existing on January 1, 1996, which result in pHs that exceed the criteria shall not be considered in violation of the standard if the Department determines that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria;</u></p> <p>Basins with Cascade Lakes (except the Klamath Basin):</p> <p>(C) Cascade lakes <u>above 3,000 feet altitude:</u> pH values shall not fall outside the range of 6.0 to 8.5.</p>	<p>No equivalent language existed in the rule sent out for public comment.</p>	<p>Nos. 3 and 4</p>
<p>Klamath</p> <p>(A) ...;</p> <p>(B) Cascade lakes <u>above 5,000 feet altitude:</u> pH values shall not fall outside the range of 6.0 to 8.5.</p>	<p>No equivalent language existed in the rule sent out for public comment.</p>	<p>No. 3</p>

New Rule	Old Rule	Comment Number
<i>OAR 340-41-[Basin](2)(e) - Bacteria</i>		
(D) Effluent Limitations: <u>Upon NPDES permit renewal or issuance, or upon request for a permit modification by the permittee at an earlier date,....</u>	No equivalent language existed in the rule sent out for public comment.	No. 1, General Comments
(e)(D) Effluent Limitations: <u>Upon NPDES permit renewal or issuance, or upon request for a permit modification by the permittee at an earlier date,</u> effluent discharges to fresh waters and estuarine waters other than shellfish growing waters shall not exceed a monthly log mean of 126 E. coli organisms per 100 ml....	(e)(D) Effluent discharges to fresh waters and estuarine waters other than shellfish growing waters shall not exceed a monthly log mean of 126 E. coli organisms per 100 ml...	No. 3
No text replaces the deleted CAFO language.	(e)(I) {CAFOs: Bacteria from confined animal feeding operations (CAFOs) shall not be detectable in waters of the state. Appropriate design criteria shall be adopted and best management practices employed to comply with this criterion;}	No. 7

New Rule	Old Rule	Comment Number
<p><u>(I) Water Quality Limited for Bacteria: In those waterbodies, or segments of waterbodies identified by the Department as exceeding the relevant numeric bacteria criteria and designated as water quality limited under Section 303(d) of the Clean Water Act, the requirements specified in OAR 340-41-026(e)(a)(I) shall apply.</u></p>	<p>(J) Water Quality Limited for Bacteria: In those waterbodies, or segments of waterbodies[in which the criteria relating to bacteria are exceeded, development and implementation of a bacteria management plan shall be required. The bacteria management plans will identify the specific technologies and BMPs to be implemented by point and nonpoint sources to limit bacterial contamination. For point sources, the bacteria management plan will be part of their National Pollutant Discharge Elimination System permit. For nonpoint sources, the bacteria management plan will be developed by designated management agencies (DMAs) which will identify the appropriate BMPs.]</p>	<p>No. 1, General Comments</p>

New Rule	Old Rule	Comment Number
<i>OAR 340-41-026(3)(a)</i>		
<p><u>(I) In waterbodies designated by the Department as water quality limited for bacteria, and in accordance with priorities established by the Department, development and implementation of a bacteria management plan shall be required of those sources that the Department determines to be contributing to the problem. The Department may determine that a plan is not necessary for a particular stream segment or segments within a water quality limited basin based on the contribution of the segment(s) to the problem. The bacteria management plans will identify the specific technologies, BMPs and/or measures and approaches to be implemented by point and nonpoint sources to limit bacterial contamination. For point sources, their National Pollutant Discharge Elimination System permit is their bacteria management plan. For nonpoint sources, the bacteria management plan will be developed by designated management agencies (DMAs) which will identify the appropriate BMPs or measures and approaches.</u></p>	<p>No equivalent language existed in the rule sent out for public comment.</p>	<p>No. 1, General Comments</p>

Policy Advisory Committee

Name	Affiliation
Craig Johnston Chair	Northwestern School of Law
Ward Armstrong	Oregon Forest Industries Council
Bill Bakke	Oregon Trout
Nina Bell	Northwest Environmental Advocates
Bill Gaffi	Association of Clean Water Agencies
Bob Gilbert	James River Corporation
Jim Griggs	Confederated Tribes of the Warm Springs Reservation
Mike Houck	Urban Streams Council
Sha Spady	Unaffiliated
Terry Smith	League of Oregon Cities
Larry Trosi	Oregon Farm Bureau
Benno Warkenton	Oregon State University
Jim Whitty	Associated Oregon Industries

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for
1992-1994 Triennial Water Quality Standards Review: Proposed Revisions
to Standards

Rule Implementation Plan

Introduction

This Implementation Plan applies to proposed amendments to Oregon Administrative Rules (OAR) 340-41 resulting from the 1992-1994 Triennial Water Quality Standards Review. The Implementation Plan was developed for the Department's staff to establish the overall strategy for implementing the proposed standard. Several components of the plan were developed to specifically address comments received during the public comment period for the proposed standards. The plan includes a description of implementing actions and training actions.

Summary of the Proposed Rule

Dissolved Oxygen:

The dissolved oxygen standard proposed for adoption includes provisions that would:

- Change the numeric criteria from a mixture of percent saturation and concentration to primarily concentration. This change would better reflect the needs of aquatic resources and reduce the number of streams that violate water quality criteria due to natural conditions.
- Change the criteria for eastern Oregon so that they are protective of the most sensitive of designated beneficial uses.
- Allow dischargers to meet more flexible in-stream criteria if they provide adequate data to demonstrate that the diurnal variation in dissolved oxygen levels is within protective ranges.

- Establish an intergravel dissolved oxygen standard that includes both a criterion and an action level. The criterion is set at the acute threshold; oxygen levels below the criterion indicate poor to negligible survival of salmonids from the redd. The action level provides a threshold that reflects more optimal conditions.

Temperature:

The temperature standard proposed for adoption includes provisions that would:

- Establish statewide numeric criteria that apply based on the presence of cold-water aquatic species and their various life stages in a given waterbody. A number of exceptions to the relevant numeric criterion would be allowed.
- A less stringent criterion (68° F.) would be set for the lower Willamette and Columbia rivers.
- The numeric criteria would be waived when air temperatures are at abnormally high levels.
- The Environmental Quality Commission could allow individual sources to exceed the relevant criterion if the source demonstrates that beneficial uses would be fully protected in the basin.
- Provide special protection for: bull trout, cold water refugia, threatened and endangered species, natural lakes, and waterbodies where dissolved oxygen levels are within 0.5 mg/l of the dissolved oxygen criteria.
- Require development and implementation of surface water temperature management plans by those contributing to the temperature problem in basins designated as water-quality limited for temperature.
- Sources that add thermal loads to surface waters would not be deemed to be causing a violation of the numeric criterion if they are using recommended technologies and best management practices identified in basin management plans required by the rule.
- One degree cumulative increase in stream temperatures could be allowed from new sources when stream temperatures are above the relevant numeric criterion.

- When all feasible steps have been taken in a water-quality limited basin to reduce anthropogenic temperature impacts, the relevant criteria would become the temperatures actually attained in the basin.

pH:

The pH standard proposed for adoption includes provisions that would allow for naturally occurring conditions by:

- Lowering the acceptable range of pH's from 6.5 to 6.0 in Cascade lakes above 3,000 feet elevation (or 5,000 feet in the Klamath Basin).
- Raising the acceptable range of pH's from 8.5 to 9.0 in some eastern Oregon basins. A study would be initiated in the appropriate basin when pH's of 8.7 or higher are detected.
- Waiving the criteria for existing dams that have taken all practicable steps to reduce pH's in the impounded waters.

Bacteria:

The bacteria standard proposed for adoption includes the following major elements:

- Change from the use of fecal coliform or *Enterococci* species in freshwaters and non-shellfish-producing estuaries to *Escherichia coli* (*E. coli*) as the indicator species for the numeric criteria. Set an in-stream 30-day log mean limit of 126 *E. coli* per 100 ml. Require that single in-stream and effluent exceedences of more than 406 *E. coli* per 100 ml be followed up with additional testing to determine whether a systematic or long-term problem exists.
- Adopt a narrative criterion that prohibits surface water discharge of untreated sewage. Some exceptions to the prohibition would apply:
 - The EQC could approve basin management plans that allow for limited overflows from sanitary and combined sewer systems.
 - Statewide, at least by the year 2010, overflows of sewage during winter would be allowed only due to a one in five year storm event or greater. Beginning upon rule adoption, overflows during summer could occur only because of a ten year/24 hour storm or greater. New treatment facilities would need to be designed to meet these conditions from the outset.

- Managers of storm sewers would be required to remove illicit and cross connections.
- Contamination from nonpoint and non-human sources would be minimized through use of best management practices and treatment technologies.

Groundwater Nitrate:

The groundwater nitrate standard proposed for adoption sets a numeric criterion of 10 mg/l for nitrate as nitrogen in groundwater.

Proposed Effective Date of the Rule

Dissolved Oxygen	Effective July 1, 1996
Temperature	Effective July 1, 1996
pH	Effective upon filing.
Bacteria	Effective upon filing.
Groundwater Nitrate	Effective upon filing.

Proposal for Notification of Affected Persons

Upon adoption of the proposed rules, the Department will send a fact sheet identifying the changes made in the rules and the dates the rules will become effective to the groups listed below. The notice will also identify who to contact for additional information.

Individually permitted point sources,
 Natural resource agencies (State and Federal),
 DEQ Regional Water Quality Program Offices, and
 Water Quality Standards mailing list of interested persons.

Proposed Implementing Actions

Dissolved Oxygen (D.O.)

D.O. is one of the principal standards to determine water quality, and adequate D.O. is vitally important for supporting fish, invertebrates, and other aquatic life. Some aquatic species, such as the salmonids, are very sensitive to reduced concentrations of D.O. The D.O. requirements of these species were considered in developing the proposed standard.

Because municipal and industrial waste discharges can result in decreased levels of D.O. in receiving waters, permit conditions typically include limitations on oxygen-demanding constituents that can deplete D.O. These limitations are expressed as numeric criteria for biological oxygen demand or carbonaceous biological oxygen demand, which are indicative of the relative efficiency of a sewage treatment plant.

The proposed D.O. standards may result in changes in waste load allocations (limitations on oxygen-demanding constituents) that are included in the permits. Moreover, nonpoint sources of pollution can have an adverse impact on D.O. levels from runoff of oxygen-demanding constituents. Both point and nonpoint sources can contribute to reduced intergravel dissolved oxygen levels. The proposed standard provides a more sophisticated approach than the existing standard to the protection of aquatic species that are dependent on D.O. in both the water column and the intergravel spaces.

Implementing Actions

The Department has recognized the importance of D.O. as a basic element of water quality from the beginning of its pollution control efforts. Dissolved Oxygen is an essential element in the health of the aquatic ecosystem. The Department has an existing water column ambient monitoring program to indicate D.O. levels in the major river basins of the state.

The Department has traditionally controlled point source discharges affecting D.O. by establishing technology based effluent limits, such as the basin limits for Biochemical Oxygen Demand (BOD) for domestic wastewater plants. In recent years, the Department has also established water quality based effluent limits through the Total Maximum Daily Load (TMDL) program. These limits are based on the BOD or CBOD (Carbonaceous Biological Oxygen Demand) loads allowed and still achieve the instream water quality standard.

The current D.O. standard is based on protecting the life cycles of various beneficial uses, such as providing 95 percent saturation for salmon spawning areas. The proposed D.O. standard also protects specific beneficial use life cycles, but has converted the percent saturation to concentration. Table 21 depicts the various life cycles and concentrations based on data availability. Described below is an implementation strategy for the proposed D.O. standard.

- 1) Provide barometric pressure data with all new D.O. data collected by the Department. - Laboratory

For an accurate measure of D.O., the concentration should be corrected for barometric pressure. Heretofore, barometric pressure measurements have not routinely been taken with D.O. data collected by the Department's laboratory. Because the Department recognizes that saturation is dependent on barometric pressure, future data collection should include measurement of this field parameter and data should be corrected for altitude and barometric pressure. Technical guidance about this parameter and a recommended procedure will be provided by the Laboratory to Department staff and others collecting D.O. data. In developing this guidance, the Laboratory will evaluate the capabilities of the Department, and the costs involved, to:

- modify the monitoring procedures to measure barometric pressure routinely, and
- code the STORET data so the differences in analytical methods are recognized.

The Department will continue to accept D.O. saturation data calculated where barometric pressure measurements have not been taken and only estimated altitude information (with an assumed 1 atmosphere) is available. This data may be identified so that the differences in the quality of the data are apparent to the user.

- 2) Provide guidance on when barometric pressure, altitude, or temperature could prevent attainment of the D.O. criteria. Standards and Assessments Section

The new standard allows D.O. to be 95 percent saturation in salmonid spawning streams instead of a concentration of 11 or 9 mg/L, if the cause can be attributed to barometric pressure, altitude, or temperature. Measurements of D.O. taken by DEQ laboratory staff will take barometric pressure into account. Streams violating the D.O. standard because of anthropogenic warming will be dealt with primarily as temperature violations in basins that are water-quality limited for both parameters.

- 3) Provide IGDO sampling and data interpretation procedural guidance.-Laboratory with Wastewater Control Section, Standards and Assessments Section, and Surface Water Section

The new D.O. standard allows a point or nonpoint source to demonstrate compliance with the standard by providing data on the Intergravel Dissolved Oxygen (IGDO) for a particular receiving stream. The Department, other resource agencies, point and nonpoint sources, and designated management agencies have little experience with IGDO monitoring. In addition, the

monitoring inherently involves risk of disturbance of salmonid "redds" if performed by inexperienced personnel. Moreover, it would be advantageous to have fisheries biologists provide oversight of such monitoring activities in order to ensure that the sampling personnel are not unduly disturbing the very resource that is being protected by the standard.

The Department's Laboratory will develop guidance for IGDO sampling methods and the Standards and Assessments Section, will develop guidance covering data interpretation. Guidance will include procedures for conducting the sampling in the least intrusive, yet accurate and reliable, way. Because the conditions at each site may vary, the guidelines will differentiate between the factors subject to local discretion and those factors that all sampling personnel should follow in order to ensure statewide consistency and reliability of data. The guidance will also provide criteria and procedures for quality control and data recording. This guidance will apply to anyone performing IGDO sampling.

Additional guidance will be needed to provide procedures to ensure that data provided by point and nonpoint sources, who will have a vested interest in the outcome of the sampling, are as objective and reliable as possible. This is necessary because the Department will need to know the sampling results can be relied upon to establish Total Maximum Daily Loads (TMDLs) and to allocate waste loads based on IGDO data.

Although the Department's Laboratory will develop the technical guidance for performing IGDO sampling, the Department's Standards and Assessments, Wastewater Control, and Surface Water Sections will develop guidance for permit writers, point and nonpoint sources, and designated management agencies regarding procedures for collecting IGDO data. This guidance will indicate that sampling plans and reports of sampling results will need to be reviewed by permit writers, the Laboratory, or the Standards and Assessments Section. The guidance may also include a procedure to notify the Oregon Department of Fish and Wildlife (ODFW), the National Marine Fisheries (NMFS), and the U.S. Fish and Wildlife Service (USFWS) fisheries biologists of the proposed IGDO sampling whose approval may be necessary to ensure that spawning areas are not unduly disturbed. The NMFS should be informed due to their responsibility for endangered species and possible concerns with "takings" issues. The guidance will also describe how the results will be used in assigning waste loads and processing related permit actions. Moreover, the guidance will describe how the data will be used relative to standards violations associated with nonpoint sources and the associated designated management agencies.

- 4) Provide guidance on the use of IGDO data in prospectively setting TMDLs and allocating wasteloads to point and nonpoint sources. - Standards and Assessments Section with Wastewater Control Section

Heretofore the Department has not used IGDO data in establishing TMDLs and allocating wasteloads to point and nonpoint sources. Guidance will be developed by the Standards and Assessments Section, with the assistance of the Wastewater Control Section, to establish procedures on how to apply the IGDO criteria.

Two new factors will be involved with using IGDO data to allocate waste loads. First, it should be noted that the Department believes it is currently impractical to model IGDO prospectively. However, the IGDO data can supplement water column D.O. data to determine waste loads protective of beneficial uses. Note also that the IGDO standard only relates to one beneficial use_salmonid spawning_whereas water column D.O. relates to additional beneficial uses. Second, to use IGDO data for waste load allocations (WLAs) will require consideration of the relationships between the oxygen sag in the water column, the effect on IGDO of BOD and ammonia in the water column, and the effect on the IGDO of suspended solids discharged from point and nonpoint sources.

Because prospective modeling of IGDO is currently impractical, the guidance will establish a procedure to relate IGDO concentrations to water column D.O., which can be modeled. A starting assumption could be that the IGDO is typically 3 mg/L less than the water column D.O., but a more sophisticated empirical approach will be needed to actually use the IGDO data to set legally enforceable TMDLs and to use as a basis for setting WLAs in waste discharge permits. The guidance will provide a procedure to relate IGDO to water column D.O. to allow prospective modeling .

The guidance will also relate the effect of BOD and ammonia in the water column to IGDO because it is possible that these oxygen demanding waste loads may affect IGDO differently than they affect water column D.O.

Additionally, the guidance will include a procedure to relate suspended solids from point and nonpoint sources to sedimentation-related effects on IGDO. This will be needed in order to allocate suspended solids waste loads to the point and nonpoint sources on a stream segment.

- 5) Establish an interagency agreement with ODFW regarding designation of fish species and provide guidance on application of fisheries information to the

D.O. standard. - Wastewater Control Section with Standards and Assessment Section and Oregon Department of Fish and Wildlife

The new standards require that the aquatic communities (cold, cool, or warm water) be known in order to apply the standards and that the Department decide which aquatic communities need to be protected. This will require that the Department and others have access to information on the distribution of fish species and their lifecycles for any stream being evaluated. Maps are being compiled by the Oregon Department of Fish and Wildlife (ODFW) so most of this information will soon be available. Additional information is available from ODFW basin management plans, resource agencies, universities, and scientific literature. The Department's permit writers will need to refer to the maps and to contact ODFW to obtain further information about spawning and rearing cycles in the affected waterbody.

The Department's Standards and Assessments Section, with support from the Wastewater Control Section, will negotiate an interagency agreement to ensure that ODFW will provide fish species distribution maps and other technical information to the Department. The agreement will also indicate that, although ODFW is the recognized fisheries management agency, it is the Department's responsibility to determine which standard will be applied to any given waterbody.

Besides negotiating an interagency agreement with ODFW, the Department's Wastewater Control Section will provide guidance to permit writers about how fish species distribution and lifecycle information should be applied to the D.O. standard. The guidance will also cover how the Department's Surface Water Section will apply this information to nonpoint sources.

- 6) Provide guidance for Department permit writers regarding the use of IGDO data obtained from various sources for allocating waste loads in a stream segment. - Wastewater Control Section with Standards and Assessment Section

The new standards could result in IGDO data being developed by persons outside of the Department for the purpose of trying to justify a lower water column D.O. and accordingly a higher waste load allocation for its discharges to a stream segment. Guidance will be provided for the Department's permit writers regarding the use of the data developed by a particular point or nonpoint source for determining waste load allocations for other sources on the same stream segment.

The guidance will indicate that all data available on a stream segment will be used by permit writers in establishing waste load applications. This guidance will be needed to ensure that all point and nonpoint dischargers are required to meet the same water quality standard for a stream segment even though only one of the dischargers may have the means to provide the IGDO data. Also, the guidance will need to provide a procedure for permit writers to use to allocate waste loads for point sources when data may have been developed for only one particular source. For example, the guidance might indicate that the source first in time to provide IGDO data will be allowed the desired use of the available assimilative capacity, while later applicants may be limited to a lesser share of the available assimilative capacity. The guidance will also provide guidelines covering how permit writers will determine the level of treatment (Best Available Technology) required before the waste load allocation can be increased, even if the IGDO and water column D.O. data do not predict standards violations with the increased waste loads.

The guidance will be developed by the Wastewater Control Section with assistance from the Standards and Assessments Section.

Implementation Schedule

The new D.O. standard will be implemented according to the following schedule:

- 1) Discharge permits will be modified to implement the new standard when a permit is renewed, when there is a need to modify the permit for some other reason, or when there is a request from a source for the Department to change a wasteload allocation and the source provides adequate additional data.
- 2) The new standard will be used by the Department as a basis for waste load allocations when new or renewed discharge permits are to be issued.
- 3) All water quality basin studies, 303(d)(1) listings, TMDLs, and nonpoint source Best Management Practices will utilize the new D.O. standard upon its adoption by the EQC.
- 4) Consent orders (Mutual Agreement and Orders) will be negotiated with all sources that can not comply with the new D.O. standard at the time the standard is adopted.
- 5) The standard is expected to be fully implemented in a five year period.

Temperature:

Basins which are in Compliance with the Temperature Criteria:

For basins that are not water quality limited, the proposed temperature standard would be implemented much as other standards are implemented. Point sources would be expected to meet established permit limits at the boundary of their mixing zone, and nonpoint sources would be expected to implement best management practices either voluntarily, or according to existing rules.

Regulation of nonpoint sources would be accomplished primarily through efforts of the Surface Water Section, in collaboration with regional nonpoint source staff.

- For forestry activities, the Surface Water Section is responsible for evaluating the practices developed by the Oregon Department of Forestry under the Forest Practices Act to determine if they are in compliance with water quality standards. Regional staff can identify areas where temperature problems exist in forested areas and the Surface Water Section is responsible to examine the situation to determine whether the practices need to be improved. The Surface Water Section is also responsible to assure that the Memoranda of Agreement with the U.S. Forest Service and the U.S. Bureau of Land Management are effective for implementing forest practices on federal lands which equal or improve upon state forest practices.
- For agricultural activities, the Surface Water Section is responsible to collaborate with the Oregon Department of Agriculture to develop and implement best management practices on a voluntary basis.
- The Surface Water Section is responsible for working with urban agencies such as cities, special districts, and Oregon Department of Transportation to develop voluntary Memoranda of Agreement to develop and implement Best Management Practices for stream temperature protection.
- The Surface Water Section and regional nonpoint source staff have responsibility to work with watershed councils to define strategies for reducing nonpoint source impacts on surface water.
- Section 319 grant monies are administered by the Surface Water Section to promote development, evaluation, and adoption of effective management practices.

New, increased, or existing permitted sources of heat loads would be regulated by the regions through effluent limitations and design criteria. To assure that beneficial uses are fully protected in compliance with the standard, the activities outlined below would be necessary:

- Permit writers would need to confirm whether anadromous fish spawn, or bull trout exist, in the stream segment that would be affected by the discharge. This information should be included in the permit application, but regional staff would need to compare the information with maps being prepared by ODFW or information available in ODFW's basin management plans in order to determine whether the relevant standard would be 64°, 55°, or 50° F.
- Permit writers would need to confirm that a new source would not result in temperature increases that would harm temperature-sensitive state sensitive and federal threatened and endangered species. The source should provide this information, but permit writers would need to confirm its accuracy by comparing with information available from ODFW, USFWS, and other relevant agencies that map the distribution of such species.
- The Standards and Assessments Section, with the assistance of the ODFW and other agencies with applicable information, would need to determine where significant cold water refugia exist within the state and designate these areas for specific protection. The information would be distributed to regional staff. If a discharge source requests a permit to discharge into or above such a refuge, the source would need to show that their discharge would not measurably raise temperatures within the refuge. Permit writers would need to confirm the veracity of the submitted information.
- Permit writers would need to confirm whether dissolved oxygen levels in the stream segment that would be affected by a discharge are within .5 mg/l or 10 percent saturation of the dissolved oxygen criteria. The information could be required from individual permittees, or taken from the 305(b) water quality assessment report produced biennially by the Standards and Assessments Section.
- Staff charged with enforcement of permit temperature violations that occur during hot weather would need to consider whether the air temperatures at the time of the exceedence were outside the 90th percentile of historic seven-day average maximum temperatures. Information to support this calculation should be provided by the permittee, who could obtain the necessary data for the calculations from one of many regional reference sites monitored by federal agencies. The Standards and Assessments Section would need to provide information on appropriate sites and agencies to call.

Basins Designated as Water Quality Limited:

The proposed temperature standard specifies that management plans shall be prepared by each individual source or designated management agency in water quality limited

basins. For this to happen, a number of steps would be necessary. Using information obtained during development of the 303(d)(1) list of water quality limited waterbodies, Standards and Assessments staff would identify stream segments that are either water quality limited for temperature, or are essential for lowering temperatures in the water quality limited segments. These waterbodies would then be prioritized by headquarters staff in collaboration with other agencies to determine the order in which the waterbodies would benefit from full implementation of the standard. Full implementation of the standard would depend on availability of agency resources to accomplish the required tasks. Once the priority waterbodies had been selected, Standards and Assessments staff, in consultation with regional staff, would identify those sources that are contributing to the temperature problem and the designated management agencies responsible to regulate them. Guidance would be needed for the sources and the agency staff responsible for development or oversight of management plans and practices.

Nonpoint sources of temperature would be regulated by the appropriate legislature-or-DEQ-designated management agency. DEQ would oversee these efforts through requirement of a management plan and the periodic water quality assessments required under Section 305(b) of the Clean Water Act.

Management of nonpoint sources would be accomplished in a manner very similar to that followed in basins that are not water quality limited:

- Temperature increases introduced due to forestry activities would be regulated by either Oregon Department of Forestry or the relevant federal agency. The EQC has already approved statewide BMPs that staff believe to be protective of water quality. Practices required by federal agencies are equal to or more protective than the state-identified practices. ODF has the authority to fine those who fail to follow the mandated practices, and the EQC may petition the Board of Forestry to define even better practices should the currently-approved practices prove inadequate for protecting water quality.
- Temperature increases introduced due to agricultural practices would be regulated by the Oregon Department of Agriculture or the relevant federal agency, depending on jurisdiction. DEQ and ODA would need to establish a memorandum of agreement regarding how ODA proposes to work with farmers and ranchers to reduce agricultural impacts. One possible model is provided by the Forest Practices Act. Using this model, staff from the Surface Water Section would need to collaborate with ODA to identify acceptable rules for agricultural practices in the same way that the forest practices were developed, and the EQC could petition ODA to change the rules if they did not prove protective enough.

- Temperature increases entering the stream from urban areas would be regulated by an appropriate local government, which would be designated and overseen by DEQ regional staff. Based on experience with the Tualatin basin, the Surface Water Section would develop guidance to assist regional staff in identifying appropriate DMA's and establishing intergovernmental agreements.

Lack of shade, poor groundwater infiltration to streams, and poor stream-channel morphology would likely be of greater concern than stormwater runoff in urban areas. Local governments would need to identify acceptable management practices for improving these attributes, and submit a management plan with monitoring and enforcement provisions for approval by DEQ regional staff. Guidance would be needed for DEQ regional staff regarding the criteria to be used in determining which whether the proposed management plans are acceptable.

For NPDES permittees, the permit would be the management plan or would refer to an additional document to be submitted such as would be necessary if the permittee is proposing to mitigate their impacts. Applicants for 401 Hydro Certifications would likewise need to identify how any adverse temperature impacts from their discharge would be minimized. Guidance and training would be needed for implementation of a number of elements included in the NPDES permit and management plans. These needs are described below:

- For *existing* dischargers, the proposed rule requires the development of a temperature management plan with the implementation of best management practices. Permits would be modified with standard language requiring the development and implementation of best management practices. This language could be developed by the Surface Water Section, in collaboration with regional staff.

Guidance would also be needed to develop best management practices. A possible model for the management plans exists in the stormwater program, where best management practices developed and recommended by the Department are described for each Standard Industrial Classification code. The Wastewater Control Section, in collaboration with regional staff could develop a range of BMP's that would be used as guidance.

- For *new or increased* discharges that include a heat load, the steps outlined for waterbodies in compliance with the standard would apply. Additionally, permit writers would need to determine that the proposed discharge would not result in a cumulative increase of more than 1.0° F. The Standards and Assessments Section would develop guidance for permit writers to determine whether cumulative impacts exceed this margin. Training would also be provided. The Wastewater Control Section (general permits) and regional

permit writers (individual permits) would need to include permit language that requires submittal of accurate latitude, longitude, and river mile descriptors necessary to evaluate the cumulative impacts of the proposed discharge.

General permits would be considered management plans. They would need to require information on in-stream flows so that staff can determine whether the discharge would result in an in-stream increase of less than $.25^{\circ}$ F. (If the discharge would exceed $.25^{\circ}$ F., a general permit would not be appropriate.) The Wastewater Control Section would provide the new permit language, which should also be included in the monitoring report format.

Individual permits would need to be modified to include standard language requiring the development and implementation of a management plan. This language, as well as implementation guidance, would be developed by the Surface Water Section in collaboration with regional staff. Permit writers would need to assure that the management plan was acceptable based on the guidance.

The contents of the required management plan would differ depending on the heat load proposed by the permit applicant. For individual sources whose discharge would result in less than a $.25^{\circ}$ F increase in the receiving stream at the edge of the mixing zone, the permit would serve as the management plan. Permit applicants would need to supply the information required to determine the expected heat load, and permit writers would need to verify the accuracy of the application. Data needed for this category of applicant would include:

- Maximum expected flow from the facility
- Temperature and flow of effluent on a daily/weekly average basis
- Low flow in the receiving stream at the point of discharge
- The dilution ratio at the edge of the mixing zone (optional)

Sources whose discharge would be greater than 0.25° but less than 1.0° F, would need to provide the information listed, and also provide staff with information to determine whether: they have implemented all reasonable management practices; the activity will not significantly affect beneficial uses; and the environmental cost of reducing the heat load outweighs the benefit of the lower temperatures. Staff would make these determinations based on guidance produced by the Standards and Assessments Section and through consultation with ODFW staff regarding presence of beneficial uses.

Individual permits for new point sources that would result in more than a 1° increase in temperature at the edge of the mixing zone would need to fulfill the requirements listed above, and provide upstream mitigation to reduce their net impact on the water

quality limited segment to .25° F. or less. Standards and Assessments staff would prepare guidance on acceptable mitigation projects, and their expected temperature benefits. They would also identify and describe mechanisms for regulating the mitigation project, such as easements or secondary permits, which might be necessary where the mitigation is on land owned by someone other than the original permit applicant. Permit writers would need to verify that the proposed mitigation plan is acceptable, and select an appropriate regulatory mechanism for the mitigation project.

pH:

The Department will use best professional judgement to evaluate if the facility has implemented all practical control measures to reduce the pH in the impoundments as low as possible.

Despite popular belief, pH measurements are among the least reliable of those typically taken by a wide number of parties. The Department's Laboratory program will develop QA/QC procedures for the monitoring of water quality standards including pH. This will alleviate concern that without adequate quality assurance/quality control (QA/QC) procedures in place monitoring results may not be accurate and the Department will not be able to determine compliance with the standards.

Bacteria:

DEQ actions:

- 1) NPDES permit writers will need to be cognizant of information available from the ODA Shellfish Program on the location of estuarine shellfish growing waters. Commercial shellfish growing areas will continue to be delineated in the 305B report, which is updated every 2 years. Specific questions regarding shellfish can be directed to Deb Cannon with the ODA Shellfish Program and ODFW staff. Where appropriate, a special condition will be added to NPDES permits, requiring specific response from a permittee when a plant upset or bypass results in abnormal bacteria releases to areas of concern identified during the permitting process. Specific guidance and suggested special condition language will be made available in the "Water Quality Permit Writer's Guidance Manual".
- 2) DEQ Water Quality Administrator (Mike Downs) will petition the EPA to approve the E. coli testing procedure for inclusion in 40 CFR § 136. DEQ Laboratory (Chris Redman) will update the "Guidelines for Laboratory Quality Assurance" to include the E. coli procedures and the Wastewater

Control Section (WCS) of the Water Quality Division shall include this with future updates of the domestic wastewater systems guidance manual prepared by WCS. The WCS will coordinate with the DEQ laboratory to provide a handout detailing the procedures of the E. coli test for timely distribution to self-monitoring laboratories.

- 3) The E. coli standard will take effect immediately upon adoption; however, the effluent limits will apply only upon permit renewal or issuance, or upon request by a permittee for a permit modification at an earlier date. NPDES permit writers will work with existing sources at permit renewal to include the E. coli standard in the permits.

NPDES permit writers will use BPJ, in accordance with criteria to be supplied in guidance to determine whether facilities should have modified re-sampling schedules or CSO/SSO compliance schedules. Permit writers will need to work with facilities that need alternative CSO/SSO schedules to prepare a case for presentation to the Commission.

Regulated Community Actions:

- 1) Permittees will need to work with the DEQ to ease implementation of the new standard. The sooner sources begin sampling for E. coli, and also correlating overflow data with storm data, the easier it will be for a facility to evaluate their ability to comply with the standard. A permittee will need to provide the Department with documentation to support a claim that the sampling regime as established in the rule for monitoring following an excursion poses an "undue hardship" on that facility. Permittees that can't meet the CSO/SSO limits now, but could over time, will need to develop a compliance schedule. Permittees that will never be able to comply with the CSO/SSO limits will need to establish a feasible plan for acceptance by the Commission.

Groundwater:

No new implementing actions will be needed for the groundwater standard, since it is the same as the interim standard which is already being implemented.

Proposed Training/Assistance Actions

Dissolved Oxygen:

Training requirements for Department staff are summarized below.

- 1) DEQ staff will be trained on the correct methods to obtain barometric pressure data and to make barometric pressure and altitude corrections to D.O. data. Training will be conducted by the Laboratory
- 2) Permit writers will be trained on the application of fish distribution and lifecycle information to waste load allocations for point source permits. Training will be provided by the Standards and Assessments Section and the Laboratory.
- 3) Regional technical assistance staff will be trained in modeling techniques involving more sophisticated levels of water column D.O. modeling. Training will be provided by the Standards and Assessments Section or by a contractor.

Temperature:

Training and guidance were identified in the previous section.

pH:

DEQ staff will need to receive training in laboratory QA/QC procedures and interpretation of validity of data. Staff will also need to communicate the QA/QC procedure requirements to the sources.

Bacteria:

DEQ staff training:

- 1) DEQ lab (or Health Division lab) staff should provide a summary of any differences in the setup and analysis of E. Coli vs fecal coliform.

Regulated community technical assistance and training:

- 1) DEQ water quality source inspectors will provide field assistance regarding interpretation of the rule.
- 2) DEQ WCS will provide information for use at the various wastewater operator short schools to address concerns regarding the implementation of the rule.

- 3) DEQ lab (or Health Division lab) should work with labs that test for E. coli to assure that enumeration techniques are valid.


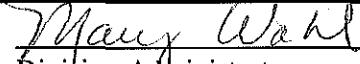
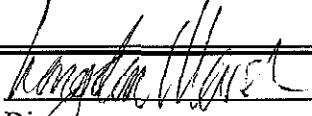

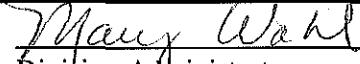
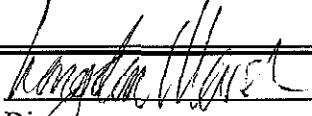

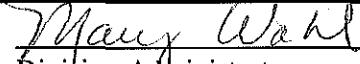
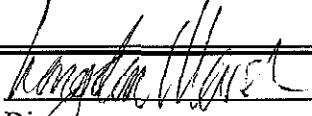
Groundwater Nitrate:

No special training or assistance actions are being proposed.

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item D
November 17, 1995 Meeting

Title: Temporary Rules: Delay Effective Date of Requirements for Very Small Landfills			
Summary: The rule adopts Federal changes which will allow municipal solid waste landfills which accept less than 20 tons of waste per day and are located in dry, remote areas two years to meet Federal RCRA Subtitle D landfill requirements such as groundwater monitoring requirements. The delay allows EPA and the State of Oregon more time to develop less costly alternatives to groundwater monitoring, and allows the very small landfills time to implement Subtitle D requirements.			
Department Recommendation: It is recommended that the Commission adopt temporary rules modifying OAR 340-94-001 and 340-94-140, delaying the date of requirements at certain very small landfills in remote dry areas. The complete text of the proposed rule amendments is presented in attachment A, together with supporting findings presented in Attachment B.			
<table style="width: 100%; border: none;"><tr><td style="text-align: center; width: 33%;"> Report Author</td><td style="text-align: center; width: 33%;"> Division Administrator</td><td style="text-align: center; width: 33%;"> Director</td></tr></table>	 Report Author	 Division Administrator	 Director
 Report Author	 Division Administrator	 Director	

October 31, 1995

†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: November 1, 1995

To: Environmental Quality Commission

From: Langdon Marsh, Director

Subject: Agenda Item D, November 17, 1995, EQC Meeting

Temporary Rules: Delay Effective Date of Requirements for Certain Very Small Landfills

Statement of the Issue

On October 2, 1995, the Environmental Protection Agency adopted final rules delaying from October 9, 1995 to October 9, 1997 the effective date for certain very small municipal landfills to meet the standards required under the Resource Conservation and Recovery Act (RCRA) Subtitle D. EPA did this to allow more time to develop specific requirements for these small landfills that are feasible to be implemented while still protecting the environment and human health. The Environmental Quality Commission (EQC) has previously adopted the federal Subtitle D landfill requirements by reference. The Department believes that the State should adopt the new federal effective date for these very small landfills for the same reasons that EPA delayed these requirements two years. Adopting the October 1997 date will give more time to develop standards for cost-effective alternatives to groundwater monitoring, and for small landfills to implement these standards.

Background

When the Environmental Protection Agency originally adopted Subtitle D standards for municipal landfills, it exempted certain very small landfills from some of these standards and adopted a delayed effective date for the very small landfills to meet the reduced requirements. Landfills meeting the following criteria would be eligible for the reduced standards and delayed effective date:

- o accept no more than 20 tons of waste per day, on an annual average.
- o have no evidence of groundwater contamination from the landfill, and
- o be located in an area receiving less than 25 inches of precipitation per year, and
- o have no other practicable waste management alternative.

However, a subsequent court decision found that the federal law did not allow EPA to exempt these landfills from all the groundwater monitoring requirements. Thus, the very small landfills would

[†]Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

need to implement a groundwater monitoring program if they wished to remain open after the October 9, 1995 effective date of the requirements.

On August 10, 1995, EPA published proposed rules that would allow states with approved solid waste programs such as Oregon to consider allowing alternatives to traditional groundwater monitoring on a site-specific basis at the very small landfills, as long as the alternatives detect contamination from the landfill. EPA also proposed delaying the Subtitle D requirements for these very small landfills until October 1997 to give more time for the alternative monitoring requirements to be developed and implemented. Landfills that stopped receiving waste by October 1997 and that installed final cover by October 1998 would remain exempt from Subtitle D standards after closure. EPA adopted the two-year delay on October 2, 1995 (published in the October 6, 1995 Federal Register), and expects to adopt the alternatives to groundwater monitoring proposals by October 1996.

Of the 57 operating municipal landfills in Oregon, 37 landfills meet the daily tonnage and precipitation criteria for delayed effective date for Subtitle D standards. However, these 37 landfills take only 1.2 percent of the total waste disposed at municipal facilities.

The Department believes that we should adopt the new federal effective date for the following reasons:

- o The 37 very small landfills are not prepared to come into immediate compliance with Subtitle D standards. A combination of court rulings (adding requirements) and proposals from EPA and Congress (reducing requirements) has made the operators of these landfills uncertain as to what standards they will eventually need to meet.
- o The environmental threat posed by these 37 landfills is relatively small. Most are very small, with 22 of the 37 disposing of less than one ton of waste per day. The dry location of these 37 landfills results in very little leachate being produced, thus reducing the potential for groundwater contamination.
- o The cost of immediate full compliance with Subtitle D standards would be relatively large. Many of these landfills serve communities of less than 200 people, and are located more than 100 miles from the nearest landfill currently required to meet Subtitle D standards. These communities do not have the personnel or expertise available to immediately meet all Subtitle D standards, and the cost of compliance would be very high on a per capita basis.

The Department notified the affected landfills on October 2, 1995 that we do not intend to enforce the Subtitle D standards that would otherwise take effect at these small landfills until the Commission has had a chance to consider adopting these temporary rules.

Authority to Address the Issue

ORS 459.045, ORS 459.209, ORS 468.020, and EPA rule published in 60 FR 52337-52342.

Alternatives and Evaluation

Three alternatives were considered:

- o Do nothing, and have existing Subtitle D requirements take effect at the very small landfills. This would result in the landfills either closing or having to expend considerable funds installing groundwater monitoring and meeting other Subtitle D requirements, with not much environmental benefit.
- o Delay only the groundwater monitoring requirements, and have other Subtitle D requirements go into effect. The Department believes that most of the small landfills are not prepared to immediately come into compliance with the Subtitle D standards.
- o Do not adopt a temporary rule, but proceed with adopting these proposed amendments as permanent rules. Due to the length of time it takes to adopt permanent rules, the small landfills will be out of compliance with the existing adopted solid waste rules for about four months until the amendments are adopted. The Department believes it best to adopt the temporary rule as soon as possible, rather than have landfills be uncertain as to what they have to comply with for this period.

Summary of Any Prior Public Input Opportunity

The Solid Waste Advisory committee reviewed the proposed temporary rule, and supports adopting the rule. All affected landfill owners and 350 other persons on DEQ's rule notification lists also received copies of the proposed rules, but no comments have yet been received from these people.

Conclusions

- o On October 2, 1995, EPA adopted new rules changing the effective date by which certain very small municipal landfills will need to come into compliance with RCRA Subtitle D standards. The effective date was changed from October 9, 1995 to October 9, 1997.
- o By adopting the new Federal effective date, Oregon would allow these very small landfills to potentially make use of less expensive alternatives to standard groundwater monitoring that still are able to detect releases of contaminated water from the landfills. EPA expects to adopt rules allowing these less expensive alternatives some time in 1996.

Proposed Findings

1. Failure to promptly adopt this temporary rule will result in serious prejudice to the public interest.

2. If the temporary rule is not adopted, the owners, operators, and permittees of the affected very small landfills will be required to immediately install full groundwater monitoring, instead of being able to install less expensive alternatives under rules expected to be adopted by EPA in 1996.

Recommendation for Commission Action

It is recommended that the Commission adopt temporary rules modifying OAR 340-94-001 and 340-94-140 as presented in Attachment A of the Department Staff Report together with the supporting findings presented in Attachment B.

Attachments

- A. Text of proposed temporary rule modifications
- B. Supporting Findings

Reference Documents (available upon request)

1. Oregon Revised Statutes Chapter 459 and 468
2. OAR Division 94
3. 40 CFR Part 258 (Subtitle D standards)
4. Adopted Federal amendment in 60 FR 52334-52342

Approved:

Section:

Deanne Mueller-Ding for EPV

Division:

Mary Ward

Report Prepared By: Peter Spendelow

Phone: (503) 229-5253

Date Prepared: October 31, 1995

ATTACHMENT A

Proposed Rule Modifications

~~Redlining~~ indicates proposed additions.

~~[Strikeout and brackets]~~ indicates proposed deletions

340-94-001

- (1) OAR Chapter 340, Division 94 applies to municipal solid waste landfills and their appurtenances such as leachate management facilities, and to ash monofills.
- (2) The criteria adopted in OAR 340-94-010 apply to all municipal solid waste landfills which receive waste on or after October 9, 1993, unless the landfill meets the following requirements for a later effective date:
 - (a) For existing municipal solid waste landfills or lateral expansions of municipal solid waste landfills that meet the conditions of 40 CFR, §258.1(e)(2) ("small landfills"): the criteria apply if the landfill receives waste on or after April 9, 1994;
 - (b) For new, existing or lateral expansions of municipal solid waste landfills that meet the conditions in 40 CFR, §258.1(f)(1) ("very small landfills serving certain small communities"): the criteria apply if the landfill receives waste on or after October 9, ~~[1995]~~~~1997~~.
- (3) Municipal solid waste landfills that receive waste after October 9, 1991 but stop receiving waste before a date certain, and which complete installation of a final cover as specified in 40 CFR, §258.60(a) by another date certain, are exempt from the other criteria adopted in OAR 340-94-010. The dates are as follows:
 - (a) All municipal solid waste landfills (unless the landfill meets the conditions under subsections (3)(b) or (3)(c) of this rule): no waste received after October 9, 1993, and installation of final cover completed by October 9, 1994;
 - (b) A "small landfill" meeting the criteria in 40 CFR, §258.1(e)(2): no waste received after April 9, 1994 and installation of final cover completed by October 9, 1994;
 - (c) A "very small landfill serving certain small communities" meeting the criteria in 40 CFR, §258.1(f)(1): no waste received after October 9, ~~[1995]~~~~1997~~ and installation of final cover completed by October 9, ~~[1996]~~~~1998~~.
- (4) In order to meet the requirements for later effective dates as a "very small landfill serving certain small communities," a landfill owner or operator shall make the demonstration required in 40 CFR, §258.1(f)(2) by April 9, 1994. The owner or operator shall keep the demonstration available for inspection by the Department.
- (5) Persons who receive municipal solid waste but who are exempt from any or all criteria in 40 CFR, Part 258 must comply with all relevant requirements in OAR Chapter 340, Divisions 93, 94, 95, 96 and 97.

340-94-140 [Renumbered from 340-61-034]

If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the owner or operator shall comply with financial assurance criteria in 40 CFR, Part 258, Subpart G. All municipal solid waste permittees shall also comply with this rule.

- (1) **Financial Assurance Required.** The owner or operator of a municipal solid waste landfill shall maintain a financial assurance plan with detailed written cost estimates of the amount of financial assurance that is necessary and shall provide evidence of financial assurance for the costs of:
 - (a) Closure of the municipal solid waste landfill;
 - (b) Post-closure maintenance of the municipal solid waste landfill; and
 - (c) Any corrective action required by the Department to be taken at the municipal solid waste landfill, pursuant to OAR 340-94-080(3).

- (2) **Exemptions.** The Department may exempt from the financial assurance requirements existing municipal solid waste landfills which stopped receiving waste before October 9, 1993 (or which stopped receiving waste before April 9, 1994, if a "small landfill" meeting criteria in 40 CFR, §258.1(e)(2)), and completed installation of final cover by October 9, 1994. The Department may also exempt from the financial assurance requirements an existing "very small landfill serving certain small communities" meeting criteria in 40 CFR, §258.1(f)(1), if such a landfill stops receiving waste before October 9, ~~1995~~~~1997~~ and completes installation of final cover by October 9, ~~1996~~~~1998~~.
 - (a) **Exemption criteria.** To be eligible for this exemption, the applicant shall demonstrate to the satisfaction of the Department that the site meets all of the following criteria and that the site is likely to continue to meet all of these criteria until the site is closed in a manner approved by the Department:
 - (A) The landfill poses no significant threat of adverse impact on groundwater or surface water;
 - (B) The landfill poses no significant threat of adverse impact on public health or safety;
 - (C) No system requiring active operation and maintenance is necessary for controlling or stopping discharges to the environment;
 - (D) The area of the landfill that has been used for waste disposal and has not yet been properly closed in a manner acceptable to the Department is less than and remains less than two acres or complies with a closure schedule approved by the Department.
 - (b) In determining if the applicant has demonstrated that a site meets the financial assurance exemption criteria, the Department will consider existing available information including, but not limited to, geology, soils, hydrology, waste type and volume, proximity to and uses of adjacent properties, history of site operation and construction, previous compliance inspection reports, existing monitoring data, the proposed method of closure and the information submitted by the applicant. The Department may request additional information if needed.
 - (c) An exemption from the financial assurance requirement granted by the Department will remain valid only so long as the site continues to meet the exemption criteria in subsection (2)(a) of this rule. If the site fails to continue to meet the exemption criteria, the Department may modify the closure permit to require financial assurance.
[Renumbered from 340-94-100 (3)-(5)]

- (3) **Schedule for provision of financial assurance.**

- (a) For costs associated with the "worst-case" closure plan and the "Subtitle D" post-closure plan prepared pursuant to 40 CFR Subparts F and G and OAR 340-94-110(1)(a)(A) and OAR 340-94-115(1)(a), respectively: Evidence of the required financial assurance for closure and post-closure maintenance of the landfill shall be provided on the following schedule:
 - (A) For a new municipal solid waste landfill: no later than the time the solid waste permit is issued by the Department and prior to first receiving waste;
 - (B) For a regional disposal site operating under a solid waste permit on November 4, 1993: by May 4, 1994; [ø#]
 - (C) For other municipal solid waste landfills operating under a solid waste permit on November 4, 1993: by April 9, 1997; or
 - (D) For a "very small landfill serving certain small communities" meeting criteria in 40 CFR §258.1(f)(1) and operating under a solid waste permit on November 4, 1993: by October 9, 1997.
 - (b) For costs associated with the Final Engineered Site Closure Plan and the Final Engineered Post-closure Plan prepared pursuant to OAR 340-94-110(1)(a)(B) and OAR 340-94-115(1)(b) respectively: Evidence of the required financial assurance for closure and post-closure maintenance of the landfill shall be provided at the same time those two Plans are due to the Department.
 - (c) Evidence of financial assurance for corrective action shall be provided before beginning corrective action.
 - (d) Continuous financial assurance shall be maintained for the facility until the permittee or other person owning or controlling the site is no longer required to demonstrate financial responsibility for closure, post-closure care or corrective action (if required).
- (4) Financial assurance plans. The financial assurance plan is a vehicle for determining the amount of financial assurance necessary and demonstrating that financial assurance is being provided. A financial assurance plan shall include but not be limited to the following, as applicable:
- (a) Cost Estimates. A detailed written estimate of the third-party costs in current dollars (as calculated using a discount rate equal to the current yield of a 5-year U.S. Treasury Note as published in the Federal Reserve's H.15 (519) Selected Interest Rates for the week in which the calculation is done) of:
 - (A) Closing the municipal solid waste landfill;
 - (B) Providing post-closure care, including installing, operating and maintaining any environmental control system required on the landfill site;
 - (C) Performing required corrective action activities; and
 - (D) Complying with any other requirement the Department may impose as a condition of issuing a closure permit, closing the site, maintaining a closed facility, or implementing corrective action.
 - (b) The source of the cost estimates;
 - (c) A detailed description of the form of the financial assurance and a copy of the financial assurance mechanism;

- (d) A method and schedule for providing for or accumulating any required amount of funds which may be necessary to meet the financial assurance requirement;
 - (e) A proposal with provisions satisfactory to the Department for disposing of any excess moneys received or interest earned on moneys received for financial assurance, if applicable.
 - (A) To the extent practicable and to the extent allowed by any franchise agreement, the applicant's provisions for disposing of the excess moneys received or interest earned on moneys shall provide for:
 - (i) A reduction of the rates a person within the area served by the municipal solid waste landfill is charged for solid waste collection service as defined by ORS 459.005; or
 - (ii) Enhancing present or future solid waste disposal facilities within the area from which the excess moneys were received.
 - (B) If the municipal solid waste landfill is owned and operated by a private entity not regulated by a unit of local government, excess moneys and interest remaining in any financial assurance reserve shall be released to that business entity after post-closure care has been completed and the permittee is released from permit requirements by the Department.
 - (f) Adequate accounting procedures to insure that the permittee does not collect or set aside funds in excess of the amount specified in the financial assurance plan or any updates thereto or use the funds for any purpose other than required by paragraph (8)(a) of this rule; [Renumbered from 340-94-140(6)(b)]
 - (g) The certification required by subsection (6)(c) of this rule; and
 - (h) The annual updates required by subsection (6)(d) of this rule.
- (5) Amount of Financial Assurance Required. The amount of financial assurance required shall be established as follows:
- (a) Closure. Detailed cost estimates for closure shall be based on the "worst-case" closure plan or the Final Engineered Site Closure Plan, as applicable. Cost estimates for the Final Engineered Site Closure Plan shall take into consideration at least the following:
 - (A) Amount and type of solid waste deposited in the site;
 - (B) Amount and type of buffer from adjacent land and from drinking water sources;
 - (C) Amount, type, availability and cost of required cover;
 - (D) Seeding, grading, erosion control and surface water diversion required;
 - (E) Planned future use of the disposal site property;
 - (F) The portion of the site property closed before final closure of the entire site; and
 - (G) Any other conditions imposed on the permit relating to closure of the site.
 - (b) Post-closure care. Detailed cost estimates for post-closure care shall be based on the "Subtitle D" post-closure plan or the Final Engineered Post-closure Plan, as applicable.

Cost estimates for the Final Engineered Post-closure Plan shall also take into consideration at least the following:

- (A) Type, duration of use, initial cost and maintenance cost of any active system necessary for controlling or stopping discharges; and
 - (B) Any other conditions imposed on the permit relating to post-closure care of the site.
- (c) Corrective action. Estimated total costs of required corrective action activities for the entire corrective action period, as described in a corrective action report pursuant to requirements of OAR 340-94-080(3) and 40 CFR §258.73.
- (d) If a permittee is responsible for providing financial assurance for closure, post-closure care and/or corrective action activities at more than one municipal solid waste landfill, the amount of financial assurance required is equal to the sum of all cost estimates for each activity at each facility.
- (6) How Financial Assurance Is to Be Provided and Updated.
- (a) The permittee shall submit to the Department a copy of the first financial assurance mechanism prepared in association with a "worst-case" closure plan, a Final Engineered Site Closure Plan, a "Subtitle D" post-closure plan, a Final Engineered Post-closure Plan, and a corrective action report.
 - (b) The permittee shall also place a copy of the applicable financial assurance plan(s) in the facility operating record on the schedule specified in section (3) of this rule.
 - (c) The permittee shall certify to the Director at the time a financial assurance mechanism is submitted to the Department and when a financial assurance plan is placed in the facility operating record that the financial assurance mechanism meets all state and federal requirements. This date becomes the "annual review date" of the provision of financial assurance, unless a corporate guarantee is used, in which case the annual review date is 90 days after the end of the corporation's fiscal year.
 - (d) Annual update. The permittee shall annually review and update the financial assurance during the operating life and post-closure care period, or until the corrective action is completed, as applicable.
 - (A) The annual review shall include:
 - (i) An adjustment to the cost estimate(s) for inflation and in the discount rate as specified in subsection (4)(a) of this rule;
 - (ii) A review of the closure, post-closure care and corrective action (if required) plans and facility conditions to assess whether any changes have occurred which would increase or decrease the estimated maximum costs of closure, post-closure care or corrective action since the previous review;
 - (iii) If a trust fund or other pay-in financial mechanism is being used, an accounting of amounts deposited and expenses drawn from the fund, as well as its current balance.

- (B) The financial assurance mechanism(s) shall be increased or may be reduced to take into consideration any adjustments in cost estimates identified in the annual review.
 - (C) The annual update shall consist of a certification from the permittee submitted to the Department and placed in the facility operating record. The certification shall state that the financial assurance plan(s) and financial assurance mechanism(s) have been reviewed, updated and found adequate, and that the updated documents have been placed in the facility operating record. The annual update shall be no later than:
 - (i) The facility's annual review date; or
 - (ii) For a facility operating under a closure permit, by the date specified in OAR 340-94-100(3).
- (7) Department Review of Financial Assurance and Third-Party Certification.
- (a) The Department may at any time select a permittee to submit financial assurance plan(s) and financial assurance mechanism(s) for Department review. Selection for review will not occur more frequently than once every five years, unless the Department has reasonable cause for more frequent selection. The Department may, however, review such plans and mechanisms in conjunction with a site inspection at any time.
 - (b) A permittee who wants to provide "alternative financial assurance" pursuant to OAR 340-94-145(5)(g) shall submit its financial assurance plan and proposed financial assurance mechanism for Department review and approval on the schedule specified in section (3) of this rule. The submittal shall include certification from a qualified third party that the financial assurance mechanism meets all state and federal requirements for financial assurance including criteria in OAR 340-94-145(5)(g), and is reasonably designed to provide the required amount of financial assurance. The third-party certification shall be submitted in a format acceptable to the Department.
 - (c) The Department will review the financial assurance and the third-party certification, if applicable, for compliance with applicable laws.
- (8) Accumulation of any financial assurance funds:
- (a) The financial assurance mechanisms for closure, post-closure care and corrective action shall ensure the funds will be available in a timely fashion when needed. The permittee shall pay moneys into a trust fund in the amount and at the frequency specified in the financial assurance plan or obtain other financial assurance mechanisms as specified in the financial assurance plan, on the schedule specified in section (3) of this rule.
 - (A) Closure. The total amount of financial assurance required for closure shall be available in the form specified in the financial assurance plan or any updates thereto, whenever final closure of a municipal solid waste landfill unit is scheduled to occur in the "worst case" closure plan or in the Final Engineered Site Closure Plan.
 - (B) Post-closure care. The total amount of financial assurance required for post-closure care shall be available in the form specified in the financial assurance plan or any updates thereto, whenever post-closure care is scheduled to begin for a municipal solid waste landfill unit in the "Subtitle D" post-closure plan or in the Final Engineered Post-closure Plan.

- (C) Corrective action. The total amount of financial assurance required for corrective action shall be available in the form specified in the financial assurance plan or any updates thereto on the schedule specified in 40 CFR §258.74.
- (b) The permittee is 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 and OAR 340-94-145;
- (c) If the Department determines that the permittee did not set aside the required amount of funds for financial assurance in the form and at the frequency required by the applicable financial assurance plan, or if the Department determines that the financial assurance funds were used for any purpose other than as required in section (1) of this rule, the permittee shall, within 30 days after notification by the Department, deposit a sufficient amount of financial assurance in the form required by the applicable financial assurance plan along with an additional amount of financial assurance equal to the amount of interest that would have been earned, had the required amount of financial assurance been deposited on time or had it not been withdrawn for unauthorized use;
- (d) If financial assurance is provided under OAR 340-94-145(5)(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 subsection (4)(e) of this rule. [Renumbered from OAR 340-94-150(7)]

ATTACHMENT B

Statement of Findings of Serious Prejudice
and
Attorney General Approval of Temporary Rule Justification

Agency: Environmental Quality Commission

Temporary Rules: OAR 340-94-001 and 340-94-140 Relating to Effective Date for Requirements for Certain Very Small Landfills in Arid Areas.

1. The Environmental Quality Commission finds that its failure to promptly take this rulemaking action will result in serious prejudice to the public interest.
2. This finding of serious prejudice is based on the Commission's conclusion that local governments and others that operate or are permittees for very small solid waste landfills that have no other practicable waste management alternative would be caused economic hardship if the Commission does not take immediate action to postpone the deadline for compliance with groundwater monitoring and other Resource Conservation and Recovery Act (RCRA) Subtitle D requirements. Failure to adopt the temporary rule will require these landfills to either close or install full groundwater monitoring, instead of being able to install potentially less-expensive alternatives to groundwater monitoring that can still detect releases from the landfill. The Environmental Protection Agency has not yet completed rulemaking on groundwater monitoring alternatives, but expects to complete the rulemaking in 1996.
3. The Commission concludes that following the permanent rulemaking process, rather than taking this temporary rulemaking action, will result in the consequences stated above because the current deadline for implementation of Subtitle D standards by the very small landfills takes effect at least three months before a permanent rule delaying that deadline could be adopted.
4. This temporary rulemaking will mitigate these consequences by delaying the requirement for the very small landfills to meet Subtitle D standards, allowing time for rules allowing for alternatives to groundwater monitoring to be developed and for those alternatives to be implemented at the landfills.

ON BEHALF OF THE COMMISSION:

11/17/95
Date

Langdon Marsh
Langdon Marsh, Director

ATTORNEY GENERAL APPROVAL

I have reviewed this temporary rule as required by Oregon Laws 1993, chapter 729, section 6, and find that the above statement of agency findings is legally sufficient. I therefore approve this rule as required by, and for the purposes of, Oregon Laws 1993, chapter 729, section 6.

11/17/95
Date

Michael R. Houston
Assistant Attorney General

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item E
November 17 Meeting

Title:

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

Summary:

Under the Asbestos Program, the Department is proposing rule changes to: adopt a reporting requirement based on a federal rule, adopt the federal waste conversion rule by reference, and increase liability for gaining certification from a non-approved training provider. The changes will make the Department's program comparable to EPA's, and will facilitate State delegation of authority to implement the federal program.


The Primary Aluminium Plant rules contain references to obsolete test requirements and are ambiguous about appropriate test methods and about which portions of the rule apply to fugitive emissions. The proposed changes would clarify the testing method issues and allow the Department to set required testing frequency based on case-by-case review of monitoring results.

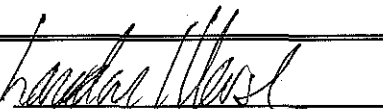
The proposed housekeeping changes would remove redundant language and re-insert inadvertently deleted language in the Asbestos Program rules.

Department Recommendation:

The Department recommends that the Commission adopt the rules and rule amendments regarding Asbestos, Aluminum plants, and housekeeping changes as presented in Attachment A of the report.


Report Author


Division Administrator


Director

October 23, 1995

Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503) 229-5317 (voice) / (503) 229-6993 (TDD).

State of Oregon

Department of Environmental Quality

Memorandum[†]

Date: November 1, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director
Subject: Agenda Item E , November 17, 1995, EQC Meeting

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

Background

On August 15, 1995, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules which would:

- Require that users of asbestos filters report information about the filters. Adopt a regulation concerning asbestos waste conversion facilities. Expand liability for those gaining certification from a non-approved training provider.
- Redefine "Volatile Organic Compound" for area sources to reflect EPA's "delisting" of acetone and expected delisting of perchloroethylene as VOCs.
- Clarify appropriate test methods for aluminum plants. Allow the Department to require decreased or increased frequency of testing. Clarify which provisions include fugitive emissions.
- Delete one of two identical provisions in Division 32. Delete redundant language in an asbestos certification rule. Reinsert language inadvertently deleted from the Asbestos Abatement Notifications requirements during the last rule revision.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on September 1, 1995. The Hearing Notice and informational materials were mailed on August 21, 1995 to the mailing list of those persons who have asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action.

[†] **Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).**

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A Public Hearing was held September 22, 1995, 11:00 AM, Room 10 A, 811 SW 6th Ave, Portland, OR 97204 with Benjamin M. Allen serving as Presiding Officer. The Presiding Officer's Report (Attachment C) summarizes the hearing.

Written comment was received through September 22, 1995. A list of written comments received is included as Attachment D. (A copy of the comments is available upon request.)

Department staff have evaluated the comments received (Attachment D). No modifications to the initial rulemaking proposal are being recommended because of comments. However, because of interest shown by the Industrial Advisory Committee (Attachment F) the Department proposes to modify the original proposal by deferring the delisting of acetone and perchloroethylene as volatile organic compounds (VOCs). The Department may propose the delisting of acetone and perchloroethylene to the Commission in January or at a future meeting.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments, and a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

Issue this Proposed Rulemaking Action is Intended to Address

Asbestos

The Department has requested that EPA delegate to the Department authority to implement an asbestos control program, and has submitted such a program to EPA. In order for Oregon's program to receive delegated authority, it must contain a filter data reporting requirement and a waste conversion regulation.

EPA has revised its Model Accreditation Program. In order to maintain EPA approval of Oregon's asbestos certification program, the Department must expand the liability of persons receiving asbestos certification from a non-approved provider.

Aluminum

The current rules contain obsolete test requirements and are ambiguous about which test methods are appropriate, and about which portions of the rules apply to fugitive emissions.

Housekeeping

Division 32 contains two identical provisions (OAR 340-32-105, 210).

The asbestos certification rule (OAR 340-33-060(4)(i)) contains language which is redundant because of a similar provision in (OAR 340-33-050(9)(d)).

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Language was inadvertently deleted from the Asbestos Abatement Notifications Requirements (OAR 340-32-5630(4)(b)) during the last revision.

Relationship to Federal and Adjacent State Rules

Asbestos

EPA has promulgated federal asbestos regulations. Federal regulations allow EPA to delegate enforcement authority for asbestos regulation if a state adopts a program comparable to the federal asbestos regulations in 40 CFR Part 61.

EPA has also promulgated a Model Accreditation Program. Approved state programs can certify asbestos training providers and workers.

Aluminum

The federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements for Primary Aluminum plants have not yet been promulgated. Hydrogen fluoride is a hazardous air pollutant which will be regulated under the NESHAP standard, and is currently regulated under the aluminum rules. Also, while they apply to a different class of sources, the test methods specified by this revision are identical to those in 40 CFR Subpart S (Standards of Performance for Primary Aluminum Reduction Plants).

Housekeeping

Not applicable.

Authority to Address the Issue

ORS 468.020, 468A.025.

Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)

Asbestos

The language of the reporting requirement is identical to a federal regulation, modified to refer to the Oregon program instead of other federal rules. The waste conversion rule is an adoption by reference of a federal rule. The liability requirement is based on negotiation with EPA, and corresponds to EPA's Model Accreditation Plan.

Redefinition of "Volatile Organic Compound" for Area Sources

The redefinition of VOC is based on similar federal changes, and is meant to make Oregon area source rules conform to federal definitions.

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Aluminum

The clarifications to the rules were developed by Program Operations staff.

Housekeeping

The needed changes were pointed out by staff, the regulated community, and the public.

Advisory Committee - The Industrial Sources Advisory Committee was not available to discuss these revisions. However, in the past, the Committee has indicated that it would prefer discussing policy issues rather than technical details such as these.

The committee showed substantial interest in the proposed delisting of acetone and perchloroethylene as VOCs. Because of that interest, the Department has deferred proposing the delisting to allow discussion with members of the committee. The Department may propose the delistings at a future EQC meeting.

Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.

Asbestos

This rulemaking would adopt a reporting requirement based on the federal rule, and adopt the federal waste conversion regulation (40 CFR §61.155) by reference. With the proposed revisions, EPA will be able to approve the Department's program and delegation request.

The rulemaking will increase liability for incorrect certification. The rule will no longer require that certification from a non-approved training provider be acquired "fraudulently" before liability will accrue. The change will conform Oregon's program to EPA's model language. Without the change, EPA will not approve the Department's program.

Redefinition of "Volatile Organic Compound" for Area Sources

Removal of acetone from the definition of VOC would bring the Departmental definition into line with the federal definition; in certain cases, removal of acetone would allow manufacturers to use acetone in their products as a way to meet the new VOC Area Source rules.

Aluminum

The rulemaking would clarify appropriate test methods for Primary Aluminum Plants, delete obsolete test requirements, and clarify when rules are applicable to fugitive emissions. The amendments would also enable the Department to do case-by-case reviews of monitoring data of the control equipment. If the emissions were shown to be an insignificant contributor to the plant's total emissions and were fairly constant throughout the prior permit periods, then the

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Department might allow the testing frequency to be decreased. Conversely, if the test results warranted, the Department might require increased testing frequency.

Housekeeping

The revisions would:

Delete one of the two identical provisions in Division. 32.

Reinsert the language inadvertently deleted from OAR 340-32-5630(3)(b) during the last revision.

Delete the redundant wording in OAR 340-33-060(4)(i)

Summary of Significant Public Comment and Changes Proposed in Response

The only comments were with respect to the redefinition of "VOC" to exclude acetone. All comments were in support, and the Department made no changes in the proposed language.

Summary of How the Proposed Rule Will Work and How it Will be Implemented

Asbestos

The Department will pursue delegation of EPA authority for the asbestos regulation program. The Department will begin to suspend or revoke the certification of asbestos workers who received certification from a non-approved provider, regardless of whether the worker knew the provider not to be approved. A provider's approval status can be checked with a phone call to the Department. The Department will highlight the issue in information packets sent out by the Department and in information provided to workers applying for certification as supervisors, and will request that contractors notify workers about their potential liability.

Aluminum

The Department will require sources to use the specified test methods. The Department will be able to vary testing frequency on a case by case basis, instead of requiring monthly testing for each source.

Housekeeping

These revisions will not lead to changes in rule implementation.

Recommendation for Commission Action

It is recommended that the Commission adopt the rule amendments regarding Asbestos, Aluminum, and housekeeping changes as presented in Attachment A of the Department Staff Report.

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Attachments

- A. Rule (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
 - 1. Legal Notice of Hearing
 - 2. Public Notice of Hearing (Chance to Comment)
 - 3. Rulemaking Statements (Statement of Need)
 - 4. Fiscal and Economic Impact Statement
 - 5. Land Use Evaluation Statement
 - 6. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
- C. Presiding Officer's Report on Public Hearing
- D. Written Comments Received and Department Response
- E. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- F. Advisory Committee Membership and Report
- G. Rule Implementation Plan

Reference Documents (available upon request)

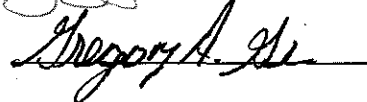
Written Comments Received (listed in Attachment D)

Approved:

Section:



Division:



Report Prepared By: Benjamin M. Allen

Phone:

(503) 229-6828

Date Prepared:

November 1, 1995

BMA

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Asbestos Requirements

Reporting Requirements for Sources Using Air Cleaning Devices.

340-32-5604

- (1) New sources covered by this rule shall submit the requested information 90 days prior to initial startup. Existing sources covered by this rule shall comply by March 1, 1996. Changes in the information provided to the Department shall be submitted within 30 days after the change.**
- (2) Sources covered by OAR 340-32-5600(1) Mills, 340-32-5600(3) Manufacturing, 340-32-5640(14) Fabricating, and 340-32-5605 Asbestos to Nonasbestos Conversion Operations, shall provide the following information to the Department.**
 - (a) A description of the emission control equipment used for each process; and**
 - (b) If a fabric filter device is used to control emissions,**
 - (A) The airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and**
 - (B) If the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd^2), the minimum thickness in millimeters (inches), and the airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$).**
 - (c) If a HEPA filter is used to control emissions, the certified efficiency.**
- (3) For sources covered by this rule and subject to OAR 340-32-5650(1) through 340-32-5650(9) Asbestos Disposal Requirements:**
 - (a) A brief description of each process that generates asbestos-containing waste material; and**
 - (b) The average volume of asbestos-containing waste material disposed of, measured in m^3/day (yd^3/day); and**
 - (c) The emission control methods used in all stages of waste disposal; and**
 - (d) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.**
- (4) For sources covered by this rule and subject to OAR 340-32-5650(10) Active Disposal Sites and 340-32-5650(11) Inactive Disposal Sites:**
 - (a) A brief description of the site; and**
 - (b) The method or methods used to comply with the standard, or alternative procedures to be used.**

Asbestos To Nonasbestos Conversion Operations.

340-32-5605

- (1) 40 CFR Part 61.155 (July 1, 1995) is by this reference adopted and incorporated herein.**
- (2) The following substitutions shall be made in 40 CFR Part 61.155:**
 - (a) "Administrator" means "Department";**
 - (b) §61.07 means OAR 340-32-1720**
 - (c) §61.07(b)(3) means OAR 340-32-1770**

- (d) §61.150 means OAR 340-32-5650
- (e) §61.152 means OAR 340-32-5640(13)
- (f) §61.154 means OAR 340-32-5650
- (g) §61.154(e) means OAR 340-32-5650(10)(a)(C)-(G)
- (h) §61.154(f) means OAR 340-32-5650(10)(b)

Asbestos Disposal Requirements

340-32-5650 Work practices and procedures for packaging, storage, transport, and disposal of asbestos-containing waste material: The owner or operator of a ~~any source or an activity covered under the provisions of OAR 340-32-5600(3), 340-32-5620(1), or 340-32-5640(12) and section (15) of this rule~~ through OAR 340-32-5650 or any other source of friable asbestos-containing waste material shall meet the following standards:

- (1) There shall be no visible emissions to the atmosphere, except as provided in section (12) of this rule, during the collection; processing, including incineration; packaging; transporting; or deposition of any asbestos-containing waste material which is generated by such source.
- (2) All asbestos-containing waste materials shall be adequately wetted to ensure that they remain wet until disposed of, and:
 - (a) Processed into nonfriable pellets or other shapes; or
 - (b) Packaged in leak-tight containers such as two plastic bags each with a minimum thickness of 6 mil., or fiber or metal drum. Containers are to be labeled as follows:
 - (A) The name of the asbestos waste generator and the location at which the waste was generated; and
 - (B) A warning label that states:

DANGER
Contains Asbestos Fibers
Avoid Creating Dust
Cancer and Lung Disease Hazard
Avoid Breathing Airborne
Asbestos Fibers

Alternatively, warning labels specified by 26.1101(k)(7) (8/10/94) may be used.

- (3) Where the asbestos-containing materials are not removed from a facility prior to demolition as described in OAR 340-32-5640(5), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Such asbestos-containing waste materials, shall be transported in lined and covered containers for bulk disposal.
- (4) The interim storage of asbestos-containing waste material shall protect the waste from dispersal into the environment and provide physical security from tampering by unauthorized persons. The interim storage of asbestos-containing waste material is the sole responsibility of the contractor, owner or operator performing the asbestos abatement project.
- (5) All asbestos-containing waste material shall be deposited as soon as possible by the asbestos waste generator at:
 - (a) A waste disposal site authorized by the Department and operated in accordance with this rule; or

- (b) A Department approved site that converts asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of **OAR 340-32-5605 Asbestos to Nonasbestos Conversion Operations** ~~40 CFR 61.155 Standard for Operations~~ that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.
- (6) Persons disposing of asbestos-containing waste material shall notify the landfill operator of the type and volume of the waste material and obtain the approval of the landfill operator prior to bringing the waste to the disposal site.
- (7) For each waste shipment the following information shall be recorded on a Department form:
- (a) Waste Generation
- (A) The name, address, and telephone number of the asbestos waste generator.
- (B) The number and type of asbestos-containing waste material containers and volume in cubic yards.
- (C) A certification that the contents of this consignment are carefully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highways according to applicable regulations.
- (b) Waste Transportation
- (A) The date transported.
- (B) The name, address, and telephone number of the transporter(s).
- (c) Waste Disposal
- (A) The name and telephone number of the disposal site operator.
- (B) The name and address or location of the waste disposal site.
- (C) The quantity of the asbestos-containing waste material in cubic yards.
- (D) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers.
- (E) The date asbestos-containing waste is received at disposal site.
- (8) For the transportation of asbestos-containing waste material:
- (a) The asbestos waste generator shall:
- (A) Maintain the asbestos waste shipment records and ensure that all the information requested on the Department form regarding waste generation and transportation has been supplied.
- (B) Limit access into loading and unloading area to authorized personnel.
- (C) Mark vehicles, while loading and unloading asbestos-containing waste, with signs (20 in. x 14 in.) that state:

DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
Authorized Personnel Only

Alternatively, language that conforms to the requirements of 26.1101(k)(6) (8/10/94) may be used.

- (b) The waste transporter shall:
 - (A) Immediately notify the landfill operator upon arrival of the waste at the disposal site.
 - (B) Provide a copy of the asbestos waste shipment record to the disposal site owners or operators when the asbestos-containing waste material is delivered to the disposal site.
- (9) After initial transport of asbestos-containing waste material the asbestos waste generator shall:
 - (a) Receive a copy of the completed asbestos waste shipment record within 35 days, or determine the status of the waste shipment. A completed asbestos waste shipment record will include the signature of the owner or operator of the designated disposal site.
 - (b) Have a copy of the completed asbestos waste shipment record within 45 days, or submit to the Department a written report including:
 - (A) A copy of the asbestos waste shipment record for which a confirmation of delivery was not received; and
 - (B) A cover letter signed by the asbestos waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.
 - (c) Keep asbestos waste shipment records, including a copy signed by the owner or operator of the designated waste disposal site, for at least three years. Make all disposal records available upon request to the Department. For an asbestos abatement project conducted by a contractor licensed under OAR 340-33-040, the records shall be retained by the licensed contractor. For any other asbestos abatement project, the records shall be retained by the facility owner.
- (10) Each owner or operator of an active asbestos-containing waste disposal site shall meet the following standards:
 - (a) For all asbestos-containing waste material received:
 - (A) Ensure that off-loading of asbestos-containing waste material is done under the direction and supervision of the landfill operator or their authorized agent and accomplished in a manner that prevents the leak-tight transfer containers from rupturing and prevents visible emissions to the air.
 - (B) Ensure that off-loading of asbestos-containing waste material occurs at the immediate location where the waste is to be buried and restrict public access to off-loading area until waste is covered in accordance with paragraph (I), of this subsection.
 - (C) Maintain asbestos waste shipment records and ensure that all information requested on the Department form regarding waste disposal has been supplied.
 - (D) Retain a copy of asbestos waste shipment records for at least three years.
 - (E) Immediately notify the Department by telephone, followed by a written report to the Department the following working day, of the presence of improperly enclosed or uncovered waste. Submit a copy of the asbestos waste shipment record along with the report.
 - (F) As soon as possible and no longer than 30 days after receipt of the waste send a copy of the signed asbestos waste shipment record to the asbestos waste generator.

(G) Upon discovering a discrepancy between the quantity of waste designated on the asbestos waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the asbestos waste generator. Report in writing to the Department within the 15th day after receiving the waste any discrepancy between the quantity of waste designated on the asbestos waste shipment records and the quantity actually received which cannot be reconciled between the asbestos waste generator and the waste disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the asbestos waste shipment record along with the report. Identify the Department assigned asbestos project number in the discrepancy report.

(H) Select the waste burial site in an area of minimal work activity that is not subject to future excavation.

(I) Cover all asbestos-containing waste material deposited at the disposal site with at least 12 inches of soil or six inches of soil plus 12 inches of other waste before compacting equipment runs over it but not later than the end of the operating day.

(b) Maintain, until closure, record of the location, depth and area, and quantity in cubic yards of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(c) Excavation or disturbance of asbestos-containing waste material, that has been deposited at a waste disposal site and is covered, shall be considered an asbestos abatement project. The notification for any such project shall be submitted as specified in OAR 340-32-5630 but modified as follows:

(A) Submit the project notification and project notification fee to the Department at least 45 days before beginning any excavation or disturbance of asbestos-containing waste disposal site.

(B) Reason for disturbing the waste.

(C) Procedures to be used to control emissions during the excavation, storage, transport and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.

(D) Location of any temporary storage site and the final disposal site.

(d) Upon closure of an active asbestos-containing waste disposal site each owner or operator shall:

(A) Comply with all the provisions for inactive asbestos-containing waste disposal sites.

(B) Submit to the department a copy of records of asbestos waste disposal locations and quantities.

(C) Furnish upon request, and make available during normal business hours for inspection by the Department, all records required under this section.

(11) The owner or operator of an inactive asbestos-containing waste disposal site shall meet the following standards:

(a) Insure that a cover of at least two feet of soil or one foot of soil plus one foot of other waste be maintained.

(b) Grow and maintain a cover of vegetation on the area to prevent erosion of the non asbestos-containing cover of soil or other waste materials or in desert areas where

vegetation would be difficult to maintain, a layer of at least three inches of well-graded, nonasbestos crushed rock may be placed and maintained on top of the final cover instead of vegetation.

(c) For inactive asbestos waste disposal sites for asbestos-containing tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used and maintained to achieve the requirements of subsections (a) and (b) of this section, provided prior written approval of the Department is obtained.

(d) Excavation or disturbance at any inactive asbestos-containing waste disposal site shall be considered an asbestos abatement project. The notification for any such project shall be submitted as specified in OAR 340-32-5630, but modified as follows:

(A) Submit the project notification and project notification fee to the Department at least 45 days before beginning any excavation or disturbance of asbestos-containing waste disposal site.

(B) Reason for disturbing the waste.

(C) Procedures to be used to control emissions during the excavation, storage, transport and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Department may require changes in the emission control procedures to be used.

(D) Location of any temporary storage site and the final disposal site.

(e) Within 60 days of a site becoming inactive, request in writing that the Commission issue an environmental hazard notice for the site. This environmental hazard notice will in perpetuity notify any potential purchaser of the property that:

(A) The land has been used for the disposal of asbestos-containing waste material; and

(B) That the survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required for active asbestos disposal sites have been filed with the Department; and

(C) The site is subject to OAR 340-32-5590 through 340-32-5650.

(12) Any waste which contains nonfriable asbestos-containing material not subject to this rule shall be handled and disposed of using methods that will prevent the release of airborne asbestos-containing material.

(13) Rather than meet the requirements of this rule, an owner or operator may elect to use an alternative storage, transport, or disposal method which has received prior written approval by the Department.

Certification

340-33-050

(1) Persons on asbestos abatement projects shall be certified at one or more of the following levels:

(a) Certified supervisor. A certified supervisor may work as a certified worker without having separate certification as a worker;

(b) Certified worker.

(2) Application for Certification-General Requirements:

- (a) Persons applying to become certified supervisors or persons relying on prior training as described in OAR 340-33-080 shall submit applications to the Department;
- (b) Persons applying for worker certification without prior training and certified workers taking refresher courses shall apply directly to the accredited training provider using Department approved forms.
- (3) Application to be a certified supervisor shall include:
 - (a) Documentation that the applicant has successfully completed the supervisor level training and examination as specified in OAR 340-33-070 and the Department Asbestos Training Guidance Document; and
 - (b) Documentation that the applicant has:
 - (A) Been certified as a worker and has at least three months of asbestos abatement experience, including time on powered air purifying respirators and experience on at least five separate asbestos abatement projects; or
 - (B) Has successfully completed certified worker training and six months of general construction, environmental or maintenance supervisory experience demonstrating skills to independently plan, organize and direct personnel in conducting an asbestos abatement project. The Department shall have the authority to determine if any applicant's experience satisfies those requirements.
- (4) Application to be a certified worker shall include documentation that the applicant applying to be a certified worker has successfully completed the level of training and examination as specified in OAR 340-33-070 and the Department Asbestos Training Guidance Document.
- (5) A certification card and a certificate of course completion shall be issued by the training course provider to an applicant who has fulfilled the requirements of certification.
- (6) Certification at all levels is valid for a period of one year after the date of issue.
- (7) Annual Recertification:
 - (a) Certified workers and supervisors must be approved by a training provider before taking a recertification refresher course;
 - (b) Training providers must ensure applicants possess valid certification before granting refresher course admission;
 - (c) Certified supervisors and workers must complete their annual recertification course during the three months prior to the expiration date of their certification card. Certified supervisors and workers may reinstate certification by taking the appropriate refresher course up to one year after the expiration date. After that time, such persons must take the initial course to be recertified.
- (8) A current worker certification card shall be readily available for inspection by the Department at each asbestos abatement project for each worker or supervisor engaged in asbestos abatement activities.
- (9) Suspensions and Revocations: The Department may suspend or revoke a person's certification for:
 - (a) Failure to comply with state or federal asbestos abatement regulations;
 - (b) Performing asbestos removal without having physical possession of a current certification card;

- (c) Permitting the use or duplication of one's certification card or certificate by another;
 - (d) ~~[Fraudulently obtaining]~~**Obtaining** certification from a training provider that does not have approval to offer training for the particular discipline from the Department or EPA;
 - (e) Failure to pay delinquent application fees, and civil penalties.
- (10) A person whose certification has been revoked may apply for recertification 12 months after the revocation date.

Primary Aluminum Plants

Definitions

340-25-260 As used in OAR 340-25-255 through 340-25-285:

- (1) "All Sources" means sources including, but not limited to, the reduction process, alumina plant; anode plant, anode baking plant, cast house, and collection, treatment, and recovery systems. **Except for the purposes of 340-25-265(1)(c) and (3)(d), "all sources" does not include sources of fugitive emissions.**
- (2) "Ambient Air" means the air that surrounds the earth, excluding the general volume of gases contained within any building or structure.
- (3) "Annual Average" means the arithmetic average of the monthly averages reported to the Department during the twelve most recent consecutive months.
- (4) "Anode Baking Plant" means the heating and sintering of pressed anode blocks in oven-like devices, including the loading and unloading of the oven-like devices.
- (5) "Anode Plant" means all operations directly associated with the preparation of anode carbon except the anode baking operation.
- (6) "Commission" means Environmental Quality Commission.
- (7) "Cured Forage" means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.
- (8) "Department" means Department of Environmental Quality.
- (9) "Emission" means a release into the outdoor atmosphere of air contaminants.
- (10) "Emission Standards" means the limitation on the release of contaminant or multiple contaminants to the ambient air.
- (11) "Fluorides" means matter containing fluoride ion **emitted to the ambient air as measured by EPA Method 13A or 13B and Method 14 in accordance with the Department's Source Sampling Manual or an equivalent test method approved in writing by the Department.**
- (12) "Forage" means grasses, pasture, and other vegetation that is consumed or is intended to be consumed by livestock.
- (13) **"Fugitive emissions" means emissions of any air contaminant that escapes to the atmosphere from any point or area that is not identifiable as a stack, vent, duct, or equivalent opening.**
- ~~(13)~~(14) "Monthly Average" means the summation of the arithmetic average of all representative test results obtained during any calendar month and the emission rates established for sources not subject to routine testing.
- ~~(14)~~(15) "Opacity" means the degree to which an emission reduces transmission of light or obscures the view of an object in the background **as measured by EPA Method 9 in accordance with the Department's Source Sampling Manual.**
- ~~(15)~~(16) "Particulate Matter" means a small discrete mass of solid or liquid matter, but not including uncombined water **emitted to the ambient air as measured by DEQ Method 5 in accordance with the Department's Source Sampling Manual or an equivalent test method approved in writing by the Department.**

~~[(16)]~~(17) "Primary Aluminum Plant" means those plants which will or do operate for the purpose of, or related to, producing aluminum metal from aluminum oxide (alumina).

~~[(17)]~~(18) "Pot Line Primary Emission Control Systems" means the system which collects and removes contaminants prior to the emission point. If there is more than one such system, the primary system is that system which is most directly related to the aluminum reduction cell.

~~[(18)]~~(19) "Regularly Scheduled Monitoring" means sampling and analyses in compliance with a program and schedule approved pursuant to OAR 340-25-280.

~~[(19)]~~ "Ringlemann Smoke Chart" means the Ringlemann Smoke Chart with instructions for use as published in May, 1967, by the U.S. Department of Interior, Bureau of Mines.]

(20) "Source test" means a minimum of three (3) individual test runs with the pollutant emissions determined from the arithmetic average of the three tests.

~~[(20)]~~(21) "Standard Dry Cubic Foot of Gas" means that amount of the gas which would occupy a cube having dimensions of one foot on each side, if the gas were free of water vapor at a pressure of 14.7 P.S.I.A. and a temperature of 68 °F.

Emission Standards

340-25-265

- (1) The ~~[exhaust gases from-]~~ emissions from all sources at each primary aluminum plant constructed after January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:
 - (a) Total fluoride emissions ~~[from all sources-]~~ shall not exceed:
 - (A) A monthly average of 1.3 pounds of fluoride ion per ton of aluminum produced; and
 - (B) An annual average of 1.0 pound of fluoride ion per ton of aluminum produced; and
 - (C) 12.5 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.
 - (b) The total of organic and inorganic particulate matter emissions ~~[from all sources-]~~ shall not exceed:
 - (A) A monthly average of 7.0 pounds of particulate per ton of aluminum produced; and
 - (B) An annual average of 5.0 pounds of particulate per ton of aluminum produced.
 - (c) Visible emissions from any source shall not exceed ten (10) percent opacity ~~[or 0.5 on the Ringlemann Smoke Chart]~~ at any time.
- (2) Each primary aluminum plant constructed and operated after January 1, 1973, shall be in full compliance with OAR 340-25-255 through 340-25-285 no later than 180 days after completing potroom start-up and shall maintain full compliance thereafter.
- (3) The ~~[exhaust gases from-]~~ emissions from all sources at each primary aluminum plant constructed on or before January 1, 1973, shall be collected and treated as necessary so as not to exceed the following minimum requirements:

- (a) Total fluoride emissions ~~[from all sources]~~ shall not exceed:
 - (A) A monthly average of 3.5 pounds of fluoride ion per ton of aluminum produced; and
 - (B) An annual average of 2.5 pounds of fluoride ion per ton of aluminum produced; and
 - (C) 22.0 tons of fluoride ion per month from any single aluminum plant without prior written approval by the Department.
- (b) The total of organic and inorganic particulate matter emissions from all sources at plants using vertical stud Soderberg cells shall not exceed:
 - (A) A monthly average of 13.0 pounds of particulate per ton of aluminum produced; and
 - (B) An annual average of 10.0 pounds of particulate per ton of aluminum produced.
- (c) The total of organic and inorganic particulate matter emissions from all sources at plants using prebake cells shall not exceed:
 - (A) A monthly average of 15.6 pounds of particulate per ton of aluminum produced; and
 - (B) An annual average of 13.5 pounds of particulate per ton of aluminum produced.
- (d) Visible emissions from any source shall not exceed 20 percent opacity ~~[or 1.0 on the Ringelmann Smoke Chart]~~ at any time.

~~[(4) Each existing primary aluminum plant shall comply with OAR 340-25-255 through 340-25-285 upon adoption.]~~

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[Publications: The Publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 60, **adopted by EOC 6/26/70, ef. 8/10/70**; f. 12-5-73, ef. 12-25-73; DEQ 4-1980, f. & ef. 1-28-80; DEQ 10-1982, f. & ef. 6-18-82; DEQ 4-1993, f. & cert. ef. 3-10-93

Monitoring

340-25-280

- (1) Each primary aluminum plant constructed and operated on or before January 1, 1973, shall submit and conduct a detailed, effective monitoring program. The program shall include regularly scheduled monitoring and testing by the plant of emissions of gaseous and particulate fluorides and total particulates. Each plant shall test emissions from each operating potline once per calendar month. A minimum of three (3) representative test/s/ **runs** shall be taken each month. All such testing shall include simultaneous sampling of control system(s) and/or roof vents **unless otherwise authorized in writing by the Department**. Anode bake oven control systems shall be tested at least once per month. All tests shall be taken on prespecified dates. A schedule for measurement of fluoride levels in forage and ambient air shall be submitted. The Department shall establish a monitoring program for each plant which shall be placed in effective operation within ninety (90) days after written notice to the plant by the Department of the established monitoring program.

- (2) Each primary aluminum plant proposed to be constructed and operated after January 1, 1973, shall submit a detailed pre-construction and post-construction monitoring program as a part of the air contaminant discharge permit application.
- (3) All monitoring methods used to demonstrate compliance with OAR 340-25-255 through 340-25-285, including sampling and analytical procedures, must be filed with and approved by the Department. Where applicable, methods in the **Department Source Sampling Manual**, including, but not limited to, EPA Methods 5 and 7 for particulates and Method/s/ 13A or 13B **and Method 14** for fluorides, shall be used.

Housekeeping

Bulk Gasoline Terminals

340-22-130

- (1) No terminal owner or operator, shall allow volatile organic compounds (VOC) to be emitted into the atmosphere in excess of 80 milligrams of VOC per liter of gasoline loaded from the operation of loading truck tanks, and truck trailers at bulk gasoline terminals with a daily throughputs of greater than 76,000 liters (20,000 gallons) per day of gasoline (determined by a thirty-day rolling average):
 - (a) The owner or operator of a gasoline loading terminal shall only allow the transfer of gasoline between the facility and a truck tank or a truck trailer when a current leak test certification for the delivery vessel is on file with the terminal or a valid permit as required by OAR 340-22-137(1)(c) is displayed on the delivery vessel;
 - (b) The owner or operator of a truck tank or a truck trailer shall not make any connection to the terminal's gasoline loading rack unless the gasoline delivery vessel has been tested in accordance with OAR 340-22-137(1);
 - (c) The truck driver or other operator who fills a delivery truck tank and/or trailer tank shall not take on a load of gasoline unless the vapor return hose is properly connected;
 - (d) All equipment associated with the vapor recovery system shall be maintained to be vapor tight and in good working order.
- (2) Compliance with section (1) of this rule shall be determined by testing in accordance with Method 33 on file with the Department. The method for determining compliance with section (1) of this rule are delineated in **40 CFR Part 60, Subpart XX, §60.503.**
- (3) Bulk Gasoline terminals shall comply with the following within the limits of section (1) of this rule:
 - (a) All displaced vapors and gases during tank truck gasoline loading operations are vented only to the vapor control system;
 - (b) The loading device must not leak when in use. The loading device shall be designed and operated to allow no more than 10 cubic centimeters drainage per disconnect on the basis of 5 consecutive disconnects;
 - (c) All loading liquid lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected;
 - (d) All vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically and immediately when disconnected or which contain vapor-tight unidirectional valves;
 - (e) Gasoline is handled in a manner to prevent its being discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. If more than 5 gallons are spilled, the operator shall report the spillage in accordance with OAR [~~340-20-350 to 340-20-380~~]
340-28-1400 through 340-28-1450;
 - (f) The vapor collection system is operated in a manner to prevent the pressure therein from exceeding the tank truck or trailer pressure relief settings.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

[**Publications:** The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 21-1978, f. & ef. 12-28-78; DEQ 17-1979, f. & ef. 6-22-79; DEQ 23-1980, f. & ef. 9-26-80; DEQ 12-1981(Temp), f. & ef. 4-29-81; DEQ 3-1986, f. & ef. 2-12-86; DEQ 8-1991, f. & cert. ef. 5-16-91; DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 25-1994, f. & ef. 11-2-94

[**ED. NOTE:** The text of Temporary Rules is not printed in the Oregon Administrative Rules Compilation. Copies may be obtained from the adopting agency or the Secretary of State.]

[Applicability

~~340-32-210~~

- ~~(1) The provisions of this Division shall apply to any new, modified, or existing source that emits or has the potential to emit any HAP listed in Table 1 of OAR 340-32-130.~~
- ~~(2) The owner or operator of the following types of sources shall comply with the standards set forth in OAR 340-32-400 through OAR 340-32-5000:
 - ~~(a) any existing major source of HAP;~~
 - ~~(b) any new major source of HAP that proposes to construct;~~
 - ~~(c) any existing major source of HAP that proposes a modification;~~
 - ~~(d) any existing source currently having an Air Contaminant Discharge Permit that becomes a major source of HAP;~~
 - ~~(e) any existing unpermitted source that becomes a major source of HAP; or~~
 - ~~(f) any area source of HAP for which a standard has been adopted.~~~~

Asbestos Abatement Notifications Requirements

340-32-5630 Written notification of any asbestos abatement project shall be provided to the Department on a Department form. The notification must be submitted by the facility owner or operator or by the contractor in accordance with one of the procedures specified in sections (1), (2), or (3) of this rule except as provided in sections (5), (6), and (7).

- (1) Submit the notifications as specified in section (4) of this rule and the project notification fee to the Department at least ten days before beginning any friable asbestos abatement project and at least five days before beginning any non-friable asbestos abatement project.
 - (a) The project notification fee shall be:
 - (A) \$35 for each project less than 40 linear feet or 80 square feet, residential building, or non-friable asbestos abatement project.
 - (B) \$70 for each project greater than or equal to 40 linear feet or 80 square feet but less than 260 linear feet or 160 square feet of asbestos-containing material.
 - (C) \$275 for each project greater than or equal to 260 linear feet or 160 square feet, and less than 1300 linear feet or 800 square feet of asbestos - containing material.
 - (D) \$375 for each project greater than or equal to 1300 linear feet or 800 square feet, and less than 2600 linear feet or 1600 square feet of asbestos-containing material.

(E) \$650 for each project greater than or equal to 2600 linear feet or 1600 square feet, and less than 5000 linear feet or 3500 square feet of asbestos-containing material.

(F) \$750 for each project greater than or equal to 5000 linear feet or 3500 square feet, and less than 10,000 linear feet or 6000 square feet of asbestos-containing material.

(G) \$1,200 for each project greater than or equal to 10,000 linear feet or 6000 square feet, and less than 26,000 linear feet or 16,000 square feet of asbestos-containing material.

(H) \$2,000 for each project greater than or equal to 26,000 linear feet or 16,000 square feet, and less than 260,000 linear feet or 160,000 square feet of asbestos-containing material.

(I) \$2,500 for each project greater than 260,000 linear feet or 160,000 square feet of asbestos-containing material.

(J) \$260 for annual notifications for friable asbestos abatement projects involving 40 linear feet or 80 square feet or less of asbestos removal.

(K) \$350 for annual notifications for non-friable asbestos abatement projects performed at schools, colleges, and facilities.

(b) Project notification fees shall be payable with the completed project notification form. No notification will be considered to have occurred until the notification fee is submitted.

(c) The ten day notification requirement in section (1) of this rule may be temporarily waived in emergencies which directly affect human life, health, and property. This includes:

(A) Emergencies where there is an imminent threat of loss of life or severe injury; or

(B) Emergencies where the public is exposed to air-borne asbestos fibers; or

(C) Emergencies where significant property damage will occur if repairs are not made.

(d) The ten day notification requirement in section (1) of this rule may be temporarily waived for asbestos abatement projects which were not planned, resulted from unexpected events, and which if not immediately performed will cause damage to equipment or impose unreasonable financial burden. This includes the non-routine failure of equipment.

(e) In either subsection (c) or (d) of this section persons responsible for such asbestos abatement projects shall notify the Department by telephone prior to commencing work, or by 9 am of the next working day if the work was performed on a weekend or holiday. In any case notification as specified in section (4) of this rule and the appropriate fee shall be submitted to the Department within three days of commencing emergency or unexpected event asbestos abatement projects.

(f) The Department shall be notified prior to any changes in the scheduled starting or completion dates or other substantial changes or the notification will be void.

- (g) If an asbestos project, equal to or greater than 2,600 linear feet or 1,600 square feet continues for more than one year, a new notification and fee shall be submitted annually thereafter until the project is complete.
 - (h) Residential buildings shall include: site built homes, modular homes constructed off site, mobile homes, and duplexes or other multi unit residential buildings consisting of four units or less.
- (2) Annual notification for friable asbestos abatement projects. This notification shall only be used for projects where no more than 40 linear or 80 square feet of asbestos-containing material is removed. These projects shall only be conducted at one or more facilities by a single contractor or a single facility owner with a centrally controlled asbestos operation.
- (a) Establish eligibility for use of this notification procedure with the Department prior to use;
 - (b) Maintain on file with the Department a general asbestos abatement plan. The plan shall contain the information specified in subsections (4)(a) through (4)(i) of this rule to the extent possible;
 - (c) Provide to the Department a summary report of all asbestos abatement projects conducted using the annual notification procedure, in the previous three months by the 15th day of the month following the end of the calendar quarter. The summary report shall include the information specified in subsections (4)(i) through (4)(l) of this rule for each project, a description of any significant variations from the general asbestos abatement plan; and a description of asbestos abatement projects anticipated for the next quarter;
 - (d) Provide to the Department, upon request, a list of asbestos abatement projects which are scheduled or are being conducted at the time of the request;
 - (e) Submit project notification and fee prior to use of this annual notification procedure;
 - (f) Failure to provide payment for use of this notification procedure shall void the general asbestos abatement plan and each subsequent abatement project shall be individually assessed a project notification fee.
- (3) Annual non-friable asbestos abatement projects shall only be performed at schools, colleges, and facilities where the removal work is done by certified asbestos abatement workers. Submit the notification as follows:
- (a) Establish eligibility for use of this notification procedure with the Department prior to use;
 - (b) Maintain on file with the Department a general non-friable asbestos abatement plan. The plan shall contain the information specified in subsections (4)(a) through (4)(i) of this rule to the extent possible;
 - (c) Provide to the Department a summary report of all non-friable asbestos abatement projects conducted in the previous three months by the 15th day of the month following the end of the calendar quarter. The summary report shall include the information specified in subsections (4)(i) through (4)(l) of this rule for each project, a description of any significant variations from the general asbestos abatement plan, and a list describing the non-friable asbestos abatement projects anticipated for the next quarter, where possible;

- (d) Submit project notification and fee prior to use of this notification procedure;
- (e) Failure to provide payment for use of this notification procedure shall void the general non-friable asbestos abatement plan and each subsequent non-friable abatement project shall be individually assessed a project notification fee.
- (4) The following information shall be provided for each notification:
 - (a) Name and address of person conducting asbestos abatement.
 - (b) Contractor's Oregon asbestos abatement license number, if applicable, and certification number of the supervisor for asbestos abatement or **certification number of the trained worker for a project which does not have a supervisor.**
 - (c) Method of asbestos abatement to be employed.
 - (d) Procedures to be employed to insure compliance with OAR 340-32-5640 and 340-32-5650.
 - (e) Names, addresses, and phone numbers of waste transporters.
 - (f) Name and address or location of the waste disposal site where the asbestos-containing waste material will be deposited.
 - (g) Description of asbestos disposal procedure.
 - (h) Description of building, structure, facility, installation, vehicle, or vessel to be demolished or renovated, including:
 - (A) The age, present and prior use of the facility;
 - (B) Address or location where the asbestos abatement project is to be accomplished.
 - (i) Facility owner's or operator's name, address and phone number.
 - (j) Scheduled starting and completion dates of asbestos abatement work.
 - (k) Description of the asbestos type, approximate asbestos content (percent), and location of the asbestos-containing material.
 - (l) Amount of asbestos to be abated: linear feet, square feet, thickness.
 - (m) For facilities described in OAR 340-32-5640(5) provide the name, title and authority of the State or local government official who ordered the demolition, date the order was issued, and the date demolition is to begin.
 - (n) Any other information requested on the Department form.
- (5) The project notification fees specified in this section shall be increased by 50% when an asbestos abatement project is commenced without filing of a project notification and/or submittal of a notification fee or when notification of less than ten days is provided under subsections (1)(c) and (d) of this rule.
- (6) The Director may waive part or all of a project notification fee. Requests for waiver of fees shall be made in writing to the Director, on a case-by-case basis, and be based upon financial hardship. Applicants for waivers must describe the reason for the request and certify financial hardship.
- (7) Pursuant to ORS 468A.135, a regional authority may adopt project notification fees for asbestos abatement projects in different amounts than are set forth in this rule. The fees shall be based upon the costs of the regional authority in carrying out the delegated asbestos program. The regional authority may collect, retain, and expend such project notification fees for asbestos abatement projects within its jurisdiction.

Training Provider Accreditation

340-33-060

- (1) General:
 - (a) Asbestos training courses or certification requiring accreditation under this Division may be provided by any person;
 - (b) Training providers offering training in Oregon to satisfy these certification requirements must be accredited by the Department;
 - (c) Each training course shall be individually accredited by the Department;
 - (d) Course instructors must have academic credentials, demonstrated knowledge, prior training, or field experience in their respective training roles;
 - (e) The Department may require any accredited training provider to use examinations developed by the Department in lieu of the examinations offered by the training provider;
 - (f) Training course providers shall permit representatives of the Department or its designee to attend, evaluate and monitor any training course without charge. The Department is not required to give advance notice of its inspection. The Department may suspend or withdraw approval of a training course based upon the criteria specified in OAR 340-33-060(4);
 - (g) The Department may require accredited training providers to pay a fee equivalent to reasonable travel expenses for one Department representative to audit any accredited course which is not offered in the State of Oregon for compliance with this Division. This condition shall be an addition to the standard accreditation application fee.
- (2) Application for Accreditation:
 - (a) Application for accreditation shall be submitted to the Department in writing on forms provided by the Department and attachments as stated in OAR 340-33-060(2)(A) through 340-33-060(2)(b). Such applications shall, at a minimum, contain the following information:
 - (A) Name, address, telephone number of the firm, individual(s), or sponsors conducting the course, including the name under which the training provider intends to conduct the training;
 - (B) The type of course(s) for which approval is requested;
 - (C) A detailed course outline showing topics covered and the amount of time given to each topic, including the hands-on skill training;
 - (D) A copy of the course manual, instructor notebooks and all printed material to be distributed in the course;
 - (E) A description of teaching methods to be employed, including description of audio-visual materials to be used. The Department may, at its discretion, request that copies of the materials be provided for review. Any audio-visual materials provided to the Department will be returned to the applicant;
 - (F) A description of the hands-on facility to be utilized including protocol for instruction which includes working with asbestos-substitute materials, fitting and using respirators, use of glove-bag, donning protective clothing and constructing a decontamination unit, the number of students to be accommodated; the number of instructors; and the amount of time for hands-on skill training;
 - (G) A description of the equipment that will be used during both classroom lectures and hands-on training;

(H) A list of all personnel involved in course preparation and presentation and a description of the background, special training and qualification of each, as well as the subject matter covered by each;

(I) A copy of each written examination to be given including the scoring methodology to be used in grading the examination; and a detailed statement about the development and validation of the examination;

(J) A list of the tuition or other fees required;

(K) A sample of the certificate of completion;

(L) A description of the procedures and policies for re-examination of students who do not successfully complete the training course examination;

(M) A list of any states or accrediting systems that approve the training course;

(N) A description of student evaluation methods (other than written examination to be used) associated with the hands-on skill training, as applicable;

(O) A description of course evaluation methods used by students;

(P) Any restriction on attendance such as class size, language, affiliation, and/or target audience of class;

(Q) A description of the procedure for issuing replacement certification cards to workers who were issued a certification card or certification card label by the training provider within the previous 12 months and whose cards have been lost or destroyed;

(R) Any additional information or documentation as may be required by the Department to evaluate the adequacy of the application;

(S) Accreditation application fee.

(b) The training provider shall retain a copy of the application materials listed above for at least three years. Such applications shall be made available for inspection by the Department or its designees upon request.

(c) Application for initial training course accreditation and course materials shall be submitted to the Department at least 45 days prior to the requested approval date;

(d) Upon approval of an initial or refresher asbestos training course, the Department will issue a certificate of accreditation. The certificate is valid for one year from the date of issuance;

(e) Application for renewal of accreditation must follow the procedures described for the initial accreditation. In addition, course instructors must demonstrate that they have maintained proficiency in their instructional specialty and adult training methods during the 12 months prior to renewal.

(3) Training Provider Administrative Tasks. Accredited training providers shall perform the following as a condition of accreditation:

(a) Administer the training course only to those persons who have been approved by the Department, and/or have surrendered their expired certification cards to the trainer and others who are otherwise qualified according to these rules. Such persons are allowed to take the examination to complete the training course;

(b) Issue a numbered certificate and a photo certification card to each student who successfully passes the training course examination and meets all other

requirements for certification. Each certificate and photo certification card shall include:

- (A) A unique certificate number;
- (B) Name of certified person;
- (C) Training course completed;
- (D) Dates of the training course;
- (E) Date of the examination;
- (F) An expiration date of one year after the date upon which the person successfully completed the course and examination;

(G) The name, address, and telephone number of the training provider that issued the certificate;

(H) A statement that the person receiving the certificate has completed the requisite training for asbestos certification as specified in OAR-340-33-050.

(c) Provide the Department with advance payment for each certificate to be issued;

(d) Utilize and distribute as part of the course information or training aides furnished by the Department;

(e) Provide the Department with a monthly class schedule at least one week before the schedule begins. Notification shall include time and location of each course. Training providers shall notify the Department within three days whenever any unscheduled class is given;

(f) Recordkeeping Requirements for Training Providers:

(A) Training providers must retain copies of all instructional materials used during classroom course.

(B) Training providers must retain copies of all instructor resumes and instructor approvals issued by either the Department or US EPA. Trainers must also record the instructors that taught each part of the course for each date that an accredited course is offered;

(C) Training providers must document various information for each accredited course:

- (1) The date the exam was given;
- (2) Training course for which the exam was given;
- (3) The name of the exam proctor;
- (4) The name and score of each person taking the exam and a single copy of the exam;
- (5) Attendance record;
- (6) Course evaluation form;

(D) Training providers shall maintain records of certificates issued to students. Such records shall contain:

- (1) Name, address, telephone number, social security number of person receiving the certificate;
- (2) Certificate numbers given to each person;
- (3) Photographs of persons
- (4) Discipline for which certificate was given;
- (5) Dates of training and certificate expiration;

(E) Training providers shall maintain training records, as specified above, for a minimum of three years. Such records shall readily be available for inspection by the Department or its designee. If a training provider is not accredited, or ceases to give asbestos worker certification training, the training provider must notify and allow the Department to take possession of the records for lawful disposition.

(F) Training providers must submit information as required by the Department within 10 days or as directed by the Department.

(g) Notify the Department prior to issuing a replacement certification card;

(h) Accredited training providers must have their current accreditation certificates at the location where they are conducting training.

(4) Denial, Suspension or Revocation of Accreditation. The Director may deny, suspend or revoke an application or current accreditation upon finding of sufficient cause. Applicants and certificate holders shall also be advised of the duration of suspension or revocation and any conditions that must be met before certificate reinstatement. Applicants shall have the right to appeal the Director's determination through an administrative hearing in accordance with the provisions of OAR Chapter 340 Division 11. The following may be considered grounds for denial, revocation or suspension:

(a) Misrepresentation of the extent of a training course's approval by a State or the EPA;

(b) Failure to submit required information or notifications in a timely manner;

(c) Failure to report to the Department any change in staff or program which substantially deviates from the information contained in the application;

(d) Failure to maintain requisite records;

(e) Falsification of accreditation records, instructor qualifications, or other accreditation information;

(f) Failure to adhere to the training standards and requirements of this Division;

(g) Failure to comply with the administrative tasks and any other requirement of this Division;

(h) Providing concurrent training for either initial or refresher courses in combination for supervisors and asbestos workers;

[~~(i) Obtaining certification from a training provider that does not have approval to offer training for the particular discipline from either EPA or the Department;~~]

(i)~~(h)~~ Failure to pay delinquent application fees, notification fees, and civil penalties;

(j)~~(i)~~ In addition to the criteria listed above, the Department may also suspend or withdraw a training course's approval where an approved training course instructor, or other person with supervisory authority over the delivery of training has been found in violation of other asbestos regulations administered by the Department or other agencies.

NOTICE OF PROPOSED RULEMAKING HEARING

(Rulemaking Statements and Statement of Fiscal Impact must accompany this form.)

Department of Environmental Quality

AQ

OAR Chapter 340

DATE: September 22, 1995 **TIME:** 11:00 AM **LOCATION:** Room 10A, 811 SW 6th Ave., Portland, OR 97204

HEARINGS OFFICER(s): Benjamin M. Allen

STATUTORY AUTHORITY: 468.020, 468A.025

ADOPT: OAR 340-32-5604, 5605

AMEND: OAR 340-22-102; 340-25-260, 265, 280; 340-32-5630, 5650; 340-33-050, 060

REPEAL: OAR 340-32-210

Amendments or additions to other sections of Divisions 25, 32, or 33 listed above (or related administrative rules) may be made in response to information or public comment received by the Department.

- This hearing notice is the initial notice given for this rulemaking action.
- This hearing was requested by interested persons after a previous rulemaking notice.
- Auxiliary aids for persons with disabilities are available upon advance request.

SUMMARY:

- ASBESTOS

Adopt of a filter type reporting requirement (40 CFR 61.153(a)). Required by EPA in order to approve Oregon's asbestos regulation program.

Adopt by reference of a waste conversion regulation. (40 CFR 61.155). Oregon has no such rule.

Expand liability for those gaining certification from a non-approved training provider.
Required by EPA in order to approve Oregon's asbestos certification program.

• REDEFINITION OF "VOLATILE ORGANIC COMPOUND" FOR AREA SOURCES

Redefine "Volatile Organic Compound" (VOC) in Division 22 to reflect EPA's delisting of acetone and expected delisting of perchloroethylene as VOCs.

• ALUMINUM

Clarify appropriate test methods for aluminum plants. Allow the Department to allow or require decreased or increased frequency of testing. Clarify which rules apply to fugitive emissions.

• HOUSEKEEPING

Delete one of the two identical provisions in Div. 32.

Reinsert the language inadvertently deleted from 32-5630(3)(b) during the last revision.

Delete the redundant wording in OAR 340-33-060(4)(i).

LAST DATE FOR COMMENT: September 22, 1995

DATE PROPOSED TO BE EFFECTIVE: Upon adoption by the Environmental Quality Commission and subsequent filing with the Secretary of State.

AGENCY RULES COORDINATOR: Susan Greco, (503) 229-6775

AGENCY CONTACT FOR THIS PROPOSAL: Benjamin M. Allen

ADDRESS: Air Quality Division
811 S. W. 6th Avenue
Portland, Oregon 97204

TELEPHONE: (503) 229-6828
or Toll Free 1-800-452-4011

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

Benjamin M. Allen Aug. 15, 1995

Signature of Author of rulemaking package Date

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON . . .

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

Date Issued: Aug. 17, 1995
Public Hearings: Sep. 22, 1995
Comments Due: Sep. 22, 1995

WHO IS AFFECTED?

Users of filter-type asbestos emissions controls.
Asbestos waste conversion facilities.
Area source users of VOCs, especially acetone and perchloroethylene.
Aluminum plants.
Asbestos handlers.

WHAT IS PROPOSED?

This proposal would:

- Require that users of asbestos filters report information about the filters. Adopt a regulation concerning asbestos waste conversion facilities. Expand liability for those gaining certification from a non-approved training provider.
- Redefine "Volatile Organic Compound" for area sources to reflect EPA's "delisting" of acetone and expected delisting of perchloroethylene as VOCs.
- Clarify appropriate test methods for aluminum plants. Allow the Department to require decreased or increased frequency of testing. Clarify which provisions include fugitive emissions.
- Delete one of two identical provisions in Division 32. Delete redundant language in an asbestos certification rule. Reinsert language inadvertently deleted from the Asbestos Abatement Notifications requirements during the last rule revision.

HOW TO COMMENT:

Public Hearings to provide information and receive public comment are scheduled as follows:

Room 10A, 811 SW 6th Ave., Portland, OR 97204
September 22, 1995
11:00 AM



811 S.W. 6th Avenue
Portland, OR 97204

11/1/88

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-4011.

Attachment B-2, Page 1

Written comments must be received by 5:00 p.m. on September 22, 1995 at the following address:

Department of Environmental Quality
Air Quality Division
811 S. W. 6th Avenue
Portland, Oregon, 97204

A copy of the Proposed Rule may be reviewed at the above address. A copy may be obtained from the Department by calling the Air Quality Division at 229-5359 or calling Oregon toll free 1-800-452-4011.

**WHAT IS THE
NEXT STEP?**

The Department will evaluate comments received and will make a recommendation to the Environmental Quality Commission. Interested parties can request to be notified of the date the Commission will consider the matter by writing to the Department at the above address.

BMA:j
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Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

Rulemaking Statements

Pursuant to ORS 183.335(7), this statement provides information about the Environmental Quality Commission's intended action to adopt a rule.

1. Legal Authority

ORS 468.020, 468A.025

2. Need for the Rule

Asbestos

The Department has requested that EPA delegate to the Department authority to implement an asbestos control program, and has submitted such a program to EPA. EPA has responded that the program can be approved if the Department adopts an additional reporting requirement (data on fabric filters). This rulemaking adopts a regulation similar to the federal version. Once the requirement is adopted, EPA will be able to approve the Department's program and delegation request.

Oregon also does not have regulations governing asbestos waste conversion (from asbestos-containing material to asbestos-free material). This rulemaking would adopt federal regulations by reference.

The rulemaking would also increase the liability for those receiving asbestos certification from a non-approved training provider. The change would bring Oregon's asbestos certification program into line with changes in EPA's Model Accreditation Plan.

Redefinition of "Volatile Organic Compound" for Area Sources

EPA recently excluded acetone from the definition of Volatile Organic Compound (VOC), due to acetone's negligible photochemical reactivity, and is in the process of excluding perchloroethylene for the same reason. The perchloroethylene exclusion is expected to become effective in early autumn. To achieve consistency with the federal rules, these compounds are also being excluded from Oregon's VOC definition in Division 22.

Aluminum

The rulemaking would clarify appropriate test methods for Primary Aluminum Plants, delete obsolete test requirements, and clarify when rules are applicable to fugitive emissions. The amendments will also enable the Department to do case-by-case reviews of monitoring data of the

control equipment. If the emissions have been shown to be an insignificant contributor to the plant's total emissions and have been fairly constant throughout the prior permit periods, then the Department may allow the testing frequency to be decreased. Conversely, if the test results warrant, the Department may require increased testing frequency.

Housekeeping

Delete one of the two identical provisions in Div. 32.

Reinsert the language inadvertently deleted from 32-5630(3)(b) during the last revision.

Delete the redundant wording in OAR 340-33-060(4)(i).

3. Principal Documents Relied Upon in this Rulemaking

Asbestos

40 CFR §61.153(a), 61.155

EPA Model Accreditation Plan

Acetone

60 Federal Register 31634

These documents are available for review at DEQ Headquarters, Air Quality Division, 811 S.W. 6th Avenue, Portland, Oregon, 97204.

4. Advisory Committee Involvement

None. The Industrial Source Advisory Committee is in the process of being re-formed.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

Fiscal and Economic Impact Statement

Introduction

Asbestos

The revisions will impose some additional costs on sources. However, adoption of the filter data reporting requirement and waste conversion regulation will allow EPA to approve Oregon's asbestos regulation program, which will decrease administrative and compliance costs. Approval of the program will allow sources and the agency comply with or enforce state rules, rather than both federal and state rules.

Adoption of expanded liability may place a financial burden on persons who do not check that their training provider is approved. However, Oregon has not had any reports of unapproved providers, and approval status can be checked with a phone call to the Department. Adoption of the changed language will allow the Department to maintain EPA approval of the state's asbestos certification program. Without approval, certification would be done through EPA.

Redefinition of "Volatile Organic Compound" for Area Sources

The exclusion of acetone and perchloroethylene from the definition of Volatile Organic Compounds (VOC) constitutes a rule relaxation, and is expected to produce a net economic benefit for sources. Also, this change will allow the Oregon area source VOC definition to conform with the federal definition, and thereby enhance regulatory consistency.

Aluminum

Because increased or decreased testing frequency is allowed on Departmental request or approval, some sources may have increased or decreased testing costs.

Housekeeping

No financial impact.

General Public

There will be no financial effect on the general public from these revisions.

Small Business

Asbestos

Businesses will be required to report filter data. This will require a small cost in gathering and submitting the information.

Persons certified by non-approved training providers will have increased liability for enforcement actions, and may have their certification revoked or suspended. The associated costs may be avoided by assuring that the training provider is approved by the Department.

Redefinition of "Volatile Organic Compound" for Area Sources

Current area source VOC emission control regulations affect few small businesses in Oregon, and regulations for Hazardous Air Pollutants (HAPs) will continue to limit the use of perchloroethylene in businesses such as drycleaners. Therefore, small businesses will experience no significant economic impacts.

Aluminum

There are no affected small businesses.

Large Business

Asbestos

Businesses will be required to report filter data. This will require a small cost in gathering and submitting the information.

Waste conversion facilities will have to comply with the adopted regulation.

Persons certified by non-approved training providers will have increased liability for enforcement actions, and may have their certification revoked or suspended. The associated costs may be avoided by assuring that the training provider is approved by the Department.

Redefinition of "Volatile Organic Compound" for Area Sources

For the most part, changes to the VOC definition are expected to produce a positive economic effect as this rule relaxation will increase the number of non-VOC solvents available to area sources required to control their VOC emissions. However, companies that developed low VOC alternatives to acetone will face a loss of their research investment or a reduction of future profits. Also, EPA has not yet decided how to adjust VOC credits accrued from past acetone reductions. When EPA resolves the questions involved, companies could lose the benefit of using or selling emission reduction credits for VOC netting, offsetting or trading.

Aluminum

Because increased or decreased testing frequency is allowed on Departmental request or approval, some sources may have increased or decreased testing costs.

Local Governments

Asbestos

Asbestos filter users will be required to report filter data. This will require a small cost in gathering and submitting the information.

Persons certified by non-approved training providers will have increased liability for enforcement actions, and may have their certification revoked or suspended. The associated costs may be avoided by assuring that the training provider is approved by the Department.

Redefinition of "Volatile Organic Compound" for Area Sources

The removal of these compounds from the definition of VOC in Division 22 will cause no significant effects on local governments.

Aluminum

No financial impact.

State Agencies

No financial impact from these revisions.

Assumptions

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal
for

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant
Rules, and Housekeeping Revisions

Land Use Evaluation Statement

1. Explain the purpose of the proposed rules.

Asbestos

The Department has requested that EPA delegate to the Department authority to implement an asbestos control program, and has submitted such a program to EPA. EPA has responded that the program can be approved if the Department adopts an additional reporting requirement (data on fabric filters). This rulemaking adopts a regulation similar to the federal version. Once the requirement is adopted, EPA will be able to approve the Department's program and delegation request.

Oregon also does not have regulations governing asbestos waste conversion (from asbestos-containing material to asbestos-free material). This rulemaking would adopt federal regulations by reference.

The rulemaking would also increase the liability for those receiving asbestos certification from a non-approved training provider. The change would bring Oregon's asbestos certification program into line with changes in EPA's Model Accreditation Plan.

Redefinition of "Volatile Organic Compound" for Area Sources

EPA recently excluded acetone from the definition of Volatile Organic Compound (VOC), due to acetone's negligible photochemical reactivity, and is in the process of excluding perchloroethylene for the same reason. The perchloroethylene exclusion is expected to become effective in early autumn. To achieve consistency with the federal rules, these compounds are also being excluded from Oregon's VOC definition in Division 22.

Aluminum

The rulemaking would clarify appropriate test methods for Primary Aluminum Plants, delete obsolete test requirements, and clarify when rules are applicable to fugitive emissions. The amendments will also enable the Department to do case-by-case reviews of monitoring data of the control equipment. If the emissions have been shown to be an insignificant contributor to the plant's total emissions and have been fairly constant throughout the prior permit periods, then the

Department may allow the testing frequency to be decreased. Conversely, if the test results warrant, the Department may require increased testing frequency.

Housekeeping

Delete one of the two identical provisions in Div. 32.

Reinsert the language inadvertently deleted from 32-5630(3)(b) during the last revision.

Delete the redundant wording in OAR 340-33-060(4)(i).

2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?

Yes X No

a. If yes, identify existing program/rule/activity:

Changes to the Aluminum rules affect the following:

Oregon Title V Operating Permit Program

Air Contaminant Discharge Permit Program

The other rules do not affect land use programs.

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes X No ___ (if no, explain):

c. If no, apply the following criteria to the proposed rules.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

3. If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Greg E. Fandke for
Division Administrator
Greg Green

Robert Young
Intergovernmental Coord.

8/8/95
Date

Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.

The following questions should be clearly answered, so that a decision regarding the stringency of a proposed rulemaking action can be supported and defended:

Note: If a federal rule is relaxed, the same questions should be asked in arriving at a determination of whether to continue the existing more stringent state rule.

1. *Are there federal requirements that are applicable to this situation? If so, exactly what are they?*

Asbestos

EPA has promulgated federal asbestos regulations. Federal regulations allow EPA to delegate enforcement authority for asbestos regulation if a state adopts a program comparable to the federal asbestos regulations in 40 CFR Part 61.

EPA has also promulgated a Model Accreditation Program. Approved state programs can certify asbestos training providers and workers.

Redefinition of "Volatile Organic Compound" for Area Sources

EPA's regulations define VOC in 40 CFR §51.100. The federal definition excludes acetone. EPA is currently conducting rulemaking to exclude perchloroethylene.

Aluminum

The federal Maximum Achievable Control Technology (MACT) requirements for Primary Aluminum plants have not been promulgated yet. Hydrogen fluoride is a hazardous air pollutant which will be regulated under the MACT standard. It is currently regulated under the aluminum rules. Also, while they apply to a different class of sources, the test methods specified by this revision are identical to those in 40 CFR Subpart S (Standards of Performance for Primary Aluminum Reduction Plants).

Housekeeping

N/A.

2. *Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?*

Asbestos

Performance based.

Redefinition of "Volatile Organic Compound" for Area Sources

Performance based. Organic compounds demonstrated to have negligible photochemical reactivity can be specifically excluded from the definition of Volatile Organic Compound (VOC).

Aluminum

N/A.

Housekeeping

N/A.

3. *Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?*

Asbestos

While the federal requirements require Oregon to make some changes in its program, the changes will allow the state to enforce tailored asbestos regulations, rather than federal regulations. The changes also allow the state to continue to run a certification program, rather than requiring certification through EPA. The changes required by EPA are either neutral in effect (previously no state regulation), or are more stringent (increased liability).

Redefinition of "Volatile Organic Compound" for Area Sources

Issues relevant to the federal redefinition of VOC are also relevant to the state redefinition.

Aluminum

N/A.

Housekeeping

N/A.

4. *Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?*

Asbestos

Adoption of the reporting requirement would allow the regulated community to base their actions on the Department's rules, rather than having to track both Department and EPA rules.

Revision of the certification rule would allow the Department to maintain EPA approval of its asbestos certification program. Without a state program, certification would have to be obtained through EPA.

Redefinition of "Volatile Organic Compound" for Area Sources

The redefinition is expected to improve regulatory clarity by aligning the state and federal definitions of VOC for Oregon's regulations that apply to "Area Sources" of air pollution. However, the VOC definition that applies to "Stationary Sources" [OAR 340-28-110(122)], is not scheduled for amendment until the first meeting of the Environmental Quality Commission in 1996. Until VOC is also redefined in Division 28, the difference in definitions could generate additional confusion among the regulated community.

Aluminum

The purpose of these changes is to clarify test and rule requirements, and to allow the Department to tailor test frequency to conditions at the source.

Housekeeping

The purpose of these changes is to clarify rule language and correct errors.

Housekeeping

N/A.

5. *Is there a timing issue which might justify changing the time frame for implementation of federal requirements?*

Asbestos

EPA will not approve Oregon's asbestos regulation program until filter data reporting requirement and waste conversion regulation are adopted.

EPA will not continue approval of Oregon's asbestos certification program unless the expanded liability language is adopted.

Redefinition of "Volatile Organic Compound" for Area Sources

Yes. Many manufacturers subject to new Consumer and Commercial product rules (OAR 340-22-700 through 340-22-1130) are interested in having the widest number of exempt VOCs available for their product formulations. As the new rules begin to take effect 1-1-96, prompt modification of the Oregon VOC definition for Area Sources would increase manufacturers' flexibility to meet upcoming requirements.

Housekeeping

N/A.

6. *Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?*

Asbestos

Adoption of waste conversion regulations will allow for growth in that industry while also ensuring that environmental effects are taken into account.

Redefinition of "Volatile Organic Compound" for Area Sources

Adoption of the revised VOC definition decreases uncertainty by keeping Oregon rules in line with federal rules, and allows area sources more flexibility in using compounds which have been shown to have negligible levels of photochemical reactivity.

Aluminum

The revisions decrease uncertainty by defining test methods, and specifying which rules apply to fugitive emissions. The revisions also allow more flexibility in testing frequency depending on plant conditions. The revisions will not affect future growth.

Housekeeping

N/A.

7. *Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)*

Asbestos

N/A.

Redefinition of "Volatile Organic Compound" for Area Sources

Redefinition of VOC would allow Oregon area sources more flexibility in using acetone and perchloroethylene. Since other states will likely also adopt these changes, this removes a competitive disadvantage for Oregon sources.

The rule removes an inequity for product manufacturers to the extent that VOC regulations restrict use of a compound (acetone) shown to be no more photochemically reactive than ethane, which was previously found to have "negligible photochemical reactivity." The anticipated federal delisting of perchloroethylene is expected to be granted on similar grounds.

However, the delisting of these compounds could produce inequities as well. Because these compounds will no longer be considered pollution precursors, those who previously reduced VOC emissions beyond the required amounts may lose the advantage of using those reduction credits for emissions trading, netting, or generation of offsets. The effects in this area will not be known until EPA produces guidance on the matter sometime in the future.

Aluminum

The rules apply to all sources equally.

Housekeeping

N/A.

8. *Would others face increased costs if a more stringent rule is not enacted?*

Asbestos

N/A.

Redefinition of "Volatile Organic Compound" for Area Sources

Because fewer "exempt compounds" would be available for use in products subject to VOC limits, manufacturers and the public could expect somewhat higher costs if this rule change does not occur.

Aluminum

N/A.

Housekeeping

N/A.

9. *Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?*

Asbestos

The reporting and waste conversion requirements are identical to the federal

regulations, except that they reference equivalent Oregon regulations in place of federal ones.

The change in the liability provision brings Oregon rules into line with EPA's Model Accreditation Plan.

Redefinition of "Volatile Organic Compound" for Area Sources

The new definition of VOC will not differ from the federal version.

Aluminum

While the proposed requirement applies to different sources than the federal New Source Performance Standards, it specifies the same test methods.

Housekeeping

N/A.

10. *Is demonstrated technology available to comply with the proposed requirement?*

Yes, in all cases.

11. *Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?*

Asbestos

The proposed rules will allow the Department, the public, and sources to more efficiently monitor compliance/comply, because only Oregon rules, rather than both Oregon and federal rules will apply.

Redefinition of "Volatile Organic Compound" for Area Sources

Acetone has been found, and perchloroethylene is expected to soon be found to have negligible photochemical reactivity. Therefore, recognition of this status in the Division 22 regulatory definitions will eliminate an ineffective environmental restriction.

Aluminum

The proposed revisions will clarify the application of current rules, and make environmental gains more cost effective by tailoring testing frequency to source conditions.

Housekeeping

The proposed changes will clarify the application of current rules.

State of Oregon

Department of Environmental Quality

Memorandum

Date: September 23, 1995

To: Environmental Quality Commission

From: Benjamin M. Allen

Subject: Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time: September 22, 1995, beginning at 11:00 AM

Hearing Location: 97204 Enter

Title of Proposal: Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

The rulemaking hearing on the above titled proposal was convened at 11:00 AM.

No one attended.

There was no testimony and the hearing was closed at 11:20 AM.

Attachments:

Written Testimony Submitted for the Record.

Written Comments Received and Department Response

on

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

1. Langley A. Spurlock, Chemical Manufacturer's Association

Mr. Spurlock submitted a letter on behalf of the Chemical Manufacturer's Association, including all U.S. producers of acetone, and some large domestic users of acetone. The letter favored an approach focusing on volatile organic compounds (VOCs) that "play a significant role in ozone formation, rather than on acetone emissions which do not." The letter pointed out that states may not include acetone in VOC emissions inventories for determining reasonable further progress under the CAA, or take credit for controlling acetone emissions in their ozone control strategies.

Mr. Spurlock commented that delisting of acetone would encourage industry to use acetone instead of more photochemically reactive or more hazardous compounds. Finally, Mr. Spurlock asked the Department not to regulate acetone as a VOC while the rulemaking is pending, in order to avoid delay and confusion.

Response:

The Department agrees that the focus of ozone control strategies should be on compounds which lead to ozone formation.

The Department supports the use of non-photochemically reactive and non-hazardous compounds.

The Department will continue to regulate acetone as a VOC for Division 22 purposes until the EQC adopts the proposed rule. The likelihood of confusion is small, and the delay is short.

2. J. Mark Morford, Stoel Rives

Mr. Morford submitted a letter supporting the delisting of acetone and perchloroethylene as VOCs, commenting that this accords with recent scientific understanding.

Mr. Morford felt that the definition of VOC in Division 28 should be similarly and contemporaneously revised. Mr. Morford suggested that the Division 28 definition is more important, and that different definitions between the two divisions would lead to confusion.

Response:

The Department agrees that there is some potential for confusion because of the two definitions. New rules regulating area source VOCs go into effect on January 1, 1996, and the Department felt it was important to have the Division 22 (area source and RACT) definition in this package in place by that time. The Division 28 (industrial and permit rules) redefinition is tentatively scheduled for adoption at the January EQC meeting, because the issues related to redefinition for Division 28 are

more complex. The Department feels that the value of adopting the Division 22 redefinition in this package before January 1, 1996 exceeds the potential for confusion.

3. Thomas J. Donegan, Jr., Cosmetic, Toiletry, and Fragrance Association

Mr. Donegan wrote in support of the Department's delisting of acetone.



CHEMICAL MANUFACTURERS ASSOCIATION

August 17, 1995

Langley A. Spurlock, Ph.D., CAE
Vice President, CHEMSTAR

Ms. Yone McNally
Air Quality Division
Department of Environmental Quality
811 S.W. 6th Street
Portland, Oregon 97204

Re: Exemption of Acetone From Regulation as a VOC

Dear Ms. McNally:

This letter is submitted on behalf of the Acetone Panel of the Chemical Manufacturers Association, which includes all U.S. producers of acetone as well as some of the largest domestic acetone users.^{1/} The Panel has been informed that the Oregon Department of Environmental Quality (DEQ) is in the process of initiating a rulemaking to exempt acetone from regulation as a volatile organic compound (VOC) under state regulations. We understand that this action is being taken in response to a final rule recently promulgated by the United States Environmental Protection Agency (EPA), which exempts acetone from the definition of VOCs under the federal Clean Air Act (CAA). See generally 60 Fed. Reg. 31637 (June 16, 1995). This letter is submitted in support of the State's rulemaking proposal.

Exempting acetone from regulation as a VOC will support the State's efforts to control ground-level ozone in two ways. First, it will ensure that government and private resources are focused on reducing VOC emissions that play a significant role in ozone formation, rather than on acetone emissions which do not. The continued regulation of acetone would only give a false sense of accomplishment. For this reason, EPA will no longer enforce measures controlling acetone as part of a federally-approved ozone state implementation plan. In addition, states may not include acetone in their

^{1/} Members of the Panel are: AlliedSignal Inc.; Aristech Chemical Corporation; JLM Chemicals, Inc. (formerly BTL Specialty Resins Corporation); Dow Chemical Company; Eastman Chemical Company; Exxon Chemical Company; General Electric Plastics; Georgia Gulf Corporation; Hickory Springs Manufacturing Company; Hoechst Celanese Corporation; Shell Chemical Company; Texaco Refining and Marketing, Inc.; and Union Carbide Corporation.

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AUG 21 1995

Ms. Yone McNally
August 17, 1995
Page 2

VOC emissions inventories for determining reasonable further progress under the CAA or take credit for controlling acetone emissions in their ozone control strategies. 60 Fed. Reg. at 31637.

Second, exempting acetone from regulation as a VOC will provide a strong incentive for industry to use acetone as a substitute for more photochemically reactive VOCs. The California South Coast Air Quality Management District (South Coast AQMD) made this point in the comments it submitted in support of EPA's action to exempt acetone from the federal definition of VOCs. The South Coast AQMD noted that "[t]he reclassification of acetone will assist the AQMD's efforts in reducing ozone formation by providing an acceptable alternative, acetone, which is less photochemically reactive than other solvent substitutes."

Exempting acetone from regulation as a VOC also will assist the State's efforts to reduce emissions of hazardous air pollutants (HAPs) and ozone-depleting substances (ODSs) by removing regulatory barriers that stand in the way of using acetone as a substitute for HAPs and ODSs. Acetone has very low toxicity and is not regulated by EPA as a HAP. Acetone also does not deplete stratospheric ozone and is not regulated as an ODS.

EPA noted in its VOC final rule that "acetone can be used as a substitute for several compounds that are listed as hazardous air pollutants (HAP) under section 112 of the [Clean Air] Act," and further that "[a]llowing wider use of acetone will facilitate the transition away from ODS without adversely affecting efforts to control ground level ozone concentrations." 60 Fed. Reg. at 31634. Under the EPA's Significant New Alternatives Policy (SNAP) program, acetone already has been identified as an acceptable substitute for ODSs in several use sectors, including (1) polyurethane foam blowing; (2) metals, electronics, and precision cleaning; (3) adhesives, coatings, and inks; and (4) aerosol solvents. See 59 Fed. Reg. 13,044 (March 18, 1994).

In summary, acetone emissions contribute only negligibly to tropospheric ozone levels. Current controls on acetone emissions thus do not assist the State in its efforts to control and/or reduce ground-level ozone. In addition, as recognized by EPA, exempting acetone from regulation as an ozone precursor "could contribute to the achievement of several important environmental goals and would support EPA's pollution prevention efforts." 60 Fed. Reg. at 31634. In many cases, the substitution of acetone for HAPs, ODSs or more photochemically reactive VOCs may begin as soon as acetone is

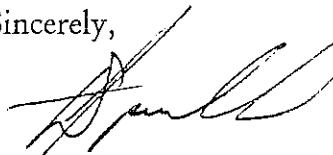
Ms. Yone McNally
August 17, 1995
Page 3

exempted, resulting in immediate and significant environmental benefits to the State's pollution prevention efforts.

For all these reasons, we urge the Oregon DEQ to move expeditiously in its rulemaking to exempt acetone from regulation as a VOC. In light of EPA's recent action to exclude acetone from the federal definition of VOCs, we also urge the State take any interim measures necessary to ensure that acetone is not regulated as a VOC while the state's rulemaking is pending. Such interim measures might include issuance of an interim final rule or policy statement that exempts acetone from regulation as a VOC, or publication of a statement indicating that the State will exercise its discretion not to enforce the current VOC regulations insofar as they relate to acetone pending final action on the State's rulemaking proposal. Granting interim relief will facilitate pollution prevention efforts without any unnecessary delay and avoid the possible confusion caused by inconsistent state and federal regulations.

If you have any questions with regard to this letter, please contact Kathleen M. Roberts, Manager of the Acetone Panel, at 202/887-1146.

Sincerely,



Langley A. Spurlock, Ph.D., CAE
Vice President, CHEMSTAR

BULLIVANT HOUSER
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& HOFFMAN
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MARGARET M. VAN VALKENBURG
Admitted in Oregon and Washington
Direct Dial (503) 499-4471

September 19, 1995

Benjamin M. Allen
Department of Environmental Quality
Air Quality Division
811 S.W. 6th Ave.
Portland, OR 97204

Re: VOC area source rules

Dear Mr. Allen:


The Bullivant law firm represents Thompson Minwax, which is interested in the above-referenced area source rules and the current, proposed amendment thereto. We currently are on the list for receipt of notice of the rule-making process.

In accordance with the notice issued August 17, 1995, I request that we continue to be kept advised of the proceeding on the VOC area source rules and receive all published information, including a copy of the recommendation that is presented to the EQC for adoption and notice of the final EQC action.

I have been receiving a duplicate copy of the materials at my home, as well as one addressed the to Bullivant firm. If you would, please direct the copy that is currently sent to our firm to my attention and delete my home address from the mailing list. This should cut down, a little, on the amount of paper that you need to send out and that I need to file.

Thank you for you help in this matter.

Very truly yours,


Margaret M. Van Valkenburg

MVV:lm
cc: Doug Houser

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SEP 20 1995

AIR QUALITY DIVISION
Dept. Environmental Quality

STOEL RIVES

ATTORNEYS

STANDARD INSURANCE CENTER
900 SW FIFTH AVENUE, SUITE 2300
PORTLAND, OREGON 97204-1268

Telephone (503) 224-3380
Fax (503) 220-2480
TDD (503) 221-1045

August 25, 1995

J. MARK MORFORD

Direct Dial
(503) 294-9259

Mr. Benjamin Allen
Department of Environmental Quality
811 SW Sixth Ave., 11th floor
Portland, OR 97204

Re: Proposed Revisions to Definition of VOC in Division 22

Dear Ben:

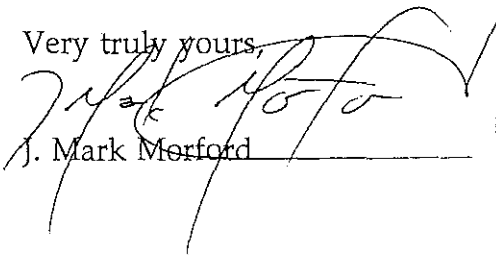
We have reviewed DEQ's proposed revision to the definition of VOC in OAR 340-22-102 to exclude acetone and perchloroethylene. We support these revisions to ensure conformity with the federal program and to reflect recent developments in the scientific community's understanding of how these compounds relate to the formation of ozone.

We are disappointed, however, that this rule package does not include a corresponding proposal to similarly revise the definition of volatile organic compound in Division 28. For most sources, the elimination of acetone from volatile organic compounds under Division 28 will be the most important. Although we recognize that revision of Division 28 will require more thought, we cannot see any reason for delay.

Moreover, we are concerned that the revision of the definition in Division 22 without revising the same term in Division 28 will create needless confusion. We expect that much of the industrial community will believe the rulemaking you currently are undertaking addresses the definition of VOC throughout DEQ's rules. This sort of inconsistency invites unintentional noncompliance and inconsistent application of the rules.

For all of these reasons, we strongly encourage DEQ to uniformly revise its definitions of volatile organic compounds throughout the air quality rules.

Very truly yours,


J. Mark Morford

RECEIVED
AUG 26 1995

JMM:v-g
cc: James M. Whitty (AOI)

AIR QUALITY DIVISION
Dept. Environmental Quality

C T F A

THE COSMETIC, TOILETRY, AND FRAGRANCE ASSOCIATION

September 21, 1995

E. EDWARD KAVANAUGH
P R E S I D E N T

VIA FEDERAL EXPRESS AND U. S. MAIL

Benjamin M. Allen
Oregon Department of Environmental Quality
Air Quality Division
811 S. W. 6th Avenue
Portland, Oregon 97204

Re: Redefinition of "Volatile Organic Compound" for Area Sources, OAR 340-22-102

Dear Mr. Allen:

The Cosmetic, Toiletry, and Fragrance Association (CTFA) has reviewed the proposal dated August 17, 1995 that would, in part, redefine the term "Volatile Organic Compound" (VOC) for area sources as it appears in OAR 340-22-102. We appreciate this opportunity to comment on the proposed revision.

CTFA has interest in the definition of VOC because of the recently finalized rule to regulate volatile organic compounds (VOCs) in consumer products sold in the Portland Air Quality Maintenance Area. (OAR 340-22-800 through 340-22-860)

CTFA supports Oregon's efforts to make Oregon area source rules consistent with other regulations in force throughout the United States. The proposed change in the VOC definition will make it consistent with U.S. Environmental Protection Agency (EPA) definition of VOC and with the definition of VOC in several other states.

CTFA is the national trade association representing the personal care product industry. Founded in 1894, CTFA represents approximately 550 companies involved in the manufacture and distribution of cosmetics, toiletries and fragrances. Our active members manufacture and distribute the vast majority of personal care products sold in the United States. Our associate members supply raw materials, and other goods and services to those active members. The personal care product industry prides itself on a long history of providing safe, reliable products to meet the diverse needs and personal tastes of the American consumer.

1101 17TH ST., N.W., SUITE 300 WASHINGTON, D.C. 20036-4702

202.331.1770 FAX 202.331.1969

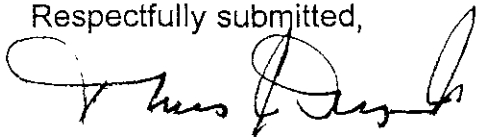
SECURING THE INDUSTRY'S FUTURE SINCE 1894

CTFA was represented on the Department of Environmental Quality's Consumer Products - "AIM" Coatings Advisory Committee. We were pleased that the advisory committee process and the final decisions of DEQ resulted in a consumer product regulation for the Portland Air Quality Maintenance Area that was effective in improving air quality for the district while permitting Oregon consumers continued access to the effective personal care products they expect. Perhaps most important, we were pleased that the regulation adopted was consistent with those in other states and planned for adoption as a national regulation by the U. S. Environmental Protection Agency. National uniformity is a critical goal for our industry as the vast majority of personal care products are distributed nationally or worldwide.

For similar reasons, we support the proposed DEQ action on acetone. It is critical to our industry that the definitions of a "volatile organic compound" be consistent across the country. This action may make the negligibly reactive solvent acetone available as an alternative material for which other, more highly reactive solvents are now used.

CTFA fully supports the excluding of acetone from the definition of "Volatile Organic Compound" for area sources as it appears in OAR 340-22-102.

Respectfully submitted,



Thomas J. Donegan, Jr.
Vice President-Legal & General Counsel

Detailed Changes to the Original Rulemaking Proposal

for

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

The Department originally proposed to redefine "Volatile Organic Compound" in Division 22 to exclude acetone and perchloroethylene. The intent was to match changes to the federal definition. EPA "delisted" acetone earlier this year, and is in the process of delisting perchloroethylene.

Because of interest by the Industrial Sources Advisory Committee, and because EPA's delisting of perchloroethylene is not yet final, the Department has decided to defer the delisting proposals.

Advisory Committee

for

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

The Industrial Sources Advisory Committee was not available to comment on these proposed rules before the public hearing. The Committee was informed of the proposed changes at their first meeting, on October 18, 1995.

Because of Committee interest in the proposed delisting of acetone and perchloroethylene as VOCs, and because EPA's delisting of perchloroethylene is not yet final, the Department has decided to defer the delisting. This will allow time for further discussion with Committee members, and allow EPA time to finalize its delisting of perchloroethylene.

State of Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal

for

Asbestos Program Requirements, Division 22 Redefinition of VOC, Primary Aluminum Plant Rules, and Housekeeping Revisions

Rule Implementation Plan

Summary of the Proposed Rule

The proposed revisions would:

- Require that users of asbestos filters report information about the filters. Adopt a regulation concerning asbestos waste conversion facilities. Expand liability for those gaining certification from a non-approved training provider.
- Clarify appropriate test methods for aluminum plants. Allow the Department to require decreased or increased frequency of testing. Clarify which provisions include fugitive emissions.
- Delete one of two identical provisions in Division 32. Delete redundant language in an asbestos certification rule. Reinsert language inadvertently deleted from the Asbestos Abatement Notifications requirements during the last rule revision.

Proposed Effective Date of the Rule

The rule would be effective on filing with the Secretary of State, after adoption by EQC.

Proposal for Notification of Affected Persons

Affected persons would be notified of the rule changes through trade groups and through the Department's "Air Time" publication. Many individuals and organizations are already aware of the proposed changes through the Department's extensive public notice mailing for the proposed rule.

Asbestos

Asbestos contractors would be notified about changes affecting them. Contractors would also be asked to tell asbestos workers about the liability for workers trained by unapproved providers. The liability issue would also be highlighted in information packets sent by the Department to those requesting them (often out of state applicants), and in information provided to workers applying for certification as supervisors.

Proposed Implementing Actions

Asbestos

The Department will pursue delegation of EPA authority for the asbestos regulation program. The Department will begin to suspend or revoke the certification of asbestos workers who received certification from a non-approved provider, regardless of whether the worker knew the provider not to be approved. A provider's approval status can be checked with a phone call to the Department. The Department will highlight the issue in information packets sent out by the Department and in information provided to workers applying for certification as supervisors, and will request that contractors notify workers about their potential liability.

Aluminum

The Department will require sources to use the specified test methods. The Department will be able to vary testing frequency on a case by case basis.

Housekeeping

These revisions will not lead to changes in rule implementation.

Proposed Training/Assistance Actions

Asbestos and Aluminum

Affected staff are already aware of the proposed changes. They would be notified if the changes are adopted.

Housekeeping

Staff will be notified of changes.

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: October 16, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director *LM*
Subject: Agenda Item F, November 17, 1995 EQC Meeting

Issuance of Pollution Control Bonds

Statement of the Issue

The Department is requesting the Commission to adopt a bond issuance resolution authorizing the Department and the State Treasurer to issue and sell not more than \$15 million in original principal amount of State of Oregon General Obligation Pollution Control Bonds and to use the proceeds: 1) To provide the required state match for federal money in the Water Pollution Control Revolving Fund (State Revolving Fund or SRF); 2) To fund the Department's Orphan Site cleanup program; and 3) To purchase special assessment sewer bonds (SABs) from the City of Gresham.

Background

The Commission has previously authorized the issuance of bonds and use of the proceeds for each of these purposes. The Department sold Orphan Site bonds in 1992 and 1994, SRF match bonds in 1993 and 1994 and bonds to purchase SABs from the City of Gresham in 1990 and 1992.

It is the Department's current intent to sell \$8 million in Orphan Site bonds and \$5 million in SRF match bonds on or about December 5, 1995. By combining the sale of these two bonds with a sale by the Department of Housing and Community Services the Department will be able to realize certain economies of scale and minimize overall issuance costs

[†]Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

Memo To: Environmental Quality Commission
Agenda Item F
November 17, 1995 Meeting
Page 2

Authority to Address the Issue

The Commission has the authority to authorize the issuance of bonds and the uses to which bond proceeds may be put under ORS 468.195 to 468.260 and ORS 468.426(2). Each of these uses of bond proceeds is specifically authorized under statute.

The 1995 Legislature has provided appropriation and/or limitation as appropriate so funds are available to pay the debt service on the bonds.

Alternatives and Evaluation

There are no viable alternatives. The issuance of Pollution Control Bonds is currently the only mechanism available to provide funding for these program activities. Commission action at the November 17, 1995 meeting is necessary to enable the Department to participate in the December 5, 1995 sale. This sale date not only fits the Treasurer's issuance calendar and provides funds to the programs in a timely manner but also enables the Department to share many of the fixed issuance costs with housing.

Summary of Any Prior Public Input Opportunity

For twenty-five years there has been opportunity for public discussion of this matter at several previous Commission meetings at which the Commission authorized the issuance of bonds and the use of bond proceeds. The most recent of these meetings took place September 18, 1991; December 11, 1992 and October 28, 1993.

Additional discussion took place with the Joint Legislative Committee on Ways and Means during the review and approval of the Department's 1995/97 budget and the adoption of the overall Bond Limitation bill.

Conclusions

- * The use of bond proceeds is the only mechanism currently available to fund the state match for SRF and the cleanup of Orphan Sites.
- * Pollution Control bonds cannot be issued without the approval of the Commission.
- * The Commission has the authority to adopt a Resolution authorizing issuance and sale of the bonds and use of bond proceeds.

Memo To: Environmental Quality Commission
Agenda Item F
November 17, 1995 Meeting
Page 3

Recommendation for Commission Action

It is recommended that the Commission adopt a Resolution as presented in Attachment A of the Department Staff Report authorizing the issuance of State of Oregon Pollution Control Bonds in an amount not to exceed \$15 million, with the proceeds to be used to provide the state match for the SRF, provided funding for the cleanup of Orphan sites and to purchase city of Gresham SABs.

Attachments

A. Form of Resolution

Reference Documents (available upon request)

1. Statutory Authority
2. Applicable Rule(s)
3. Summary of Previous Bond Issues - Amounts and Uses

Approved:

Section: _____

Division: *Hypatia Taylor*

Report Prepared By: Barrett MacDougall

Phone: X5355

Date Prepared: October 30, 1995

bm:hs
E:\wp51\eqcf.nov

October 30, 1995

RESOLUTION AUTHORIZING
AND REQUESTING ISSUANCE OF BONDS

Section 1. Findings. The Environmental Quality Commission of the State of Oregon finds:

A. The Department of Environmental Quality (the "Department") is empowered to authorize and request the issuance of general obligation pollution control bonds:

1. To fund the Orphan Site Cleanup program;
2. To fund the State's match for the State Revolving Fund; and,
3. To fund the purchase of special assessment improvement bonds or other obligations of the city of Gresham issued to finance sewer system improvements in mid-Multnomah County pursuant to the Mid-County Sewer Implementation Plan.

B. It is now desirable to authorize and request the issuance of general obligation pollution control bonds for these purposes.

C. Oregon Revised Statutes, Section 286.031, provides that all bonds of the State of Oregon shall be issued by the State Treasurer.

Section 2. Resolutions. The Environmental Quality Commission of the State of Oregon hereby resolves:

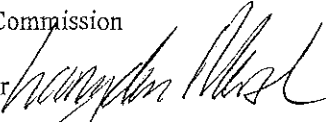
A. The State Treasurer of the State of Oregon is hereby authorized and requested to issue State of Oregon general obligation pollution control bonds ("Pollution Control Bonds") in amounts which the State Treasurer determines, after consultation with the Director of the Department or the Director's designee, will be sufficient to provide funding for the purposes described in Section 1.A of this resolution, and to pay costs associated with issuing the Pollution Control Bonds. The Pollution Control Bonds shall mature, bear interest, be subject to redemption, be in such series, and otherwise be issued and sold upon the terms established by the State Treasurer after consultation with the Director of the Department or the Director's designee.

B. The Department shall comply with all provisions of the Internal Revenue Code of 1986, as amended (the "Code") which are required for interest on tax-exempt Pollution Control Bonds to be excludable from gross income under the Code, and shall pay any rebates or penalties which may be due to the United States under Section 148 of the Code in connection with the Pollution Control Bonds. The Director of the Department or the Director's designee may, on behalf of the Department, enter into covenants for the benefit of the owners of Pollution Control Bonds to maintain the tax-exempt status of the Pollution Control Bonds.

Section 3. Other Action. The Director of the Department or the Director's designee may, on behalf of the Department, execute any agreements or certificates, and take any other action the Director or the Director's designee reasonably deems necessary or desirable to issue and sell the Pollution Control Bonds and to provide funding for the purposes described in this resolution.

State of Oregon
Department of Environmental Quality

Memorandum

Date: October 24, 1995
To: Environmental Quality Commission
From: Langdon Marsh, Director 
Subject: Agenda Item G; Department of Environmental Quality v. Oregon Coast Sanitation, Case No. HW-WR-94-038 & HW-WR-94-051 - Appeal of Hearings Officer's Findings of Fact and Conclusions of Law; EQC Meeting: November 17, 1995

Background

Oregon Coast Sanitation performs sewage collection, drain cleaning, septic and drain field work, underground storage tank removal, and emergency oil spill response and other oil removal business. Two Notices of Violation and Compliance Order, and Assessment of Civil Penalty were served on Oregon Coast Sanitation and Environmental Services in 1994. Environmental Services was an assumed business name of Oregon Coast Sanitation. Penalties in the amount of \$10,000 and \$6,000 were assessed. The violations were for storing hazardous waste without a permit, failing to perform hazardous waste determinations and marketing off-specification used oil. These functions were performed by the environmental services portion of the business, whose operations ceased prior to the issuance of the compliance orders.

Respondent contended that, due to the cessation of the environmental services portion of the business, and other financial distress, respondent was unable to pay the civil penalties. The Hearings Officer determined that respondent, while unable to pay the entire amount of the penalties at this time, was able to pay the civil penalties under a payment plan.

On June 16, 1995, Oregon Coast Sanitation filed a request for an appeal with the Environmental Quality Commission. In that request, Oregon Coast Sanitation is contending that the Hearings Officer did not fully comprehend the complexity of various financial transactions which rendered them unable to pay the civil penalties.

Department Recommendation

It is recommended that the Commission adopt Hearings Officer's Findings of Fact and Conclusions of Law and Hearings Officer's Final Order, dated May 22, 1995, as written.

Attachments

1. Hearings Officer's Findings of Fact and Conclusions of Law, dated May 22, 1995.
2. Hearings Officer's Final Order, dated May 22, 1995.
3. Letter from Daniel M. Faber requesting appeal to the Environmental Quality Commission, dated June 16, 1995.
4. Letter from Daniel M. Faber stating that letter dated June 16, 1995 is to be considered Oregon Coast Sanitation's exceptions and brief, dated July 27, 1995.
5. Letter from Susan M. Greco, accepting letter of June 16, 1995 as Oregon Coast Sanitation's exceptions and brief, dated July 28, 1995.
6. Department's Response to Exceptions of Oregon Coast Sanitation, dated August 24, 1995.
7. Letter from Susan M. Greco setting date for appeal to Environmental Quality Commission, dated October 4, 1995.

Report Prepared By: Susan M. Greco
Date Prepared: October 24, 1995

October 4, 1995

Daniel M. Faber
Oregon Coast Sanitation
201 Carlisle Avenue
Coos Bay OR 97420

Larry Edelman
Department of Justice
1515 S.W. 5th Avenue, 4th Floor
Portland OR 97201

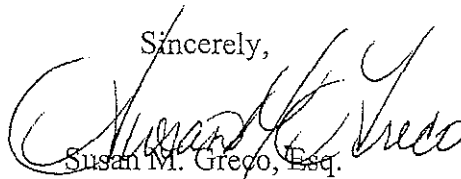
RE: Oregon Coast Sanitation , Case No. HW-WR-94-038
& HW-WR-94-051
Appeal to the Environmental Quality Commission

Dear Mr. Faber and Mr. Edelman:

The appeal by Oregon Coast Sanitation has been set for a regularly scheduled Environmental Quality Commission meeting on Friday, November 17, 1995. The meeting will take place at 811 S.W. 6th Avenue, Portland, Oregon in Conference Room 3A. The meeting will begin at 8:30 a.m. and your case will be heard in the regular course of the meeting. Each side will be allowed 5 minutes to present their case to the Commission.

If you should have any questions or need special accommodations, please feel free to call me at (503) 229-5213 in Portland.

Sincerely,



Susan M. Greco, Esq.
Rules Coordinator

cc: Nancy Couch, Enforcement Division
Kathleen Lippitt, OD



July 28, 1995

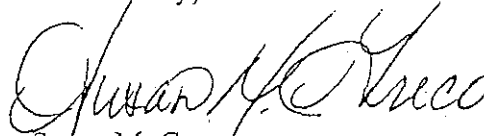
Daniel M. Faber
Oregon Coast Sanitation
201 Carlisle Avenue
Coos Bay OR 97420

RE: Appeal to the Environmental Quality Commission .

Dear Mr. Faber:

Per your letter of July 27, 1995, the Department will consider your letter of June 16, 1995 as your exceptions and brief to be filed with the Environmental Quality Commission in this appeal. The Department will be filing its answer within 20 days and a copy of the same will be forwarded to you. If you should have any further questions or need any further assistance, please feel free to call me at (503) 229-5213.

Sincerely,



Susan M. Greco
Rules Coordinator

cc: Larry Edelman, Department of Justice
Nancy Couch, Enforcement Division



Oregon Coast Sanitation, Inc.

201 Carlisle Avenue, Coos Bay, Oregon 97420 • (503) 269-5050 • FAX 267-4848

JULY 27, 1995

Department of Environmental Quality
811 S. W. 6th Ave.
Portland, OR 97204-1390

Attn: Environmental Quality Commission

Attn: Susan Greco, Rules Coordinator

Re: Request for Exceptions and Brief

Please find attached a copy of the letter we sent to the Environmental Quality Commission on June 16, 1995. We believed this to be our exceptions and brief. Since we heard nothing in response to this correspondence, we felt that the matter had been taken care of.

If the letter at that time did not suffice, please let this correspondence serve as our exceptions and brief in that it is the opinion of Oregon Coast Sanitation that Mr. Menegat was unable to accurately determine Oregon Coast Sanitation's true financial position due to the complexity of inter-company transactions found on year end and financial statements supplied to him. This paperwork was supplied to him and he was left to decipher its meaning on his own.

Oregon Coast Sanitation respectfully requests to exercise its right for a review of this decision by the Environmental Quality Commission under OAR 340-11-132.

Please let us know what the status is at this time.

Thank you.

Sincerely,


Daniel M. Faber
Oregon Coast Sanitation

DMF/tj

Oregon Coast Sanitation, Inc.

201 Carlisle Avenue, Coos Bay, Oregon 97420 • (503) 269-5050 • FAX 267-4848

June 16, 1995

Environmental Quality Commission
Directors Office
811 S.W. 6th Ave.
Portland, Oregon 97204-1390

Attn: Environmental Quality Commission

Re: Request for Review

Dear Sir/Madam:

On April 18, 1995, a hearing was held to determine the ability of Oregon Coast Sanitation to pay fines assessed by the Department of Environmental Quality regarding case #HW-WR 94-008 and HW-WR 94-051.

A decision was made by Hearings Officer, Melvin M. Menegat, and received by Oregon Coast Sanitation on May 22, 1995. It is the opinion of Oregon Coast Sanitation that Mr. Menegat was unable to accurately determine Oregon Coast Sanitation's true financial position due to the complexity of inter-company transactions found on year end and financial statements supplied to him. This paperwork was supplied to him and he was left to decipher its meaning on his own.

Oregon Coast Sanitation respectfully requests to exercise its right for a review of this decision by the Environmental Quality Commission, under OAR 340-11-132.

If you need any further information, please feel free to contact Dan Faber at (503) 269-5050.

Sincerely,



Daniel M. Faber
General Manager
Oregon Coast Sanitation, Inc.

DMF/tj

Enclosure

CC: William Wessinger, Chairman
Emery Castle
Henry Lorenzen
Linda McMahan
Carol Whipple
Nancy Couch, Enforcement
Melvin Menegat, State Employment Hearing Officer

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

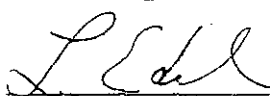
1	In the Matter of the Appeal of	)	Case Nos. HW-WR-94-038
2)	
3	OREGON COAST SANITATION, INC.,	)	HW-WR-94-051
4)	
5	Respondent.	)	DEPARTMENT'S RESPONSE TO EXCEPTIONS OF OREGON COAST SANITATION

6 By letter dated July 27, 1995, Oregon Coast Sanitation
7 stated its exceptions to the Hearings Officer's decision. Oregon
8 Coast Sanitation claims that the Hearings Officer was "unable to
9 accurately determine Oregon Coast Sanitation's true financial
10 position due to the complexity of intercompany transactions found
11 on year end and financial statements supplied to him."

12 The Department disagrees. The Hearings Officer received
13 extensive evidence and took detailed testimony on the
14 intercompany transactions of Oregon Coast Sanitation and its
15 related companies. The Hearings Officer's decision is well-
16 reasoned and accurate.

17 The Department believes the Commission should adopt the
18 Hearings Officer's decision.

19 DATED this 27th day of August, 1995.

20 Respectfully submitted,
21 THEODORE R. KULONGOSKI
22 Attorney General
23 
24 Larry Edelman, OSB No. 89158
25 Assistant Attorney General
26 Of Attorneys for EQC
Department of Justice
1515 SW 5th Avenue, Suite 410
Portland, OR 97201
Telephone: (503) 229-5725

26 LHE0241.PLE

1 CERTIFICATE OF FILING

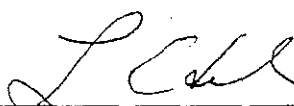
2 I certify that on August 24, 1995, I caused to be filed
3 with the Environmental Quality Commission, through Susan M.
4 Greco, Department of Environmental Quality Rules Coordinator, 811
5 SW Sixth Avenue, Portland, Oregon 97204-1390, the Department's
6 original RESPONSE TO EXCEPTIONS OF OREGON COAST SANITATION.

7
8 CERTIFICATE OF SERVICE

9 I certify that on August 24, 1995, I caused to be served
10 a true and complete copy of the Department's RESPONSE TO
11 EXCEPTIONS OF OREGON COAST SANITATION by first class mail,
12 postage prepaid, on the following:

13 Daniel M. Faber
14 Oregon Coast Sanitation
15 201 Carlisle Avenue
16 Coos Bay, Oregon 97420

17
18
19 DATED this 24th day of August, 1995.
20
21
22
23
24
25

26


Larry Edelman, OSB 89158
Assistant Attorney General.
Of Attorneys for Petitioner

26 LHE0241.PLE

PAGE 1 - CERTIFICATE OF FILING AND SERVICE

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

RECEIVED
MAY 22 1995

DEPARTMENT OF ENVIRONMENTAL QUALITY,)	
)	
Department,	)	HEARING OFFICER'S
	)	FINDINGS OF FACT AND
v	)	CONCLUSIONS OF LAW
	)	NO. HW-WR-94-038
OREGON COAST SANITATION, INC.,	)	NO. HW-WR-94-051
	)	COOS COUNTY
Respondent.)	

BACKGROUND

A Notice of Violation, Compliance Order, and Assessment of Civil Penalty, No. HW-WR-94-038 was served on Oregon Coast Sanitation, Inc. on March 21, 1994. A civil penalty of \$10,000 was assessed.

A Notice of Violation, Compliance Order, and Assessment of Civil Penalty, No. HW-WR-94-051 was served on James V. Collatt dba Environmental Services on March 21, 1994. A civil penalty of \$6,000 was imposed.

Respondent filed a request for hearing on April 19, 1994. The request was accepted as timely.

A hearing was held in Eugene, Oregon on April 18, 1995. Present were Daniel M. Faber representing respondent with witnesses Larry Garboden and James Collatt and Assistant Attorney General Larry Edelman representing the Department with witnesses Nancy Couch and Barrett MacDougall.

Prior to hearing Respondent stipulated that the facts, conclusions and calculations set forth in the Notices of Violation, Compliance Orders and Assessments of Civil Penalty were correct and not disputed. Respondent sought penalty reduction on the basis of inability to pay.

At hearing it was determined that Environmental Services was an assumed business name of Oregon Coast Sanitation, Inc. The Department moved to amend the Notice of Violation, Compliance Order, and Assessment of Civil Penalty, No. HW-WR-94-051 to name Oregon Coast Sanitation, Inc. as respondent and to consolidate the two matters. The motion was allowed and the matters are consolidated.

RESPONDENT'S CONTENTIONS

That because of the shut down of the environmental services portion of the business and the resulting decrease in income, and because of other financial distress, respondent is unable to pay the civil penalties and they should be reduced to zero.

FINDINGS OF FACT

(1) Respondent is an Oregon Corporation performing sewage collection, drain cleaning, septic tank and drain field work, underground storage tank removal, and emergency oil spill response and other oil removal business. (2) The civil penalties assessed herein were for storing hazardous waste on site

without storage permits, failing to perform hazardous waste determinations, and for marketing off-specification used oil. (3) The violations were related mainly to the environmental services portion of the business. (4) Respondent ceased the environmental services portion of the business prior to when the notice and compliance orders were issued because they were unable to bring their operation into compliance. (5) The environmental services portion of the business was more lucrative than the remaining operations and respondent had relied on that income to maintain overall business operations.

(6) In 1986, as part of an expansion and financing program, Oregon Pacific Leasing, Inc. was formed and personal assets of the principals and most of the assets of Oregon Coast Sanitation were transferred to the new corporation as security for the expansion loan. (7) In 1989, Oregon Coast Sanitation, Inc. built a sewage lagoon and retained title to that property. (8) It also retained title to the large excavator used in storage tank removal work. (9) Oregon Pacific Leasing, Inc. owns the sanicans, the rest of the equipment, and other real and personal property. (10) The same principals are involved in each corporation.

(11) Respondent plans to obtain financing to meet compliance standards and is seeking assistance through the Small Business Administration and local financial institutions.

(12) Respondent has not been able to pay all obligations when due and some accounts are significantly past due. (13) Respondent has in excess of \$30,000 of permit fees due and has other civil penalties that have been assessed.

(14) Respondent has taken steps to reduce staffing and other costs.

(15) The Department's calculations of ability to pay under the U.S. Environmental Protection Agency's ABEL computer model were based on 1990, 1991, and 1992 income tax information. (16) The environmental services portion of the business was operating during those years.

CONCLUSIONS OF LAW

1. The Commission has jurisdiction to determine Respondent's inability to pay the civil penalties herein.
2. Respondent does not have the current ability to pay the entire amount of the civil penalties herein.
3. Respondent is able to pay the civil penalties under a payment plan.

OPINION

OAR 340-12-045(3) provides that the Department or Commission may reduce any penalty based on the Respondent's inability to pay the full amount. The rule further provides that when a Respondent is currently unable to pay the full amount, the first option should be to place the Respondent on a payment schedule with interest on the unpaid balance for any delayed payment and that the department or Commission may reduce the penalty only after determining that the Respondent is unable to meet a long-term payment schedule.

Respondent is suffering financial distress, however, has the ability to enter into a financial plan or arrangement that could better match their assets and liabilities. At the current time they are attempting to obtain financing to proceed with their full operation plan. If that goes through there will be sufficient funds with which to pay the civil penalties herein. If respondent does not proceed with that plan and restructures in such manner so as not to provide environmental services, there are equities and assets that could be used to pay the amount of the penalties. The amount of the civil penalties shall not be reduced.

Respondent does not have the ability to pay the full amount of the civil penalties at this time. A long term payment plan is appropriate. Notwithstanding Respondent's current financial distress, operating expenses are being reduced and additional funds are available to be applied toward current and past obligations.

The Department's ability to pay calculations under the ABEL model were not used in this determination because they were based on tax years which included income from the environmental services portion of the business.

Respondent is ordered to pay the civil penalty together with interest at the rate of 9% from the date this order becomes final, under the following terms and conditions:

HW-WR-94-038: Penalty amount of \$10,000 together with interest at the rate of 9% per annum, to be paid in monthly installments of \$625.00 beginning July 1, 1995 and continuing on the first day of each month thereafter through June 1, 1996 and then the balance of penalty amount and interest due and payable on July 1, 1996.

HW-WR-94-051: Penalty amount of \$6,000 together with interest at the rate of 9% per annum, to be paid in monthly installments of \$375.00 beginning July 1, 1995 and continuing on the first day of each month thereafter through June 1, 1996 and then the balance of penalty amount and interest due and payable on July 1, 1996.

It is anticipated that the repayment plan will provide for relief during the restructuring phases and allow for refinancing or liquidation to provide for full payment of the penalty.

The payment plan is conditioned upon Respondent making prompt monthly payments of each of the monthly installments. If payment is not received by the 10th of any month for which payment is due, the payment plan is terminated and the Department shall take whatever steps necessary to collect the balance of the penalty amount and interest then due.

Dated this 22nd day of May, 1995.

Environmental Quality Commission

Melvin M. Menegat

Melvin M. Menegat
Hearings Officer

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

RECEIVED
MAY 22 1995

DEPARTMENT OF ENVIRONMENTAL QUALITY,)	
)	
Department,	)	HEARING OFFICER'S
	)	FINAL ORDER
v	)	NO. HW-WR-94-038
	)	NO. HW-WR-94-051
OREGON COAST SANITATION, INC.,	)	COOS COUNTY
)	
Respondent.)	

The Commission, through its hearings officer, orders that Oregon Coast Sanitation, Inc. is liable to the state of Oregon for a \$16,000 civil penalty for the violations alleged in DEQ's civil penalty assessments dated March 21, 1994 and as proved in hearing of April 11, 1995. The payment of the civil penalty together with interest shall be made in accordance with the terms and conditions as detailed and set forth in the Opinion portion of the order herein.

Review of this order is by appeal to the Environmental Quality Commission pursuant to OAR 340-11-132. A request for review must be filed within 30 days of the date of this order.

Dated this 22nd day of May, 1995.

Environmental Quality Commission

Melvin M. Menegat

Melvin M. Menegat
Hearings Officer

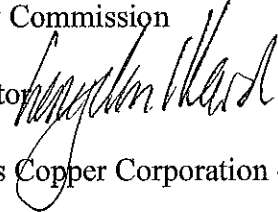
NOTICE: If you disagree with this Order you may request review by the Environmental Quality Commission. Your request must be in writing directed to the Environmental Quality Commission, 811 S.W. Sixth Avenue, Portland, Oregon 97204. The request must be received by the Environmental Quality Commission within 30 days of the date of mailing or personal service of this Order. If you do not file a request for review within the time allowed, this order will become final and thereafter shall not be subject to review by any agency or court.

A full statement of what you must do to appeal a hearings officer's order is in Oregon Administrative rule (OAR) 340-11-132. That rule is enclosed.

Original report removed by Susan
Graco 2/9/96 - sent to
Court of Appeals for appeal

State of Oregon
Department of Environmental Quality

Memorandum

Date: October 24, 1995
To: Environmental Quality Commission
From: Langdon Marsh, Director 
Subject: Agenda Item I, Kinross Copper Corporation - Appeal of Denial of Full Party Status of CIIBRI
EQC Meeting: November 17, 1995

Background

On April 7, 1995, Kinross Copper Corporation ("Kinross") filed an appeal in the matter of NPDES Permit Application No. 997233. On July 10, 1995, Citizens Interested in Bull Run, Inc. ("CIIBRI") filed a request for party status in the contested case hearing. On August 3, 1995, Kinross filed a Response to Requests to Participate in the Contested Case which requested further information from CIIBRI before their request for party status was to be considered. CIIBRI further supplemented their request on August 11, 1995.

On August 24, 1995, a hearing was held to consider the request for party status of CIIBRI, along with other organizations. Kinross and DEQ were given until September 1, 1995 to file a response to the request for party status. CIIBRI was allowed until September 8, 1995 to reply. No response by DEQ was filed but all other documents were timely received.

On September 22, 1995, Lawrence Smith entered an Order of Party Status of Citizens Interested in Bull Run, Inc. and Frank Gearhart, denying Frank Gearhart party status and allowing CIIBRI limited party status. The determination regarding Mr. Gearhart is not being appealed. The order denied CIIBRI full party status since, as an association, CIIBRI must be represented by legal counsel in order to make legal arguments. **OAR 137-03-008**. The limited party status will allow CIIBRI to participate in the hearing without the assistance of an attorney.

Department Recommendation

It is recommended that the Commission adopt the hearings officer's Order of Party Status of Citizens Interested in Bull Run, Inc. and Frank Gearhart dated September 22, 1995, as written.

Attachments

1. Letter requesting party status from Frank Gearhart, dated July 10, 1995.

2. Kinross Copper Corporation's Response to Requests to Participate in the Contested Case, dated August 3, 1995.
3. Letter amending letter of July 10, 1995 from Frank Gearhart, dated August 11, 1995.
4. Kinross Copper Corporation's Supplemental Response to Requests to Participate in the Contested Case, dated September 1, 1995.
5. Letter responding to Kinross's Response to Requests to Participate from Frank Gearhart, dated September 8, 1995.
6. Order of Party Status of Citizens Interested in Bull Run, Inc. and Frank Gearhart, dated September 22, 1995.
7. Notice of Appeal of DEQ Hearings Officer's Order Denying CIIBRI Full Participation as a Party, dated October 20, 1995.
8. Letter from Susan Greco, Rules Coordinator, to parties regarding hearing of appeal, dated October 23, 1995.

Report Prepared By: Susan M. Greco
Date Prepared: October 24, 1995

October 23, 1995

Michael R. Campbell
Stoel Rives Boley Jones & Grey
900 SW 5th Avenue, Suite 2300
Portland OR 97204-1268

Larry Knudsen
Department of Justice
1515 SW 5th, 4th Floor
Portland OR 97201

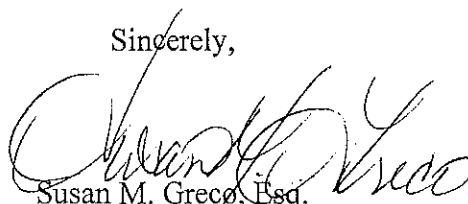
Frank Gearhart
CIIBRI
PPO Box 3426
Gresham OR 97030

Gentlemen:

The Department of Environmental Quality received CIIBRI's timely appeal of the Hearings Officer's Order denying CIIBRI full party status on October 20, 1995. The appeal has been set for the regularly scheduled Environmental Quality Commission meeting on Friday, November 17, 1995. The meeting will take place at 811 S.W. 6th Avenue, Portland, Oregon in Conference Room 3A. This case, along with several others, has been set on the agenda for 1:30 p.m. Each side will be allowed 5 minutes to present their case to the Commission.

If you should have any questions or need special accommodations, please feel free to call me at (503) 229-5213.

Sincerely,


Susan M. Greco, Esq.
Rules Coordinator

cc: Lawrence Smith, Employment Department
Kathleen Lippett, OD



Citizens Interested in Bull Run, Inc.



P.O. Box 3426
Gresham OR 97030
Phone: (503) 665-4777
Fax: (503) 669-9429

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED
OCT 20 1995

OFFICE OF THE DIRECTOR

October 20, 1995

William W. Wessinger, Chairman
Environmental Quality Commission
811 S.W. Sixth Avenue
Portland, Or 97204

Dear Chairman Wessinger and Commissioners:

CIIBRI hereby serves "notice of appeal of DEQ Hearings Office's order denying CIIBRI full participation as a party".

Also included is our certificate of service.

Sincerely,

A handwritten signature in cursive script that reads "Frank Gearhart". The signature is written in dark ink and is positioned above the typed name.

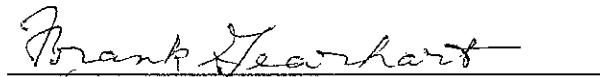
Frank Gearhart, President

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION OF OREGON

IN THE MATTER OF THE DENIAL)
OF KINROSS COPPER CORPORATION'S)
NPDES PERMIT APPLICATION NO. 997233)
)
NOTICE OF APPEAL OF DEQ
HEARING OFFICER'S ORDER
DENYING CIIBRI FULL
PARTICIPATION AS A PARTY

Pursuant to OAR 340-11-132(2), Citizens Interested In the Bull Run, Inc. (CIIBRI), hereby notifies the Environmental Quality Commission (Commission) and all parties that CIIBRI intends that the Commission review the Hearing Officer's Final Order of September 22, 1995, wherein CIIBRI was denied full participation as a party in this matter.

Signed and submitted October 20, 1995.



Frank Gearhart, President
CIIBRI

CERTIFICATE OF SERVICE

On October 20, 1995, I served the attached **NOTICE OF APPEAL** by causing a true copy to be placed in an envelope and deposited with the United States Postal Service for collection and delivery this date addressed as follows:

Larry Knudsen
Assistant Attorney General
Oregon Department of Justice.
1515 SW Fifth Avenue, Suite 410
Portland, OR 97201

Lawrence S. Smith
Administrative Law Judge
Portland Hearings Section
Oregon Employment Department
800 NE Oregon Street #6
Portland, OR 97232

Michael R.. Campbell
Stoel Rives Boley Jones & Grey
900 SW Fifth Avenue, Suite 2300
Portland, OR 97204-1268

Susan L. Smith
Attorney at Law
North Santiam Wathershed Council
245 Winter Street
Salem, OR 97301

Bart Brush
Attorney at Law
621 SW Morrison Street, Suite 440
Portland, OR 97205

Susan M. Greco
Oregon DEQ
811 SW Sixth Avenue
Portland, OR 97204

Executed on October 20, 1995 at Gresham, Oregon.

I declare under penalty of perjury under the laws of the State of Oregon that the above is true and correct.



Frank Gearhart

SEP 26 1995

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

In the Matter of the Denial of	)	ORDER OF
KINROSS COPPER CORPORATION'S	)	PARTY STATUS
NATIONAL POLLUTANT DISCHARGE ELIMINATION	)	OF CITIZENS
SYSTEM PERMIT APPLICATION NO. 997233	)	INTERESTED IN
		BULL RUN, INC.
		AND FRANK GEARHART

On August 24, 1995, a hearing was held in the office of the Attorney General in Portland, Oregon, to consider the request for party status by Citizens Interested in Bull Run, Inc. and Frank Gearhart. Robert Robinson appeared as a witness on behalf of petitioners. Applicant Kinross was represented by Phillip Chadsey and Michael Campbell, attorneys at law. The Department of Environmental Quality (DEQ) was represented by Larry Knudsen, assistant attorney general.

Applicant Kinross and DEQ were given until September 1, 1995, to respond to petitioners' petitions. Kinross' response was received on September 1, 1995. Petitioners were allowed until September 8, 1995, to reply and replied that day.

ISSUE

Shall petitioners be considered a party under OAR 137-03-005?

FINDINGS

(1) Petitioner Citizens Interested in Bull Run, Inc. (CIBRI) is a chartered statewide organization dedicated to protecting Oregon's domestic water resources. (2) It is a statewide organization of about 600 members, some of whom drink the water from the Santiam River basin. (3) Petitioner Frank Gearhart is the president.

(4) Petitioners have participated in DEQ/EQC hearings regarding water quality. (5) Their role in rulemaking for the three-basin rule was limited. (6) They asserted a public and personal interest. (7) Their interests parallel those of the Sierra Club and other environmental groups. (8) They were not represented by an attorney.

CONCLUSION

The petitioners are denied party status. However, petitioner CIBRI is allowed limited party status and will be allowed to receive notice, to attend the hearing, and make an offer of proof if petitioner CIBRI has evidence to offer.

Petitioners' petitions for party status are considered under OAR 137-03-005, which states the relevant criteria under subsection (7) are:

(a) Whether the petitioner has demonstrated a personal or public interest that could reasonably be affected by the outcome of the proceeding;

(b) Whether any such affected interest is within the scope of the agency's jurisdiction and within the scope of the notice of contested case hearing;

(c) When a public interest is alleged, the qualifications of the petitioner to represent that interest;

(d) The extent to which the petitioner's interest will be represented by existing parties.

Petitioners have asserted both a public and private interest. They have established a private and public interest which could reasonably be affected by the outcome of the proceeding. Applicant seeks to overturn or limit the three-basin rule. The three-basin rule was promulgated to protect Oregon's domestic water resources, a purpose to which CIBRI and Frank Gearhart are dedicated. Such an interest is therefore also within the scope of the contested case hearing. Petitioners meet the criteria under subsections (a) and (b).

Petitioner Frank Gearhart does not meet the other subsections. He did not testify at the hearing to establish his personal qualifications and the petitions did not specifically state his qualifications to represent either a public or private interest, especially in comparison to the other parties alleging his same interest (North Santiam Watershed Council, Northwest Environmental Defense Center, Northwest Environmental Advocates, Oregon Natural Resources Defense Council, and the Sierra Club). Because his interest will be represented by the other parties, his personal petition for party status is dismissed.

Petitioner CIBRI has established some expertise in the area. While this expertise and interest may be represented in some degree by the other parties, in deference to petitioner CIBRI's involvement in other proceedings, petitioner CIBRI has established sufficient grounds under the above criteria to become a limited party. Under subsection (8) of the rule, its petition may be considered as a petition for limited party status. Its party status is also limited because as an association, it must be represented by legal counsel in order to make legal arguments. Petitioner CIBRI will be able to participate as a limited party as described below without the assistance of an attorney.

Because its interest is somewhat represented by the other parties and because of the limitation on lay representation for associations, limited party CIBRI's rights are as follows:

1. It has the right to notice of the hearing and the right to receive and review all evidence presented in the hearing.
2. It has the right to offer evidence, including testimony at the hearing. The Hearings Officer will decide on the need and admissibility of the evidence.

3. It has the right to receive any orders in this case. Standing for an appeal to the EQC or the Court of Appeals will be decided by those respective bodies.

4. It does not have the right to cross-examine other witnesses or parties. If it has some evidence which rebuts evidence of another witness or party, it can offer to provide this evidence and the hearings officer will decide on its admissibility.

5. It does not have the right to present legal arguments.

ORDER

Petitioner Frank Gearhart's request for party status is denied.

Petitioner CIBRI's request to become a limited party is granted under OAR 137-03-005, with limitations stated above.

Lawrence S. Smith

Lawrence S. Smith
Hearings Officer

9-22-95

Date

lss

REVIEW

If you are not satisfied with this decision, you have 30 days to file a petition with the Environmental Quality Commission (EQC), requesting EQC to exercise its discretion on allowing interlocutory review of party or intervenor status.

RECEIVED
SEP 15 1995

Citizens Interested in Bull Run, Inc.



P.O. Box 3426
Gresham OR 97030
(503) 665-4777

Fax 669-9429

September 8, 1995

RECEIVED

SEP 11 1995

Water Quality Division
Dept. of Environmental Quality

Lawrence S. Smith
Administrative Law Judge
Portland Hearings Section
800 N.E. Oregon Street #6
Portland, OR 97232

Dear Honorable Judge Smith:

RE: Kinross Copper Corporation's Supplemental Response (September 1, 1995) to Request to participate in the Contested Case (NPDES application No. 997233).

Kinross has raised the issues under OAR137-03-005 (3):

(d) "--Seeks to protect a personal interest" See item 3. CIIBRI letter of August 11, 1995.

(e) --- petitioner seeks to protect a public interest --- petitioner's qualifications"

See item 4. CIIBRI letter of August 11, 1995.

(f) "--- reasons why existing parties to the proceedings cannot adequately represent The interest in (d) and (e)"

To our knowledge at present there has been no determination as to who will be allowed to be participants in the contested case hearings.

In a conversation with Susan Smith, legal council for N. Santiam Watershed Council (NSWC), Ms. Smith stated that she represented only the NSWC and not other citizens or groups. (See item 5 CIIBRI letter of August 11, 1995).

In answer to Kinross, supplemental response, September 1, 1995, item IV. CIIBRI Paragraph 2 "none of these interests, however, differ from others expressed by NSWC".

Honorable Judge Smith

Page 2

September 8, 1995

CIIBRI by state charter represents the interests of people who (1) live in the effected watershed, (2) recreate in the watershed and all effected areas downstream from Cedar Creek drainage of the N. Santiam River, (3) obtain domestic water supplies, surface and ground, from the drainage area. The drainage area includes from Cedar Creek headwaters to the mouth of the Willamette River.

Your Honor, we believe the records speak for themselves. Frank Gearhart, a citizen and also as a representative of CIIBRI has spoken at many public meetings and before EQC and DEQ concerning the Kinross Baronite Project and the NPDES permit.

CIIBRI contends that our interest will best be served by your granting us party status. During the contested case hearings it will be revealed that we do have a special interest in behalf of the citizens of Oregon.

Our last point, NSWC has not offered to represent CIIBRI, we have not requested that they do so. Justice will not be served by dividing the groups that represent various areas of our society.

Thank you Judge Smith for allowing us to communicate. All that we request is a fair and open hearings of this case which affects all the citizens of Oregon, now and in the future.

Sincerely,



Frank Gearhart
President

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

In the matter of the denial of) KINROSS COPPER CORPORATION'S
Kinross Copper Corporation's) SUPPLEMENTAL RESPONSE TO
National Pollutant Discharge) REQUESTS TO PARTICIPATE IN
Elimination System Permit) THE CONTESTED CASE
Application No. 997233)

I. INTRODUCTION

On August 3, 1995, Kinross Copper Corporation ("Kinross") submitted a response to requests to participate in the contested case. The response opposed the grant of limited party or party status to any requestor other than the North Santiam Watershed Council ("NSWC") and, in particular, opposed the requests for party status by Mr. Scott Forrester and by Mr. Frank Gearhart on behalf of himself and Citizens Interested in Bull Run, Inc. (collectively, "CIIBRI"¹).

In accordance with the agreement of the parties and requestors at the August 24, 1995, hearing on this matter, this supplemental response addresses additional petitions for party status and information submitted by Mr. Forrester, CIIBRI, and four joint requestors for party status: Northwest Environmental Defense Center ("NEDC"); Sierra Club, Oregon Chapter ("Sierra Club"); Northwest Environmental Advocates

¹ Although Mr. Gearhart has requested party status for both himself and for CIIBRI, the petition and information submitted to date do not distinguish their interests in any significant respect. Accordingly, they are addressed collectively here.

("NWEA"); and Oregon Natural Resources Council ("ONRC").² Kinross continues to oppose party status for any individual or organization other than NSWC because the other requestors have not demonstrated that NSWC cannot adequately represent their interests, as required by OAR 137-03-005(3)(f) and (7)(d).

II. CRITERIA FOR PARTICIPATION

Requests to participate as a party or limited party in this proceeding are governed by OAR 137-03-005. See OAR 340-45-035(9); OAR 340-11-098. OAR 137-03-005(3) provides that a request to participate as a party or limited party must include, among other things:

"(d) If the petitioner seeks to protect a personal interest, a detailed statement of the petitioner's interest, economic or otherwise, and how such interest may be affected by the results of the proceeding;

"(e) If the petitioner seeks to protect a public interest in the results of the proceeding, a detailed statement of such public interest, the manner in which such public interest will be affected by the results of the proceeding, and the petitioner's qualifications to represent such public interest; [and]

"(f) A statement of the reasons why existing parties to the proceeding cannot adequately represent the interest

² An additional joint petition for party status was submitted at the hearing on August 24, 1995, on behalf of Mr. Larry Jargensmeier and Local 290, Plumbers and Steamfitters. In accordance with the agreement of the parties and requestors at the hearing, Kinross will respond by September 8, 1995, to the petition and to additional information to be submitted by September 1, 1995, in support of the petition.

identified in subsection (3)(d) or (e) of this rule." (Emphasis added.)

Further, OAR 137-03-005(7) provides, "In ruling on petitions to participate as a party or a limited party, the agency shall consider: *** (d) The extent to which the petitioner's interest will be represented by existing parties."

III. MR. FORRESTER

Mr. Forrester's petition dated August 24, 1995, asserts public and private interests in the outcome of this proceeding. These asserted interests, however, all concern the effect that Kinross' proposed mine might have on downstream water quality for existing and potential drinking water supplies. NSWC asserts the very same interests, as well as others. NSWC also has a well-qualified attorney to articulate and advocate its interests; Mr. Forrester does not.

Given these interests and circumstances, it is difficult, if not impossible, to imagine how NSWC could not adequately represent the interests that Mr. Forrester asserts. Indeed, apart from a single, unexplained assertion that "These groups don't represent my view," Mr. Forrester does not identify any respect in which his interests would not be adequately represented by NSWC or identify any point of disagreement with NSWC that is relevant to the issues involved in this proceeding. For these reasons, Mr. Forrester should be denied party or limited party status.³

³ Mr. Forrester's petition suggests that his primary interest in this proceeding may be journalistic. He need not
(continued...)

IV. CIIBRI

CIIBRI's petition dated August 11, 1995, as well as the testimony of Mr. Robinson on behalf of CIIBRI at the hearing on August 24, 1995, also asserted public and private interests in the outcome of this proceeding. The interests concerned the effects that Kinross' proposed mine might have on downstream water quality for drinking and recreation. In addition, CIIBRI asserts an interest in the "Three Basin Rule," OAR 340-41-470, which Kinross has challenged in this proceeding.

None of these interests, however, differ from those expressed by NSWC. It, too, asserts public and private interests in the effects that the proposed mine might have on water quality for drinking and recreation. NSWC Petition, ¶¶ 2-3, 5. NSWC also asserts an interest in maintaining and strengthening the Three Basin Rule. NSWC Petition, ¶¶ 4, 6. Indeed, NSWC describes its extensive participation in various rulemakings and advisory committees concerning the Three Basin Rule. Id.

CIIBRI does not explain how its interests differ from NSWC's in any respect that is relevant to this proceeding. Like Mr. Forrester, CIIBRI makes a single, unsupported, and unexplained assertion that "Susan Smith and N. Santiam Watershed Council, et al[.], presently do not represent the

³(...continued)
be a party or limited party to exercise that interest, however.

interests of CIIBRI." But such an assertion, without more, is not sufficient to show that CIIBRI's interests will not be adequately represented by NSWC. Moreover, like Mr. Forrester, CIIBRI does not have legal counsel to advocate and articulate its interests; NSWC does.

Finally, the fact that CIIBRI expresses an equal interest in all three basins subject to the Three Basin Rule, whereas NSWC is primarily concerned with the North Santiam River Basin, does not demonstrate that its interests differ from NSWC's in any manner relevant to this proceeding. Kinross' proposed mine and this proceeding could affect the Clackamas and McKenzie Rivers only in the indirect sense that Kinross has challenged a rule that is common to all three basins. CIIBRI has not argued, much less demonstrated, however, that NSWC is any less interested in defending the rule than CIIBRI. In fact, given that NSWC has secured counsel to represent it and CIIBRI has not, NSWC would appear to be much better able to defend the rule than CIIBRI.

CIIBRI and Mr. Gearhart have not demonstrated why their asserted interests cannot be adequately represented by NSWC. For that reason, they should be denied party or limited party status.

V. NEDC/SIERRA CLUB/NWEA/ONRC

NEDC, the Sierra Club, NWEA, and ONRC seek to represent a public interest in the proceeding. The asserted interest is two-fold: (1) an interest in maintaining the water quality of the North Santiam River for drinking, recreation,

and other beneficial uses; (2) an interest in upholding the integrity of the Three Basin Rule against challenges by Kinross.

Again, these interests do not differ in any relevant respect from those of NSWC. Indeed, their petition concedes that NSWC's interests "are generally aligned with" their own. The only respect in which they argue that NSWC would not adequately represent their interests is that NSWC's "sole concern is with the North Santiam Subbasin and the Kinross mine," whereas they are interested more broadly in the Three Basin Rule.

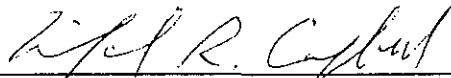
As discussed above, however, NSWC has as much interest in upholding the Three Basin Rule as any other person or entity seeking party status. See NSWC Petition, ¶¶ 4, 6. Although NSWC is primarily concerned with the North Santiam Basin, NEDC, the Sierra Club, NWEA, and ONRC have not explained in what respect this affects NSWC's ability or interest in upholding the rule, which applies equally to all three basins. If the rule is invalidated or weakened with respect to the Clackamas and McKenzie Basins, it will be invalidated or weakened to at least the same extent in the North Santiam Basin.

Because these groups have not demonstrated why the NSWC cannot adequately represent their interests, they should be denied party or limited party status.⁴

VI. CONCLUSION

For the foregoing reasons, Kinross respectfully urges the Hearings Officer to deny party or limited party status to requestors Forrester, CIIBRI, Gearhart, NEDC, the Sierra Club, NWEA, and ONRC.

DATED: September 1, 1995.



Phillip D. Chadsey, OSB No. 66028
Margaret D. Kirkpatrick, OSB No. 82304
Michael R. Campbell, OSB No. 87001
Stoel Rives
Suite 2300
900 S.W. Fifth Avenue
Portland, Oregon 97204-1268

Attorneys for
Kinross Copper Corporation

⁴ Even if for some reason NSWC could not adequately represent these groups' interests in this proceeding, the groups have not argued that their interests in this proceeding differ from each other's. Therefore, if the groups are granted party status, the grant should be conditioned on the groups having common legal counsel or other representative. If one or more of the groups should elect to be represented by separate counsel or other representative at a later stage of the proceeding, they should be required to petition anew at that time for party or limited party status, subject to any appropriate objections, including timeliness.

CERTIFICATE OF SERVICE AND FILING

I hereby certify that on September 1, 1995, I served or filed the foregoing Kinross Copper Corporation's Supplemental Response to Requests to Participate in the Contested Case on the following persons by the methods indicated:

Mr. Lawrence Smith (fax and first-class mail)
Oregon Employment Division
Hearings Section
Suite 225
800 N.E. Oregon Street #6
Portland, Oregon 97232
Fax: 731-4042

Ms. Susan M. Greco (hand delivery)
Rules Coordinator
Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Mr. Larry Knudsen (fax and first-class mail)
Assistant Attorney General
Department of Justice
Suite 410
1515 S.W. Fifth Avenue
Portland, Oregon 97201
Fax: 229-5120

Ms. Susan L. Smith (fax and first-class mail)
245 Winter Street
Salem, Oregon 97301
Fax: (503) 370-6375

Mr. Scott Forrester (hand delivery and
first-class mail)
2030 N.W. 7th Place
Gresham, Oregon 97030

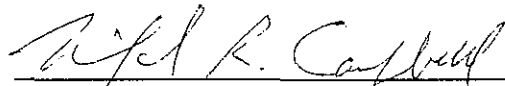
Mr. Frank Gearhart (fax and first-class mail)
2103 N.E. 24th Court
Gresham, Oregon 97030
Fax: 669-9429

Mr. Bart A. Brush (fax and first-class mail)
Suite 440
621 S.W. Morrison Street
Portland, Oregon 97205
Fax: 223-0218

Mr. Karl G. Anuta (fax and first-class mail)
Larry N. Sokol & Associates, P.C.
735 S.W. First Avenue
Portland, Oregon 97204
Fax: 228-6551

Ms. Linda K. Williams (fax and first-class mail)
10266 S.W. Lancaster Road
Portland, Oregon 97219
Fax: 245-2772

DATED: September 1, 1995.



Michael R. Campbell, OSB No. 87001
Stoel Rives
Suite 2300
900 S.W. Fifth Avenue
Portland, Oregon 97204-1268

Of Attorneys for
Kinross Copper Corporation

Citizens Interested in Bull Run, Inc.



P.O. Box 3426
Gresham OR 97030
(503) 665-4777

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 2
To <i>Larry Knudsen</i>	From <i>Frank Gearhart</i>	
Co. <i>A. G.</i>	Co. <i>CIIBRI</i>	
Dept.	Phone # <i>665-4777</i>	
Fax # <i>229-5120</i>	Fax # <i>667-9429</i>	

August 11, 1995

Larence S. Smith
Administrative Law Judge
Portland Hearings Section
800 NE Oregon Street #6
Portland OR 97232

Honorable Judge Smith:

This is an addendum to our letter of July 10, 1995, to Langdon Marsh, Director of DEQ requesting intervenor (participant) status on the Kinross contested case hearing on NPDES permit appeal.

Participation as Party OAR 137-02-005 (3)

1. a. CIIBRI
P. O. Box 3426
Gresham OR 97030
1. b. Frank Gearhart, an individual
2103 NE 24th Court
Gresham OR 97030
2. Request: Participation as a party
3. Petitioners (CIIBRI members and Frank Gearhart, as presiding president and as an individual, have recreational interests (fishing, hunting, hiking, camping, etc.) in each of the 3 Basins (N. Santiam included). When using the Little N. Santiam Basin we use the water to drink and bathe. We obtain drinking water from the N. Santiam Watershed. The Kinross Boronite Mine Project if allowed to be operational will become a health hazard from mine pollution discharges to Oregon's waters.

If Kinross prevails and operates the Boronite Mine in the Cedar Creek Canyon, or any mine in the 3 Basins, it would imperil the purity and the safe use of these waters

Larence S. Smith
Page Two
August 11, 1995

Oregon's waters are the property of its citizens. We all have economic and other interests in the waters of the N. Santiam Watershed.

4. Petitioner represents the public interest: the 3 Basin Rule, OAR 340-41-470, controls discharges into the Clackamas, N. Santiam and McKenzie Rivers. Presently, 650,000 people depend on surface water and ground water from the 3 Basins.

CIIBRI is chartered by Oregon to protect the public's interests in domestic water. In addition we inform the public of issues and activities affecting their water supplies.

Mining activities in the N. Santiam will affect water quality and the water supplies of more than 100,000 people. CIIBRI has been publicly involved with various aspects of the Kinross Boronite Mine project since 1992. CIIBRI staff and members have spent countless hours participating in public meetings with EQC, DEQ, various committees and legislators.

We have spent time at the Boronite Mine site and in the Cedar Creek Canyon.

CIIBRI informs the public through publications and public meetings. CIIBRI is an organizer and member of the "3 Basin Alliance" (ad hoc committee representing public interest and citizen activist groups).

5. Kinross Copper Corporation cannot and will not represent CIIBRI's interest in protection for the waters of the N. Santiam River. CIIBRI opposes [3 & 4] all mines that will or may discharge contaminants to Oregon's waters.

Susan Smith and the N. Santiam Watershed Council, et al, presently do not represent the interests of CIIBRI

We hope this is adequate for granting us participant status.

Sincerely,



Frank Gearhart
President

Citizens Interested in Bull Run, Inc.



P.O. Box 3426
 Gresham OR 97030
 (503) 665-4777 Fax (503) 661-6225

RECEIVED

JUL 10 1995

July 10, 1995

Langdon Marsh
 Director of DEQ
 811 SW 6th Ave
 Portland, Or 97204

Post-It™ brand fax transmittal memo 7671		# of pages * 1
To Roberta Young	From Frank Gearhart	
Co. DEQ	Co. CIIBRI	
Dept. MSD	Phone # 665-4777	
Fax # 229-6124	Fax # 661-6225	

Dear Mr. Marsh:

Kinross Copper Corporation application no. 997233 requested a NPDES permit to discharge process waste water from the Bornite Project to the Little North Santiam drainage basin. The application was denied by DEQ on March 21, 1995 in a letter signed by Barbara Burton for Steve Greenwood.

On April 7, 1995, Steel Rives Boley Jones & Gray (attorneys representing Kinross Copper Corp.) filed a "request for a contested case hearing" with your office.

CIIBRI requests:

- o Full and complete "intervener" status on the "contested case hearing" requested by Kinross on the Bornite Project NPDES permit.
- o Notification by mail and fax of the hearing date, time and place for the "contested case hearing" and the name, address and phone no. of the hearings office.
- o Notification of any deadlines and requirements for filing and addendum to this request for "intervener" status.

The CIIBRI board and members have been involved and participating in the "Three Basin Rule" and the Kinross episode for several years. If a more formal "intervener" request is needed, please inform us within 5 days. Thank you.

Sincerely,

Frank Gearhart, President

cc: Roberta Young

FG/fg

Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item J
November 17, 1995 Meeting

Title:

Extension of the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order (EQC Order)

Summary:

The purpose of this staff report is to request that the Commission extend the compliance schedule adopted in the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order (EQC Order).

The EQC Order was adopted on July 21, 1993, to insure continued implementation of ongoing nonpoint source pollution control efforts to achieve compliance with the Tualatin Basin phosphorus Total Maximum Daily Load (TMDL). The Order expires on December 31, 1995.

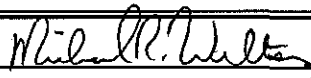
Significant progress has been made by the Designated Management Agencies (DMAs) responsible for implementing programs to reduce nonpoint source pollution in the Tualatin Watershed as required by the EQC Order.

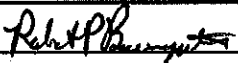
The Department is currently performing a scientific review of the Tualatin Basin TMDL. The broad review of the TMDL will not be completed prior to the EQC Order expiring at the end of this year. An extension of the EQC Order will allow for a comprehensive review of scientific information to be incorporated in any new TMDL implementation and compliance strategies.

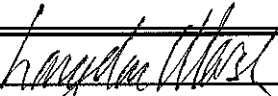
The DMAs and the Department intend to continue to comply with the tasks and responsibilities outlined in the EQC Order.

Department Recommendation:

The Department recommends that the Commission extend the compliance schedule in the EQC Order for fifteen months.


Report Author RWB


Division Administrator For Tom Bingham



Director

†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: October 11, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director 
Subject: Agenda Item J, November 17, 1995 EQC Meeting

Extension of the Tualatin Sub-basin Nonpoint Source Management
Implementation/Compliance Schedule and Order (EQC Order)

Statement of the Issue

The purpose of this staff report is to request that the Commission extend the compliance schedule adopted in the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order (EQC Order).

The EQC Order was adopted on July 21, 1993, to insure continued implementation of ongoing nonpoint source pollution control efforts to achieve compliance with the Tualatin Basin phosphorus Total Maximum Daily Load (TMDL). The Order expires on December 31, 1995.

Significant progress has been made by the Designated Management Agencies (DMAs) responsible for implementing programs to reduce nonpoint source pollution in the Tualatin Watershed as required by the EQC Order. Some of the DMAs' accomplishments are discussed, in the Department's 1993 Tualatin TMDL status report, which is attached. The 1994 status report is in draft. Although the efforts of the DMAs have resulted in a significant decrease in total phosphorus in the Tualatin River, the original TMDL goal has not been achieved. Scientific information gathered over the last couple of years indicates that achieving the original TMDL goal is unlikely. The DMAs and the Department intend to continue to comply with the tasks and responsibilities outlined in the EQC Order.

The Department is now conducting a broad review of the TMDL and the general health of water quality in the basin. The review will be based on substantially more information than was available during the establishment of the original TMDL. A Tualatin Basin Technical Advisory Committee (TBTAC) has been formed to review the

[†]Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

Memo To: Environmental Quality Commission
Agenda Item J
November 17, 1995 Meeting
Page 2

TMDL and develop a waterbody assessment. A Tualatin Basin Policy Advisory Committee (TBPAC) will be formed in the near future to assess the information provided by the TBTAC. The TBPAC will make recommendations to the Department on the refinement, final goals and implementation strategies and schedule for the Tualatin Basin TMDL.

The TMDL process is iterative and the Department anticipates working on Tualatin Basin water quality improvements for the foreseeable future.

The TBTAC and TBPAC reviews will not be completed by the time EQC Order expires. The DMAs want assurance that future actions are based on the Department's assessment of scientific information and review of the TMDLs. An extension of the EQC Order will allow the Department to conduct a thorough review of sound scientific information gathered over the last few years and base future implementation strategies and compliance schedules on that science. It will also prevent the DMAs and the Department from being out of compliance with the EQC Order.

Background

In 1988, the EQC promulgated rules to limit discharges of ammonia and total phosphorus to the Tualatin River in accordance with Section 303 of the Clean Water Act and 40 CFR, part 130.7. This action amended Oregon Administrative Rules (OAR) 340-41-470 by establishing target concentrations for both total phosphorus and ammonia-nitrogen at various locations on the main stem of the Tualatin River and at the mouths of certain tributaries.

The EQC Order for the DMAs was established by the EQC on July 23, 1993. The EQC Order requires specific tasks and responsibilities of a number of government entities. The DMAs include Unified Sewerage Agency, Clackamas County, Multnomah County, Washington County, City of Portland, City of Lake Oswego, City of West Linn, the Oregon Department of Agriculture, and the Oregon Department of Forestry.

The compliance schedule in the EQC Order lists tasks and responsibilities of the DMAs in controlling nonpoint source water pollution in the Tualatin River Watershed. The primary intent of the EQC Order is to improve water quality and to achieve all applicable water quality standards by December 31, 1995. A second goal is to promote ongoing communication among the jurisdictions in the basin. A third major consideration is to encourage and promote the involvement of interest groups of all kinds in the implementation of the EQC Order.

Efforts by the DMAs in accordance with the EQC Order and the TMDL have resulted in a significant improvement in the general health of the Tualatin River. The river routinely violated the instream dissolved oxygen standard prior to the TMDL water quality improvement strategies being implemented. The ammonia TMDL has been achieved and the river now meets the dissolved oxygen standard most of the time. There has been a substantial reduction in instream total phosphorus which has resulted in lower algal growth in the river, although the TMDL goal has not been achieved.

The Department believes that a review of the data generated by the TMDL process will better enable us to refine our implementation strategies for achieving compliance.

Authority to Address the Issue

The 1988 rules promulgated by the EQC amended Oregon Administrative Rules (OAR) 340-41-470 by establishing instream criteria (TMDLs) for both total phosphorus and ammonia-nitrogen at various locations on the main stem of the Tualatin River and at the mouths of certain tributaries.

Establishment of TMDLs is in accordance with Section 303 of the Clean Water Act and 40 CFR, part 130.7 and OAR 340-41-026(4)(d). ORS 468B.020, ORS 468B.035, and ORS 468B.048 provide authority for implementation of the Clean Water Act and the setting of water quality standards. ORS 183.310 to 183.550 provide authority to adopt, modify or repeal rules for the administration of water quality standards.

Alternatives and Evaluation

There are two options:

- 1) Do not extend the EQC Order deadline
- 2) Extend the EQC Order deadline

If the deadline is not extended the Department could quickly develop a new TMDL implementation agreement with the DMAs. This would only serve as an interim measure until such time as the TMDL review is completed and a new implementation/compliance schedule is developed. It is not likely that a hastily drafted interim agreement could improve much upon the existing EQC Order and it would entail a commitment of resources that could better be spent on the TMDL review.

An extension of the existing Tualatin Basin EQC Order would provide a time frame consistent with a thorough review of TMDLs and alleviate the need to develop an interim agreement. The scope of the TMDL review is expanding to include Tualatin River tributaries and pollutants in addition to ammonia and total phosphorus. The review will result in the development of scientifically-based strategies for achieving compliance. Inadequate time spent on the TMDL review would result in decisions being made without a full assessment of available science.

Summary of Any Prior Public Input Opportunity

The DMAs meet routinely to discuss water quality activities taking place in the Tualatin Basin. The meetings are open to public participation.

The TBTAC is currently performing a waterbody assessment of the Tualatin Basin. The committee includes DMAs, university professors, private consultants and environmental group representatives. The meetings are open to the public.

Conclusions

- Considerable progress has been made by the DMAs in reducing nonpoint source pollution in the Tualatin River Watershed. The DMAs and the Department will continue implementing the tasks and responsibilities outlined in the EQC Order.
- The Department is conducting a scientific review of the Tualatin Basin TMDL with input from the DMAs and advisory committees.
- A thorough TMDL review will not be completed by the time the EQC Order expires. The DMAs want to assure future actions are based on the Department's assessment of scientific information and review of the TMDL.
- An extension of the existing EQC Order will allow for a comprehensive review of scientific information, preparation of a waterbody assessment and a policy review for the Tualatin Basin TMDL.

Department Recommendation

The Department recommends that the Commission extend the compliance schedule in the EQC Order for fifteen months.

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Attachments

- A. Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order
- B. Department of Environmental Quality 1993 Tualatin River Basin Status Report
- C. Oregon Administrative Rules 340-41-470
- D. Agenda Item F, July 23, 1993, EQC Meeting - Report on the Tualatin River Watershed Nonpoint Source Management Implementation/Compliance Schedule and Order.

Approved:

Section: *R. H. P. [Signature]*

Division: *Sam [Signature]*

Report Prepared By: Michael R. Wiltsey

Phone: 229-5325

Date Prepared: October 11, 1995

MRW:mrw
e:\wp51\eqc\eqcorder.rpt
October 11, 1995

DEPARTMENT OF ENVIRONMENTAL QUALITY
TUALATIN RIVER BASIN STATUS REPORT - 1993

In 1988, the Environmental Quality Commission (EQC) promulgated rules to limit discharges of nutrients to the Tualatin River in accordance with Section 303 of the Clean Water Act and 40 CFR, part 130.7. This action amended Oregon Administrative Rules (OAR) 340-41-470 by establishing in-stream criteria for both total phosphorus and ammonia-nitrogen at various locations on the main stem of the Tualatin River and at the mouths of certain tributaries. The in-stream criteria were set at levels necessary to meet water quality standards for dissolved oxygen, pH, and the action level for nuisance algae. Waste load allocations (WLAs) were assigned to point sources and load allocations (LAs) were assigned to nonpoint sources as necessary to achieve the in-stream criteria.

Attainment of the ammonia-nitrogen criteria is primarily a point source issue requiring upgrading of the sewage treatment facilities operated by Unified Sewerage Agency of Washington County (USA). The Department anticipates that the ammonia-nitrogen criteria will be achieved in 1994.

Meeting the total phosphorus criteria will require reductions by both point and nonpoint sources. Substantial progress towards reducing phosphorus levels has been realized particularly by the point source dischargers. Further discussion on water quality improvements occurs later in this report.

This report is required by Task #8 of the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order for Designated Management Agencies (hereinafter referred to as Order) which was established by the EQC on July 21, 1994. The primary intent of the Order is to improve water quality and to achieve all applicable water quality standards and limits. A second goal is to promote communication among the jurisdictions in the basin. A third major consideration is to encourage and promote the involvement of interest groups of all kinds in the implementation of the Order.

The Order requires specific tasks and responsibilities of a number of governmental entities. The Designated Management Agencies (DMAs) include USA, Clackamas County, Multnomah County, Washington County, City of Portland, City of Lake Oswego, City of West Linn, the Oregon Department of Agriculture, and the Oregon Department of Forestry.

The specific tasks of the Order include: monitoring (task # 1); public awareness/education (task # 2); site specific problems (task # 3); implementation of management practices (task # 4); riparian area management (task # 5); rules, ordinances and guidance (task # 6); annual reporting (task # 7); status report of the basin (task # 8); the Jackson bottom wetland (task # 9); exemptions from on-site stormwater treatment (task # 10); confined animal feeding operations (task

11); container nurseries (task # 12); assurance of implementation (task # 13); and county road ditches (task # 14).

The DMAs in conjunction with the Department of Environmental Quality are required to meet the tasks according to a time schedule in the Order terminating on December 31, 1995.

Since the Order refers exclusively to Nonpoint sources, this report will also confine itself to nonpoint source issues and the requirements or tasks required in the Order.

MONITORING:

Monitoring of the Tualatin River and its tributaries is an ongoing project of the DMAs and DEQ. The monitoring locations and the nature of the data collected are being reviewed by the DMAs and DEQ. Monitoring includes ambient studies to assess changes in the overall water quality of the Tualatin River and time and site specific studies to determine the effectiveness of specific water quality control projects and management practices designed and installed to mitigate water quality problems. Arrangements are being made to make all of the data being collected in the Tualatin basin available to the DMAs and DEQ through the Environmental Protection Agency data base, STORET. The basic monitoring plan will be reviewed annually and possibly revised, if necessary, to reflect new information and to accommodate changing circumstances.

DATA REVIEW:

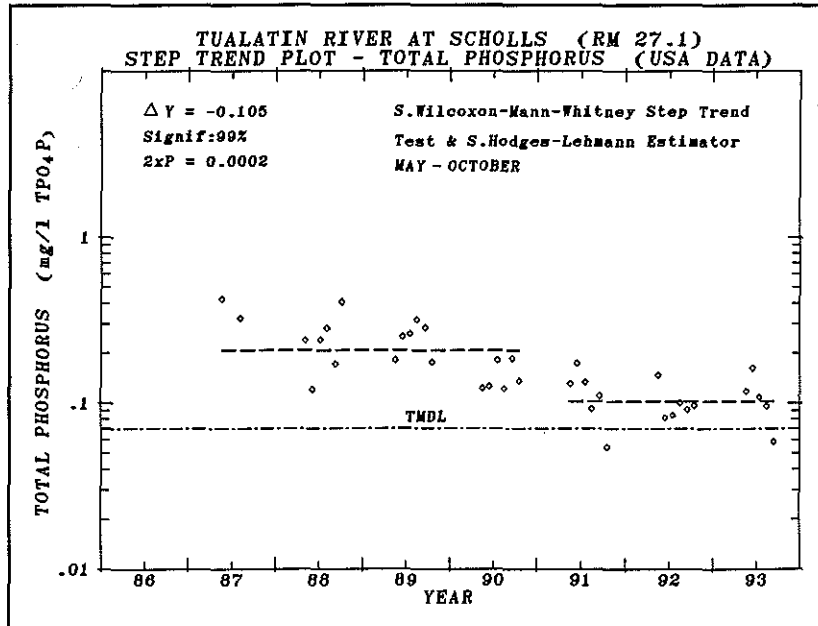
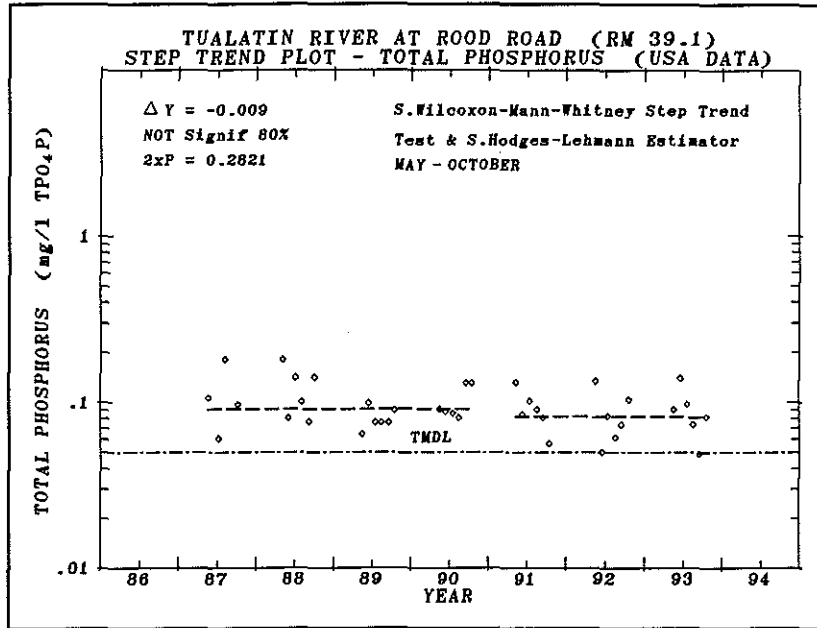
Mike Wiltsey with the DEQ Northwest Region has reviewed key water quality parameters from data gathered by USA and the Oregon Department of Agriculture in the main stem Tualatin River and the lower reaches of Burris and Christensen creeks. This review is not inclusive but is meant to highlight water quality relative to the TMDLs, water quality standards/criteria, and Best Management Practices (BMPs).

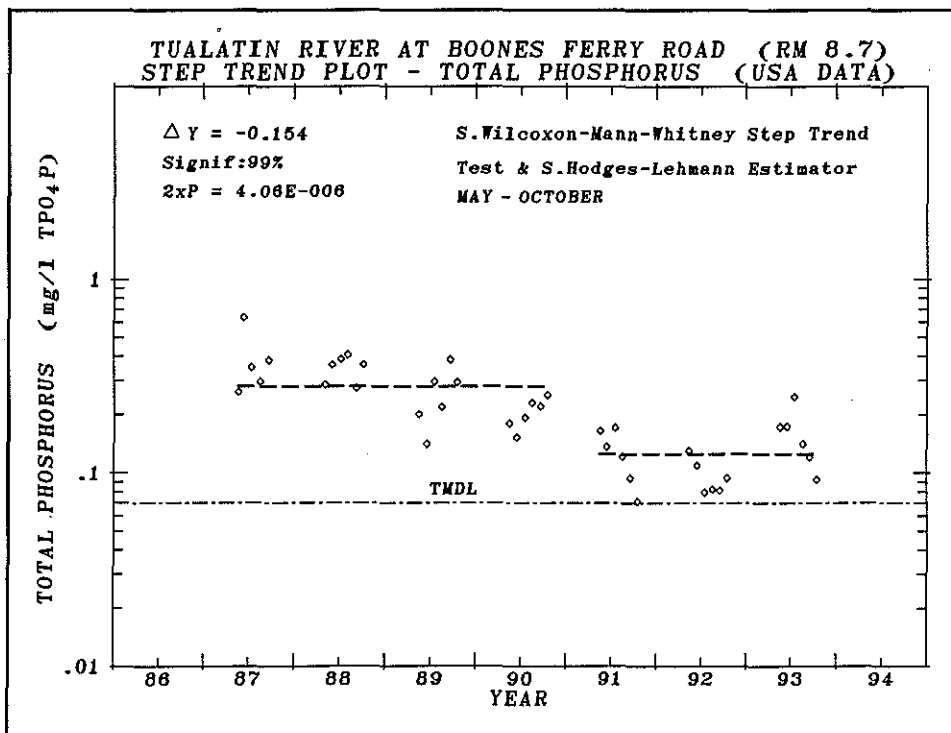
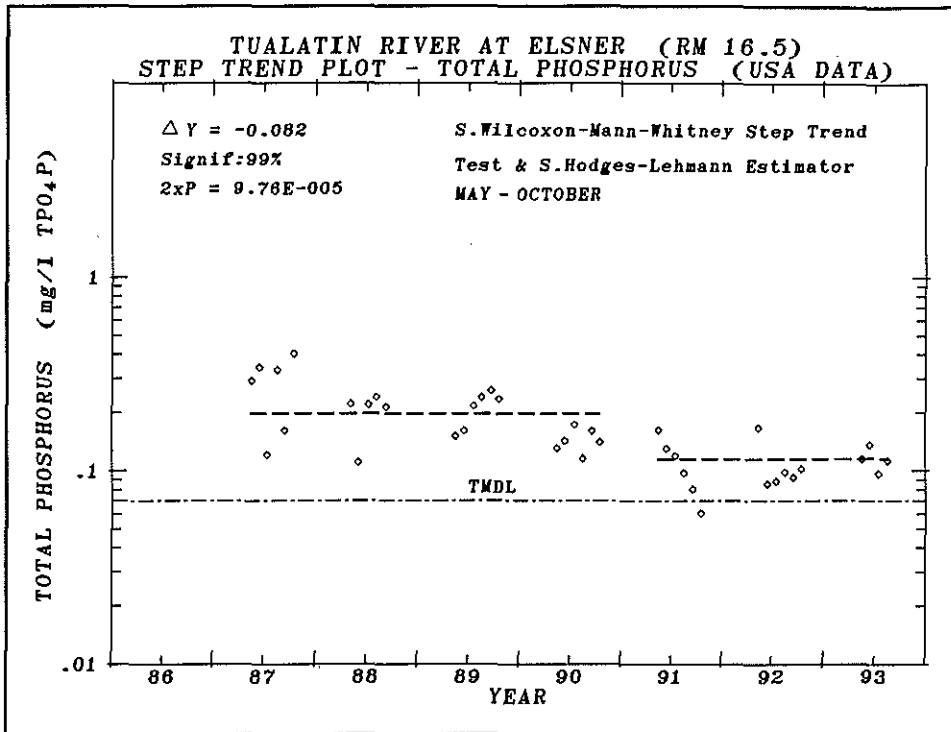
The WQHydro software package by WQHydro Consulting, Portland, Oregon, was used for performing the review.

In very general terms the overall water quality in Tualatin River at the lower reaches does seem to be improving. Using total phosphorus data collected by USA, step trend tests using the Seasonal Wilcoxon-Mann Whitney test were calculated for four main stem Tualatin River sites. The before/after time periods (May through October) used in the step trend test were 1987 to 1990 and 1991 to 1993, respectively. Where more than one monthly sample was collected, data were parsed to one measurement by selecting the value closest to the middle of

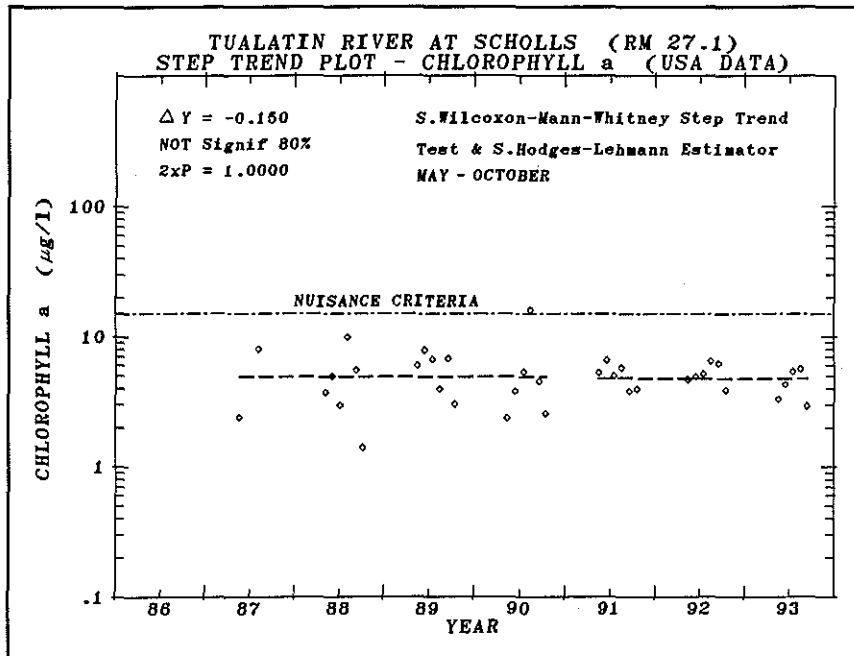
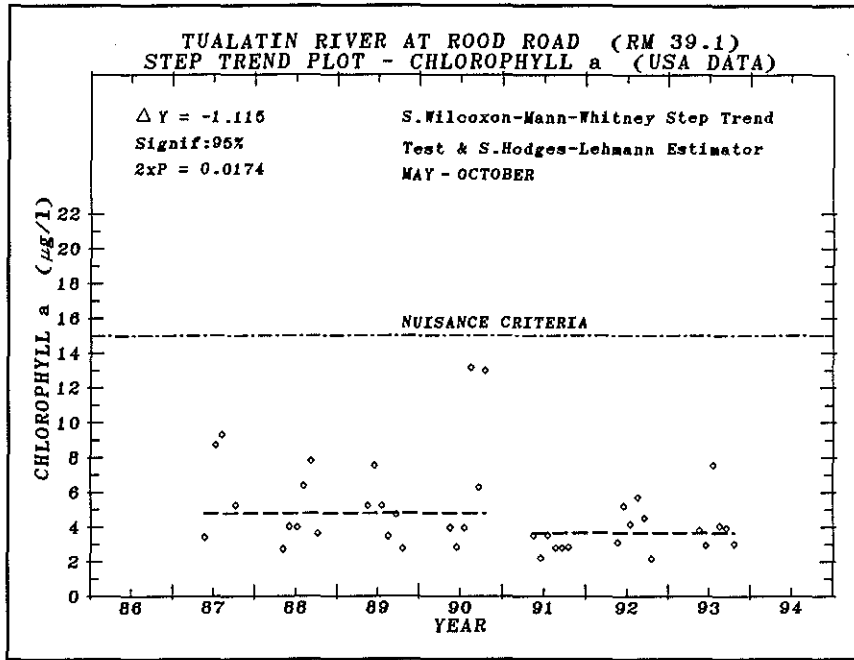
the month. No adjustments to the data were made for variability in streamflow or hour of collection.

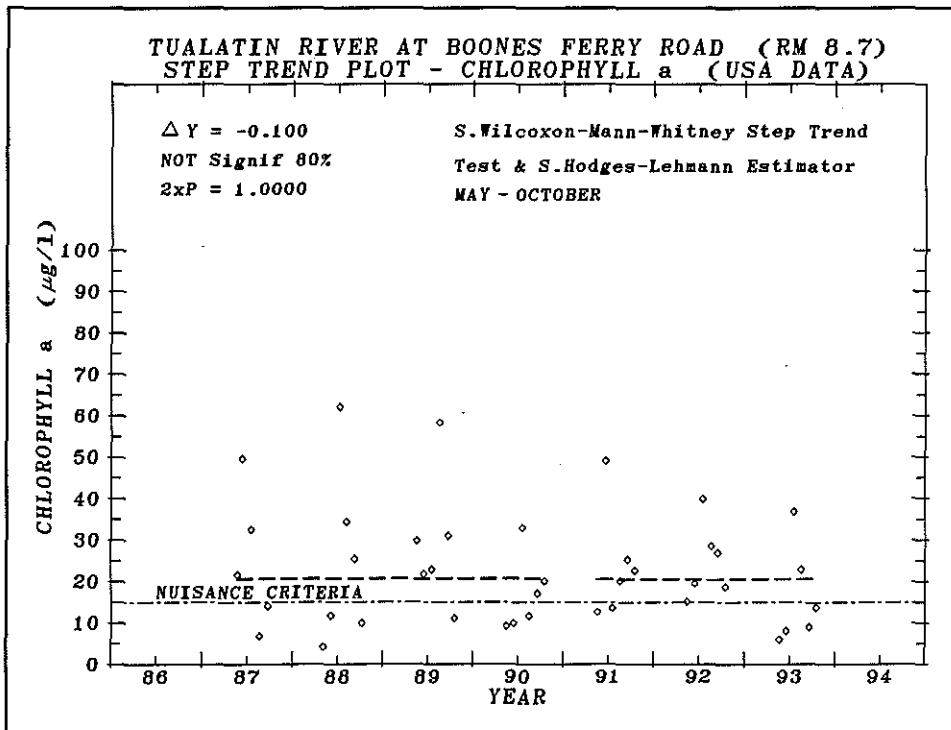
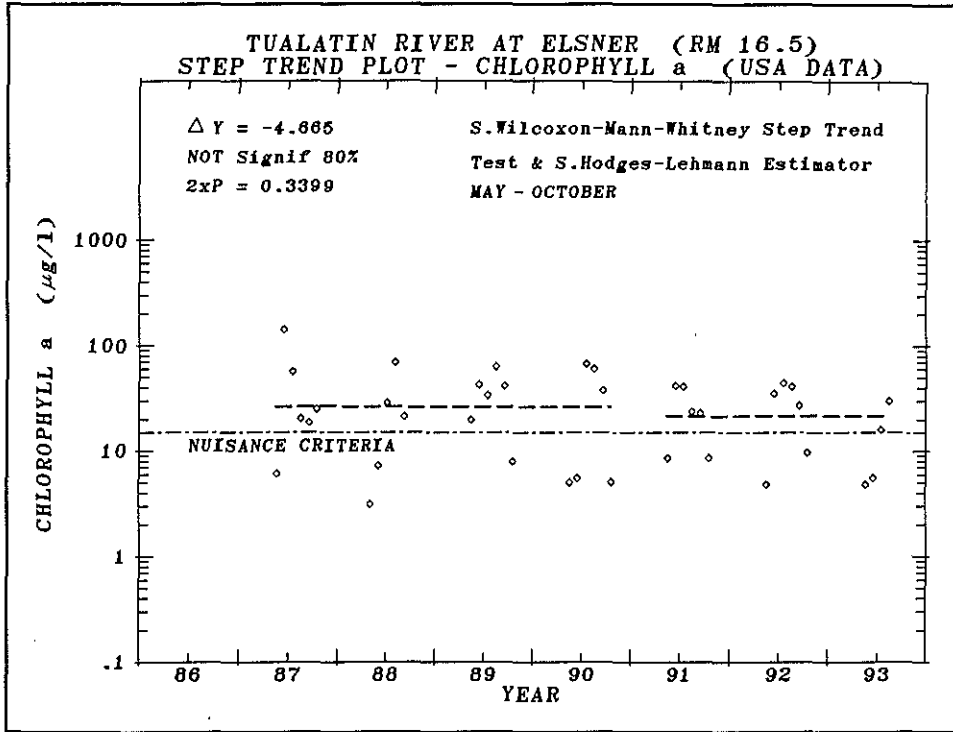
As can be seen on the following step trend plots, no significant trend in total phosphorus was seen at river mile 39.1 with statistically significant decreasing trends in total phosphorus occurring at river miles 27.1, 16.5 and 8.7. However, the phosphorus levels set in the TMDL have not been met.



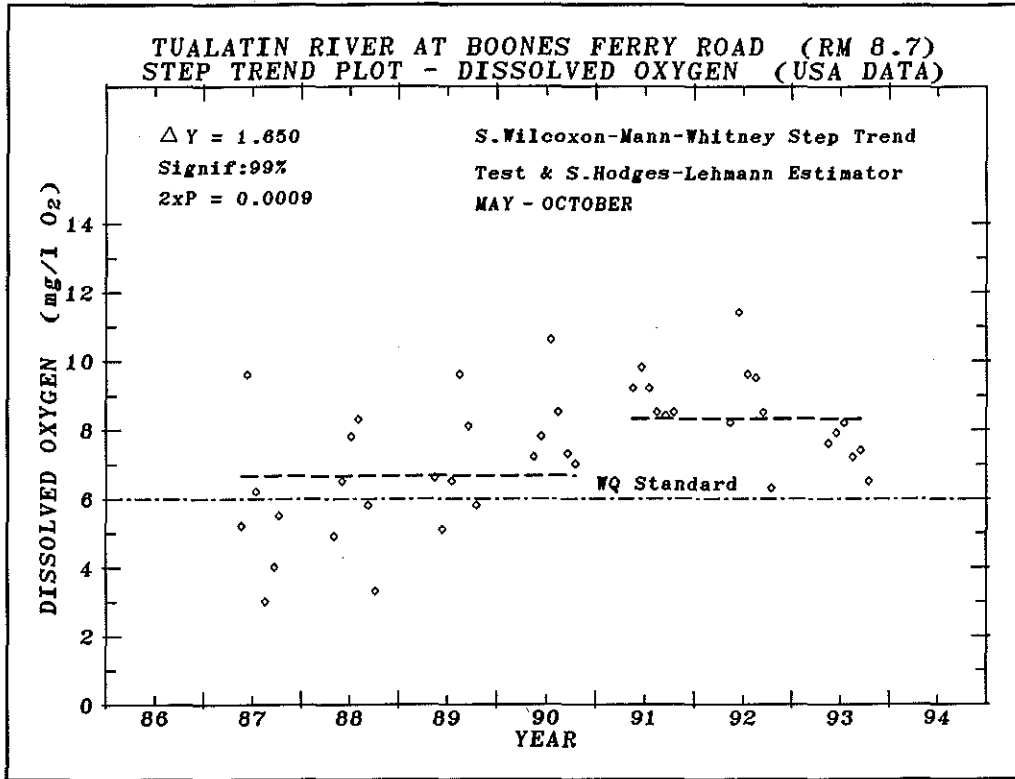


The chlorophyll a action level of 15 $\mu\text{g/l}$, based upon a three month average, has been exceeded below approximately river mile 25 in all years since 1987. Similar to the analyses for phosphorus, step trend tests were calculated for chlorophyll a for four main stem Tualatin River sampling locations. No significant trends were detected (plots follow).



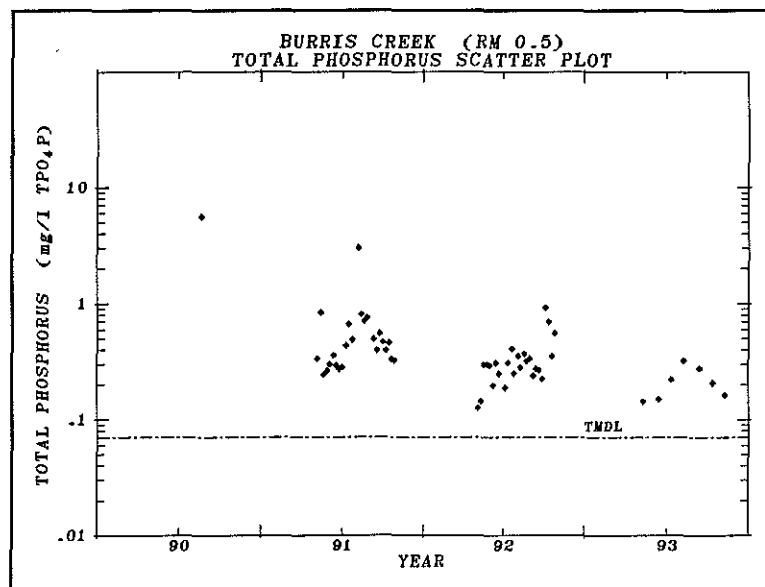
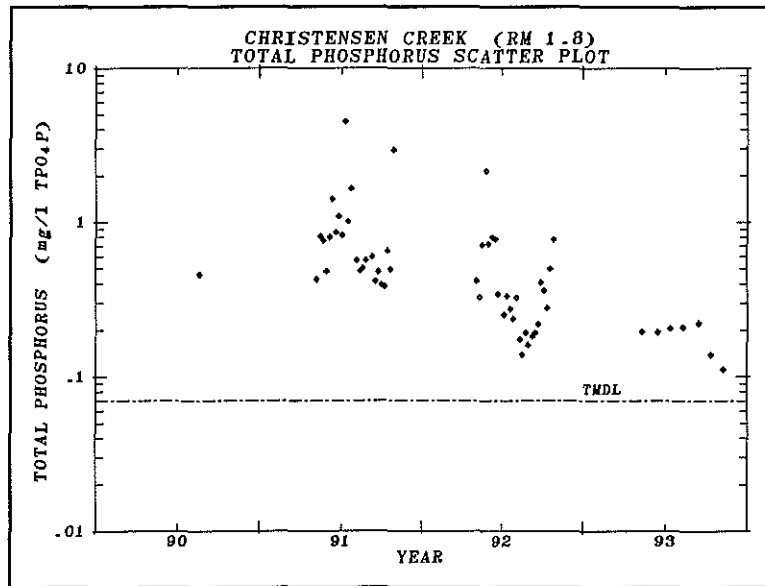


The plot below illustrates a statistically significant increase in dissolved oxygen at river mile 8.5. The data may not fully reflect the dissolved oxygen diurnal variability. To assess whether Tualatin River dissolved oxygen standards are being met during the early morning hours the Department is proposing to conduct a study this summer which would include continuous monitoring at several locations.



Instream total phosphorus reductions are being seen from monitoring on Christensen and Burris Creeks. The improved water quality is a result of the application of Oregon Department of Agriculture BMPs on the creeks. Although a marked decrease in phosphorus levels have been achieved, the loading allocation for those subbasins under the TMDL has not been met.

Future monitoring efforts on the Tualatin River tributaries should focus on providing information to assess the effectiveness of implemented BMPs.



Monitoring for organochlorine pesticides and polychlorinated biphenyls, volatile and semivolatile organic compounds showed that no toxic organic compounds were detected.

Evaluation of the effectiveness of management practices in the agricultural and forestry parts of the basin has been limited. The importance of agricultural best management practices has been demonstrated in the Burris Creek and Christensen Creek subbasins with monitoring over the last three years. In the future the Oregon Department of Agriculture will expand its efforts to measure the effectiveness of management practices that have been put in place. The Department of Forestry plans to maintain some monitoring of changes in water quality as a result of implementation of best management practices.

Urban management practices are even more difficult to assess. The effects of management practices on water quality will probably only be seen over several years as they are implemented over entire subbasins.

Assessment of the effectiveness of local water quality control structures is being done as they are being installed.

PUBLIC AWARENESS AND EDUCATION:

A vigorous program spearheaded by the Unified Sewerage Agency has been initiated to inform the public of water quality concerns in the Tualatin Basin and to assess the level of public awareness. The plan includes a baseline survey to gauge progress and to enhance and possibly modify current strategies in the plan. To this point the DMAs have reached out through publications, educational programs, promotional meetings, workshops, tours and volunteer efforts.

Publications include newsletters, brochures describing streams and riparian areas, doorhangers, commodity newsletters and articles in newspapers. The publications have been distributed through direct mailings, incorporation in billings, placement in public areas, etc.

Volunteer activities include stream monitoring by the general public and school children, riparian and wetland remediation projects and storm drain stenciling.

Educational efforts include the Tualatin River Rangers Water Education Program that reaches approximately 5000 fourth graders each year with programs on wastewater, storm water, and conservation and agreements with the City of Lake Oswego School District to develop a water quality curriculum and to monitor several streams.

Numerous promotional meetings, workshops and seminars on water quality have

been held to inform the public of water quality concerns in the basin.

The Department of Agriculture has concentrated on key commodity groups in its efforts to control erosion and nutrients through demonstration sites, grower field days, and focus sessions on cover cropping strategies.

The Department of Forestry, through "Forest Log", supplies operators with compliance information, recommendations and advice on preventing water quality problems.

Tours of key water quality control sites used to mitigate water quality problem have attracted considerable public interest. Speakers have been made available to a wide variety of organizations. Hot lines are available to respond to complaints related to water quality.

SITE SPECIFIC PROBLEMS;

The Compliance/Implementation Schedule provides that site specific problems, such as streambank erosion sites, illicit discharges, and illegal dump sites, along the Tualatin River and its tributaries be identified, ranked, and corrected and/or addressed in long term restoration plans. That portion of the Tualatin basin within the jurisdictions of USA and Multnomah County was surveyed using aerial photography and video imaging. The City of Lake Oswego is in the process of identifying and correcting site specific problems. The City of Portland inventoried streams in 1991 and plans to reinventory the streams in 1994 using aerial imaging. Clackamas County has not as yet developed a program to identify site specific problems. The Department of Forestry continues to identify problem sites through operation inspections, landslide reporting, and complaint investigations. The Department of Agriculture has identified site specific areas through subbasin inventories that represent approximately two-thirds of the agricultural lands in the basin, basinwide inventories of specific agricultural operations including Confined Feeding Operations and Container Nurseries, and complaints.

IMPLEMENTATION OF MANAGEMENT PRACTICES

The Schedule provides for annual reporting of the progress made toward area-wide adoption of management practices. The urban management practices address new development management, erosion and sediment control, road and street runoff, lawn/landscape chemical management, wetland/riparian protection, and on-site stormwater systems.

Erosion control measures have been developed for all construction sites and for non-construction activities that contribute to off-site erosion. To meet the DEQ

requirement for 65% total phosphorus removal stormwater quality standards, appropriate construction and materials standards as well as design standards have been developed.

The New Development Management program, which considers the establishment and enforcement of regulations for management of stormwater from new developments, was adopted by USA and its member cities. Within that portion of the basin in the USA jurisdiction some of the management process may require off-site water quality projects rather than on-site water quality projects. On-site systems are the strongly preferred option for control of stormwater water quality. However, in the absence of suitable on-site systems, off-site systems may be constructed. If off-site systems are used, in-lieu fees are used to fund the off-site projects. Approximately 72% of the new developments, by acreage, and 58% by number have used on-site systems. USA has evaluated potential sites for off-site systems and depending upon DEQ wetland policy formulation will begin to develop the sites. Other parts of the basin require on-site projects for all new developments.

Stormwater maintenance has included TV line inspection, line cleaning, catch basin cleaning, street sweeping, detention pond maintenance, shoulder work, and open channel and ditch maintenance.

In the Multnomah County portion of the basin a Best Management Practices implementation plan was adopted in 1993 to supplement the Multnomah County Water Quality Management Plan. The City of Portland has identified four sites that will be used in the construction of water quality pollutant reduction facilities to mitigate storm water.

The Department of Agriculture has developed management practices that specifically address nutrient management and erosion control measures, particularly for Confined Animal Feeding Operations and Container Nurseries.

The Oregon Department of Forestry uses the Best Management Practices in the Oregon Forest Practice Rules to limit the impact to streams of timber management activities. All commercial forest management activities are subject to review for rule compliance. Modification of the water classification and protection rules, which are now being completed, will lead to much more refined controls over water quality impacts resulting from forest management practices.

RIPARIAN AREA MANAGEMENT:

Little effort up to now has been made to address these concerns in some of the urban areas. Multnomah County, however, using aerial imagery has identified

high priority riparian areas. The City of Portland is conducting policies that seek to protect and preserve riparian areas in the Fanno Creek drainage. The City of Lake Oswego is in the process of inventorying riparian areas within its jurisdiction and has restored a portion of one stream.

The rule revisions being undertaken by the Oregon Department of Forestry governing forestry practices will provide substantially greater protection for riparian areas.

RULES, ORDINANCES, AND GUIDANCE

Generally the rules and ordinances governing erosion control are considered to be adequate by the DMAs and consequently have not undergone revisions during the last year. With USA acting as the lead agency, all the DMAs contributed to changes that were made to the Erosion Control Plans Technical Guidance Manual in 1993. The City of Lake Oswego is revising its wetlands development standards. The Water Quality Facilities Technical Handbook is currently being revised by the City of Portland.

The legislature in 1993 passed SB 1010 that designated the Oregon Department of Agriculture as the lead agency to address agricultural nonpoint water pollution problems. The legislation provides authority to the Department of Agriculture to develop and implement a water quality management plan for TMDL basins. Agreements may be entered into with other agencies to develop and implement the plan. The plan may require actions to prevent or control water pollution resulting from agricultural activities. Civil penalties may be assessed for violations of the requirements of the plan.

JACKSON BOTTOM WETLAND:

In November, 1993 USA submitted to DEQ a draft Recycled Wastewater Facilities Plan which describes the land application efforts of USA.

After reviewing the data and reports concerning Jackson Bottom DEQ and USA will lay out future sampling and analytical requirements.

CONFINED ANIMAL FEEDING OPERATIONS:

The Oregon Department of Agriculture has evaluated Confined Animal Feeding Operations (CAFO) facilities in the Tualatin basin. An aerial survey of all 52 permitted facilities was followed by ground inspections. In conjunction with administering the CAFO permit program 12 notices of non compliance and 12 stipulation and final orders have been issued. Manure management systems have

been planned and constructed for permitted CAFO's throughout the basin. As part of the management systems, nutrient management plans are being implemented.

CONTAINER NURSERIES PROGRAM:

A program to address runoff from container nursery irrigation has been implemented as required by the Container Nursery Irrigation Water Management Plan. The discharges from container nurseries were evaluated to assess their level of compliance with the management plan initially by letter and subsequently as needed with site inspections. Irrigation tailwater recycling has been implemented on the larger acreage container nurseries. Smaller nurseries have modified their existing irrigation systems and/or adopted more efficient water management strategies.

COUNTY ROAD DITCHES:

Clackamas County, Multnomah County, Washington County, the Oregon Department of Agriculture, and the Oregon Department of Forestry prepared a report in December, 1993 that developed a roadside ditch maintenance program to enhance water quality in the Tualatin basin. The report described how current management practices address water quality through techniques for road shoulder maintenance, vegetation control/maintenance, herbicide application, ditch maintenance, and stream crossings and culverts.

DEPARTMENT OF ENVIRONMENTAL QUALITY
TUALATIN RIVER BASIN STATUS REPORT - 1993

In 1988, the Environmental Quality Commission (EQC) promulgated rules to limit discharges of nutrients to the Tualatin River in accordance with Section 303 of the Clean Water Act and 40 CFR, part 130.7. This action amended Oregon Administrative Rules (OAR) 340-41-470 by establishing in-stream criteria for both total phosphorus and ammonia-nitrogen at various locations on the main stem of the Tualatin River and at the mouths of certain tributaries. The in-stream criteria were set at levels necessary to meet water quality standards for dissolved oxygen, pH, and the action level for nuisance algae. Waste load allocations (WLAs) were assigned to point sources and load allocations (LAs) were assigned to nonpoint sources as necessary to achieve the in-stream criteria.

Attainment of the ammonia-nitrogen criteria is primarily a point source issue requiring upgrading of the sewage treatment facilities operated by Unified Sewerage Agency of Washington County (USA). The Department anticipates that the ammonia-nitrogen criteria will be achieved in 1994.

Meeting the total phosphorus criteria will require reductions by both point and nonpoint sources. Substantial progress towards reducing phosphorus levels has been realized particularly by the point source dischargers. Further discussion on water quality improvements occurs later in this report.

This report is required by Task #8 of the Tualatin Sub-basin Nonpoint Source Management Implementation/Compliance Schedule and Order for Designated Management Agencies (hereinafter referred to as Order) which was established by the EQC on July 21, 1994. The primary intent of the Order is to improve water quality and to achieve all applicable water quality standards and limits. A second goal is to promote communication among the jurisdictions in the basin. A third major consideration is to encourage and promote the involvement of interest groups of all kinds in the implementation of the Order.

The Order requires specific tasks and responsibilities of a number of governmental entities. The Designated Management Agencies (DMAs) include USA, Clackamas County, Multnomah County, Washington County, City of Portland, City of Lake Oswego, City of West Linn, the Oregon Department of Agriculture, and the Oregon Department of Forestry.

The specific tasks of the Order include: monitoring (task # 1); public awareness/education (task # 2); site specific problems (task # 3); implementation of management practices (task # 4); riparian area management (task # 5); rules, ordinances and guidance (task # 6); annual reporting (task # 7); status report of the basin (task # 8); the Jackson bottom wetland (task # 9); exemptions from on-site stormwater treatment (task # 10); confined animal feeding operations (task

11); container nurseries (task # 12); assurance of implementation (task # 13); and county road ditches (task # 14).

The DMAs in conjunction with the Department of Environmental Quality are required to meet the tasks according to a time schedule in the Order terminating on December 31, 1995.

Since the Order refers exclusively to Nonpoint sources, this report will also confine itself to nonpoint source issues and the requirements or tasks required in the Order.

MONITORING:

Monitoring of the Tualatin River and its tributaries is an ongoing project of the DMAs and DEQ. The monitoring locations and the nature of the data collected are being reviewed by the DMAs and DEQ. Monitoring includes ambient studies to assess changes in the overall water quality of the Tualatin River and time and site specific studies to determine the effectiveness of specific water quality control projects and management practices designed and installed to mitigate water quality problems. Arrangements are being made to make all of the data being collected in the Tualatin basin available to the DMAs and DEQ through the Environmental Protection Agency data base, STORET. The basic monitoring plan will be reviewed annually and possibly revised, if necessary, to reflect new information and to accommodate changing circumstances.

DATA REVIEW:

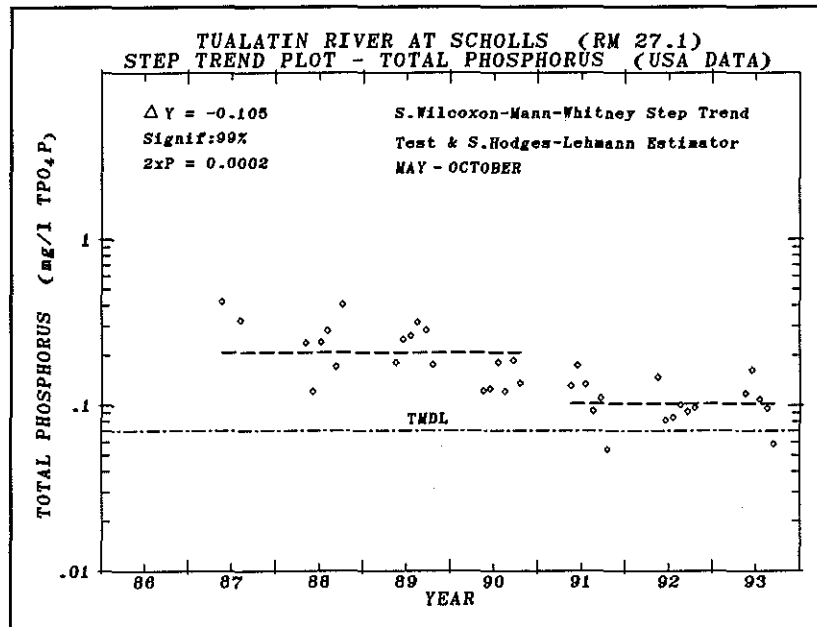
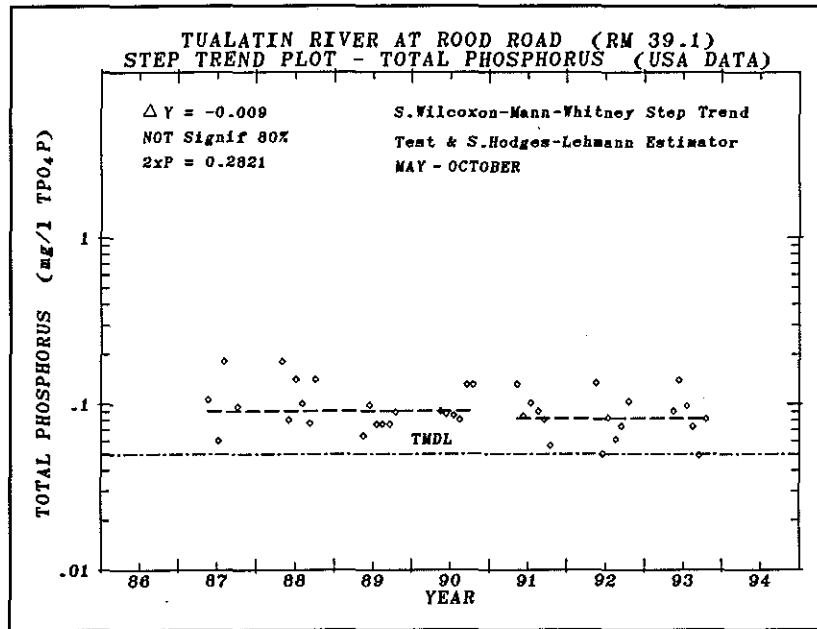
Mike Wiltsey with the DEQ Northwest Region has reviewed key water quality parameters from data gathered by USA and the Oregon Department of Agriculture in the main stem Tualatin River and the lower reaches of Burris and Christensen creeks. This review is not inclusive but is meant to highlight water quality relative to the TMDLs, water quality standards/criteria, and Best Management Practices (BMPs).

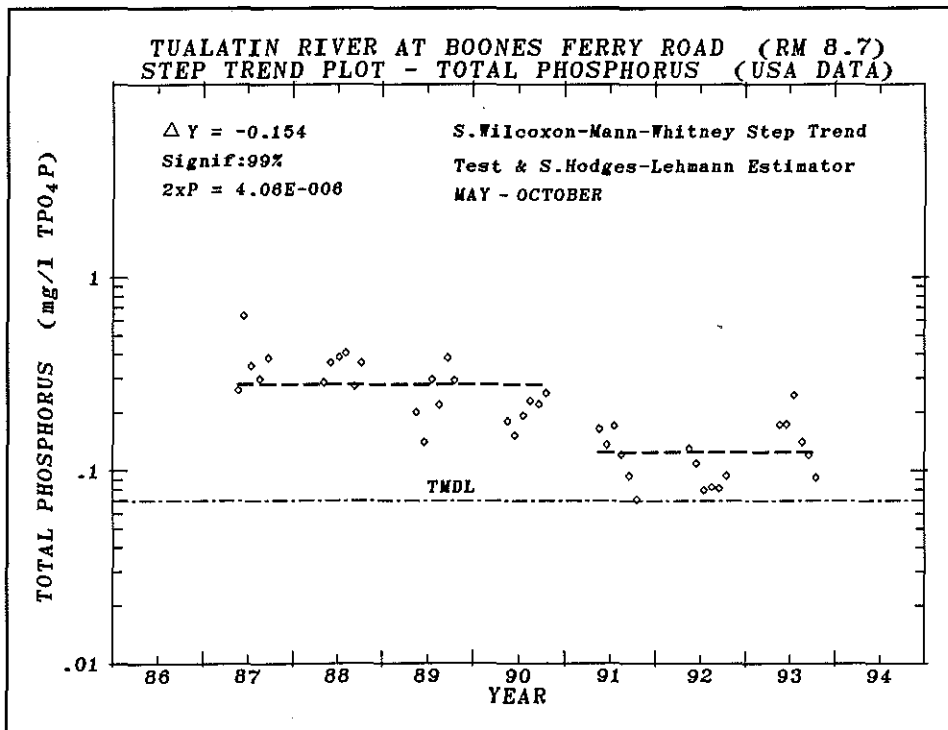
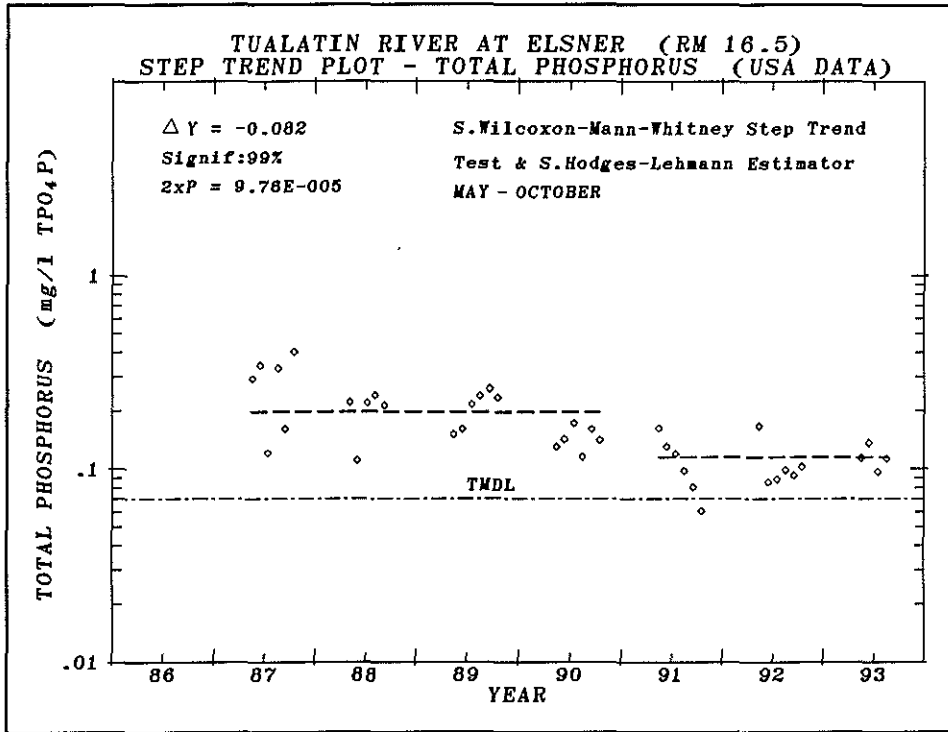
The WQHydro software package by WQHydro Consulting, Portland, Oregon, was used for performing the review.

In very general terms the overall water quality in Tualatin River at the lower reaches does seem to be improving. Using total phosphorus data collected by USA, step trend tests using the Seasonal Wilcoxon-Mann Whitney test were calculated for four main stem Tualatin River sites. The before/after time periods (May through October) used in the step trend test were 1987 to 1990 and 1991 to 1993, respectively. Where more than one monthly sample was collected, data were parsed to one measurement by selecting the value closest to the middle of

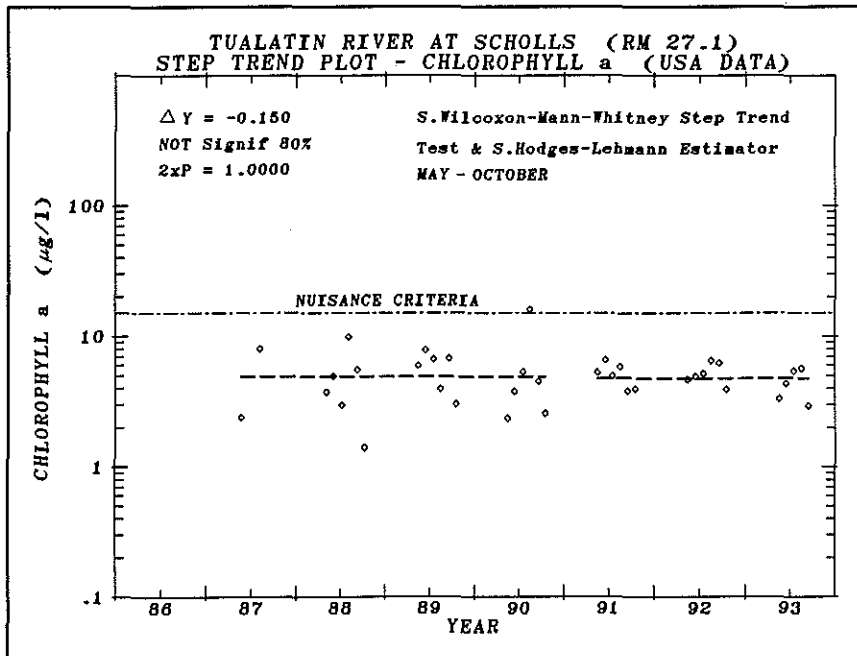
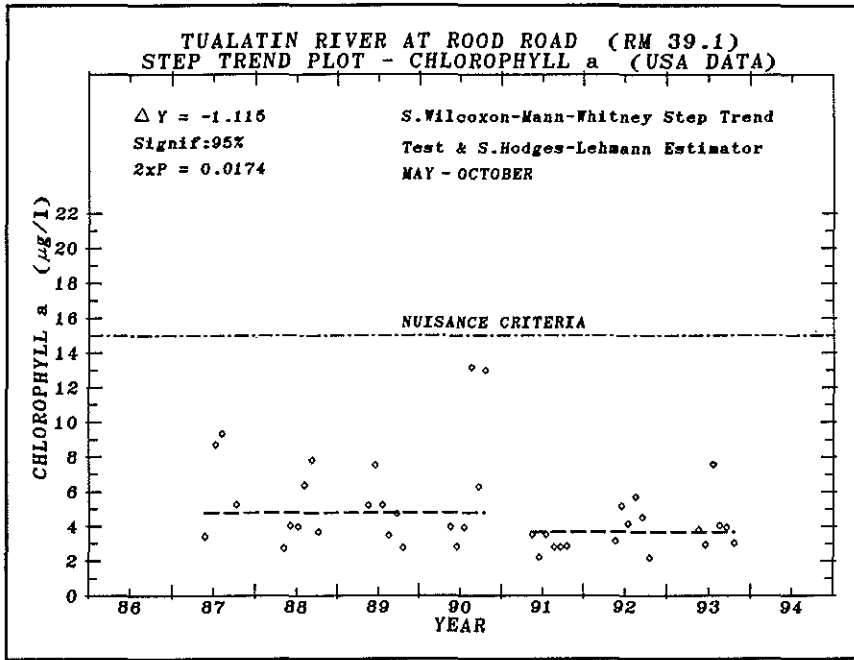
the month. No adjustments to the data were made for variability in streamflow or hour of collection.

As can be seen on the following step trend plots, no significant trend in total phosphorus was seen at river mile 39.1 with statistically significant decreasing trends in total phosphorus occurring at river miles 27.1, 16.5 and 8.7. However, the phosphorus levels set in the TMDL have not been met.





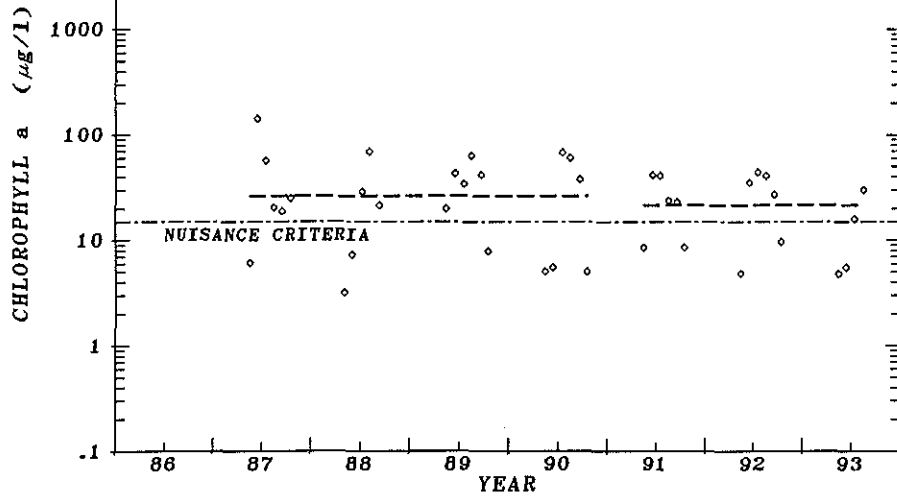
The chlorophyll a action level of 15 $\mu\text{g/l}$, based upon a three month average, has been exceeded below approximately river mile 25 in all years since 1987. Similar to the analyses for phosphorus, step trend tests were calculated for chlorophyll a for four main stem Tualatin River sampling locations. No significant trends were detected (plots follow).



TUALATIN RIVER AT ELSNER (RM 16.5)
STEP TREND PLOT - CHLOROPHYLL a (USA DATA)

$\Delta Y = -4.665$
NOT Signif 80%
 $2xP = 0.3399$

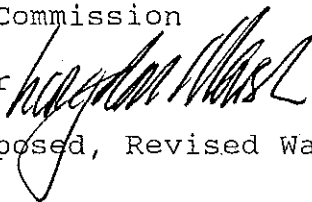
S. Wilcoxon-Mann-Whitney Step Trend
Test & S. Hodges-Lehmann Estimator
MAY - OCTOBER



State of Oregon
Department of Environmental Quality

Memorandum

Date: November 7, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director 
Subject: Flexibility in the Proposed, Revised Water Quality Standards

The Commission has previously asked that new rules include adequate flexibility to allow for case-by-case determinations when such determinations would result in better public policy. Commission members have also expressed concern that rules be implementable using existing staff resources. This memo outlines the policies proposed in the revised water quality standards that are intended to address these concerns.

Flexibility

Flexibility to allow case-by-case determinations on individual discharges is allowed in each of the proposed surface-water standards. The major areas of flexibility are summarized below:

- Dissolved Oxygen Standard
 - The criteria vary, depending on the beneficial use present in the waterbody.
 - Less stringent criteria may apply if additional data is supplied by a discharger.
 - Additional discharges may be allowed in water-quality limited basins if they will result in a decrease of no more than 0.10 mg/l individually, or 0.20 mg/l cumulatively.
- Temperature Standard:
 - The criteria vary, depending on the beneficial use present in the waterbody.
 - The criteria are waived during periods when air temperatures are abnormally high.
 - The Commission may grant an exception to the criteria if beneficial uses will be protected and the cost of complying would outweigh the risk to the resource.

- New or increased discharges from point sources are allowed a 1.0° F cumulative increase in water quality limited basins. The Commission may waive the one degree limitation under some circumstances.
- When the Department determines that all feasible steps have been taken in a water-quality limited basin, the temperatures actually achieved become the criteria.
- pH Standard:
 - Existing dams may be recertified even if they don't meet the pH criteria, provided all practicable measures have been taken to achieve compliance.
- Bacteria Standard:
 - Sources may negotiate a re-sampling schedule that is different from that required in the rule.
 - Sources may negotiate a different date for the beginning of summer.
 - The Commission can approve a different frequency of overflows than required in the rule.

Staff Resources and Implementability

There are several ways in which the limited availability of staff to implement new standards provisions could be addressed through the rules themselves:

- Effluent limitations mandated in standards could be technology-based rather than water-quality based. This would be easy to implement, but would require extensive rules with very little flexibility. Greater in-stream monitoring and oversight would be required to assure that cumulative effects don't exceed in-stream standards.
- In-stream standards could be made voluntary or less protective. This approach is likely *not* acceptable under the Clean Water Act.
- Fully protective, water-quality based criteria could be adopted that allow for a phased implementation according to priorities identified through a public process.
- Resources at other agencies and organizations dedicated to water quality-related goals could be leveraged through rule language where appropriate statutory authority exists to do so.

Memo To: Environmental Quality Commission
November 7, 1995
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The water quality standards proposed for your consideration have relied primarily on the latter two options. The standards are intended to be fully protective of the most sensitive beneficial uses (as required by the Clean Water Act and federal regulations), but they allow the Department to use discretion regarding which waterbodies will be addressed first.

Language similar to the bold-faced text below appears in the dissolved oxygen and pH rules with respect to Department actions to be taken in response to exceedances of a trigger value:

"...Upon determination that the spatial median intergravel dissolved oxygen concentration is below 8.0 mg/l, the Department may, in accordance with priorities established by the Department for evaluating water quality impaired waterbodies, determine whether to list the waterbody as water-quality limited..." (OAR 340-41-[basin](2)(a))

Language similar to the bold-faced text below appears in the temperature and bacteria rules with respect to Department actions to be taken in response to exceedances of the in-stream criteria:

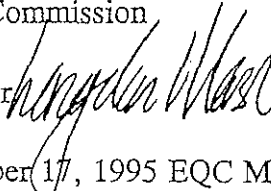
"Effective July 1, 1996, in waterbodies identified by the Department as exceeding the relevant numeric temperature criteria specified for each individual water quality management basin identified in OAR 340-41-[basin] and designated as water quality limited under section 303(d) of the Clean Water Act, the following requirements shall apply to appropriate watersheds or stream segments in accordance with priorities established by the Department. The Department may determine that a plan is not necessary for a particular stream segment or segments within a water-quality limited basin based on the contribution of the segment(s) to the temperature problem:..." (OAR 340-41-026(3)(a)(D))

The prioritization process envisioned in the rules will allow the Department to leverage resources available outside the agency by focusing efforts on basins where they are most needed. The role of some of these outside agencies is described in detail in the temperature plan.

State of Oregon
Department of Environmental Quality

Memorandum[†]

Date: November 9, 1995

To: Environmental Quality Commission
From: Langdon Marsh, Director 
Subject: Agenda Item K, November 17, 1995 EQC Meeting
Deputy Director Position

Statement of the Issue

This memo begins the process of appointing a Deputy Director for the Department. ORS 468.050 requires that the position be approved by the Environmental Quality Commission and that a written order be filed with the Secretary of State. The Department had a Deputy Director position until 1975. This staff report requests authorization to reestablish such a position.

Background

In the last ten years DEQ has nearly tripled in size of its staff and budget. The Department's growth reflects the broader scope and responsibility given to DEQ by the state legislature and the federal government. These include Superfund, RCRA, asbestos, underground storage tanks cleanup, state revolving fund administration and groundwater. It is taking on more complex financial programs, such as the Underground Storage Tank finance program and funding, debt service through bond sales, and cleanup activities including the voluntary cleanup program. The Department is also now a union represented agency which adds a different dimension to management. The Department is working closely with the other Natural Resource Agencies to build partnering efforts to protect the environment. Interagency and interstate activities are demanding more time, and thus require a higher level of effort than they did previously.

[†]Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

Memo To: Environmental Quality Commission
Agenda Item K
November 17, 1995 Meeting
Page 2

The nationwide focus on environmental protection makes it likely that DEQ will continue to be asked to assume more responsibilities. In light of the current growth of the Department, it is prudent to create the position of Deputy Director to help guide and coordinate the agency.

The Deputy position will dovetail with the Director's. The Deputy will have the authority to act on the Director's behalf when he is absent. This person will assist in managing the Department and will coordinate efforts within the Department, as well as with other Federal and State Agencies. Division administrators, as well as staff in the Director's office will have direct access to me, but I expect that the Director and Deputy will speak with one voice.

This person will also expand and proactively schedule for the Director and the Deputy with the regulated community, federal, state and local government officials, interest groups, and the public. The Deputy will be in a position to serve as a spokesperson and representative for the agency to the general public, private organizations and local, state and federal governments. Since the Deputy will have the authority to speak for the agency, creating this position will build on our public outreach program.

I will remain responsible for performance appraisals for the Division Administrators, the Communications Manager, the Inter/Intraprogram Coordinator and the Executive Assistants to the Director and the Deputy.

The Deputy, under my supervision, will have overall responsibility to assure that Oregon's environmental quality meets or exceeds standards established by the Environmental Quality Commission, the State Legislature, or the federal government. The Deputy will share with me the responsibility of making DEQ an exemplary agency by creating an environment that attracts talented and qualified staff.

Creating the Deputy position will fill the management gap that threatens to develop as the agency grows and continues to take on more responsibility. It will enhance my position as Director by making me available to tackle complex and innovative environmental policy issues. It will provide for high quality agency administration.

The funding for the Deputy position comes from the existing resources of the Department. I plan to recruit solely within the Department in filling the position.

Authority to Address the Issue

ORS 468.050 requires that the Environmental Quality Commission approve establishment of this position.

Memo To: Environmental Quality Commission
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Page 3

Recommendation for Commission Action

It is recommended that the Commission adopt the establishment of a deputy director position for the Department.

Attachments

Draft Deputy Director position description

Report Prepared By: Langdon Marsh

Phone: 229-5301

Date Prepared: November 9, 1995

STATE OF OREGON

EXECUTIVE DEPARTMENT
Personnel and Labor Relations Division

POSITION DESCRIPTION

This position is:

- Mgmt Service-Supv
- Mgmt Service-Conf
- Classified
- Unclassified
- Executive Service

** PLEASE READ INSTRUCTIONS BEFORE COMPLETING THIS FORM **

New Revised

SECTION 1. POSITION INFORMATION

- a. Class Title: Principal Executive/Manager G
- b. Class No.:
- d. Position No.: **0000**
- c. Effective Date: January 1, 1995/6
- e. Working Title: Deputy Director
- f. Work Unit: Office of Director
- g. Agency No.: 34000
- h. Agency Name: Department of Environmental Quality
- i. Employee Name: Vacant
- j. Work Location (City-County): Portland/Multnomah

- k. Position: Permanent Seasonal Limited Duration Academic Year
- Full Time Part Time Intermittent Job Share

- l. FLSA: Exempt Non-Exempt
- m. Eligible for Overtime: Yes No

SECTION 2. PROGRAM/POSITION INFORMATION

- a. Describe the program in which this job exists. Include program purpose, who's affected, size, and scope. Include relationship to agency mission.

The purpose of the Department of Environmental Quality is to be an active force to restore, enhance and maintain Oregon's air, water and land. The Department has approximately 700 positions and a total operating budget of 153.3 million dollars.

- b. Describe the purpose of this position, and how it functions within this program, by completing this statement:
The purpose of this job/position is to . . .

administer and enforce laws regulating air, water, and land pollution; administer authorities delegated by U. S. Environmental Protection Agency (EPA) including the Clean Air, Clean Water and Resource Conservation and Recovery Acts; administer state statutes including solid waste management, recycling, and environmental cleanup; serve on behalf of the Director as an attendee of the Governor's cabinet; and assist on behalf of the Director, the Assistant to the Governor for Natural Resources in efforts to coordinate Natural Resource Agencies.

SECTION 3. DESCRIPTION OF DUTIES

List major duties. Note percentage of time duties are performed. If this is an existing position, mark "N" for new duties or "R" for revised duties.

% of	N/R	DUTIES
30%		<u>I. PROGRAM ADMINISTRATION/DIRECTION</u> <ul style="list-style-type: none">* a. Assists the Director in the development and implementation of Department strategic environmental plans to protect, maintain and enhance Oregon's water, air and land.* b. Evaluates the agency's programs and makes recommendations to the Director to assure compliance with state/federal laws and regulations, in collaboration with senior staff and Environmental Quality Commission.* c. When assigned by the Director, levies civil and criminal penalties under authority delegated by the Commission which hears appeals from such penalties.
45%		<u>II. AGENCY MANAGEMENT/ADMINISTRATION</u> <ul style="list-style-type: none">* a. Develops, through subordinate managers, the agency biennial budget request, implementing the agency's strategic planning goals through this mechanism. Together with the Director, presents the Governor's Recommended Budget to the Legislative Ways and Means Committee, explaining how it achieves goals and describing results of particular portions of the budget when implemented or if not implemented. Implements and manages, through subordinate managers, the agency legislatively-approved budget to achieve goals.* b. Maintains sufficient knowledge of environmental issues locally and nationally and in sufficient technical depth to allow for reasoned policy and administrative rules recommendations to the Director.* c. Together with the Director, provides guidance and leadership on a regular basis to DEQ management and staff through "brown baggers" and through electronic communication, at Natural Resource Agency meetings, and at State agency overall policy development meetings.* d. Provides direction and implementation of agency affirmative action plans, employee safety activities, and of plans to attract, retain and manage a diverse, well-trained work force.* e. Encourages and implements, in collaboration with the Director and senior staff, management improvements to the agency such as span of control, responsiveness to citizens, efficiencies and improvements to agency performance.
15%		<u>III. EXTERNAL/OUTREACH</u> <ul style="list-style-type: none">* a. On behalf of the Director, anticipates issues and maintains rapport with the Oregon Legislature, directors of state and federal agencies, and special interest groups to assure DEQ the best opportunity for success in receiving resources and support for environmental programs.* b. Promotes awareness of environmental issues and agency programs to the public and the regulated community through public informational meetings, public hearings, and the media.* c. Reports regularly to the Director on appropriate topics.
10%		<u>IV. SUPERVISION</u> <ul style="list-style-type: none">* a. Contributes to annual performance appraisals; recommends appropriate personnel actions.* b. Directs the investigation, responds and facilitates resolution of grievances and complaints.* c. Evaluates and implements unit training needs to ensure staff are prepared to perform assigned duties including evaluation and creation of opportunities for staff development.* d. Handles personnel issues expeditiously according to procedures and collective bargaining agreement.

* indicates essential function

SECTION 4. WORKING CONDITIONS

Describe special working conditions, if any, that are a regular part of this job. Include frequency of exposure to these conditions.

involves substantial travel in-state and nationally to attend meetings and conferences. Extended work hours.

SECTION 5. GUIDELINES

- a. List any established guidelines used to do this job, such as state or federal laws or regulations, policies, manuals or desk procedures.

Oregon Revised Statutes and Oregon Administrative Rules
Collective Bargaining Agreement
EPA guidelines, rules, policies, procedures
Employment laws, policies and procedures
Agency administrative policies and procedures

- b. How are these guidelines used to perform the job?

Used to provide direction in leading the Department, faithful to the Commission's directives and the best environmental actions.

SECTION 6. WORK CONTACTS

With whom outside of co-workers in this work unit must this position regularly come in contact?

<u>Who Contacted</u>	<u>How</u>	<u>Purpose</u>	<u>How Often?</u>
Agency Management Staff	in person/phone/ e-mail	Direct activities, answer questions	daily
Agency employees	"	"	daily
Other Agency Directors	in person/phone/ mail	share information	daily
Legislature	in person	present programs/answer questions	as needed
Governor	in person/phone	share information/answer questions	as needed
Other governments	in person/phone/ mail	share information	as needed
Public/media	in person/phone	provide information/promote agency programs	as needed

SECTION 7. JOB-RELATED DECISION MAKING

Describe the kinds of decisions likely to be made by this position. Indicate effect of these decisions where possible.

Assists in making leadership decisions related to the operation of the Department. Makes decisions which have long term effects on Oregon's livability, healthy environment and valued resources.

SECTION 8. REVIEW OF WORK

Who reviews the work of this position? (List classification title and position number.) How? How often? Purpose of the review?

The Deputy Director reports to, and is appointed by, the Director. The Environmental Quality Commission reviews and approves the position.

SECTION 9. SUPERVISORY DUTIES TO BE COMPLETED **ONLY** FOR POSITIONS IN MANAGEMENT SERVICE

a. How many employees are directly supervised by this position? ___ Through Subordinate Supervisors? 700+

b. Which of the following supervisory/management activities does this job perform?

- Plans Work
- Responds to Grievances
- Hires/Fires (or Effectively Recommends)
- Assigns Work
- Disciplines/Rewards
- Prepares and Signs Performance Appraisals
- Approves Work

SECTION 10. ADDITIONAL JOB-RELATED INFORMATION

Any other comments that would add to an understanding of this position:

SPECIAL REQUIREMENTS: List any special mandatory recruiting requirements for this position:

BUDGET AUTHORITY: If this position has authority to commit agency operating money, indicate in what area, how much (biennially) and type of funds:

Agency budget

SECTION 11. ORGANIZATIONAL CHART

Attach a current organizational chart. See instructions for detail to be included on the chart.

=====

Employee Signature	Date	Supervisor Signature	Date
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Appointing Authority Signature	Date
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